

YAMAHA *Clavinova*[®]

CVP-98
CVP-96

Owner's Manual

Reference Manual

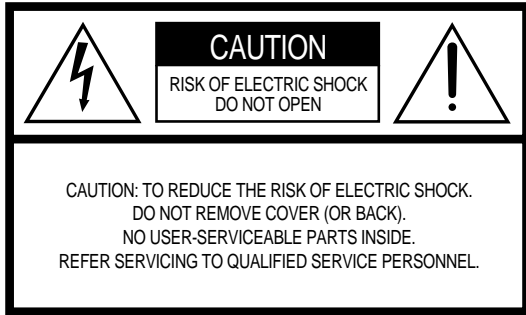
IMPORTANT

Check Your Power Supply

Make sure that your local AC mains voltage matches the voltage specified on the name plate on the bottom panel. In some areas a voltage selector may be provided on the bottom panel of the main keyboard unit near the power cord. Make sure that the voltage selector is set for the voltage in your area. The voltage selector is set at 240V when the unit is initially shipped. To change the setting use a "minus" screwdriver to rotate the selector dial so that the correct voltage appears next to the pointer on the panel.

SPECIAL MESSAGE SECTION

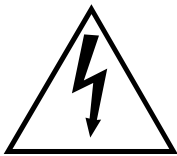
PRODUCT SAFETY MARKINGS: Yamaha electronic products may have either labels similar to the graphics shown below or molded/stamped facsimiles of these graphics on the enclosure. The explanation of these graphics appears on this page. Please observe all cautions indicated on this page and those indicated in the safety instruction section.



See bottom of Keyboard enclosure for graphic symbol markings



The exclamation point with the equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.



The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.

IMPORTANT NOTICE: All Yamaha electronic products are tested and approved by an independent safety testing laboratory in order that you may be sure that when it is properly installed and used in its normal and customary manner, all foreseeable risks have been eliminated. **DO NOT** modify this unit or commission others to do so unless specifically authorized by Yamaha. Product performance and/or safety standards may be diminished. Claims filed under the expressed warranty may be denied if the unit is/has been modified. Implied warranties may also be affected.

SPECIFICATIONS SUBJECT TO CHANGE: The information contained in this manual is believed to be correct at the time of printing. However, Yamaha reserves the right to change or modify any of the specifications without notice or obligation to update existing units.

ENVIRONMENTAL ISSUES: Yamaha strives to produce products that are both user safe and environmentally friendly. We sincerely believe that our products and the production methods used to produce them, meet these goals. In keeping with both the letter and the spirit of the law, we want you to be aware of the following:

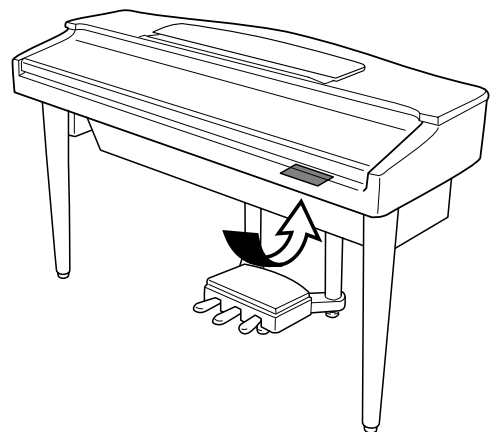
Battery Notice: This product **MAY** contain a small non-rechargeable battery which (if applicable) is soldered in place. The average life span of this type of battery is approximately five years. When replacement becomes necessary, contact a qualified service representative to perform the replacement.

Warning: Do not attempt to recharge, disassemble, or incinerate this type of battery. Keep all batteries away from children. Dispose of used batteries promptly and as regulated by applicable laws. Note: In some areas, the servicer is required by law to return the defective parts. However, you do have the option of having the servicer dispose of these parts for you.

Disposal Notice: Should this product become damaged beyond repair, or for some reason its useful life is considered to be at an end, please observe all local, state, and federal regulations that relate to the disposal of products that contain lead, batteries, plastics, etc.

NOTICE: Service charges incurred due to lack of knowledge relating to how a function or effect works (when the unit is operating as designed) are not covered by the manufacturer’s warranty, and are therefore the owners responsibility. Please study this manual carefully and consult your dealer before requesting service.

NAME PLATE LOCATION: The graphic below indicates the location of the name plate. The model number, serial number, power requirements, etc., are located on this plate. You should record the model number, serial number, and the date of purchase in the spaces provided below and retain this manual as a permanent record of your purchase.



Model _____

Serial No. _____

Purchase Date _____

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

* Please keep these precautions in a safe place for future reference.



WARNING

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

- Do not open the instrument or attempt to disassemble the internal parts or modify them in any way. The instrument contains no user-serviceable parts. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.
- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place containers on it containing liquids which might spill into any openings.
- If the power cord or plug becomes frayed or damaged, or if there is a sudden loss of sound during use of the instrument, or if any unusual smells or smoke should appear to be caused by it, immediately turn off the power switch, disconnect the electric plug from the outlet, and have the instrument inspected by qualified Yamaha service personnel.
- Only use the voltage specified as correct for the instrument. The required voltage is printed on the name plate of the instrument.
- Before cleaning the instrument, always remove the electric plug from the outlet. Never insert or remove an electric plug with wet hands.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.



CAUTION

Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others, or damage to the instrument or other property. These precautions include, but are not limited to, the following:

- Do not place the power cord near heat sources such as heaters or radiators, and do not excessively bend or otherwise damage the cord, place heavy objects on it, or place it in a position where anyone could walk on, trip over, or roll anything over it.
 - When removing the electric plug from an outlet, always hold the plug itself and not the cord. Pulling by the cord can damage it.
 - Do not connect the instrument to an electrical outlet using a multiple-connector. Doing so can result in lower sound quality, or possibly cause overheating in the outlet.
 - Remove the electric plug from the outlet when the instrument is not to be used for extended periods of time, or during electrical storms.
 - Before connecting the instrument to other electronic components, turn off the power for all components. Before turning the power on or off for all components, set all volume levels to minimum.
 - Do not expose the instrument to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of panel disfiguration or damage to the internal components.
 - Do not use the instrument near other electrical products such as televisions, radios, or speakers, since this might cause interference which can affect proper operation of the other products.
 - Do not place the instrument in an unstable position where it might accidentally fall over.
 - Before moving the instrument, remove all connected cables.
 - When cleaning the instrument, use a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths. Also, do not place vinyl or plastic objects on the instrument, since this might discolor the panel or keyboard.
 - Do not rest your weight on, or place heavy objects on the instrument, and do not use excessive force on the buttons, switches or connectors.
 - Take care that the key cover does not pinch your fingers, and do not insert a finger or hand in the key cover gap.
 - Never insert or drop paper or metallic or other objects between the slits of the key cover and the keyboard. If this happens, immediately turn off the power and remove the electric plug from the outlet and have the instrument inspected by qualified Yamaha service personnel.
 - Do not place the instrument against a wall (allow at least 3 cm/one-inch from the wall), since this can cause inadequate air circulation, and possibly result in the instrument overheating.
 - Read carefully the attached documentation explaining the assembly process. Failure to assemble the instrument in the proper sequence might result in damage to the instrument or even injury.
 - Do not operate the instrument for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.
- **USING THE BENCH (if included)**
- Do not play carelessly with or stand on the bench. Using it as a tool or step-ladder or for any other purpose might result in accident or injury.
 - Only one person should sit on the bench at a time, in order to prevent the possibility of accident or injury.
 - If the bench screws become loose due to extensive long-term use, tighten them periodically using the included tool.
- **SAVING USER DATA**
- Always save data to a floppy disk frequently, in order to help prevent the loss of important data due to a malfunction or user operating error.

Yamaha cannot be held responsible for damage caused by improper use or modifications to the instrument, or data that is lost or destroyed.

Always turn the power off when the instrument is not in use.

Thank you for purchasing the Yamaha Clavinova CVP-98/96! We recommend that you read this manual carefully so that you can fully take advantage of the advanced and convenient functions of the CVP-98/96. We also recommend that you keep this manual in a safe and handy place for future reference.

Included Accessories

- **Music Software Collection Disk (+ Music Book)**

This disk features various recorded song samples for playing on the CVP-98/96, and MIDI driver software for computers (page 157).

- **Floppy Disk**

Blank disk for recording your performances.

- **Owner's Manual and Reference Manual (Assembly Instructions and Lists)**

- **Bench (included or optional depending on locale)**

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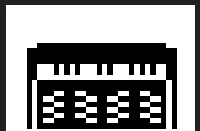
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CHAPTER 1: Getting Ready



Features of the CVP-98/96

● Large, Easy-to-use LCD Display

The large LCD (along with the dedicated buttons) provides comprehensive and easy-to-understand control of the CVP-98/96's operations (page 12).

● Wealth of Rich, Realistic Voices

The CVP-98/96 has a wide variety of authentic and dynamic voices (133 Clavinova voices + 480 XG voices + 12 Drum Kits). These include exceptionally natural-sounding piano, strings and brass voices. Moreover, you can play realistic drum and percussion sounds directly from the keyboard. (See page 32.)

● Playback of Song Disks

The CVP-98/96 can play back various commercially available song disks. With the appropriate disk software, you can play the piano part of the song yourself along with playback of a full orchestra or backing band.

● Special Guide Functions for Easy Learning

With the appropriate disk software, the LCD display and guide lamps help you learn songs by showing you when and where to play the proper notes. The three-step system helps you to easily and quickly master each song. (See page 100.)

● Fun, Dynamic Automatic Accompaniment

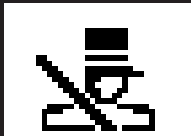
The Automatic Accompaniment of the CVP-98/96 gives you full and exciting instrumental backing in your favorite music styles, according to the chords you play. There are 100 accompaniment styles (page 47), plus an additional 40 "Pianist" styles that allow you to enjoy solo piano accompaniment (page 57).

● Easy-to-use Recording Features

Depending on your keyboard expertise and preference, you use a variety of different recording methods: Quick Recording, Track Recording, and Step Recording of Automatic Accompaniment (Chord Sequence Function) (page 105).

● Convenient TO HOST Terminals for Direct Connection to Computers

The CVP-98/96 can be used as a high-quality sound source for playback of music software for computers. It can also be used as a master keyboard for inputting performance data and creating music with a computer. (See page 156.)



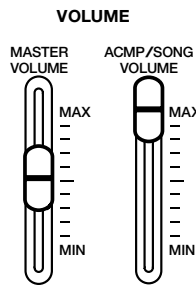
About This Manual

Conventions Used in This Manual

■ Indications of Buttons and LCD Display

[]: This indicates actual panel buttons.

When this mark is used, words such as button, slider, jack (terminal) sometimes may not be used. For example, the slider for the master volume is expressed as [MASTER VOLUME] in this manual.

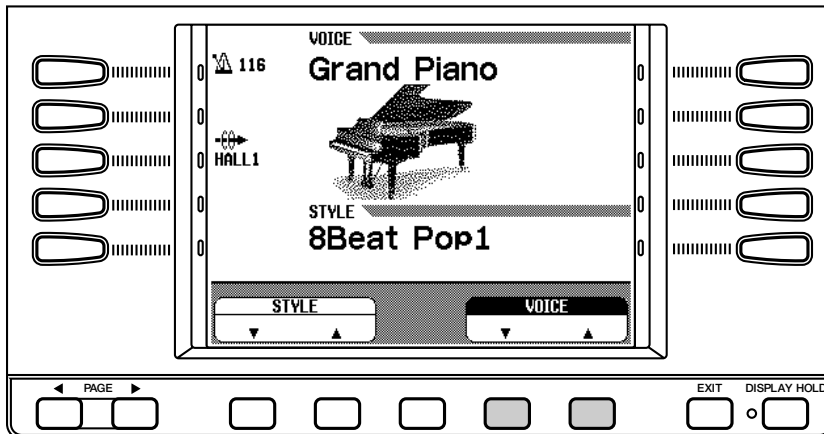


NOTE

- The illustrations and LCD displays shown here are for explanation purposes only, and may be different than those that actually appear on the CVP-98/96.

Bold characters:

Items in the LCD display and the LCD buttons corresponding to these items (directly below, or to the left or right) are indicated in bold characters in this manual. For example, the term “VOICE” shown in the LCD display is written as **VOICE**. Also the LCD buttons corresponding to “VOICE ▼ ▲” in the display are indicated as **VOICE ▼ ▲** in the manual.



■ Indications of Operation Explanations

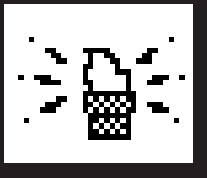
The arrows shown below are used in this manual in order to distinguish the results of the operation from the operation steps.

Operation results

♥ → ♠ This mark indicates that executing ♥ results in ♠.

Operation steps

♥ > ♣ This mark indicates that after executing ♥, then execute ♣.

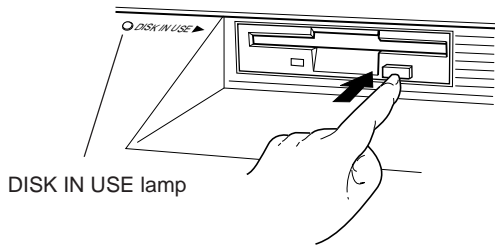


Handling Floppy Disks

The “Music Software Collection” disk and one blank disk are supplied with the Clavinova.

■ Taking Care of Your Floppy Disks

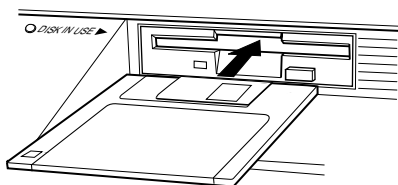
- Do NOT eject the disk during recording or playback, or at any time when the DISK IN USE lamp is lit. Doing so may damage both the disk and the FDD.
- Do NOT turn the Clavinova on or off while the disk is in the drive.
- Always eject the disk before turning the Clavinova off.
- When ejecting a floppy disk from the disk drive:



NOTES

- To eject a floppy disk, press the eject button slowly as far as it will go. Then when the disk is fully ejected, remove it by hand.
- The disk may not be ejected properly if the eject button is pressed too quickly or if it is not pressed in far enough. (The eject button may become stuck halfway with the disk extending from the slot by only a few millimeters). If this is the case, do not attempt to pull out the partially ejected disk. Doing so may damage the disk drive mechanism and/or the floppy disk. To remove a partially ejected disk, try pressing the eject button once again or push the disk back into the slot, then repeat the eject procedure carefully.

- Never open or close the key cover while a disk is extending from the drive (i.e. in the ejected position). The key cover may contact the disk, possibly damaging the disk or even the disk drive.
- Do not insert anything but floppy disks into the disk drive. Other objects may cause damage to the disk drive or floppy disk.
- Use the 3.5-inch 2DD or 2HD floppy disks with the Clavinova.



■ Precautions Regarding Floppy Disk Use

- Never open the disk’s shutter. Dirt or dust on the Internal magnetic surface will cause data errors.
- Never leave disks near a speaker, TV, or other device that emits a strong magnetic field.
- Do not store disks in places exposed to direct sunlight or sources of high temperature.
- Do not place heavy objects such as books on top of a disk.
- Avoid getting the disks wet.
- Be sure to store the disks in environmental conditions as specified below:
 - Storage temperature: 4° to 53°C (39° to 127°F).
 - Storage humidity: 8 to 90% relative humidity.
 - Store in an area free from dust, sand, smoke, etc.
- Be sure to apply the disk label at the proper position. When changing the label never cover the old label with a new label; always remove the old label first.

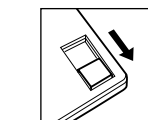
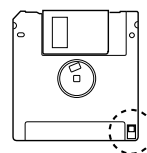
■ Head Cleaning

The head of the disk drive unit will get dirty as you use it eventually causing data errors. If this occurs, clean the head with a 3.5 inch head cleaning disk (available from most computer supply stores).

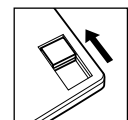
■ Data Backup

It is recommended that you copy your recorded songs to another disk for backup (see page 136). If the original disk is damaged or your song is deleted, the backup disk can be used instead of the original.

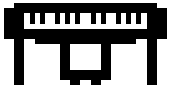
■ Protecting Your Data (Write Protect Tab)



Write protect tab open (locked — write protected)

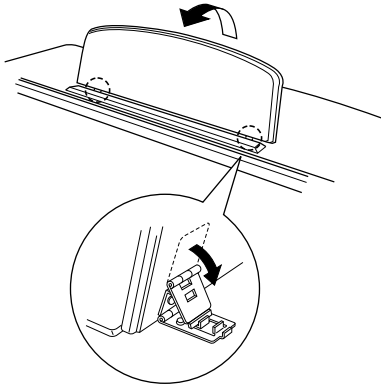


Write protect tab closed (unlocked — write enabled)



Setting Up the CVP-98/96

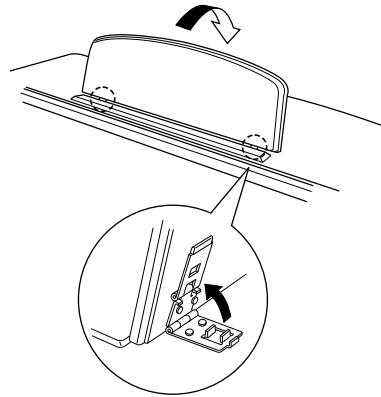
Music Stand



■ To raise the music stand:

- 1 Pull the stand up and toward yourself as far as it will go.
- 2 Flip down the two metal supports at the left and the right on the rear of the music stand.
- 3 Lower the music stand so that it rests on the metal supports.

As shown in the illustration, the angle of the music stand can be set in one of three positions, according to the position of the metal supports. Set the left and right metal supports to the same position.



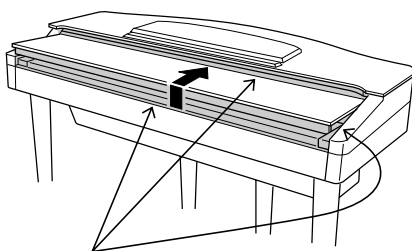
■ To lower the music stand:

- 1 Pull the music stand toward yourself as far as it will go.
- 2 Raise the two metal supports (at the rear of the stand).
- 3 Gently lower the music stand backward until it is all the way down.

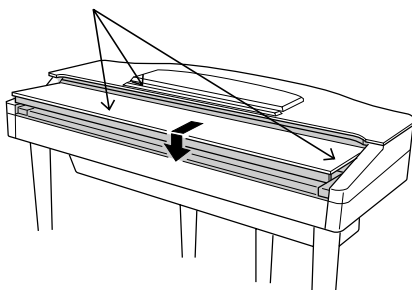
★ CAUTION

- Do not try to use the music stand in a half-raised position. Also, when lowering the stand, make sure to press it until it is all the way down.

Key Cover



Be careful to avoid catching your fingers when opening or closing the cover.



■ To open the key cover:

- 1 Lift the cover slightly (not too much).
- 2 Slide the cover open.

■ To close the key cover:

- 1 Slide the cover toward you.
- 2 Gently lower the cover over the keys.

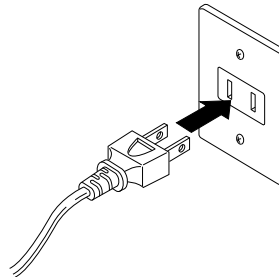
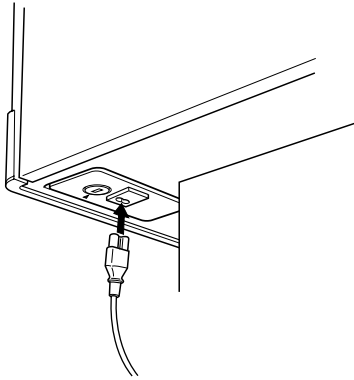
★ CAUTION

- Hold the cover with both hands when moving it, and do not release it until it is fully opened or closed. Be careful to avoid catching fingers (yours or others) between the cover and main unit.
- Do not place objects on top of the key cover. Small objects placed on the key cover may fall inside the main unit when the cover is opened and may not be able to be removed. This could cause electric shock, short circuit, fire or other serious damage to the instrument.

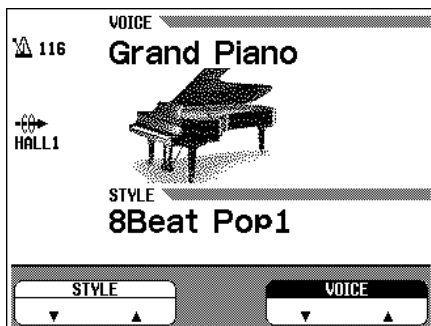
Turning on the Power

1 Connect the power cord.

Insert the plugs at the ends of the cord, one into the AC INLET on the rear panel of the CVP-98/96, and the other into a standard AC outlet.



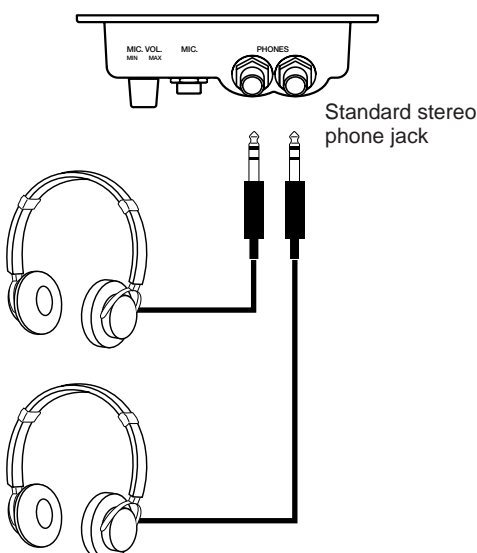
2 Press the **[POWER]** switch. The power is turned on and the main display appears in the LCD display. The voice of Grand Piano 1 and the accompaniment style of 8Beat Pop1 are selected automatically at first. The power lamp which is located at the left front of the main unit is lit up.



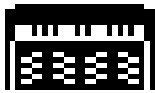
- * If the LCD is difficult to read, adjust the contrast with the **[CONTRAST]** button at the left of the LCD.
- * Adjust the volume by using **[MASTER VOLUME]**.

Press **[POWER]** again when turning off the power. Both the display and the power lamp at the left of the panel will turn off.

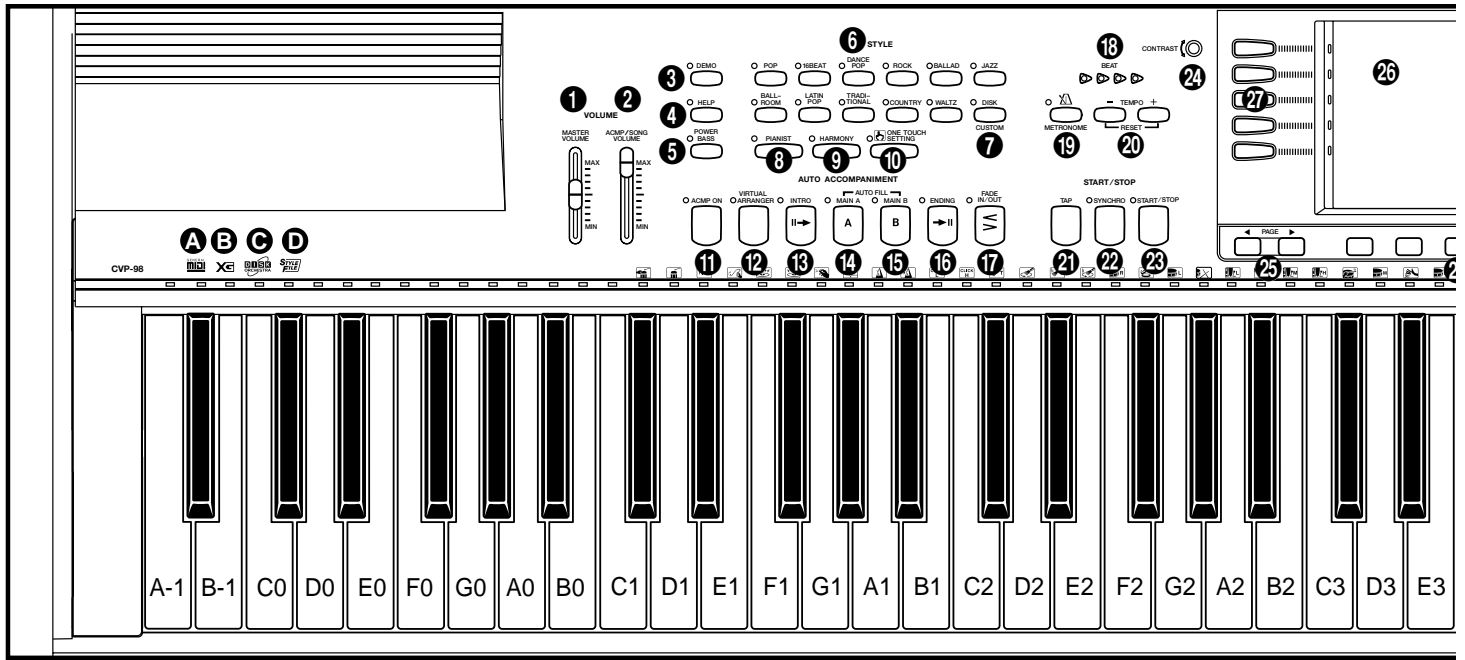
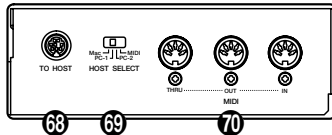
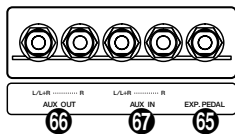
Headphones



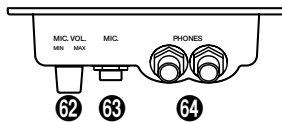
Connect a set of stereo headphones (optional) to the **[PHONES]** jack. When headphones are connected, the internal speaker system is automatically shut off. Since the CVP-98/96 has two PHONES jacks, two sets of headphones can be used simultaneously, allowing two people to enjoy listening to the performance.



Panel Controls and Terminals



CVP-98



- A** This is the GM (General MIDI) logo. This indicates that the CVP-98/96 can playback GM-compatible disk software. See page 8 in the Reference Manual for more information on GM.
- B** This is the XG format logo. This indicates that the CVP-98/96 can playback XG-compatible disk software. See page 8 in the Reference Manual for more information on the XG format.
- C** This is the Disk Orchestra Collection (DOC) format logo. This indicates that the CVP-98/96 can playback DOC format disks. See page 8 in the Reference Manual for more information on the DOC format.
- D** This is the Style File logo. This indicates that the CVP-98/96 can use optional Yamaha Style File disks. See page 80 for more information on Style File data.

Volume Section

- 1** [MASTER VOLUME] page 17
- 2** [ACMP/SONG VOLUME] page 17
- 3** [DEMO] page 24
- 4** [HELP] page 22
- 5** [POWER BASS] (CVP-98) page 21

Accompaniment Style Section

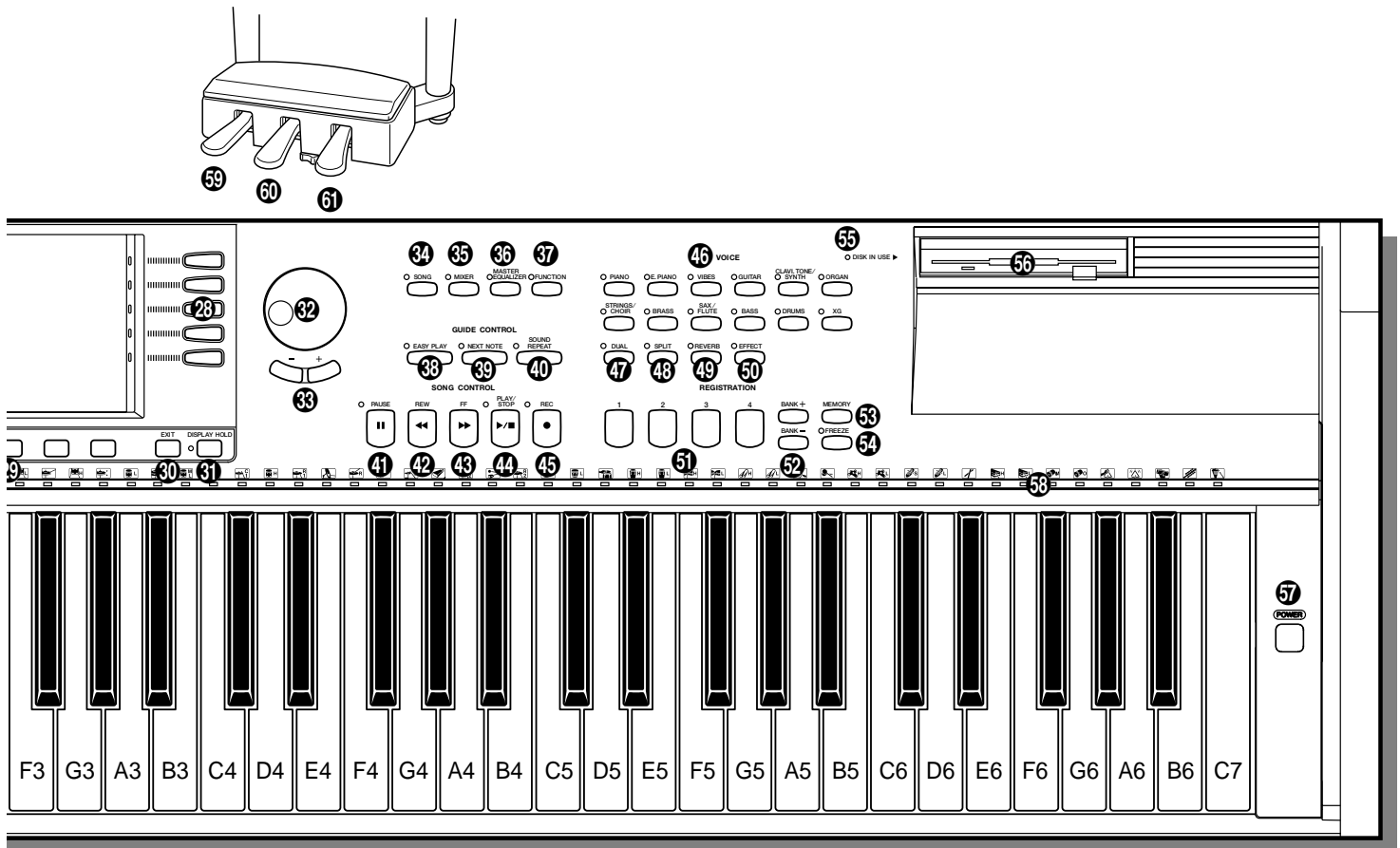
- 6** STYLE buttons page 47
- 7** [DISK/CUSTOM] page 68
- 8** [PIANIST] page 57
- 9** [HARMONY] page 62
- 10** [ONE TOUCH SETTING] page 63
- 11** [ACMP ON] page 57
- 12** [VIRTUAL ARRANGER] page 64
- 13** [INTRO] page 51
- 14** [MAIN A] page 50
- 15** [MAIN B] page 50
- 16** [ENDING] page 53
- 17** [FADE IN/OUT] page 52
- 18** [BEAT] page 52
- 19** [METRONOME] page 54
- 20** TEMPO [-/+] page 49

Start/Stop Section

- 21** [TAP] page 51
- 22** [SYNCHRO] page 51
- 23** [START/STOP] pages 50, 53

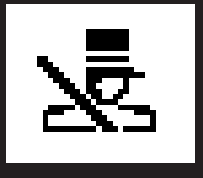
Display Control Section

- 24** [CONTRAST] page 15
- 25** PAGE [◀, ▶] page 14
- 26** LCD display page 12



27	Left LCD buttons	page 12
28	Right LCD buttons	page 12
29	LCD buttons	page 12
30	[EXIT]	page 15
31	[DISPLAY HOLD]	page 15
32	Data dial	page 13
33	[-/+]	page 13
34	[SONG]	page 88
35	[MIXER]	page 17
36	[MASTER EQUALIZER]	page 19
37	[FUNCTION]	page 128
Guide Control Section		
38	[EASY PLAY]	page 100
39	[NEXT NOTE]	page 100
40	[SOUND REPEAT]	page 101
Song Control Section		
41	[PAUSE]	page 99
42	[REW]	page 99
43	[FF]	page 99
44	[PLAY/STOP]	page 89
45	[REC]	page 108
Voice Section		
46	VOICE buttons	page 27
47	[DUAL]	page 33

48	[SPLIT]	page 36
49	[REVERB]	page 41
50	[EFFECT]	page 44
Registration Section		
51	REGISTRATION [1] - [4]	page 84
52	BANK [-] [+]	page 83
53	[MEMORY]	page 84
54	[FREEZE]	page 86
55	DISK IN USE lamp	page 7
56	Floppy disk drive (3.5")	page 7
57	[POWER]	page 9
58	Keyboard guide lamps	page 104
59	Soft pedal	page 40
60	Sostenuto pedal	page 40
61	Damper pedal	page 40
62	[MIC.VOL.]	page 154
63	[MIC.]	page 154
64	[PHONES]	page 154
65	[EXP.PEDAL]	page 18
66	AUX OUT [R], [L/L+R]	page 155
67	AUX IN [R], [L/L+R]	page 154
68	[TO HOST]	page 155
69	[HOST SELECT]	page 155
70	MIDI [IN], [OUT], [THRU]	page 155

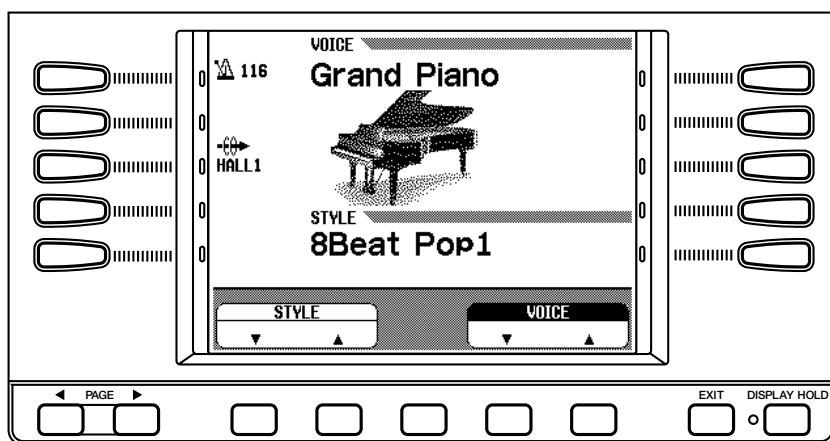


Basic Operation

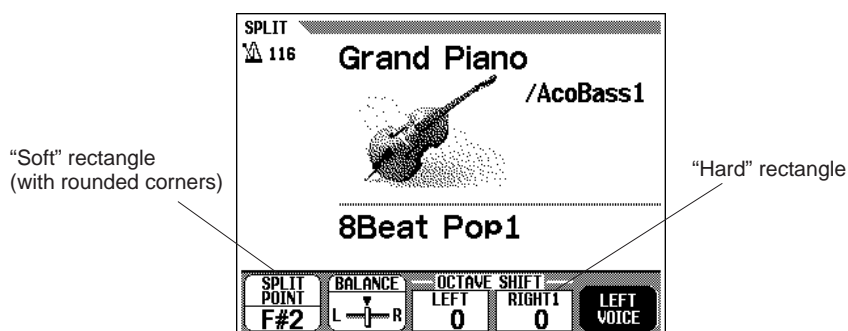
Virtually all of the CVP-98/96's operations are done from the LCD display. When you press a button on the panel once, the relevant function's display appears. Depending on the display that appears, you can conveniently perform various functions and change values/settings by using the buttons located directly below, or to the left or right of the LCD, and the data dial and [-/+] buttons at the right of the LCD. Once you're familiar with these operations, you can easily use other functions in the same way.

LCD Display and LCD Buttons

The five buttons located under the LCD display are referred to as the LCD buttons. These buttons are used either to select the corresponding items displayed in the LCD or to change the values. The five buttons located to the left and right of the LCD display are referred to as the left/right LCD buttons. These buttons are used to directly select parameters and settings in the LCD display.



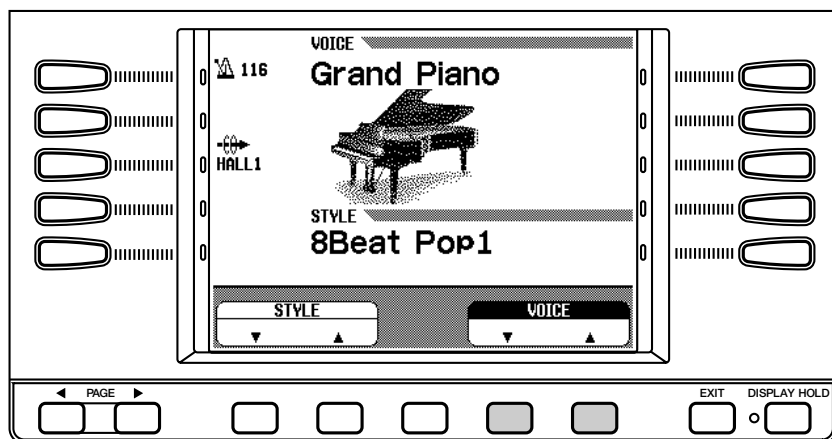
The functions of the LCD buttons differ depending on the selected LCD. Keep in mind that functions are enclosed in two types of rectangles, one a "soft" rectangle with rounded corners, the other a "hard" rectangle with 90-degree corners.



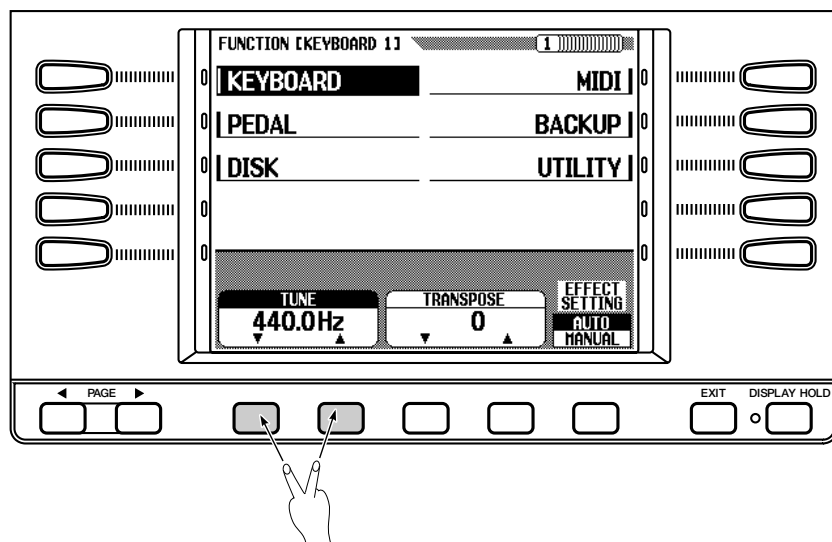
■ When function is within “soft” rectangle:.....

First press the appropriate LCD button under the display (the selected item is highlighted), and use the data dial or [-/+] to set the items which are in “soft” rectangles with rounded corners.

Alternately, after selecting the item, press the LCD button again. For example, when selecting a voice from the display shown below, press the LCD button below **VOICE ▼▲** at the lower right. **VOICE** then is highlighted, and you can select the desired voice by using the data dial or the [-/+] buttons.



For functions or parameters that have ▼ and ▲ or ◀ and ▶ indications, you can reset the value to its basic value by simultaneously pressing both LCD buttons (or both [-/+] buttons).



NOTE

Display Highlight

- When selecting an item or parameter in the display, the indication of the selected item is highlighted (appears in reverse display).

When holding down a button...

- In some cases, when one of the LCD buttons or [-/+] buttons is held down, the value or setting changes continuously.

NOTE

- There are some functions and parameters whose settings cannot be returned to the basic value even by pressing the ▼ and ▲ buttons, or the ◀ and ▶ buttons simultaneously.

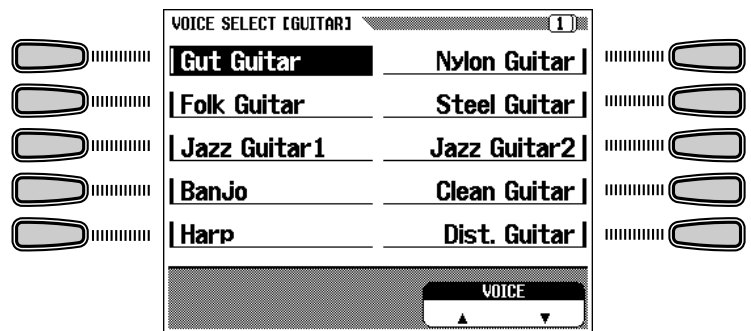
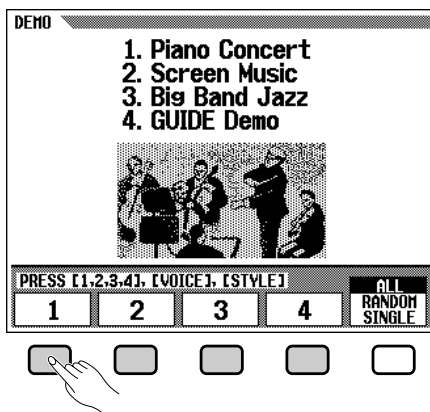
Basic Operation

■ When function is within “hard” rectangle:.....

Items within a “hard” rectangle can be directly selected or switched ON/OFF by simply pressing the corresponding LCD button located directly below the desired item.

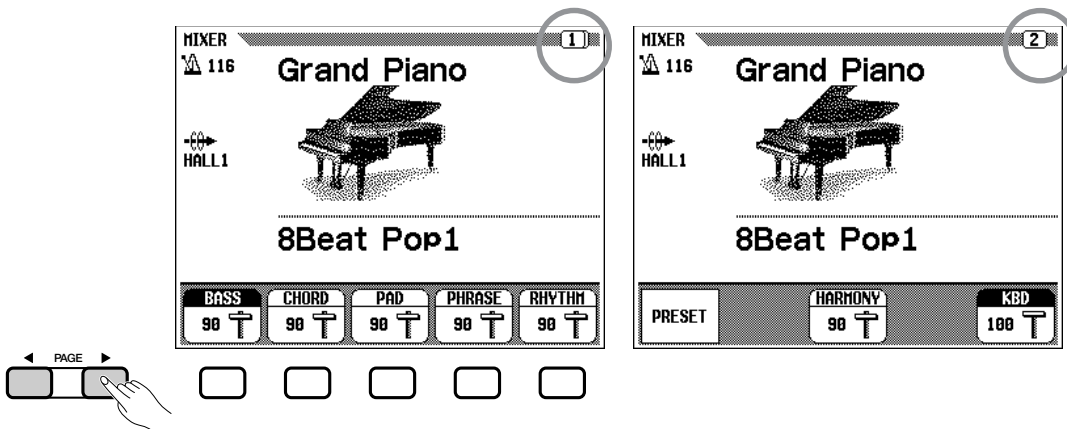
For example, when selecting the first Demo song in the display shown below, you can immediately begin playback of the first song by pressing the LCD button under **1**.

Settings which can be selected by using the left and right LCD buttons are surrounded by “hard” rectangles. Select these settings directly by pressing the left or right LCD buttons.



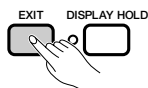
PAGE [◀] [▶] Buttons

Some of the CVP-98/96's functions are contained on successive display pages. To select the next page or previous page, press the appropriate PAGE [◀] [▶] button. The current page and the entire number of pages for the function are indicated at the top right of the display.



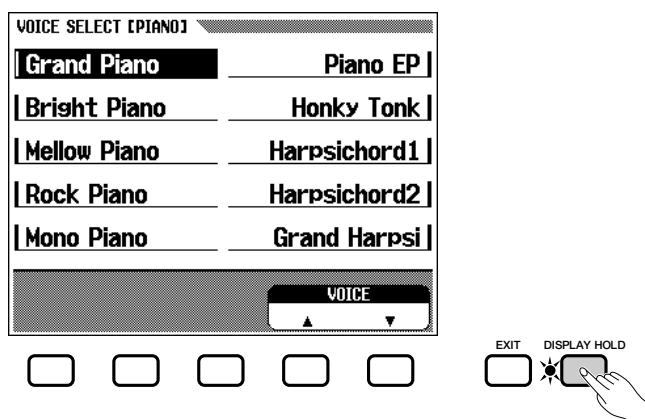
[EXIT] Button

Press [EXIT] in order to leave the current mode or return to the previous display.



[DISPLAY HOLD] Button

The [DISPLAY HOLD] button lets you keep the display from changing. For example, voices and accompaniment styles can be selected by pressing the VOICE button or STYLE button. The display of the selected voice/style appears for a few seconds, then changes to the previous display. Displays such as this that appear briefly are called pop-up displays. The [DISPLAY HOLD] lamp flashes to indicate that it is the pop-up display, and that the previous display will appear after a few seconds. By pressing the [DISPLAY HOLD] at this point, the lamp stays lit continuously and the selected display stays. Pressing [DISPLAY HOLD] again turns the lamp off and the display returns to the previous one.



NOTE

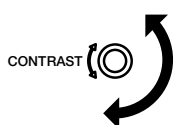
- If [DISPLAY HOLD] is pressed for any non pop-up display, and the lamp is lit up, the pop-up display cannot be opened.

NOTE

- The duration of pop-up displays can be set with the Pop-up Time parameter (page 153).

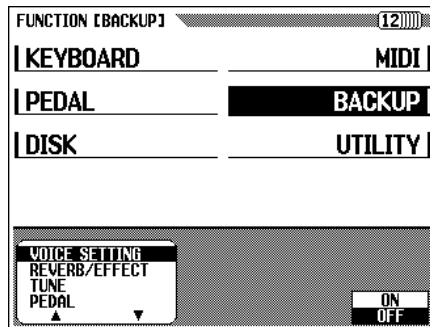
Adjusting the Contrast of the LCD Display

Turn the [CONTRAST] button in order to adjust the contrast or brightness of the display.



Memory Backup

The Backup function (page 147) can be used to maintain various values and settings, even after the power has been turned off. In the Backup function display, each parameter group to be backed up can be selected individually. Values and settings which are not backed up revert to the basic settings when the power is turned off.



When set to ON, the last setting of these parameters are retained in memory even after the power is turned off. For a list of the backup parameters, see page 147.

If the CVP-98/96 is left unused without the power being turned on for approximately a week, the backed up data is deleted and all the settings return to the basic settings. For this reason, you should turn on the power at least once a week and keep it on for a few minutes.

NOTE

Backup of the Last Settings

- For parameters which can be set to Backup ON/OFF, the basic setting is indicated as "Backup of last settings: ON (or OFF)" in the explanation of each parameter.
- Items set to Backup ON can be returned to the basic setting anytime by using the Recall function (page 148).

Display Messages

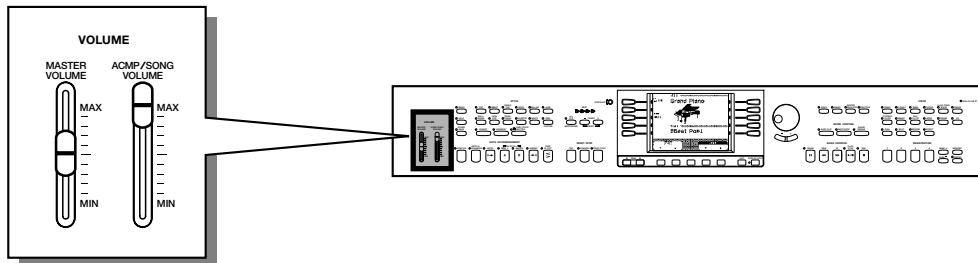
For ease of operation, the CVP-98/96 shows various messages that either prompt you to the next operation, ask for confirmation, or inform you that the last operation is not effective, valid or appropriate. When such messages appear, follow the instructions as shown. For details about each message, please refer to the "Messages" section on page 2 in the Reference Manual.





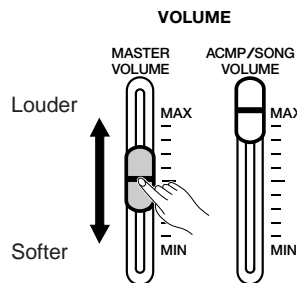
Adjusting the Volume

The CVP-98/96 has two sliders on the panel for adjusting the volume. It also allows you to adjust the volume of each part of the Automatic Accompaniment or song.



[MASTER VOLUME]

This determines the entire volume of the CVP-98/96.

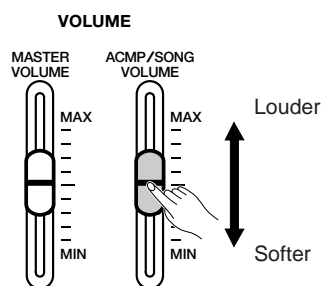


NOTE

- This also determines the output level of the signal at the [PHONES] and [AUX OUT] jacks.

[ACMP/SONG VOLUME]

This determines the playback volume of the Automatic Accompaniment and Songs.



NOTE

- This control has no effect on the volume of your keyboard performance.

[MIXER]

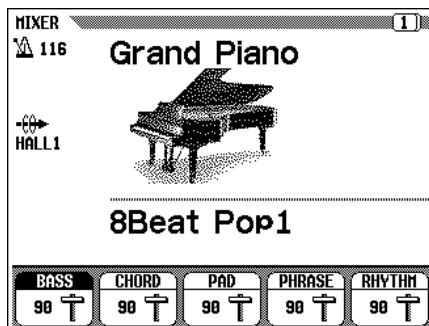
Call up the Mixer display by pressing [MIXER]. In the Mixer display, the volume of Automatic Accompaniment and individual parts of a song can be adjusted. Press [MIXER] again (or [EXIT]) to return to the previous display.

There are three types of mixer display, as shown below.

Adjusting the Volume

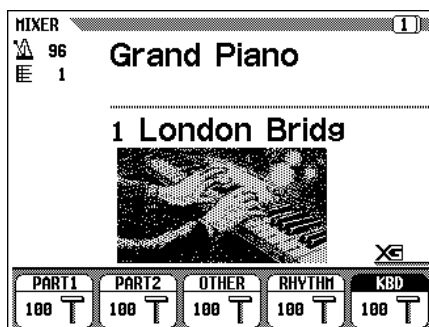
● Automatic Accompaniment Volume

See Automatic Accompaniment volume (page 60) for details.



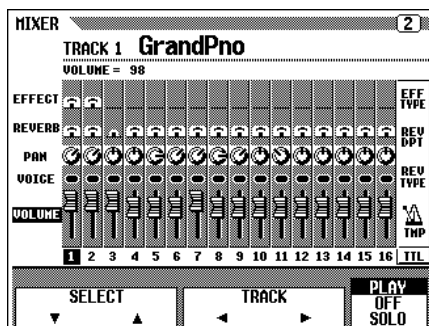
● Page 1, when using disk

See Song volume (page 94) for details.



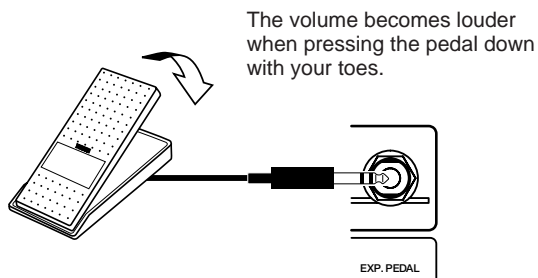
● Page 2, when using disk

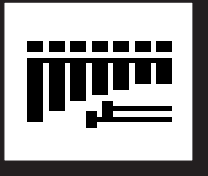
See Song volume (page 95) for details.



[EXP.PEDAL]

You can control the volume of your keyboard performance with your foot, by connecting the optional Yamaha FC7 foot controller to the [EXP.PEDAL] jack of the CVP-98/96.



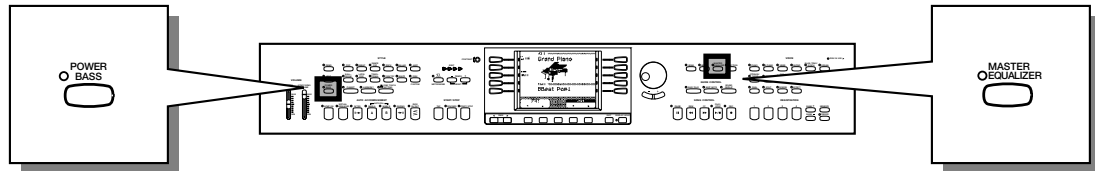


Adjusting the Timbre of the Sound

The sound timbre can be adjusted by using the [MASTER EQUALIZER] and [POWER BASS] (CVP-98 only) controls.

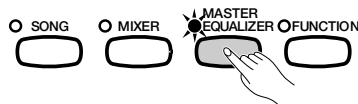
NOTE

- Distortion could result if these effects are set to higher levels. If this is the case, reduce the overall volume with the [MASTER VOLUME] control.



[MASTER EQUALIZER]

The lamp lights when the [MASTER EQUALIZER] button is pressed. The MASTER EQUALIZER display appears, allowing you to finely adjust the timbre of the sound with a five-band equalizer. Five preset settings are provided; use these as a basis for making your own settings. The set values affect all the parts.



■ Changing the Master Equalizer Settings

1 Select the type of equalization.

Use the left and right LCD buttons in the MASTER EQUALIZER display. Six different types are available: **FLAT**, **JAZZ**, **POPS**, **ROCK**, **CLASSIC**, and **USER**.

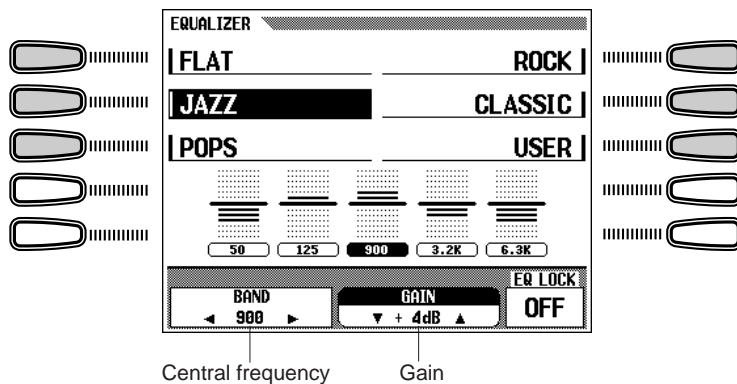
- ➔ The central frequency and the gain of the selected type will appear in the LCD display.

The gain becomes 0 for all frequencies when **FLAT** is selected.

NOTE

MASTER EQUALIZER type

- Basic setting: **FLAT**
- Backup of last settings: **OFF**



Adjusting the Timbre of the Sound

2 Select the band (frequency range) to be adjusted.

Select the band you wish to adjust by pressing the **BAND** ◀ or ▶ button.

- The central frequency of the selected band (expressed in Hz) is shown in the **BAND** ◀ ▶ section of the display.

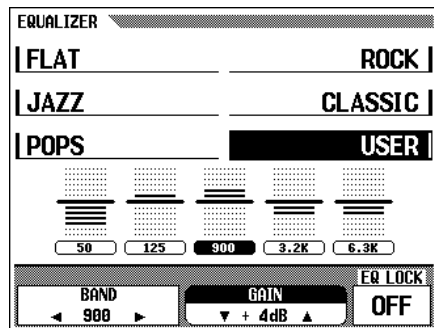
3 Change the value.

Change the value of the gain either by pressing the **GAIN** ▼ ▲ buttons, or by using the data dial or [-/+] buttons.

Since the value can be changed during playback, you can adjust the settings while listening to the changes in the sound.

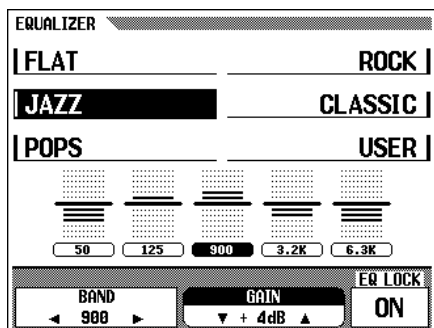
- The value is shown in the **GAIN** section of the display.

If you change the value (even slightly) when any type except **USER** is selected, **USER** will be highlighted and the newly set value will overwrite the original **USER** setting.



■ EQ LOCK ON/OFF

When equalizer setting values are contained in the song data or when the equalizer setting data is received via MIDI, the current settings in the MASTER EQUALIZER display will be overridden by the settings of the song data or MIDI data. Set the **EQ LOCK** to **ON** to prevent reception of this data, or set to **OFF** to enable reception.



NOTE

Gain

- Range: -12 — 0 — +12 (dB)

NOTE

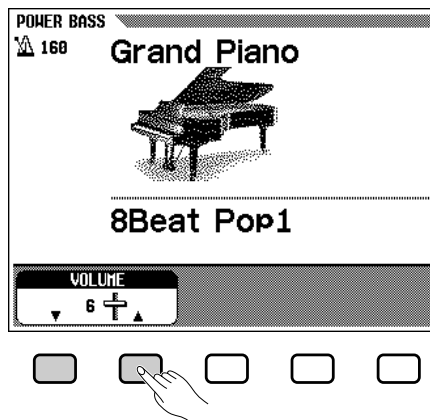
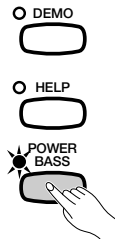
EQ LOCK ON/OFF

- Settings: ON/OFF
- Basic setting: OFF

Power Bass (CVP-98 only)

Press the **[POWER BASS]** button (the lamp lights) to emphasize the sounds of the lower range.

The amount of the emphasis can be changed by the **VOLUME** ▼ ▲ buttons in the POWER BASS display.



To turn off the Power Bass function and return the sound to normal, press the **[POWER BASS]** button again so that the lamp goes out.

NOTE

POWER BASS ON/OFF...

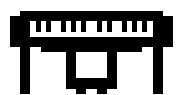
- Settings: ON/OFF
- Basic setting: OFF
- Backup of last settings: OFF

NOTE

VOLUME of POWER BASS

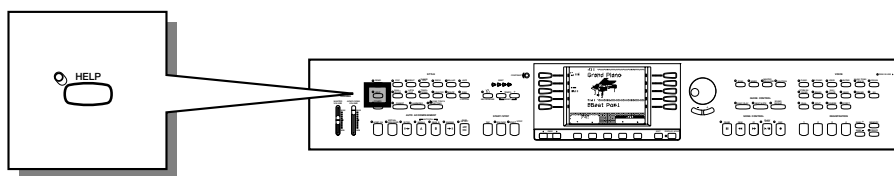
- Range: 1 — 10
- Basic value: 6
- Backup of last settings: OFF

CHAPTER 2: Help Mode and Demo



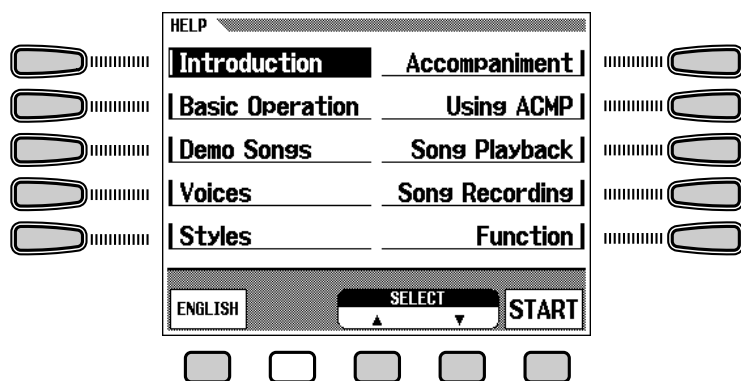
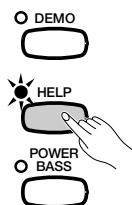
Using the Help Mode

The Help mode provides convenient explanations of the main functions of the CVP-98/96. As the explanations shown in the display automatically progress, the CVP-98/96 actually operates itself in demonstration — the CVP-98/96 sounds various voices and styles.



1 Call up the Help mode.

Press the [HELP] button. The Help menu display appears.



2 Select the language if necessary.

Select the desired language for help (ENGLISH, GERMAN, FRENCH, SPANISH or JAPANESE) by pressing the first LCD button at the bottom.

NOTE

- While the Help mode is active, no other operations can be used.

NOTE

- The selected language is always backed up even after the power is turned off.

3 Select the desired menu.....

Use the left/right LCD buttons to select the desired menu.

You can also select the menu by pressing the **SELECT ▼ ▲** buttons.

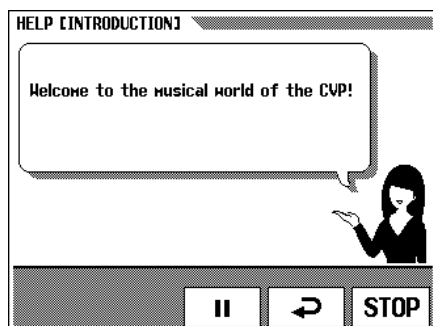
The selected menu is highlighted. Ten menus (listed below) are available.

Help Menus

- | | |
|--------------------|-------------------|
| 1. Introduction | 6. Accompaniment |
| 2. Basic Operation | 7. Using ACMP |
| 3. Demo Songs | 8. Song Playback |
| 4. Voices | 9. Song Recording |
| 5. Styles | 10. Function |

4 Start the explanation.....

Press **START** to begin the explanation of the selected menu.



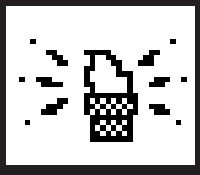
The display pages are advanced automatically. To pause the explanation, press **II**. Then, by pressing **↶**, you can return to the previous page and read the explanations.

➤ To resume the explanation, press **II** again.

5 Stop the explanation.....

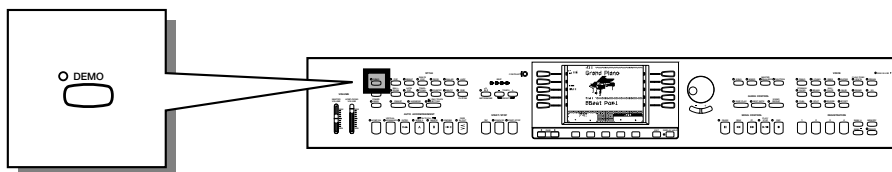
When the explanation is finished, the display automatically returns to the Help menu display. If you wish to stop the explanation while it is playing and return to the Help menu display, press the **STOP** button.

You can select another menu and read through other explanations, or you can exit from the Help mode and to go back to the main display by pressing **[HELP]** (or by pressing **[EXIT]**).



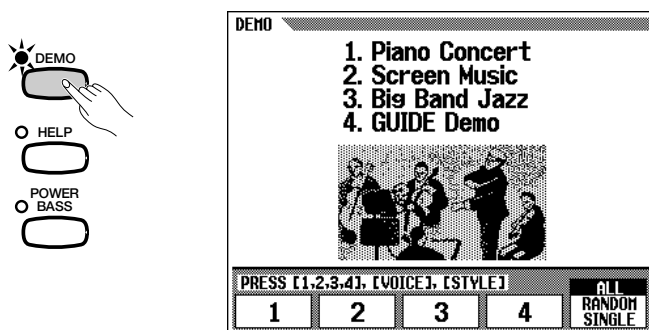
Demo Play

The CVP-98/96 features a total of 27 demo pieces: 4 entire Demo songs, 12 special pieces showcasing the voices, and 11 showcasing the styles. Listen to them all and hear what the CVP-98/96 can do.



1 Call up the Demo Play mode.

Press [DEMO]. The lamps of the STYLE button and VOICE button flash continuously, and the DEMO display appears.



2 Select the desired Play mode.

Select the desired play mode by pressing the LCD button at the right. The following three modes are available:

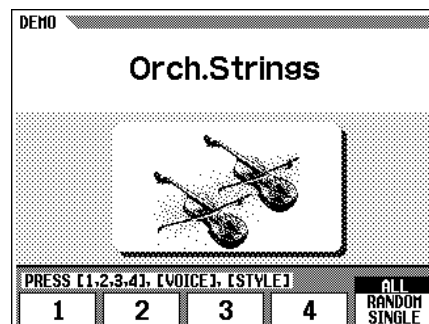
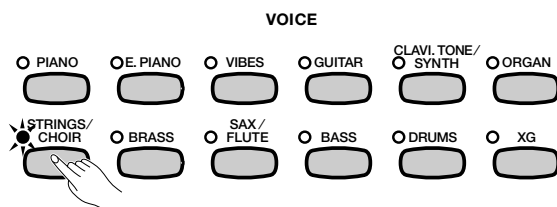
ALL	All the songs play back continuously in order, starting from the selected song. Playback continues repeatedly until stopped.
RANDOM	All the songs play back randomly, starting from the selected song. Playback continues repeatedly until stopped.
SINGLE	Only the selected song plays back. When the song is finished, playback stops automatically.

3 Select the song and start playback.

When the song is selected, the Demo automatically plays back in the currently selected Play mode. There are three ways to play back the song(s), as described below:

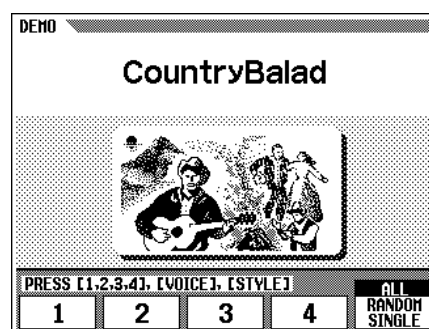
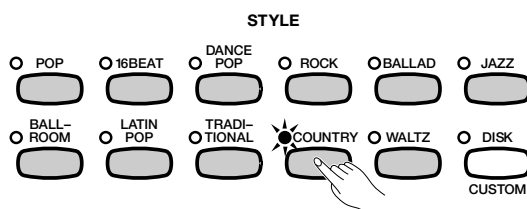
(A) To listen to a Demo song for voices, press the VOICE button corresponding to the desired voice.

→ Playback starts from the Demo song of the selected voice. The lamp of the corresponding VOICE button flashes.



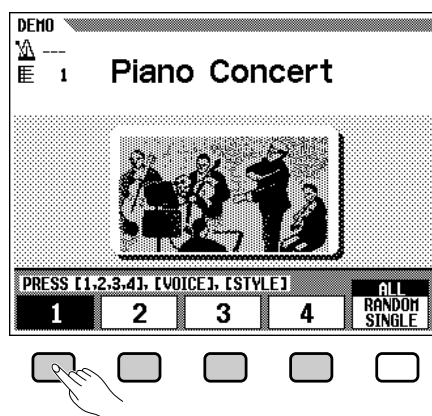
(B) To listen to a Demo song for styles, press the STYLE button corresponding to the desired style.

→ Playback starts from the Demo song of the selected style. The lamp of the corresponding STYLE button flashes.



(C) To listen to one of the entire Demo songs, press one of the LCD buttons corresponding to 1 - 4 in the display.

→ The currently selected song number is highlighted during playback.



Demo playback can also be started by pressing [START/STOP] or [PLAY/STOP].

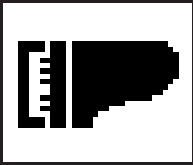
● Playing the keyboard with Demo playback

You can play the keyboard while the demo song is playing back. You can also change the tempo (page 49) and use the [REW], [FF] and [PAUSE] buttons. The Guide function (page 100) can also be used when playing back the “4. GUIDE Demo” song. However, the voice cannot be changed.

NOTE

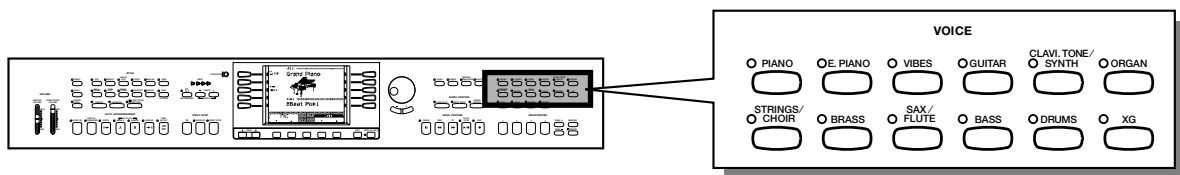
- Demo song data is not output through the [MIDI OUT] terminal; however, your keyboard performance data is output.

CHAPTER 3: Voices



Selecting Voices

The CVP-98/96 features a wealth of rich, authentic voices, including piano, strings and brass instruments. It also features a Keyboard Percussion function that lets you play the realistic drum and percussion sounds directly from the keyboard.



● Voice Types

- Clavinova Voices: 133
- XG Voices: 480
- Drum Kit: 12 kits

* For a list of the voices, see page 26 in the Reference Manual.

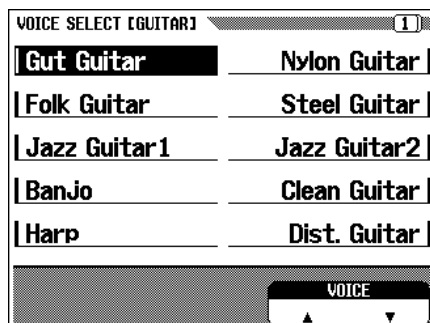
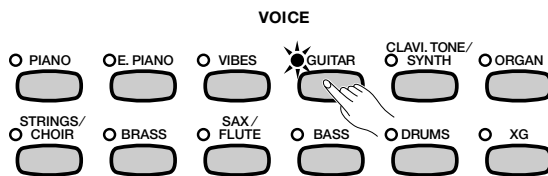
* The voices of the CVP-98/96 are divided into twelve groups, and each voice group is assigned to the corresponding VOICE button on the panel.

Selecting a Voice from the VOICE SELECT Display

1 Select the voice group.

Select the desired voice group by pressing the appropriate VOICE button.

→ The pop-up display of the VOICE SELECT display appears.



NOTE

Pop-up Display

- The pop-up display returns to the previous display after a few seconds. You can keep the pop-up display from changing by using the Display Hold function (page 15).

NOTE

Backing Up the Selected Voice

- The last selected voice in each group can be retained in memory, even after turning off the power, when the Backup function (page 147) is set to ON.
- When the power is turned ON, the GRAND PIANO voice is selected automatically. However, if the Backup function (page 147) is set to ON, the last selected voice will automatically be selected.

Selecting Voices

2 Select the voice.....

Select the desired voice by pressing the appropriate left/right LCD button.. The data dial and [-/+] buttons can be also used.

You can also select the voice by pressing the **VOICE ▼ ▲** buttons.

Some of the VOICE SELECT displays have several successive pages. Use the PAGE [◀] [▶] buttons to call up the various pages.

3 Play the selected voice.....

Adjust the volume by using the [MASTER VOLUME] slider.



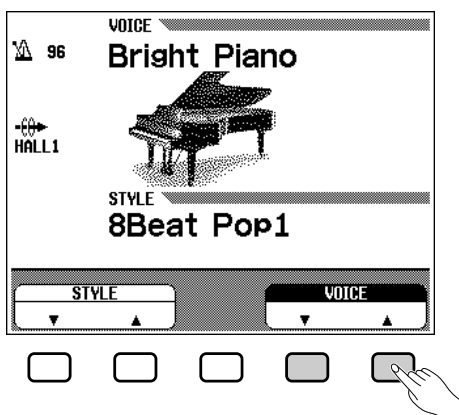
NOTE

Automatic Effect Settings

- Selecting a voice automatically selects the best-suited effects for that particular voice. You can disable this so that effects are not automatically selected by using the Effect Setting parameter (page 131).

Selecting Voices from the Main Display

You can also select a voice by using **VOICE ▼ ▲**, even after the VOICE SELECT display has changed back to the main display.



1 Press either **VOICE ▼** or **▲**.....

→ **VOICE** is highlighted.

2 Select the voice.....

Select the voice by using the data dial or [-/+] buttons. You can also select voices by pressing **VOICE ▼ ▲**. (When selecting a voice in this way, the voice can be selected not only from a certain voice group but from all voices.)

3 Play the voice.....

Adjust the volume by using the [MASTER VOLUME] slider.



NOTE

About XG Voices

- Yamaha's XG format is a major new enhancement to the GM (General MIDI) System Level 1 format. It provides for more instrument sounds and variations, as well as greater expressive control over voices and effects. XG also ensures compatibility with future instruments and software.

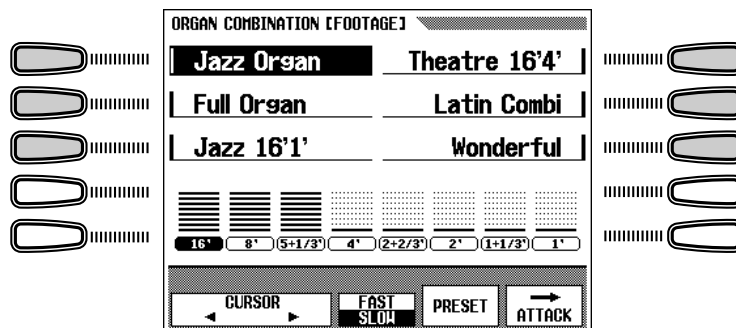
Organ Combination (Organ Combi.)

To call up the ORGAN COMBINATION display, press the [ORGAN] button and select **Organ Combi.** in the pop-up display. With the Organ Combination function in this display, you can select from six different kinds of organ sounds, and even create your own organ sounds by editing these voices.

■ Selecting Organ Combination Voices

Select the desired voice by pressing the left/right LCD buttons in the pop-up ORGAN COMBINATION display.

→ The settings of the selected voice are shown in the display.



■ Editing Organ Combination Voices

The editing features in this function let you recreate organ voices by adjusting several footage settings, just as on conventional organs. Various organ voices can be created by the setting combinations shown below.

● FOOTAGE display

- Footage volume setting (eight continuous voices corresponding to conventional organ footages)
- Setting the speed of the rotary speaker effect (FAST/SLOW)

● ATTACK display

- Attack Footage volume setting (three decay voices used as percussive attack sounds)
- Length setting (length of attack sound for decaying voices)
- Response setting (speed of sound starting for continuous voices)
- Attack Mode setting (EACH/FIRST)

To create a percussive organ sound, adjust the volume of the decay sound and the attack length of attack sound to appropriate settings, then add them to the continuous voice. To recreate the sound of a pipe organ with a slow attack, set the Response to a large value.

NOTE

- The edited voices can be backed up in sets of six by setting VOICE SETTING to ON (in the Function section's Backup parameter, page 147).

NOTE

- An asterisk (*) appears next to the voice name when the selected voice has been already edited.

NOTE

- **Rotary speed effect:** A rich, swirling chorus effect, created by actual rotation of a speaker.
- **Attack sound:** A sharp, percussive sound at the beginning of a note.
- **Attack Mode:** The manner in which the attack sound is output.

Selecting Voices

■ Editing the Voice

Select the desired voice for editing, then set each parameter.

The ORGAN COMBINATION has two display pages: [FOOTAGE] and [ATTACK]. Press the right-most LCD button to change between the displays. Press the **PRESET** button in each display to instantly return to the pre-edited voice.

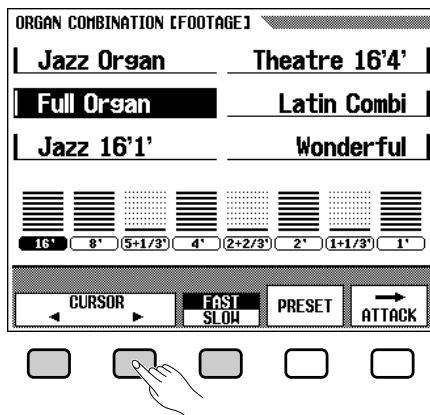
● Making settings in the ORGAN COMBINATION [FOOTAGE] display

Footage volume setting

Select the footage “bar” to be adjusted by using the **CURSOR** buttons, then set the volume by using the data dial or [-/+] buttons.

Setting the speed of the rotary speaker effect

Press the middle LCD button to change between **FAST/SLOW**.

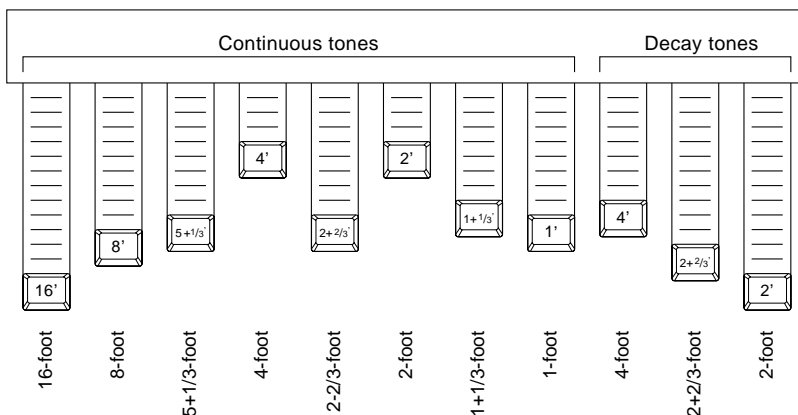


NOTE

- To call up the ATTACK display, press the **CURSOR** button when the cursor is at “1.”

● Voice Type and Volume Image (About Organ Footages)

The standard pitch is 8 feet. A setting of 4 feet is one octave higher than 8 feet, 2 feet is two octaves higher, and 1 foot is three octaves higher; 16 feet is one octave lower.



● Making Settings in the ORGAN COMBINATION [ATTACK] Display

Attack Footage Volume, Length, and Response settings

Select the appropriate bar in the display by pressing the **CURSOR** buttons, then set the Volume, Length or Response by using the data dial or [-/+] buttons.

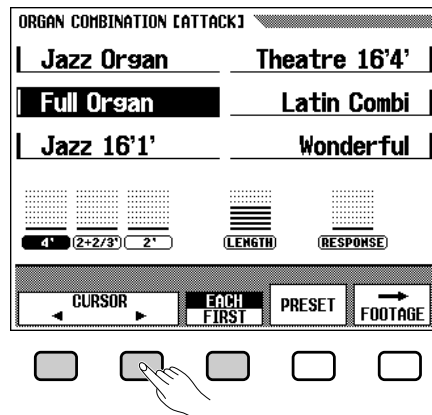
Setting the Attack Mode

Press the middle LCD button to change between the **EACH/FIRST** settings. When set to **EACH**, the attack sound is applied to all played notes.

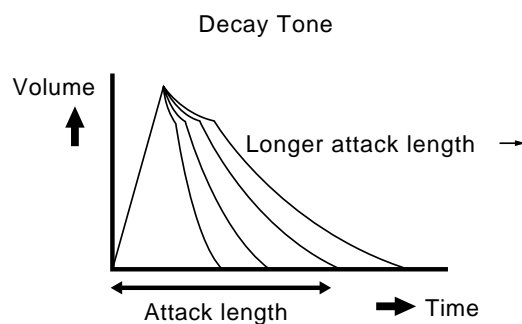
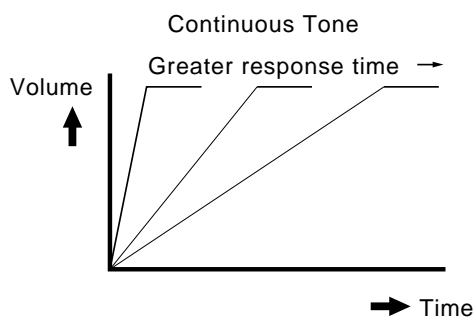
When set to **FIRST**, the attack sound is applied only to the first played note in a legato sequence, and is not applied to subsequent notes played in legato.



- To call up the FOOTAGE display, press the **CURSOR** ◀ button when the cursor is at "4."



● Image of Attack Length and Response



Keyboard Percussion

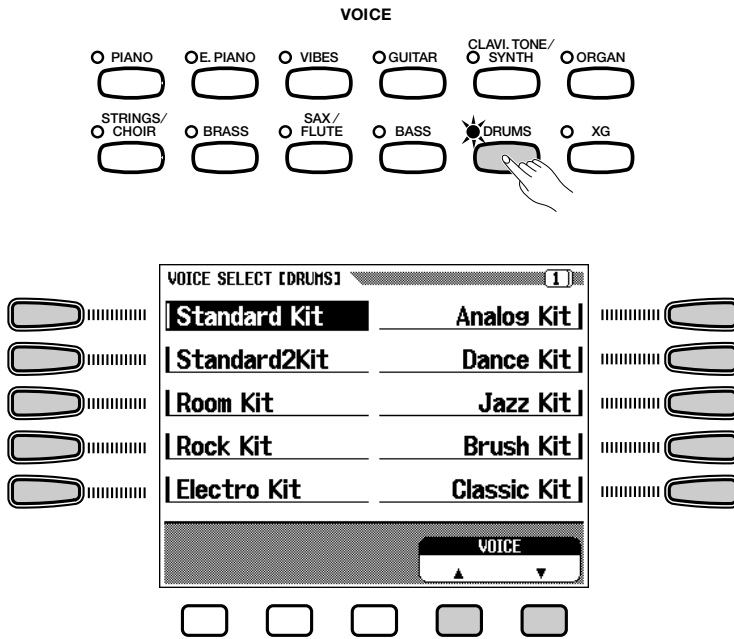
The CVP-98/96 has twelve Drum Kits in the [DRUMS] voice group. When one of the Drum Kits is selected, various drum and percussion sounds are assigned individually to the keys, letting you play the sounds from the keyboard.

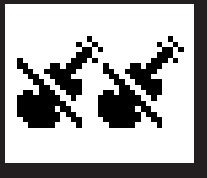
The various drum/percussion instruments of the Standard Kit are marked by symbols above the assigned keys.

See the Drum Kit list on page 32 in the Reference Manual for the types of percussion sounds in each Drum Kit.

NOTE

- When a Drum Kit is selected, only the keys with drum or percussion symbols printed above them will sound.
- The Transpose (page 130), Tune (page 130) and Octave Shift (page 35, 38) functions do not affect the Drum Kits.

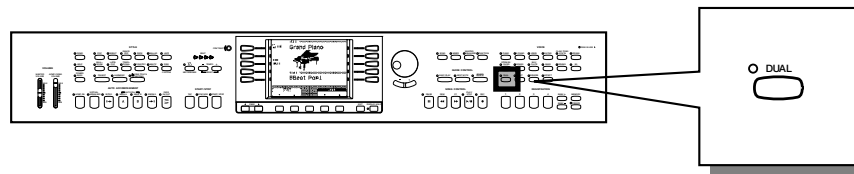




Playing Two Voices Simultaneously — Dual Mode

The Dual mode of the CVP-98/96 allows you to select and play two different voices simultaneously in a layer. This makes it easy to create exceptionally rich and thick tonal textures. The volume balance and the depth of detune* can also be set for the two voices.

**Detune: This lets you finely change the pitch of the two different voices, creating a "thicker" sound.*



Selecting the Dual Voice

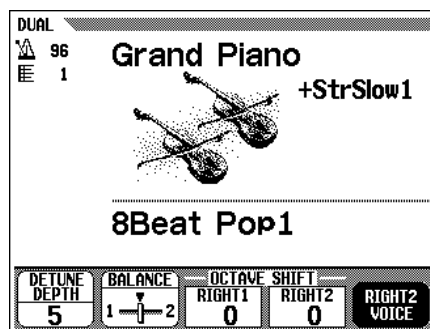
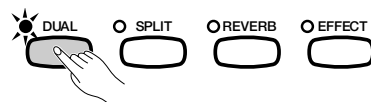
1 Select the first voice.

Select a voice in the normal way. (See page 27.)

2 Call up the Dual mode.

To call up the Dual mode, press the [DUAL] button.

→ The DUAL pop-up display appears.



3 Select the second voice.

The second voice can be selected from the DUAL pop-up display. Select the second voice by using the VOICE buttons, and/or the data dial or [-/+] buttons after pressing **RIGHT2 VOICE** (it is highlighted). Pressing **RIGHT2 VOICE** also advances through the available voices; holding it down advances continuously.

NOTE

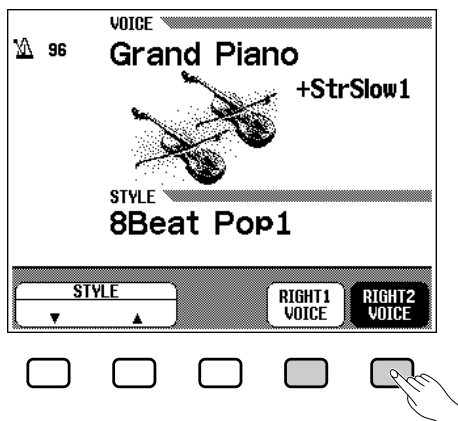
Second Voice

- Range: All voices
- Basic setting: Strings Slow 1
- Backup of last settings: OFF

Playing Two Voices Simultaneously — Dual Mode

The second voice can be selected from all available voices, including the same voice as the first one.

You can also select a voice by using **RIGHT1 VOICE** or **RIGHT2 VOICE**, even after the pop-up DUAL display has changed back to the main DUAL display.



After pressing **RIGHT1 VOICE** or **RIGHT2 VOICE** (it is highlighted), select the voice in the normal way.

4 Exit the Dual mode.

Press **[DUAL]** again; the lamp turns off and the Dual mode is no longer active.

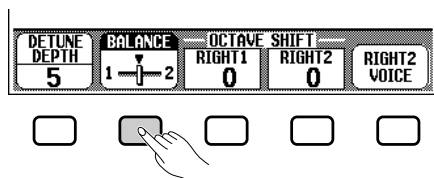
NOTE

- If you select a voice with the **VOICE** buttons when **STYLE ▼▲** is highlighted, selection of the **RIGHT1 VOICE** is automatically called up.

Setting the Volume Balance of the Two Voices

1 Press **BALANCE** from the DUAL pop-up display.

→ It is highlighted.



2 Adjust the volume balance of the two voices by using the data dial or **[-/+]** buttons.

Pressing **BALANCE** lets you increase the level of the second voice only. Equal balance can be instantly reset by simultaneously pressing the **[-/+]** buttons.

NOTE

Volume Balance

- Basic setting: Equal volume
- Backup of last settings: OFF

NOTE

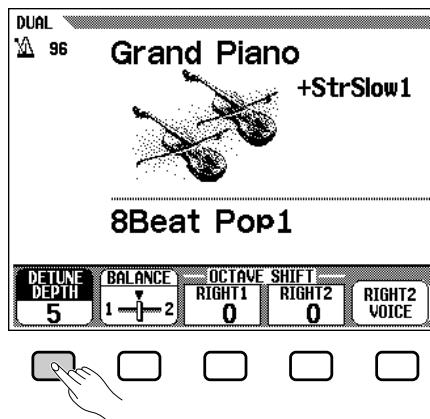
- The Volume Balance setting globally affects all voice combinations. Different settings cannot be made for each voice.

Detuning the Pitches of the Two Voices

The Detune Depth setting lets you produce an even richer sound by finely detuning the pitch of the two voices.

1 Press DETUNE DEPTH from the DUAL pop-up display.

→ It is highlighted.



2 Adjust the Detune Depth by using the data dial or [-/+] buttons.

You can also press **DETUNE DEPTH** to increase the value. The higher the value, the greater the Detune Depth.

NOTE

Detune Depth

- Range: 0 - 10
- Basic setting: 5
- Backup of last settings: OFF

NOTE

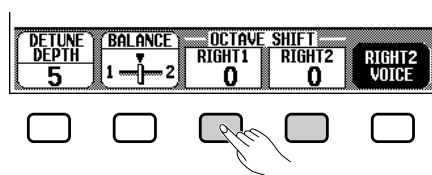
- The Detune Depth setting globally affects all voice combinations. Different settings cannot be made for each voice.

Changing the Octave Setting of the Two Voices

The Octave Shift setting lets you adjust the pitch of the two voices up or down an octave.

Press either **RIGHT 1** or **RIGHT 2** of the **OCTAVE SHIFT** parameter in the DUAL pop-up display.

→ The values change each time the LCD button is pressed. Available settings are -1, 0, and +1.



NOTE

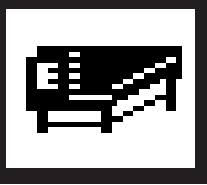
Octave Shift

- Settings: -1 (1 octave lower)
0 (no octave shift)
+1 (1 octave higher)
- Basic setting: 0 (no octave shift)
- Backup of last settings: OFF

NOTE

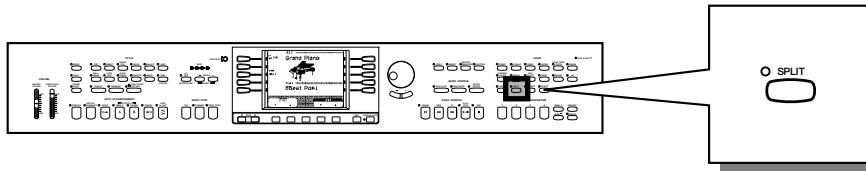
About the Sounding Range for Octave Shift

- Notes below and above the original 88-key range (A-1 to C7) sound one octave higher and lower, respectively.
- The **RIGHT1** setting is effective for normal playing with one voice, and also affects the **RIGHT1** setting in the **SPLIT** mode (page 36).



Playing Two Voices from Different Sides of the Keyboard — Split Mode

The Split mode of the CVP-98/96 allows you to select and play two different voices with your left and right hands — for example, play bass with the left and piano with the right.



Selecting the Split Voice

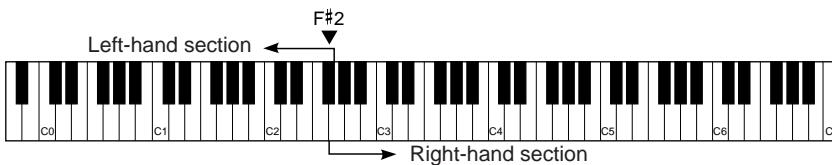
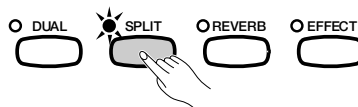
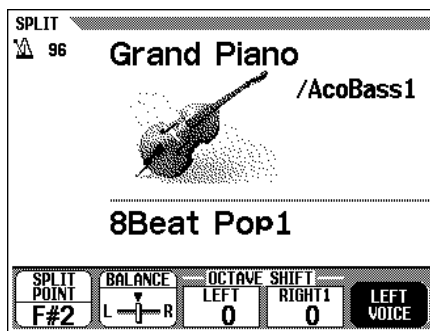
1 Select the voice for the right keyboard range.

Select the desired voice in the normal way.

2 Call up the Split mode.

To call up the Split mode, press the [SPLIT] button.

→ The SPLIT pop-up display appears.



3 Select the voice for the left keyboard range.

The second voice can be selected from the SPLIT pop-up display. Select the second voice by using the VOICE buttons, and/or the data dial or [-/+] buttons after pressing **LEFT VOICE** (it is highlighted). Pressing **LEFT VOICE** also advances through the available voices; holding it down advances continuously.

The second voice can be selected from all available voices.

NOTE

Left range voices

- Range: All voices
- Basic setting: Acoustic Bass 1
- Backup of last settings: OFF

Playing Two Voices from Different Sides of the Keyboard — Split Mode

You can also select a voice by using **LEFT VOICE** or **RIGHT1 VOICE**, even after the pop-up SPLIT display has changed back to the main SPLIT display.



NOTE

- If you select a voice with the VOICE buttons when **STYLE** ▼▲ is highlighted, selection of **RIGHT1 VOICE** is automatically called up.

After pressing **LEFT VOICE** or **RIGHT1 VOICE** (it is highlighted), select the voice in the normal way.

4 Exit the Split mode.

Press [**SPLIT**] again; the lamp turns off and the Split mode is no longer active.

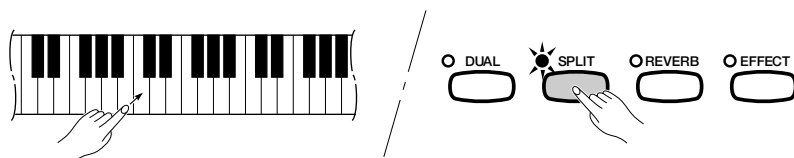
Changing the Split Point

You can set the point dividing the right and left keyboard ranges at any desired key position.

The basic setting of the Split Point is F#2.

To set the Split Point, press the desired key while holding down the [**SPLIT**] button. (The Split Point key is included in the left range.)

- ➔ The keyboard guide lamp corresponding to the selected Split Point lights, and the key name is displayed at **SPLIT POINT** in the display.



NOTE

Split Point

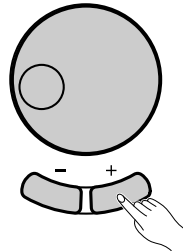
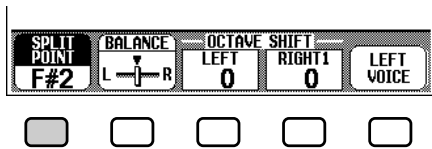
- Range: All keys
- Basic setting: F#2
- Backup of last settings: OFF

NOTE

- The Split Point setting globally affects all voice combinations. Different settings cannot be made for each voice.

Playing Two Voices from Different Sides of the Keyboard — Split Mode

You can also set the Split Point by using the data dial or [-/+] buttons, after pressing **SPLIT POINT** in the pop-up SPLIT display. Pressing **SPLIT POINT** also advances the value. To reset the value to the basic setting of F#2, simultaneously press the [-/+] buttons.



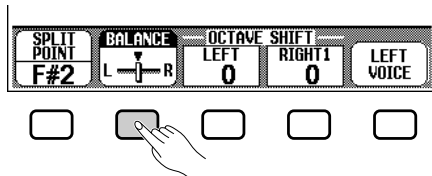
NOTE

- You can use the Damper Range function (page 134) to set the damper pedal to affect one or both sides of the Split. Available settings are:
 - Only right range
 - Only left range
 - Both ranges
- In the basic setting, the damper pedal affects only the right range.

Setting the Volume Balance of the Two Voices

1 Press **BALANCE** from the SPLIT pop-up display.

→ It is highlighted.



NOTE

- Volume Balance**
- Basic setting: Equal volume
 - Backup of last settings: OFF

NOTE

- The Volume Balance setting globally affects all voice combinations. Different settings cannot be made for each voice.

2 Adjust the volume balance of the two voices by using the data dial or [-/+] buttons.

Pressing **BALANCE** lets you increase the level of the right voice only. Equal balance can be instantly reset by simultaneously pressing the [-/+] buttons.

Changing the Octave Setting of the Two Voices

The Octave Shift setting lets you adjust the pitch of the two voices up or down an octave.

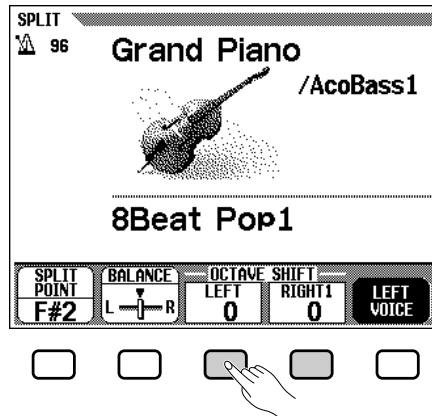
Press either **LEFT** or **RIGHT1** of the **OCTAVE SHIFT** parameter in the SPLIT pop-up display.

→ The values change each time the LCD button is pressed. Available settings are -1, 0, and +1.

NOTE

- Octave Shift**
- Settings: - 1 (1 octave lower)
 - 0 (no octave shift)
 - + 1 (1 octave higher)
 - Basic setting: 0 (no octave shift)
 - Backup of last settings: OFF

Playing Two Voices from Different Sides of the Keyboard — Split Mode



NOTE

About the Sounding Range for Octave Shift

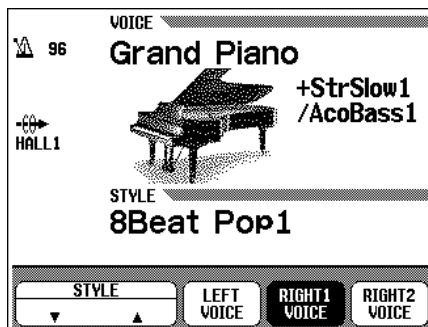
- Notes below and above the original 88-key range (A-1 to C7) sound one octave higher and lower, respectively.
- The **RIGHT1** setting is effective for normal playing with one voice. This setting also affects the **RIGHT1** setting in the DUAL mode (page 33).

NOTE

- You can use the Single Finger, Multi Finger, or Fingered modes (page 56) of the Automatic Accompaniment function with the Split mode. In this case, pressing the keys in the left range will sound the Automatic Accompaniment voices as well as the left range voice.

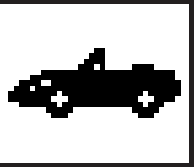
Using the Dual and Split Functions Simultaneously

The [DUAL] and [SPLIT] buttons can be turned on simultaneously. The right range set for the Split mode can be used with two voices (Dual) when using the Dual and Split modes simultaneously.



NOTE

- The volume balance of Dual and Split can be set individually.
- The Octave Shift **RIGHT1** parameter is set the same for both Dual and Split.

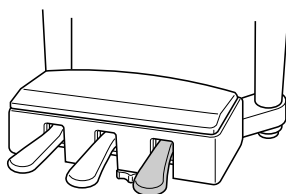


Using the Pedals

The CVP-98/96 has three pedals.

Damper Pedal (Right)

The damper pedal performs the same function as the damper pedal on an actual acoustic piano, letting you sustain the sound of the voices even after releasing your fingers from the keys.

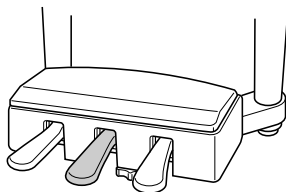


NOTE

- Certain voices in the [DRUMS] or [XG] groups may not be affected by use of the damper pedal.

Sostenuto Pedal (Center)

If you play a note or chord on the keyboard and press the sostenuto pedal while the note(s) are held, those notes will be sustained as long as the pedal is held, but all subsequently played notes will not be sustained. This makes it possible to sustain a chord, for example, while other notes are played staccato.



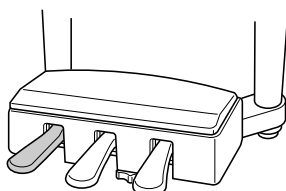
NOTE

- Certain voices in the [DRUMS] or [XG] groups may not be affected by use of the sostenuto pedal.
- Certain voices, such as [STRINGS] or [BRASS], sustain continuously when the sostenuto pedal is pressed.

Soft Pedal (Left)

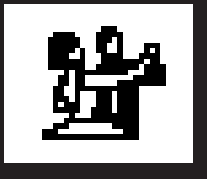
Pressing this pedal reduces the volume and slightly changes the timbre of the notes you play.

You can also assign one of many other functions to this pedal; for example, you can use it to start/stop the Automatic Accompaniment, or use it to play Fill Ins. See page 133 for details.



NOTE

- The effect of the soft pedal may differ slightly depending on the selected voice.

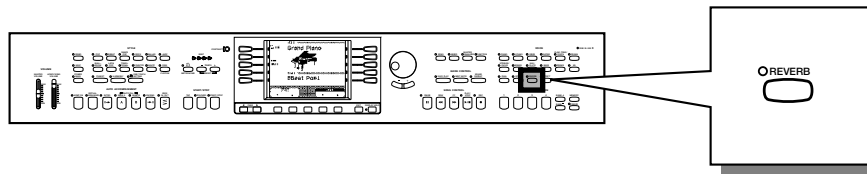


Reverb

Reverb is an effect that recreates the decaying reflections of a sound in a performance space, and reproduces the special ambience of a concert hall. The CVP-98/96 has various Reverb effects and allows you to set the Reverb Depth to your preference. The Reverb effect here is also applied to the microphone input signal received via the [MIC.] jack.

NOTE

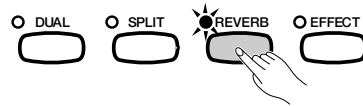
- The same Reverb Type is applied to both the sound of the CVP-98/96 and the microphone input.



Reverb ON/OFF

To turn on reverb, press the [REVERB] button. The lamp lights and Reverb is set to ON.

- ➔ The REVERB pop-up display appears, indicating the current Reverb Type and Depth settings.



To turn Reverb off, press [REVERB] again. The lamp turns off and Reverb is no longer active.

NOTE

Reverb ON/OFF

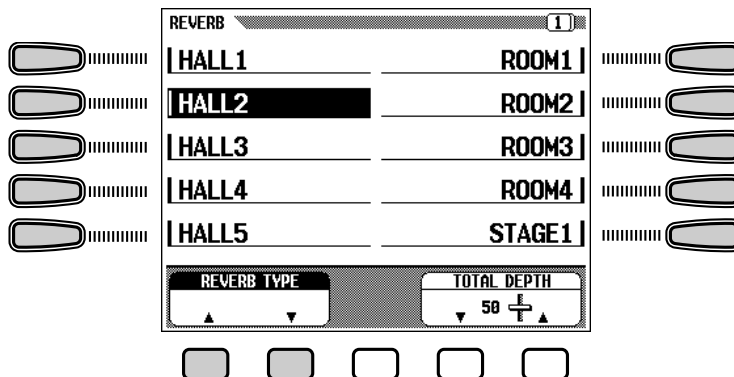
- Basic setting: Differs depending on the voice.
- Backup of last settings: OFF

NOTE

- The REVERB ON/OFF panel button has no effect on the Song, Accompaniment playback and microphone sound.
- The Reverb applied to the microphone signal is always on. To turn it off, set the Reverb Depth to "0".
- When Reverb is on, the Reverb icon "☞" and the Reverb Type are indicated in the main display.

Selecting the Reverb Type

Select the Reverb Type by pressing the left/right LCD buttons in the REVERB pop-up display.



NOTE

Reverb Type

- Range: (Refer to the Reverb Type list.)
- Basic setting: Differs depending on the accompaniment style. (The assigned type for the selected style will automatically be selected. In other words, when you select a different style, the reverb type corresponding to the new style will automatically be selected.)
- Backup of last settings: OFF

You can also select the Reverb Type by using the **REVERB TYPE** ▼ ▲ buttons, or by pressing **REVERB TYPE** (to highlight the parameter) and using the data dial or [–/+] buttons.

● Reverb Type List

HALL1	Concert hall reverb.
HALL2	
HALL3	
HALL4	
HALL5	
ROOM1	Small room reverb.
ROOM2	
ROOM3	
ROOM4	
STAGE1	Reverb for solo instruments.
STAGE2	
STAGE3	
PLATE	Simulated steel plate reverb.
WHITE ROOM	Distinctive short reverb with initial delay.
TUNNEL	Simulation of long tunnel-like space.
BASEMENT	Small, highly reflective room reverb.

NOTE

- The Reverb Type setting globally affects all voices. Different settings cannot be made for each voice.
- The indication “XG REVERB” is displayed when receiving via MIDI a reverb type which is not on the panel.

NOTE

Keep in mind...

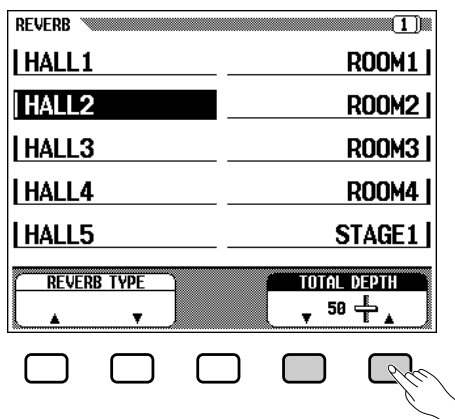
- Depending on the selected voice, the depth of the effect may sound stronger or weaker, even though the same Reverb Type is selected.
- The effect cannot be applied to the sounds input through the AUX IN [R] [L/L+R] jacks.

NOTE

- If the Reverb Type in Effect (page 45) is selected and both [REVERB] and [EFFECT] are set to on, both reverb effects will be applied.

Setting the Total Depth

The overall depth of the selected Reverb Type can be set with the Total Depth parameter (**TOTAL DEPTH** ▼ ▲).



You can also set it by pressing **TOTAL DEPTH** ▼ ▲ (it is highlighted) and using the data dial or [–/+] buttons.

The values can be changed in 5-unit steps. To reset the value to the basic setting of 50, simultaneously press **REVERB TYPE** ▼ ▲ or simultaneously press the [–/+] buttons.

NOTE

Total Depth

- Range: 0 (no effect) — 100 (maximum)
- Basic setting: 50
- Backup of last settings: OFF

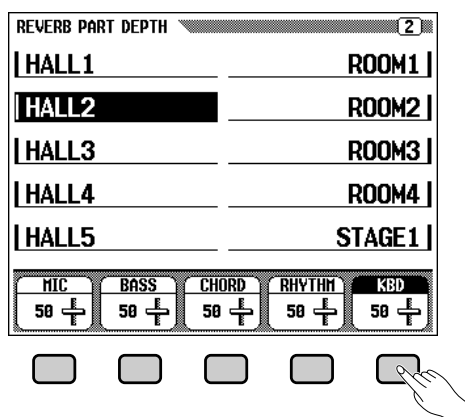
NOTE

- The Total Depth setting globally affects all voices. Different settings cannot be made for each voice.
- Different Reverb Depth settings can be made for each part. (Refer to the next section.)

Setting the Depth for Each Part — Reverb Part Depth

The Reverb Part Depth parameter lets you make different Reverb Depth settings for the microphone input connected to the [MIC.] jack, the rhythm, bass, and chord parts of the Automatic Accompaniment (page 47), as well as the parts you play from the keyboard.

To use this, call up the REVERB PART DEPTH display in the second page of the REVERB pop-up display by using the PAGE [◀] [▶] buttons.



Select the desired part by using the **MIC.**, **BASS**, **CHORD**, **RHYTHM** and **KBD** (keyboard) in the REVERB PART DEPTH display. You can also select several parts and adjust their settings simultaneously.

- Set the Reverb Depth of the highlighted part by using the data dial or [-/+] buttons. The values can be changed in 5-unit steps.

You can also advance the Depth value by pressing **MIC.**, **BASS**, **CHORD**, **RHYTHM** or **KBD** (keyboard). To reset the value to the basic setting of 50, simultaneously press the [-/+] buttons.

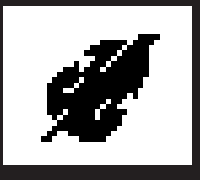
NOTE

Reverb Part Depth

- Range: 0 (no effect) — 100 (maximum) for each part
- Basic setting: 50 for each part
- Backup of last settings: OFF

NOTE

- The actual Reverb Depth is dependent on both the Part Depth and Total Depth settings. In other words, if one of the settings is "0" (no effect), no Reverb will be produced even if the other setting is "100."



Voice Effects

The CVP-98/96 has various types of effects besides Reverb that enhance the sound of the voices or create wild, special effects. You can also adjust the depth of the effect as desired. The Effect here is also applied to the microphone input signal received via the [MIC.] jack.

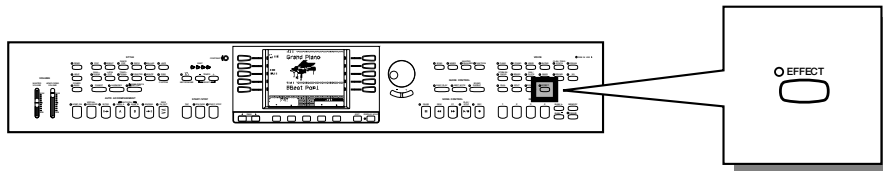


Automatic Effect Settings

- Selecting a voice automatically selects the best-suited effects for that particular voice. You can disable this so that effects are not automatically selected by using the Effect Setting parameter in the Function section (page 131).



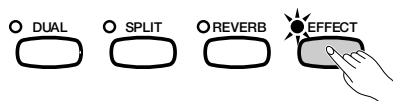
- The same Effect Type is applied to both the sound of the CVP-98/96 and the microphone input.



Effect ON/OFF

To turn Effect on, press [EFFECT]. (The lamp lights.)

- ➔ The EFFECT pop-up display appears and the current Effect Type and Depth are shown.



EFFECT	
HALL1	ROOM3
HALL2	STAGE1
HALL3	STAGE2
ROOM1	STAGE3
ROOM2	CHORUS1
EFFECT TYPE	RESET
▲ ▼	R1 DPT 50
	MIC DPT 0

To turn Effect off, press [EFFECT] again. (The lamp turns off.)



- If the Effect Depth is set to 0, the [EFFECT] lamp will not light.



Effect ON/OFF

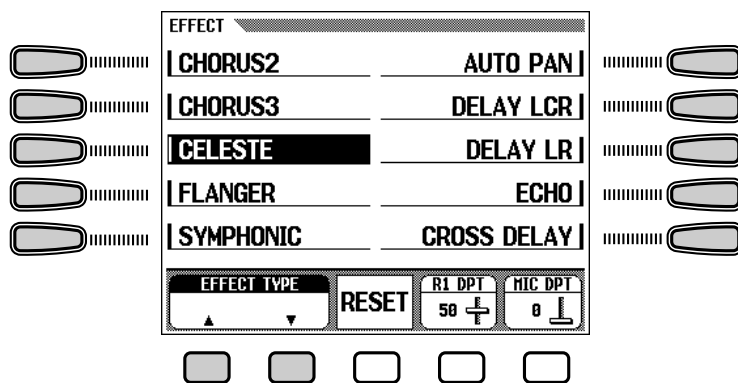
- Basic setting: Differs depending on the voice.
- Backup of last settings: OFF



- When Effect is on, the Effect icon "⊕" and the Effect Type are indicated in the main display.

Selecting the Effect Type

Select the Effect Type by pressing the left/right LCD buttons in the EFFECT pop-up display.



You can also select the Effect Type by using the **EFFECT TYPE** ▼ ▲ buttons, or by pressing **EFFECT TYPE** (to highlight the parameter) and using the data dial or [-/+] buttons.

To reset the value to the basic setting, simultaneously press **EFFECT TYPE** ▼ ▲ or simultaneously press the [-/+] buttons.

The Reverb Types in the list below can also be selected from the effect display.

● Effect Type List

Reverb Types (selectable from the Effect display)

HALL1	Concert hall reverb.	STAGE1	Reverb for solo instruments.
HALL2		STAGE2	
HALL3		STAGE3	
ROOM1	Small room reverb.		
ROOM2			
ROOM3			

Effect Types

CHORUS1	Conventional chorus program with rich, warm chorusing.	DELAY L,R	Initial delay for each stereo channel, and two separate feedback delays.
CHORUS2		ECHO	Stereo delay.
CHORUS3		CROSS DELAY	Complex effect that sends the delayed repeats "bouncing" between the left and right channels.
CELESTE	Three-phase LFO for richer, more pronounced chorusing.	TREMOLO	Rich Tremolo effect with both volume and pitch modulation.
FLANGER	Pronounced three-phase modulation with slight metallic sound.	ROTARY FAST	Rotary speaker simulation.
SYMPHONIC	Exceptionally rich & deep chorusing.	ROTARY SLOW	Rotary speaker simulation.
AUTO PAN	Several panning effects that automatically shift the sound position (left, right).	PHASER	Pronounced, metallic modulation with periodic phase change.
DELAY L,C,R	Three independent delays, for the left, right and center stereo positions.	WAH	Repeating filter sweep "wah" effect.

NOTE

- Range: (Refer to the Effect Type list.)
- Basic setting: Differs depending on the voice.
- Backup of last settings: OFF

NOTE

- When other effect type or OFF messages are received via MIDI, **HG EFFECT** is indicated in the display.
- The word "delay" refers to the echo-like effect of delayed repeats of the sound.

NOTE

When Using the DUAL or SPLIT Function:

- When the effects of both voices are set to ON, and the types are different, the effect for the second voice of the Dual mode or the left voice of the Split mode may be temporarily cancelled in some cases. After this point, if you subsequently increase the Effect Depth value of the second voice of Dual mode or of the left range voice of SPLIT mode, the effects will be applied to both voices.

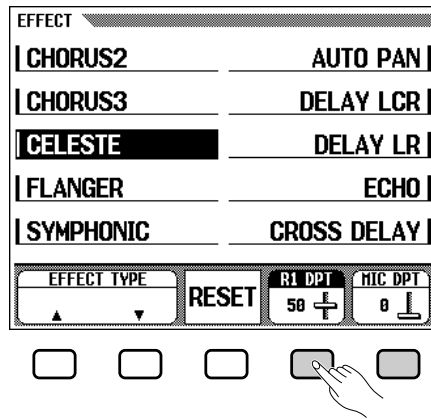
NOTE

- If the Reverb Type in Effect is selected and both [REVERB] and [EFFECT] are set to on, both reverb effects will be applied.

Setting the Effect Depth

The Effect Depth parameter lets you adjust the degree or depth of the currently selected effect type. To set this, press **R1 DPT** or **MIC DPT** (to highlight the corresponding parameter), and use the data dial or [-/+] buttons.

Depending on the currently selected voice, the **R1 DPT** indication may automatically change to the **R2 DPT**, or **L DPT**. Use **MIC DPT** to set the Effect Depth applied to the microphone input connected to the [MIC.] jack.



The following parameters can be selected by first selecting the corresponding voice from the main display of the Dual or Split modes.

R1 DPT	First voice of Dual mode or right voice of Split mode
R2 DPT	Second voice of Dual mode
L DPT	Left voice of Split mode

Pressing **R1 DPT** or **MIC DPT** also advances the value. To reset the value to the basic setting, simultaneously press the [-/+] buttons.

NOTE

Effect Depth

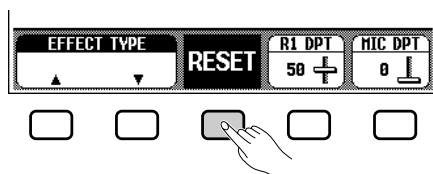
- Range: 0 (no effect) — 100 (maximum)
- Basic setting: Differs depending on the voice. (microphone = 0)
- Backup of last settings: OFF

NOTE

- If the Effect Depth is set to 0, the [EFFECT] lamp will not light.

Restoring the Basic Settings

You can easily restore the basic settings of the selected voice's **EF-FECT TYPE** and **R1 DPT** parameters by pressing **RESET** in the display.



CHAPTER 4: Accompaniment Styles

(Rhythm and Auto Accompaniment)

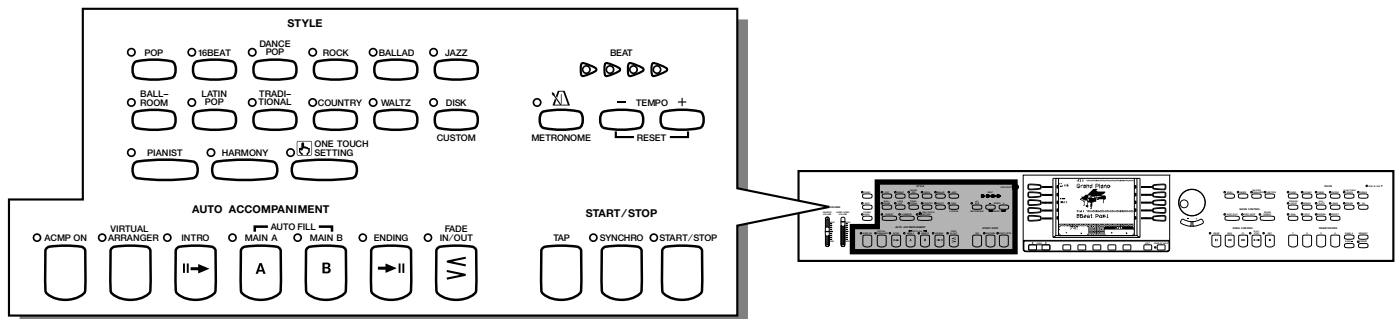


Selecting Accompaniment Styles...

The CVP-98/96 has 100 musical “Styles” that can be used as a basis for rhythm accompaniment, or fully orchestrated rhythm, bass, and chord accompaniment (Auto Accompaniment; page 56).



- The CVP-98/96 also features forty special [PIANIST] styles consisting of only piano voices, which you can use with the Auto Accompaniment feature. (These styles will not sound if Auto Accompaniment is not in use.) (See page 57.)



● Auto Accompaniment

Auto Accompaniment provides full instrumental backing, using all the parts included with the style. When not using Auto Accompaniment, only the rhythm part sounds. (For details on Auto Accompaniment, see page 50.)

The 100 preset Styles of the CVP-98/96 are divided into eleven groups, and each style group is assigned to the corresponding STYLE button on the panel.



- For information on the styles, see the Style List on page 34 in the Reference manual.

Selecting a style from the STYLE SELECT Display

1 Select the accompaniment style group.....

Select the desired style group by pressing the appropriate STYLE button.

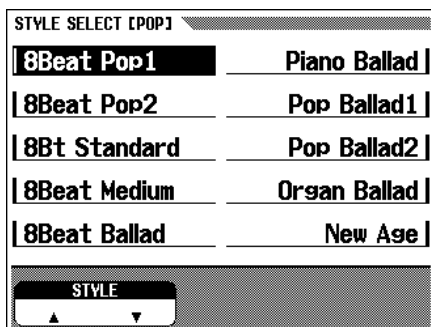
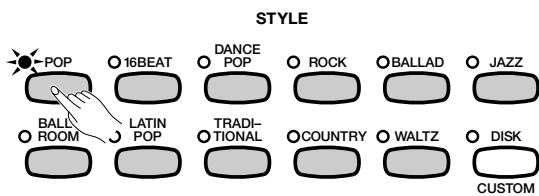
- The STYLE SELECT pop-up display appears.



Pop-up Display

- The pop-up display returns to the previous display after a few seconds. You can keep the pop-up display from changing by using the Display Hold function (page 15).

Selecting Accompaniment Styles



NOTE

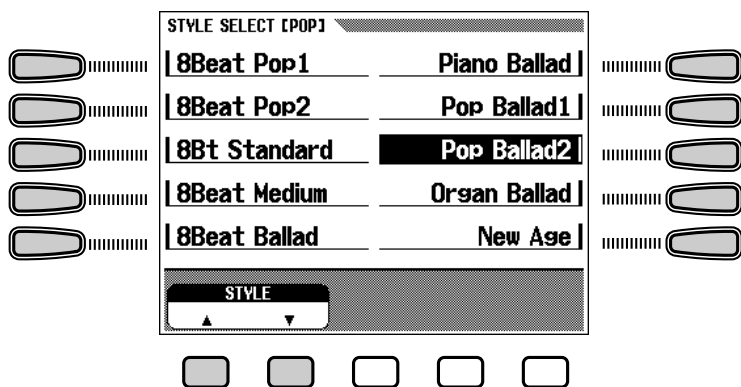
- The last selected style in each group can be retained in memory, even after turning off the power, when the Backup function (page 147) is set to ON.
- When the power is turned ON, the 8Beat Pop1 style is selected automatically. However, if the Backup function (page 147) is set to ON, the last selected style will automatically be selected.

2 Select the Style.....

Select the desired style by pressing the appropriate left/right LCD button.

The data dial and [-/+] buttons also can be used.

You can also select the style by pressing the **STYLE ▼ ▲** buttons.

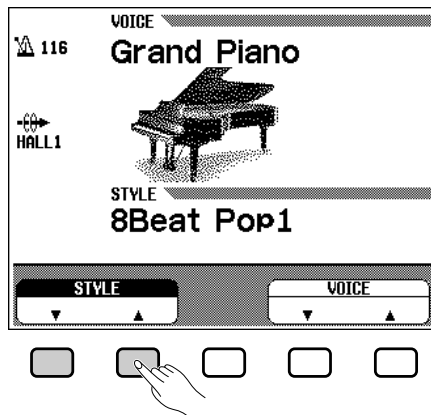


Selecting styles from the Main Display

You can also select a style by using **STYLE ▼ ▲**, even after the STYLE SELECT display has changed back to the main display.

NOTE

- When Style Buttons are Inactive**
- Accompaniment style cannot be selected in the Song Play mode.



NOTE

[DISK/CUSTOM]

- The CVP-98/96 features a [DISK/CUSTOM] button that allows you to use styles on optional Style File Disks (page 80) or your original styles (page 68).

1 Press either STYLE ▼ or ▲.

→ STYLE is highlighted.

2 Select the style.

Select the style by using the data dial or [-/+] buttons. You can also select styles by pressing **STYLE ▼ ▲**. (When selecting a style in this way, the style can be selected not only from a certain style group but from all styles.)

Tempo Control and Volume Adjustment

Whenever you select a different style, the preset tempo for that style is also selected, and the tempo is shown at the left side in the main display. (Unless you try changing the style during playback, in which case the same tempo is maintained.)

Press the **TEMPO [-/+]** buttons. (The tempo indication in the main display is highlighted.)

- ➔ Use the data dial or [-/+] buttons to set the tempo. You can also press either TEMPO [-/+] button briefly to decrement or increment the tempo value by one, or hold the button for continuous decrementing or incrementing. (In the STYLE SELECT pop-up display, only the TEMPO [-/+] buttons can be used.)

NOTE

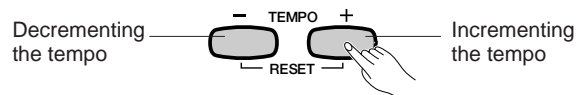
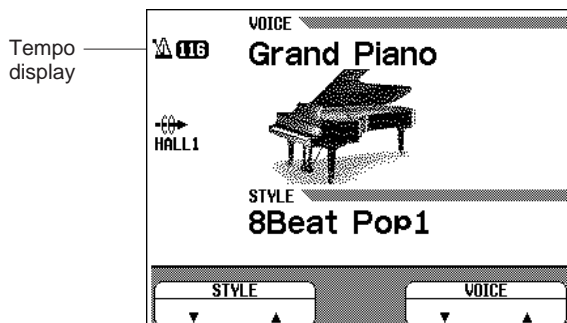
Tempo

- Range: 32 — 280
- Basic setting: Differs depending on the style.
- Backup of last settings: OFF

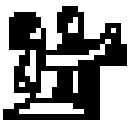
NOTE

Restoring the Basic Style Tempo

- You can restore the preset tempo for the selected Style at any time by simultaneously pressing both TEMPO [-/+] buttons.



Use [ACMP/SONG VOLUME] to control the volume of the style.



Starting/Stopping the Accompaniment Style

Starting the Accompaniment Style

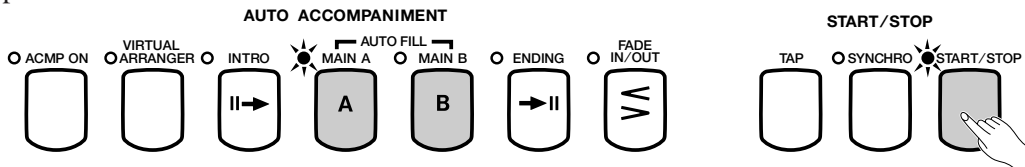
There are several ways to start the accompaniment style, as described below:

■ Straight Start

Press the [START/STOP] button.

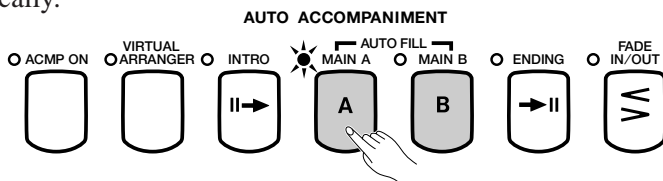
→ The lamp lights up and the style starts.

Each of the styles also has two main variations that can be selected by pressing the [MAIN A] or [MAIN B] buttons. The lamp of the currently selected pattern lights. Main A is the basic pattern of the style and Main B is a variation or rearrangement of the Main A. Judicious switching between Main A and Main B patterns within a song can add variety and make the overall rhythm more interesting. Switching during playback automatically plays a fill in (Auto Fill) before changing to the new pattern.



● Auto Fill

Press the [MAIN A] or [MAIN B] button during playback of the style. The lamp of the button flashes and the Fill-in pattern plays automatically.



■ After automatic playback of the Fill-in, the rhythm pattern will change as described:

- When Main A is playing back and [MAIN A] is pressed
→ Changes to [MAIN A].
- When Main A is playing back and [MAIN B] is pressed
→ Changes to [MAIN B].
- When Main B is playing back and [MAIN A] is pressed
→ Changes to [MAIN A].
- When Main B is playing back and [MAIN B] is pressed
→ Changes to [MAIN B].

The Fill-in pattern keeps repeating when [MAIN A] or [MAIN B] is held down.

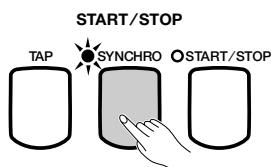
If you press the flashing button earlier than the last eighth note of the measure while the Fill-in is playing back, the Auto Fill function will be released.

If you press [MAIN A] or [MAIN B] after the last eighth note of the measure during style playback, the pattern changes to the Fill-in pattern from the next measure.

■ Synchronized Start.....

This method lets you start the style by simply playing a note or chord on the keyboard.

To use this, press the [SYNCHRO] button. (The lamp lights.) The [BEAT] lamp flashes in time with the selected tempo, indicating that Synchronized Start is in stand-by. (To cancel Synchronized Start, press the [SYNCHRO] button again so the lamp turns off.)

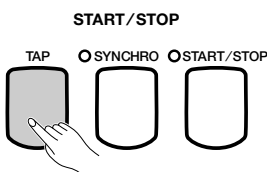


Press one of the [INTRO], [MAIN A], or [MAIN B] buttons to select the starting pattern, then play the keyboard to start the Style.

■ Tap Start

This function lets you set the tempo and start the style in one operation.

Simply tap the [TAP] button at the desired tempo — four times for 2- and 4-beat styles, three times for 3-beat styles, and five times for 5-beat styles.



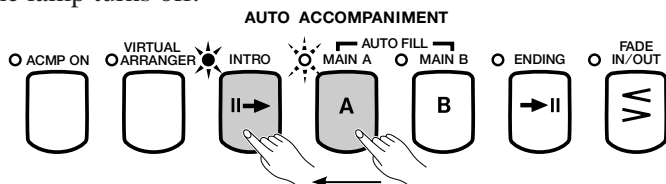
When playing a 4-beat song... → ...tap 4 times.

The [TAP] button can also be used to change the tempo during style playback (by tapping the button twice). In this case the tap “click” will not sound.

■ Start With an Introduction

First press the [MAIN A] button, then the [INTRO] button. (The [INTRO] lamp lights and the [MAIN A] lamp flashes.) This indicates that the style will start with the Intro A pattern and be followed automatically by the Main A pattern.

To cancel starting with an introduction, press the [INTRO] button so that the lamp turns off.



To start the style, press the [START/STOP] button, or press the [SYNCHRO] button and play a note or chord on the keyboard.

- ➔ The [INTRO] lamp turns off and the [MAIN A] lamp lights when the pattern changes from Intro A to Main A.

NOTE

- If the [SYNCHRO] is pressed during style playback, style playback stops and Synchronized Start is automatically set to stand-by.
- When the Split mode is used or when a split point is set for Auto Accompaniment, only the left-hand section of the keyboard can be used for Synchronized Start. (See page 36.)

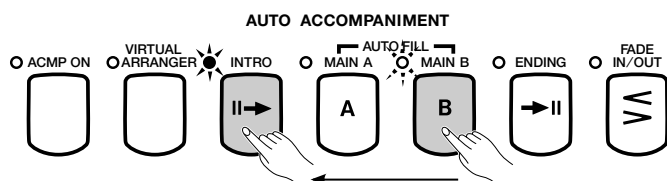
NOTE

- If you do not tap the [TAP] button the required number of times (i.e., 3 times for a 3-beat style), the Tap Start function will be canceled after a few seconds.

Starting/Stopping the Accompaniment Style

There are two introduction patterns: Intro A and Intro B.

If you press **[INTRO]** after pressing **[MAIN B]**, the style starts with the Intro B pattern, followed by Main B.



NOTE

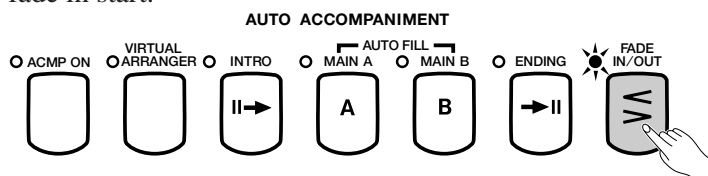
- If you press the **[MAIN A]** button before pressing **[INTRO]** and then press **[MAIN B]**, playback starts with Intro A and continues automatically with the Main B pattern. (The reverse is also true: i.e., selecting Intro B with **[MAIN B]** before pressing **[INTRO]**, then pressing **[MAIN A]** to continue with Main A.)

Start with Fade In

This function lets you gradually fade in the volume of the Style with any of the start methods above.

Press the **[FADE IN/OUT]** button (the lamp lights) and fade in start is set to stand-by.

Press the **[FADE IN/OUT]** button again to turn the lamp off and cancel the fade in start.



To start the style, press the **[START/STOP]** button, or press the **[SYNCHRO]** button and play a note or chord on the keyboard.

- The lamp flashes during the fade in, and the lamp turns off when the fade in is completed.

[FADE IN/OUT] can be set to on no matter which pattern (**[INTRO]**, **[MAIN A]**, **[MAIN B]**, **[ENDING]**) is selected.

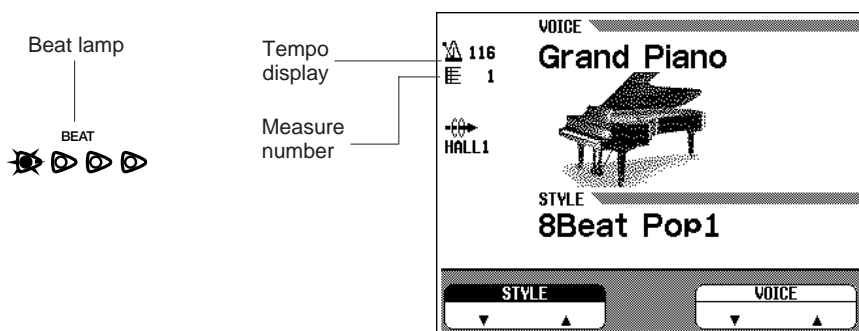
Starting styles with the Left Pedal

You can also use the left pedal to start the style by setting the the Left Pedal function (page 133) to Start/Stop. The pedal can also be set to control Break, Fade-in/out, Fill-in, or Ending. This setting is exceptionally convenient, since it lets you control the style with your foot while leaving both hands free to play.

[BEAT]

During style playback, the left-most beat lamp (red) flashes on the first beat of each measure, and the other lamps (green) flash for each successive beat. The current tempo and measure number are shown at the left side of the LCD display.

Starting/Stopping the Accompaniment Style



Break

When the Left Pedal function (page 133) is set to **BREAK**, you can use the left pedal to trigger a break (silence) in the accompaniment for dynamic effect.

Holding down the left pedal creates the break, and playback resumes from the top of the next measure after the pedal is released.

To cancel the break, press the left pedal again during the break.

Stopping the accompaniment style

To stop style playback, press the [START/STOP] button.

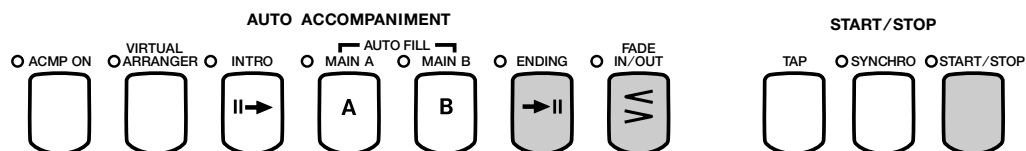
To playback an ending pattern before stopping, press the [ENDING] button.

Press [ENDING] a second time during playback to produce a ritardando (gradually slowing) ending.

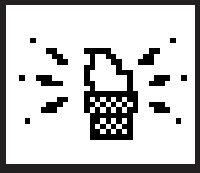
Different ending patterns are provided for the MAIN A and MAIN B variations. (The [ENDING] lamp lights during ending playback). The [MAIN A] lamp also lights when changing from the Main A pattern, and the [MAIN B] lamp lights when entering from Main B.) The ending begins from the top of the next measure if the [ENDING] button is pressed on or after the second beat of a measure.

You can have the accompaniment fade out (gradually decrease in volume to silence) and automatically stop by pressing the [FADE IN/OUT] button. Then, it automatically sets to fade in stand-by (the lamp lights) and stays in this condition for a few seconds before releasing.

[FADE IN/OUT] can be set to on no matter which pattern ([INTRO], [MAIN A], [MAIN B], [ENDING]) is selected.



When the Left Pedal function (page 133) is set to START/STOP, you can stop the style by using the left pedal.



Using the Metronome

The CVP-98/96 features a convenient metronome that is ideal for practicing.

■ [START/STOP] of Metronome

To start the metronome, simply press the [METRONOME] button so that its lamp lights.

- ➔ The metronome pop-up display appears and the currently selected beat and volume are indicated.

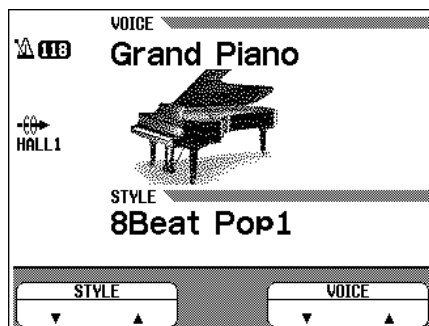
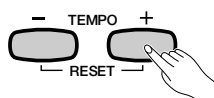


The metronome can be used also during playback. Press the [METRONOME] button again to stop the metronome sound. (The METRONOME lamp turns off.)

■ Adjusting the Tempo and Volume of the Metronome

As with the same parameter for the style, you can set the tempo over a range of 32 — 280 by using the TEMPO [-/+] buttons. Press the TEMPO [-/+] buttons. (The tempo indication in the Main Display is highlighted.)

- ➔ Use the data dial or [-/+] buttons to set the tempo. You can also press either TEMPO [-/+] button briefly to decrement or increment the tempo value by one, or hold the button for continuous decrementing or incrementing.

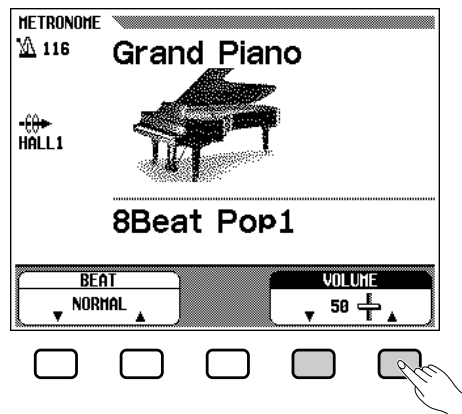


NOTE

Metronome Volume

- Range: 0 — 100
- Basic setting: 50
- Backup of last settings: OFF

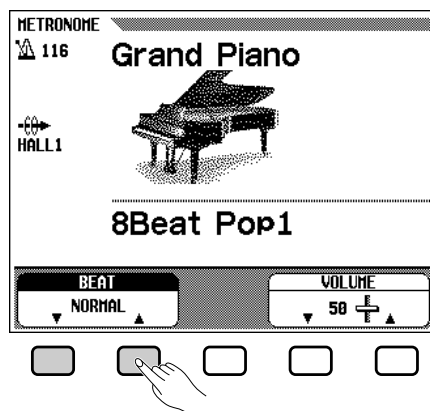
The metronome volume can also be set from the METRONOME pop-up display.



Adjust the volume by selecting **VOLUME ▼ ▲** (it is highlighted) and using the data dial or [-/+] buttons. You can also adjust it by continuously pressing **VOLUME ▼** or **▲**. As with the volume parameter of the style, it can also be adjusted by using [ACMP/SONG VOLUME].

■ Selecting the Beat (Time Signature).....

The pop-up display that appears when the [METRONOME] button is pressed also lets you select the beat or time signature.



Select the Beat parameter with **BEAT ▼** or **▲** (it is highlighted), then change the value with the data dial or [-/+] buttons. You can also select the value by holding down **BEAT ▼** or **▲**.

When **NORMAL** is selected, the metronome click sounds continuously at the current tempo with no accented beats. The **2, 3, 4** and **5** selections produce a bell accent on the first beat of each measure.

NOTE

Using Style and Metronome Together

- If a style is started by pressing the [START/STOP] button while the metronome is playing, the metronome will continue to sound along with the style.
- Pressing the [START/STOP] button simultaneously stops both the metronome and the Style, when both the metronome and style are playing.

NOTE

When Playing Back Free-tempo Disk Software

- The metronome cannot be used when playing disk software that is in free-tempo (see page 90).

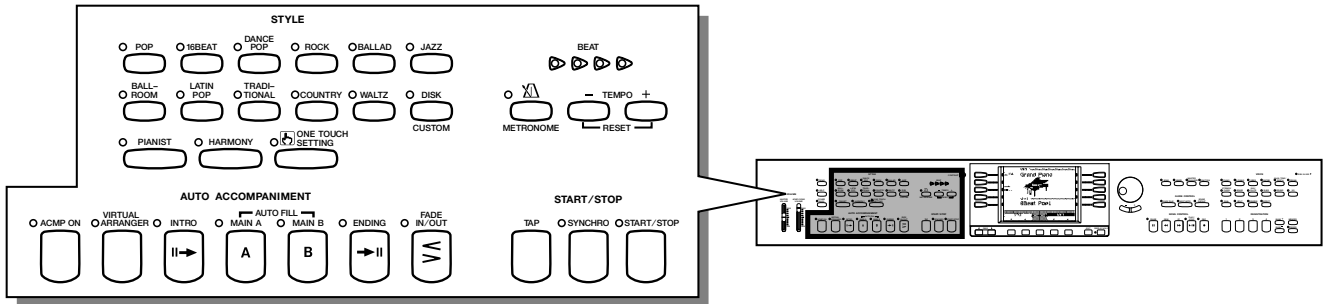


Playing with the Auto Accompaniment...

The CVP-98/96 includes a sophisticated Auto Accompaniment system that can provide automated rhythm, bass and chord backing for your performance in 100 different styles.



- The playback data of the Auto Accompaniment is normally not output through the MIDI [OUT]. However it can be output via MIDI by using the Auto Accompaniment/Harmony Send parameter (page 146) in the Function MIDI 3 page.



Types of Auto Accompaniment

The Auto Accompaniment function lets you produce automatic accompaniment in the selected style simply by indicating chords on the keyboard.

● Single Finger

The Single Finger method makes it easy to produce accompaniment using major, seventh, minor and minor-seventh chords by pressing certain keys (according to simple rules) in the left range of the keyboard (lower than the split point indicated by the keyboard guide lamp). (See page 58.)

● Fingered

The Fingered method lets you produce automatic accompaniment by playing full chords in the left range of the keyboard (lower than the split point). (See page 59.)

● Multi Finger

With Multi Finger, you can use either the Single Finger or Fingered method to indicate chords for the accompaniment. (See page 59.)

● Full Keyboard

Full Keyboard automatically produces appropriate automatic accompaniment for virtually anything you play on the keyboard, in any range. (See page 59.)



- Detailed explanations of the use of Single Finger, Multi Finger, Fingered, and Full Keyboard are given on pages 58 and 59.

1 Select a style.....

Select the desired style. (See page 47.)



When Style Buttons are Inactive

- Accompaniment style cannot be selected in the Song Play mode.

● Pianist

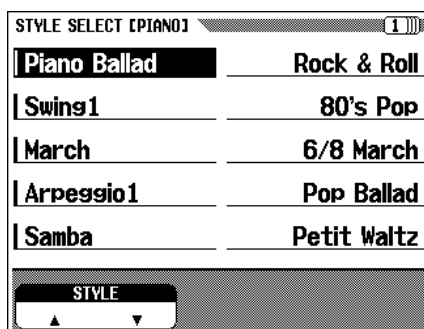
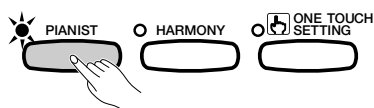
Press the [PIANIST] button to select the piano-only accompaniment styles. Forty different Pianist styles are available.

When the [PIANIST] button is pressed, the STYLE SELECT [PIANO] pop-up display appears.

→ The [PIANIST] lamp lights.

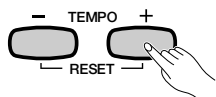
Select the desired Pianist style by pressing the appropriate left/right LCD button. The data dial and [-/+] can be also used.

You can also select the Pianist style by pressing the **STYLE ▼ ▲** buttons.



The STYLE SELECT [PIANO] display has several successive pages. Use the PAGE [◀] [▶] buttons to call up the various pages.

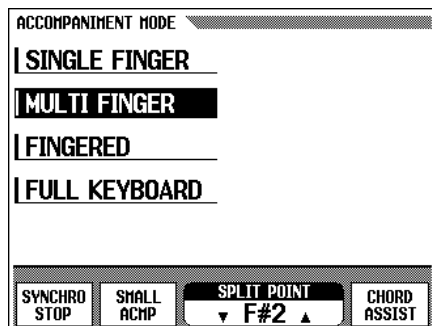
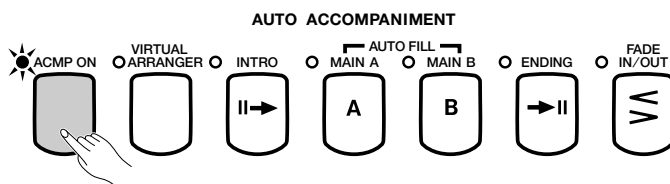
2 Set the tempo.



3 Set the Auto Accompaniment function to ON.

To do this, press the [ACMP ON] button. (The lamp lights.)

→ The Accompaniment Mode pop-up display appears.



Press the [ACMP ON] button again to turn off the lamp and set Auto Accompaniment to OFF.

NOTE

- When the Auto Accompaniment function is set to ON, Synchro Start is automatically set to stand-by.

NOTE

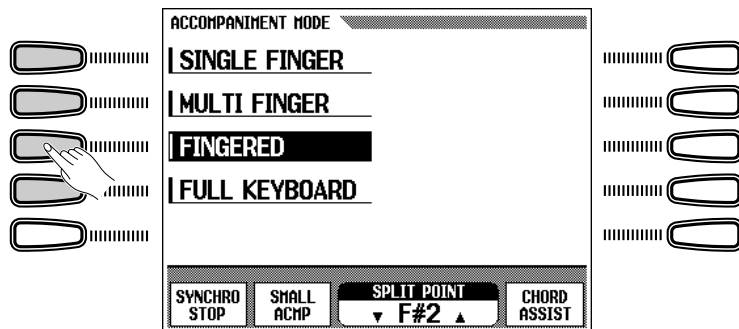
When the [ACMP ON] Button is Inactive

- The [ACMP ON] button cannot be turned on during playback of commercially available disk software. When playing back songs recorded with the recording function of the CVP-98/96, it cannot be turned on if Auto Accompaniment has been recorded to the song; however, it can be turned on if Auto Accompaniment is not used for the song. Also, it cannot be turned on if the song data was converted by use of the Transform function.

Playing with the Auto Accompaniment

4 Select the chord indication method.

To do this, press one of the left LCD buttons — **SINGLE FINGER**, **MULTI FINGER**, **FINGERED** or **FULL KEYBOARD** — while the **ACCOMPANIMENT MODE** pop-up display is active.



NOTE

Chord Indication Method

- Basic setting: Multi Finger
- Backup of last settings: OFF

NOTE

- The **SYNCHRO STOP** (page 64), **SMALL ACHP** (page 65), **SPLIT POINT** (page 61), and **CHORD ASSIST** (page 66) functions shown in the **ACCOMPANIMENT MODE** display are explained later (see corresponding page references).

5 Start the Auto Accompaniment.

To start Auto Accompaniment, press **[START/STOP]**. Alternately, press **[SYNCHRO]**, then play the keyboard. Auto Accompaniment can also be started by using the left pedal (see page 133).

● Single Finger

To play Auto Accompaniment appropriate to the selected style, press one, two, or three keys in the left range (below and including the split point), following the rules described below.

- ➔ Chord names appear at the left side of the LCD display.

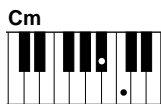
Play the melody with the keys in the right range along with the Auto Accompaniment.

■ Single Finger Chords

The following four chord types can be played with Single Finger:



- **Major**
Press the root note of the chord.



- **Minor**
Simultaneously press the root note of the chord and any black key to the left of it.

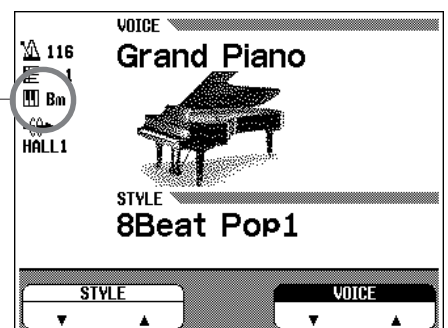


- **Seventh [7]**
Simultaneously press the root note of the chord and any white key to the left of it.



- **Minor Seventh [m7]**
Simultaneously press the root note of the chord any white and black key to the left of it (three keys altogether).

Chord name



NOTE

- The illustration below shows the corresponding keys for each root note.



● Fingered

To play Auto Accompaniment, play any chord in the left range (below and including the split point). Play the melody in the right range along with the Auto Accompaniment.

If the CVP-98/96 cannot recognize the played chord, “*” will appear instead of the chord name in the display.

■ Fingered Chords

The chord types below can be played with the Fingered method. For a fingering chart showing all chords in the example key of C, see page 36 in the Reference Manual.

- Major
- Sixth [6]
- Major seventh [M7]
- Major seventh flatted fifth [M7 (b5)]
- Major seventh sharp eleventh [M7 (#11)]
- Added ninth [add 9]
- Major seventh ninth [M7 (9)]
- Six ninth [6 (9)]
- Flatted fifth [(b5)]
- Augmented [aug]
- Seventh augmented [7 (#5)]
- Major seventh augmented [M7 (#5)]
- Minor [m]
- Minor sixth [m6]
- Minor seventh [m7]
- Minor seventh flatted fifth [m7 (b5)]
- Minor added ninth [m add 9]
- Minor seventh ninth [m7 (9)]
- Minor seventh eleventh [m7 (11)]
- Minor major seventh flatted fifth [mM7 (b5)]
- Minor major seventh [mM7]
- Minor major seventh ninth [mM7 (9)]
- Minor flatted fifth [m (b5)]
- Diminished seventh [dim7]
- Seventh [7]
- Seventh suspended fourth [7sus4]
- Seventh ninth [7 (9)]
- Seventh sharp eleventh [7 (#11)]
- Seventh added thirteenth [7 (13)]
- Seventh flatted fifth [7 (b5)]
- Seventh flatted ninth [7 (b9)]
- Seventh added flatted thirteenth [7 (b13)]
- Seventh sharp ninth [7 (#9)]
- Suspended fourth [sus4]

● Multi Finger

This method allows you to produce accompaniment using either Single Finger or Fingered. However, when indicating minor, seventh or minor seventh chords, it is necessary to play the white key and/or black key nearest the root note of the chord.

● Full Keyboard

When the Full Keyboard mode is selected, the CVP-98/96 will automatically create appropriate accompaniment while you play just about anything using both hands, anywhere on the keyboard. You don't have to worry about specifying the accompaniment chords. The name of the detected chord will appear in the display. (Although Full Keyboard is designed to work with many songs, some arrangements may not be suitable for use with this feature.)

NOTE

- The automatic accompaniment will sometimes not change when related chords are played in sequence (e.g. some minor chords followed by the minor seventh).
- The same accompaniment continues even after releasing the chord in the left range until the next chord is played.

NOTE

On-bass Chords

- To play “on-bass” chords, press the desired bass note one octave lower than the chord. For example, in order to play F on C (F chord with a C bass), play an F chord (F, A and C) and press C +C (octave notes) in the lower range of the keyboard. (Use this function for chord sequence recording.)

NOTE

- Two-note fingerings will produce a chord based on the previously played chord.
- “No chord” (i.e., rhythm-only accompaniment) can be produced by pressing any three consecutive keys (e.g., C, C#, D) simultaneously. This lets you create dynamic rhythm “breaks in the accompaniment. A “- -” indication will appear instead of a chord name in the display.

NOTE

- Chord detection occurs at approximately 8th-note intervals. Extremely short chords — less than an 8th note in length — may not be detected.

NOTE

Keep in mind...

- The DUAL or SPLIT mode can be used with the Auto Accompaniment.

Stopping the Auto Accompaniment

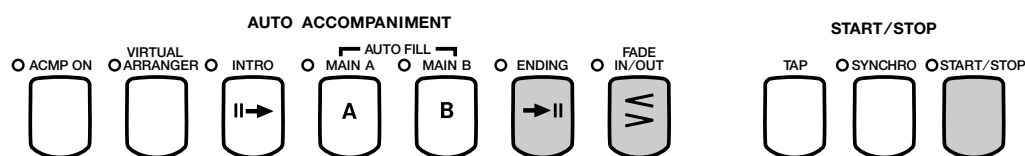
Press [START/STOP], [ENDING] or [FADE IN/OUT] to stop the Auto Accompaniment.

You can also turn off the Auto Accompaniment by pressing the [ACMP ON] button (the lamp turns off).

NOTE

- The [INTRO], [MAIN A], [MAIN B], [ENDING], and [FADE IN/OUT] buttons can be used to play different style sections, as explained on page 50.

Playing with the Auto Accompaniment

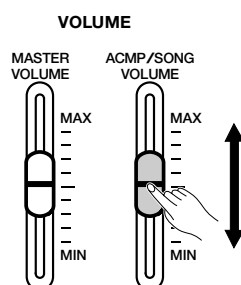


The [MAIN A], [MAIN B], [ENDING] and [FADE IN/OUT] operation can be done by using the left pedal (see page 133), conveniently allowing you to change sections without taking your hands from the keyboard.

Adjusting the Overall Auto Accompaniment Volume

Use the [ACMP/SONG VOLUME] control to adjust the overall volume of the Auto Accompaniment. (This does not affect the volume of parts played from the keyboard.) This control lets you adjust the level balance of the accompaniment and the voices played from the keyboard.

Use the [MASTER VOLUME] to control the entire volume of the CVP-98/96.



Individual Part Volume Control

The CVP-98/96 has five accompaniment parts: Bass, Chord, Pad, Phrase, and Rhythm.

BASS	The Bass part uses voices appropriate to each style, including acoustic bass and synth bass.
CHORD	The Chord part provides appropriate rhythmic chordal accompaniment for each style. You'll find guitar, piano, and other chordal instruments here.
PAD	The Pad part plays long chords where necessary, using sustained instruments such as strings, organ, and choir.
PHRASE	The Phrase part is used for embellishments such as punchy brass stabs, arpeggiated chords, and other extras that make the accompaniment more interesting.
RHYTHM	This is the main rhythm part. The Rhythm part usually plays one of the drum kits.

Each volume setting of the five accompaniment parts can be adjusted individually by using the mixer function. Press the [MIXER] button (the lamp lights) and the MIXER display appears.

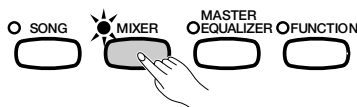
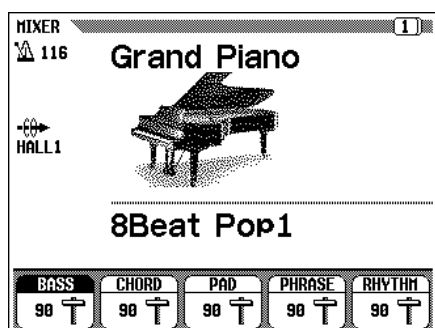
NOTE

- By adjusting the volume balance of the various parts and setting some parts' volume to 0, you can create different types of accompaniment and make changes to the basic style accompaniment.
- Some styles may not use all five accompaniment parts.

NOTE

Volume of Each Part

- Range: 0 — 100 (maximum)
- Basic setting: KBD (keyboard volume): 100; other parts: 90
- Backup of last settings: OFF



Select the desired part by pressing **BASS**, **CHORD**, **PAD**, **PHRASE**, or **RHYTHM** and set the value by using the data dial or [-/+] buttons. The value changes in units of two. You can also select several parts and adjust their volume settings simultaneously. To reset the value to the basic setting of 90, simultaneously press the [-/+] buttons.

To exit the function, press the [**MIXER**] button again (the lamp turns off) and the previous display appears.

You can also press the [**EXIT**] button to return to the previous display.

Use the PAGE [◀] [▶] buttons to call up the second page of the MIXER display. On this page you can adjust the volumes of your own keyboard performance and the Harmony sound (see page 62).

Press **KBD** (keyboard volume) or **HARMONY** to select the part and use the data dial or [-/+] buttons to set the value. Press **PRESET** to return the volume values of all parts to the basic settings.

NOTE

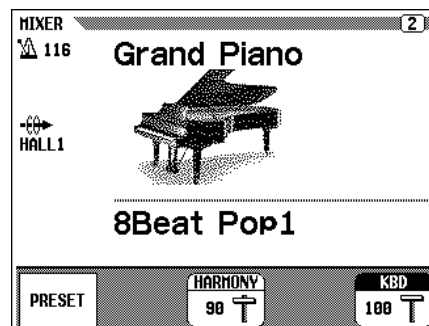
Part Volume Relation

- [ACMP/SONG VOLUME] is relative to the [MASTER VOLUME].
- Each part volume of the Auto Accompaniment is relative to the [ACMP/SONG VOLUME].
- KBD (keyboard volume) is relative to the [MASTER VOLUME].
- The Harmony part volume is relative to the KBD part volume.

NOTE

Reverb Depth of Each Part

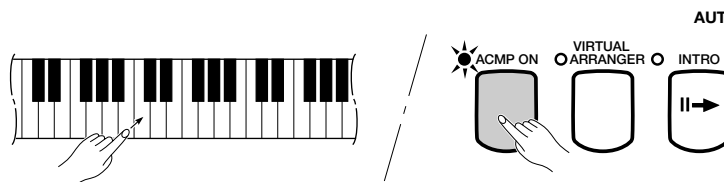
- For details on setting the Reverb Depth for each part, see page 43.



Changing the Split Point

The right range and left range for Auto Accompaniment can be divided at any key. Press the desired key while holding the [**ACMP ON**] to set the split point. (The split point key is included in the left range.)

➔ The keyboard guide lamp of the set split point lights.



The split point also can be set by pressing the **SPLIT POINT** ▼ or ▲ button, or by using the data dial or [-/+] buttons.

To reset the value to the basic setting of “F#2,” simultaneously press both **SPLIT POINT** ▼ ▲ buttons or the [-/+] buttons.

NOTE

- The split point set here for the Auto Accompaniment is the same parameter as set in the Split function (page 37).

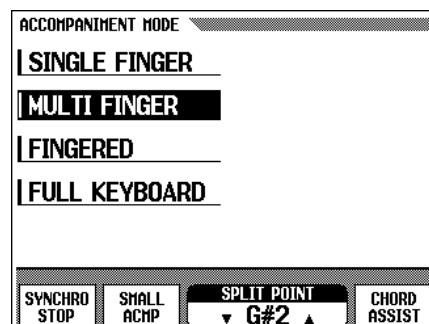
NOTE

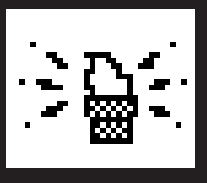
Split Point

- Range: All keys
- Basic setting: F#2
- Backup of last settings: OFF

NOTE

- The split point cannot be set when **FULL KEYBOARD** is selected.





Other Auto Accompaniment Functions.....

The CVP-98/96 has many other features and functions that make the use of the Auto Accompaniment even more convenient and enjoyable.

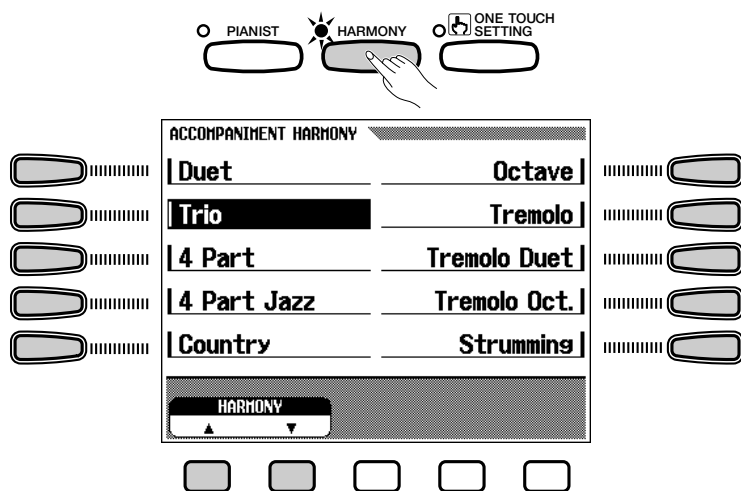
Harmony

This feature adds harmony or embellishment notes to the melody you play in the right range of the keyboard. The harmony notes are produced automatically to match chords played with Auto Accompaniment.

1 Set the Harmony function to ON.....

To do this, press the [HARMONY] button (the lamp lights).

→ The ACCOMPANIMENT HARMONY pop-up display appears.



➤ Use the the left/right LCD buttons to select the Harmony types in the ACCOMPANIMENT HARMONY pop-up display. The data dial and the [-/+] buttons can also be used.

You can also select the Harmony type by using the **HARMONY ▼ ▲** buttons.

2 Play the keyboard.....

Play the keyboard along with the Auto Accompaniment.

3 Turn Harmony off.....

To turn Harmony off, press the [HARMONY] button again (the lamp turns off).

Since the Harmony function can be turned on and off while playing, you can add “spice” and professional polish to your performance by applying harmony to selected phrases as you play.

NOTE

- The Harmony feature cannot be turned on when Full Keyboard is selected for the Auto Accompaniment.

NOTE

- With some Harmony types the voice used for the Harmony will be different from the currently selected voice.
- The Harmony feature can be used while playing back the intro or ending or while the Auto Accompaniment is off, but only octaves (no intermediate harmonies) will be produced.
- When chords are played in the right-hand section of the keyboard, the harmony will be applied to the last note played.

● Left Pedal and Harmony

If the Left Pedal Function is set to HARMONY ON/OFF (see page 133), harmonization of notes played on the right-hand section of the keyboard only occurs while the left pedal is pressed. This allows you to add harmony only to certain phrases in the middle of the song as you play, without having to take your hands from the keyboard.

NOTE

- The Left Pedal HARMONY ON/OFF function is not effective when the Harmony feature is off (i.e. the [HARMONY] lamp is not lit).

One Touch Setting

Each style has programmed panel setups of voices and effects that can be recalled easily and instantly via the One Touch Setting function. Each style has four different One Touch Settings.

For a list of the One Touch Setting parameters, refer to page 35 of the Reference Manual.

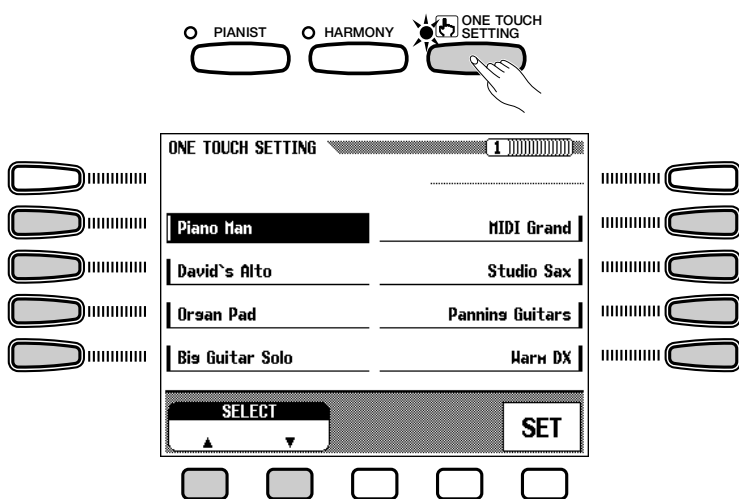
NOTE

- There are no One Touch Settings for the accompaniment styles of the [PIANIST] or [DISK/CUSTOM] groups.

■ Using the One Touch Setting Function

1 Select the desired style in the normal way, then press the [ONE TOUCH SETTING] button.

→ The lamp lights and the One Touch Setting pop-up display appears.



NOTE

- When using the ONE TOUCH SETTING function, the Auto Accompaniment turns on automatically. If the [ONE TOUCH SETTING] button is turned on before starting the style, Synchronized Start is set to stand-by.
- If you change the One Touch Setting during style playback, the tempo setting remains the same.
- Harmony will not be turned on if the Full Keyboard mode is selected, even if the selected One Touch Setting setup includes "Harmony On."

2 Select the desired setting by using the left/right LCD buttons. The data dial, [-/+], and PAGE [◀/▶] buttons can also be used. You can also select the setting by using the **SELECT** ▼ ▲ buttons. Press the **SET** button to actually change the panel setup to that of the selected setting.

The menu for the selected style is shown at first in the display; however, the menus for all other styles can be selected in this display.

Other Auto Accompaniment Functions

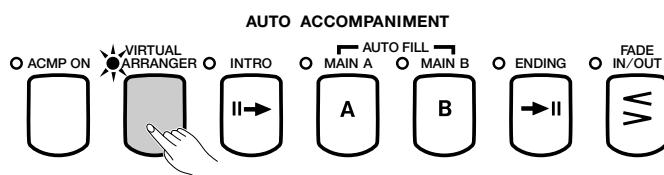
The panel setup called up here can be freely changed according to your preferences. You can also save it to memory by using the Registraton function (page 83).

To exit One Touch Setting, press the [ONE TOUCH SETTING] button again (the lamp turns off), and the previous panel setup before using One Touch Setting is recalled.

Virtual Arranger

To use this, press the [VIRTUAL ARRANGER] button (the lamp lights). The lamp automatically lights when the power is turned on. With Virtual Arranger, you can play simple chords, and the CVP-98/96 automatically embellishes them and provides melodic Auto Accompaniment.

Virtual Arranger is effective only when Auto Accompaniment is set to ON and the Full Keyboard mode is not selected.



NOTE

- The melodic Auto Accompaniment may sometimes not match with the melody or chord progression of the song being played.
- When a [DISK/CUSTOM] style is selected, the Virtual Arranger function has no effect, even if set to on.

Synchronized Stop Function

This function lets you have the Auto Accompaniment sound only when you hold down keys in the left-hand range (below and including the split point). Auto Accompaniment automatically stops when you release your left hand from the keyboard, and starts again when you play the keys again. This is useful for beginning players who have difficulty playing in precise time. It is also effective for creating accompaniment “breaks” during the performance.

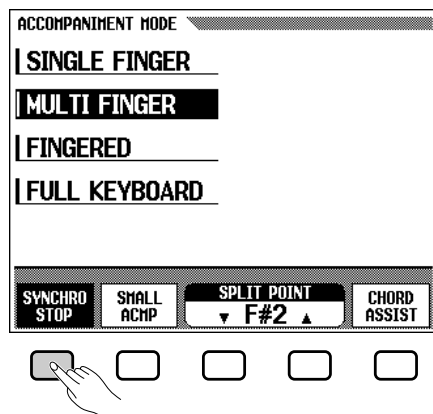
This function can only be used when Auto Accompaniment is set to on. However, it cannot be used when Full Keyboard is selected.

Other Auto Accompaniment Functions

Press the [ACMP ON] button to call up the ACCOMPANIMENT MODE pop-up display.

- Press **SYNCHRO STOP** so that it is highlighted.
- ➔ The [SYNCHRO START] lamp lights.

To turn Synchronized Stop off, press **SYNCHRO STOP** again.



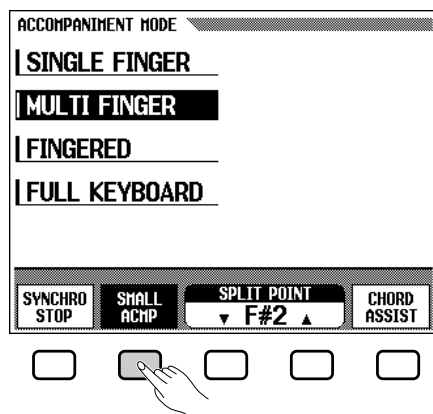
Small Accompaniment (SMALL ACMP)

The Small Accompaniment function lets you mute some of the selected Auto Accompaniment parts, creating a simpler and smaller orchestration and accompaniment.

Press [ACMP ON] to call up the ACCOMPANIMENT MODE pop-up display.

- To turn Small Accompaniment on, press the **SMALL ACMP** button so that it is highlighted.

To turn Small Accompaniment off, press the **SMALL ACMP** button again.



NOTE

- **SMALL ACMP** can be set to ON when a [PIANIST] style is selected; however, the Auto Accompaniment sounds are not changed.

Chord Assist

This function uses the keyboard guide lamps to show you appropriate fingerings for chords. (See page 104.)

The Chord Assist feature is essentially an electronic “chord book” that shows you appropriate fingerings for chords, and is ideal when you want to quickly learn how to play certain chords. Simply specify the desired chord via the display, and the fingerings of the Fingered method are indicated by the keyboard guide lamps.

1 Set the Chord Assist function to ON.

To do this, first press the [ACMP ON] button to call up the ACCOMPANIMENT MODE pop-up display.

- Press **CHORD ASSIST** to set the Chord Assist function to on. The CHORD ASSIST display appears and the chord indication automatically changes to Fingered.

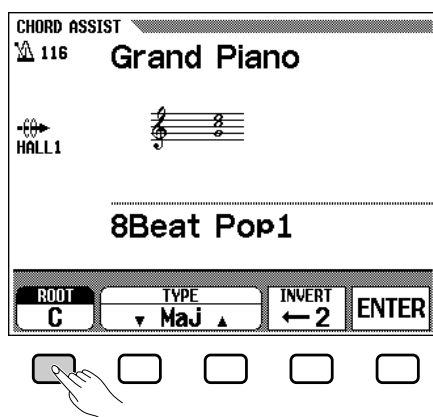
2 Start the Auto Accompaniment.

Press [START/STOP] or use Synchronized Start (see page 50) to start the Auto Accompaniment.

3 Enter the chord root.

Press **ROOT** (it is highlighted), then use the data dial or [-/+] buttons to select the desired root note of the chord.

You can also select the root note by pressing **ROOT**.



4 Enter the chord type.....

Press **TYPE** ▼ or ▲ (it is highlighted), then use the data dial or [-/+]
buttons to select the desired chord type.

You can also select the chord type by pressing **TYPE**.

5 Enter the chord.....

The fingering for the selected chord appears on the keyboard guide lamps. And the selected chord is also indicated in notation form in the center of the LCD display. At this point you can either play the indicated chord on the keyboard or press **ENTER** to actually enter the specified chord, at which the specified chord accompaniment will sound.

The following chord types can be specified from the LCD display.

Major [Maj]	Augmented [aug]
Minor [m]	Minor flatted fifth [m (♭5)]
Seventh [7]	Seventh suspended fourth [7sus4]
Minor seventh [m7]	Seventh augmented [7 (#5)]
Minor seventh flatted fifth [m7 (♭5)]	Diminished seventh [dim7]
Sixth [6]	Flatted fifth [(♭5)]
Minor sixth [m6]	Seventh flatted fifth [7 (♭5)]
Major seventh [M7]	Minor major seventh [mM7]
Suspended fourth [sus4]	

6 Rotate the fingering as desired.....

Press **INVERT** in the LCD to shift the fingering down the keyboard. Each time the **INVERT** button is pressed the next viable fingering for the chord appears. The inversion number appears in the **INVERT** section of the display.

7 Stop the Auto Accompaniment.....

Use [START/STOP] or [ENDING] to stop the accompaniment.

8 Turn Chord Assist off.....

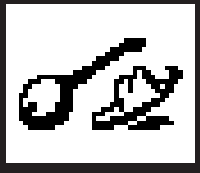
To turn Chord Assist off, press the [ACMP ON] button (the lamp turns off). Auto Accompaniment also is turned off at the same time.

NOTE

- All the Fingered chords can be entered from the keyboard.
- The root and type of the chord name entered from the LCD appears in the **ROOT** and **TYPE** parameter locations, while the chord name recognized from the keyboard (or entered by the **ENTER** button) appears at the side of the keyboard icon located at the left of the LCD.
- A flashing keyboard guide lamp indicates a note which may be omitted.

NOTE

- The split point is not shown on the guide lamps when the Chord Assist function is engaged.
- If the split point is set below F#2 it will automatically be reset to F#2.



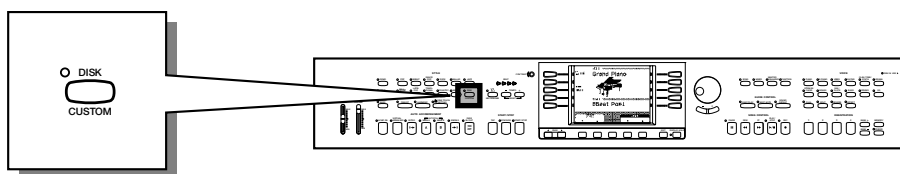
Custom Style

The CVP-98/96 Custom Style feature allows you to create original accompaniment styles that can be later recalled and played at any time, just like the presets. Up to 12 custom styles can be maintained in internal memory at the same time, and any number can be saved to disk for later reloading and use.

The basic custom style recording procedure is outlined below.

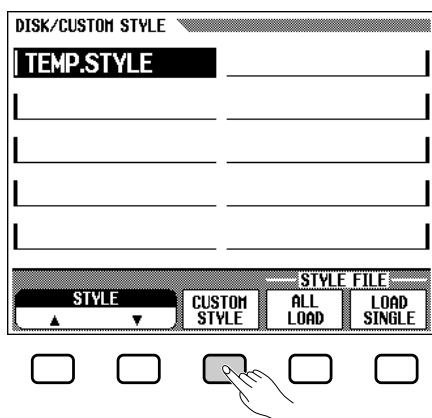
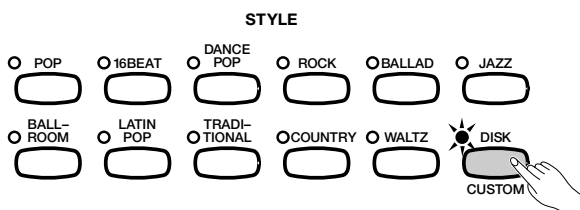
NOTE

- Custom style data is not retained in memory when the power is turned off, so be sure to save your custom styles to disk before turning the power off.
- One pre-programmed temporary style is automatically loaded into the [DISK/CUSTOM] memory whenever the power is turned on. (Memory is common to the Custom Styles and the loaded styles from the optional Style File disks — page 80.)



1 Engage the Custom Style feature.....

Press the [DISK/CUSTOM] style selector so that its indicator lights, then press the **CUSTOM STYLE** LCD button. The “**Please select a source style.**” message will appear on the display for a few seconds before going to the CUSTOM STYLE display page 1 and the current [DISK/ CUSTOM] style will begin playing.



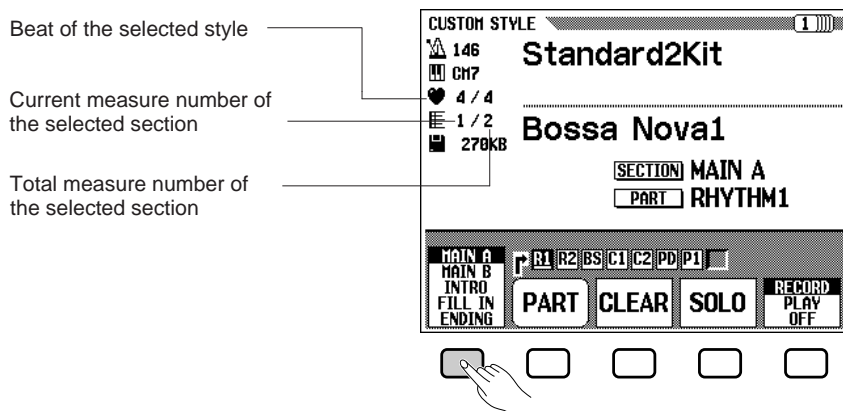
2 Select a source style.

Select a preset style that is close to the style you want to create. Preset style selection is carried out in the normal way (page 47).

If you want to select a [DISK/CUSTOM] style, press the [DISK/CUSTOM] style button once again and use the **STYLE ▲** and **▼** buttons, or the data dial or [-/+] buttons to select a [DISK/CUSTOM] style.

3 Select the section you want to record.

In the CUSTOM STYLE display page 1, press the first LCD button as many times as necessary to select the section you want to program first: MAIN A, MAIN B, INTRO, FILL IN, or ENDING. The MAIN A section is initially selected.

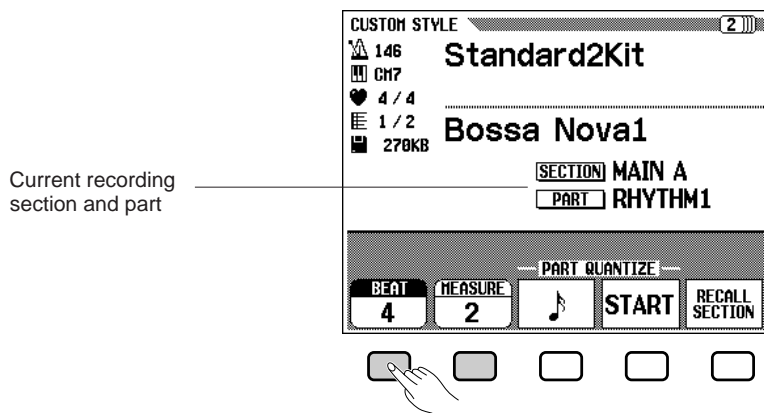


NOTE

- In the CUSTOM STYLE, MAIN A, MAIN B, INTRO, FILL IN or ENDING are referred to as "section", and RHYTHM 1/2, BASS, CHORD 1/2, PAD or PHRASE 1/2 are referred to as "part".
- Only one pattern can be created for each INTRO, FILL IN and ENDING section.
- Whether the "A" or "B" variations of the INTRO, FILL IN and ENDING sections are used as the source pattern depends on whether the MAIN A or MAIN B section was selected when the Custom Style function was engaged. (As for FILL IN, "FILL IN from A to A", or "FILL IN from B to B" is used.)

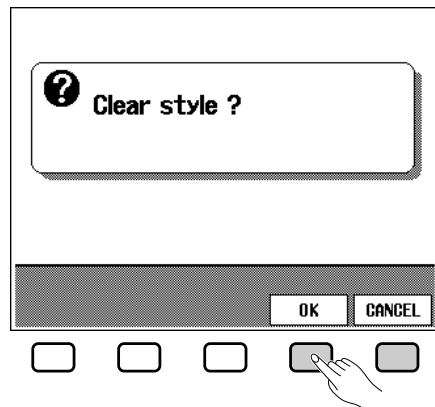
4 Change the time signature and number of measures, if required.

If you want to create a style in a different time signature than the current style, or change the number of measures in the selected section, Press the PAGE [▶] button to go to CUSTOM STYLE display page 2.

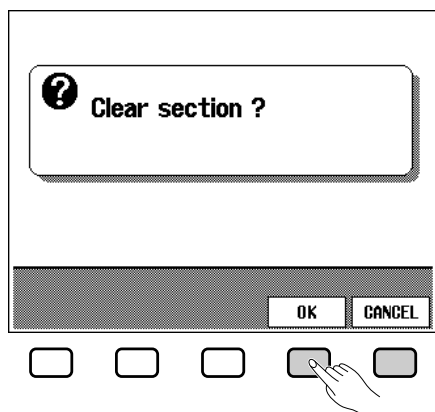


Custom Style

Use the **BEAT** LCD button to select a different time signature, or the data dial or [-/+] buttons once the **BEAT** parameter has been selected. As soon as you choose to change the beat value, the “**Clear style ?**” prompt will appear, since you will have to completely clear all sections and parts of the style and start recording from scratch if you change the time signature. Press **OK** to clear the style, or **CANCEL** to abort. Once the style has been cleared you can select a new time signature as required: 2, 3, 4, or 5.



Use the **MEASURE** LCD button to select a different number of measures for the selected section, or the data dial or [-/+] buttons once the **MEASURE** parameter has been selected. As soon as you choose to change the number of measures in the section, the “**Clear section ?**” prompt will appear, since you will have to clear all parts of the currently selected section and start recording from scratch if you change the number of measures. Press **OK** to clear the section, or **CANCEL** to abort. Once the section has been cleared you can select a new number of measures as required: 1 through 8. The **FILL IN** section has only 1 measure and the number of measures cannot be changed although the **FILL IN** section can be cleared using this operation.

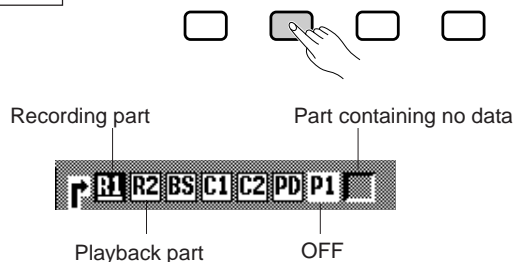
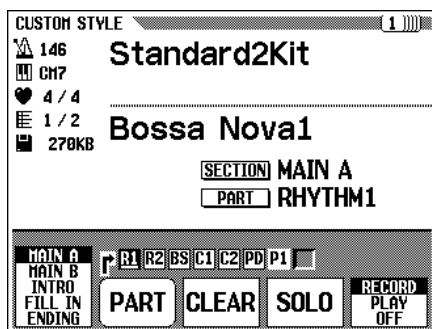


Once the **BEAT** and/or **MEASURE** parameters have been set as required, press the **PAGE** [◀] button to go back to the first Custom Style page.

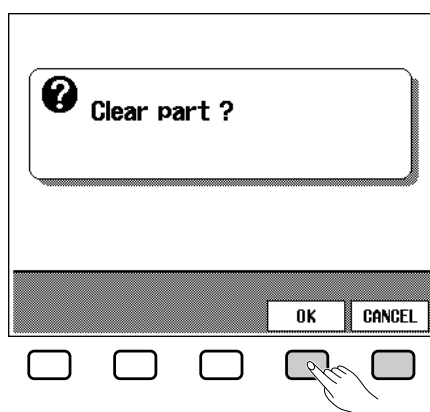
5 Select the part and voice you want to record.

Use the **PART** LCD button, the data dial, or [-/+] buttons to select the part you want to record:

R1	Rhythm 1
R2	Rhythm 2
Bs	Bass
C1	Chord 1
C2	Chord 2
Pd	Pad
P1	Phrase 1
P2	Phrase 2



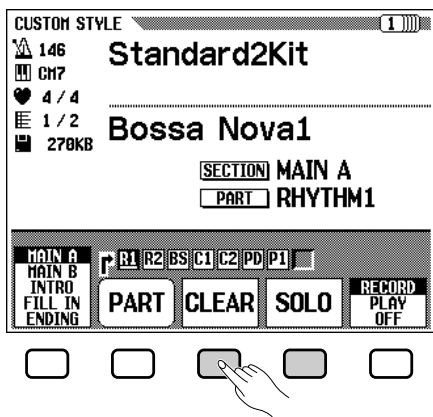
The R1 part is initially selected and set to the record mode. Any part you select can be set to the record mode by using the rightmost LCD button to select “**RECORD**” after selecting the part (the part number will be highlighted). Since parts other than R1 and R2 must be cleared before they can be recorded (if the source style is a preset style or a style loaded from the optional Style File disk) the “**Clear part ?**” confirmation will appear if you select a part that contains data: press **OK** to clear the part and continue, or **CANCEL** to abort. Only one part can be set to the record mode. All other parts will be set to “**PLAY**” (part number surrounded by box) or turned “**OFF**” (part number only — no box). No indication appears for the parts that contain no data.



At this point you can also select the voice you want to record with (the preset voice for that part will initially be selected). For the R1 part, only **[DRUMS]** voices can be used. For the R2 part, all voices except Organ Combi. voice can be used. For the remaining parts, all voices except **[DRUMS]** and Organ Combi. voice can be used.

6 Record the selected part.....

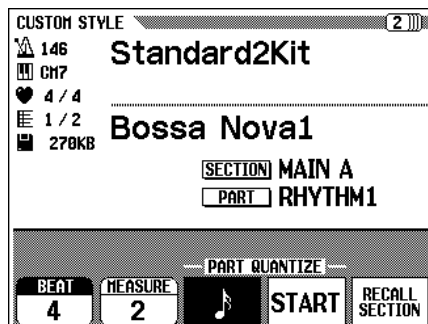
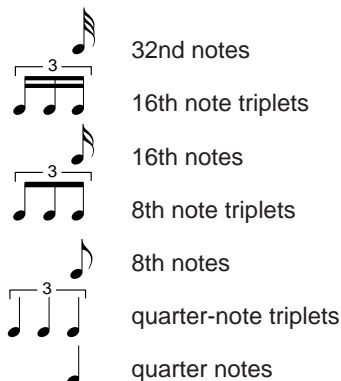
You can now add new parts to the selected part by playing the keyboard at the appropriate timing (play in C Major seventh since the Custom Style is recorded as a C Major seventh pattern). If you want to create a totally new part from scratch, press the **CLEAR** LCD button to clear the selected part before beginning to record. If both the R1 and R2 parts are cleared the metronome will sound to provide a timing guide (the metronome sound is not recorded). When a drum kit voice is used, a single drum instrument sound can be cleared from the R1 or R2 part by pressing the key corresponding to the instrument to be cleared while holding the keyboard “C1” key. The metronome timing guide can also be cleared in this way.



Another useful recording aid is the **SOLO** LCD button: when this button is pressed and highlighted, only the selected part will sound. Press the **SOLO** button again to turn the solo function off and hear the entire style.

7 Quantize the recorded part, if necessary.....

You can “tighten up” the timing of a recorded part by aligning all notes to specified beats via the PART QUANTIZE function in CUSTOM STYLE display page 2 (press the PAGE [▶] button). Press the LCD button below the note symbol to select “quantize size” — i.e. the beats to which the notes in the current part will be aligned:



NOTE

- Playback can be started and stopped via the [START/STOP] button as required while in the Custom Style mode — data cannot be recorded while playback is stopped.

NOTE

- The timing guide will stop as soon as the Custom Style is stored.
- The sound of all parts is automatically stopped at the end of the style — i.e. at the point between repeats when recording. It is therefore not advisable to record over this point.

NOTE

- Quantization can also be applied to the already recorded part.

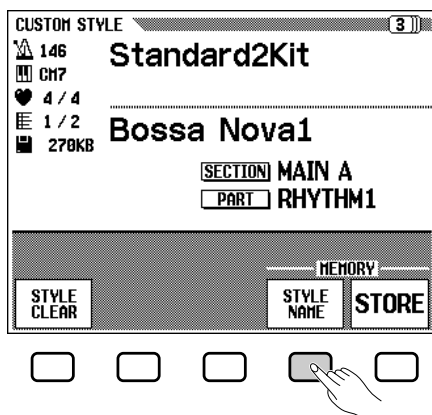
Once the required quantize size has been selected press the **START** LCD button to actually quantize the current part. Playback will stop for an instant while the data is being quantized, then the **START** LCD button will change to **UNDO**, allowing you to undo the quantize operation and return to the pre-quantized data if the results are not as you expected. You will not be able to UNDO once another button has been pressed.

8 Repeat until the custom style is complete.....

Repeat steps 3 through 7 until all parts or all sections have been recorded as required.

9 Name the custom style.....

When your custom style is complete, use the PAGE buttons to select CUSTOM STYLE display page 3, and press the **STYLE NAME** LCD button to go to the style naming page.



The current style name appears in the upper right corner of the display. Use the **CHAR** LCD button to position the underline cursor at the character you want to change (style names can be up to 12 characters in length). Use the data dial and/or the [-/+] buttons to select the character you want to enter from the list in the center of the display, then press the **CHAR SET** LCD button to enter the character at the current cursor position. Repeat this procedure until your name is complete. The **BACK SPACE** LCD button can be used to back up one space and delete a character.



When the name is complete press the **OK** LCD button to register the name for the current custom style, or **CANCEL** to abort.

NOTE

- During Custom Style recording, no MIXER display is available.

10 Store the custom style.

Press the **STORE** LCD button in CUSTOM STYLE display page 3 to store the current custom style in the internal memory. The “**Store XXXXXXXX?**” confirmation prompt and **MEMORY No.** parameter will appear (“XXXXXXXX” is the style name). Use the **MEMORY No.** ▲ and ▼ LCD buttons to select the memory number — 1 through 12 — to which you want to store the custom style, then press **OK** to store or **CANCEL** to abort.

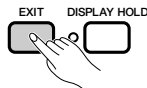


NOTE

- The tempo setting at the time the Custom Style is stored becomes the preset tempo for that style.
- If the selected memory number already contains a style, the style name will appear next to the memory number. The existing style will be overwritten when a new style is stored.

11 Exit when done.

Press the **[EXIT]** button to exit from the Custom Style mode and return to the normal play mode.



NOTE

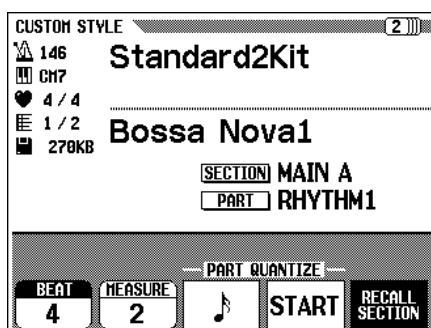
- Custom style data is not retained in memory when the power is turned off, so be sure to save your custom style before turning the power off — see “Save to disk” on page 76.

Other Custom Style Functions

In addition to the various functions described in the basic custom style recording procedure, above, the CUSTOM STYLE display pages include several other functions that you may find useful when creating custom styles.

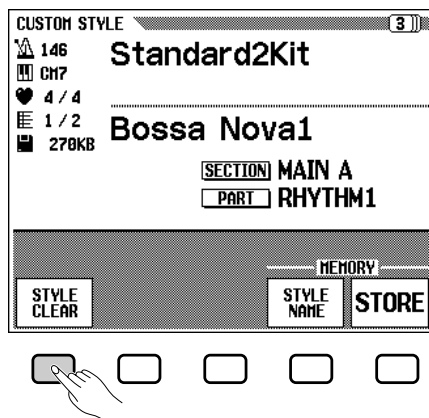
■ Recall Section

This function makes it possible to recall the last-stored version of the currently selected section (all parts of the section are recalled). Simply press the **RECALL SECTION** LCD button in CUSTOM STYLE display page 2. If the recall operation can’t be carried out (i.e. The time signature has been changed), the “**Can’t recall!**” alert display will appear. If this happens press **OK** to return to the previous display.



■ Style Clear

Press the **STYLE CLEAR** LCD button in CUSTOM STYLE display page 3 to entirely clear the current custom style. The “**Are you sure?**” confirmation prompt will appear. Press **YES** to clear the style or **NO** to abort.



■ Volume & Effects

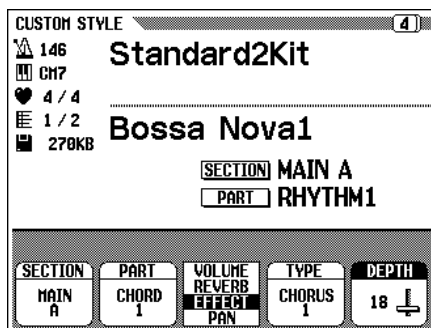
CUSTOM STYLE display page 4 includes a range of parameters that let you individually set the volume, reverb, effect, and pan for each part of each custom style section. Use the **SECTION** parameter to select the section (or “ALL” sections), and the **PART** parameter to select the part (or “ALL” parts). The third LCD button selects VOLUME, REVERB, EFFECT or PAN, and the **VALUE** (or **DEPTH**) parameter sets the amount or depth. When VOLUME is selected the **SECTION** parameter is fixed at “ALL” and the **VALUE** range is from -50 to +50, relative to the preset volume of the source style. The REVERB and EFFECT **DEPTH** ranges are from 0 to 100. The PAN **VALUE** settings are L10 (full left) ... C (center) ... R10 (full right). When EFFECT is selected the **TYPE** parameter appears and you can also select the effect type via the **TYPE** LCD button. The available effect types are listed below.

Effect Type List

- CHORUS 1
- CHORUS 2
- CHORUS 3
- CELESTE 1
- CELESTE 2
- CELESTE 3
- FLANGER 1
- FLANGER 2
- OFF

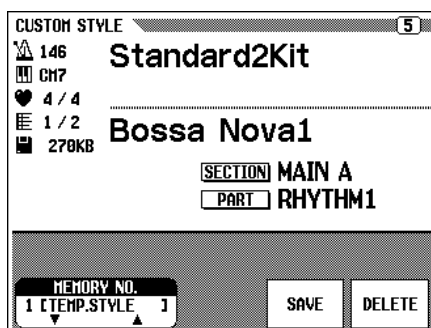
NOTE

- Normally the preset **VALUE** and **EFFECT TYPE** are initially selected. If **PART** is set to “ALL”, the R1 part preset values are displayed. If **SECTION** is set to “ALL”, the MAIN A preset values are displayed.
- Effect type “OTHERS” may appear if the preset effect type is other than that of what is in the list. The “OTHERS” selection cannot be re-selected once you change to a different type.



■ Save to Disk

A complete set of 12 custom styles or individual custom styles can be saved to disk via CUSTOM STYLE page 5.



After making sure that a properly formatted disk is inserted in the Clavinova disk drive (page 7), use the **MEMORY No.** ▲ and ▼ buttons to select the memory number of the custom style you want to save to disk, or “ALL” if you want to save a complete set of 12 custom styles. When this is done, press the **SAVE** LCD button to start saving the data to disk. At this point the name entry display will appear and you can enter a name for the Custom Style disk file in the same way as you entered a name for the Custom Style itself (page 73). Press **SAVE** when the name has been entered. If a file with the same name already exists the “**Same name! Overwrite?**” confirmation prompt will appear. Press **OK** to overwrite the existing file or **CANCEL** to abort.

NOTE

- Saved Custom Style files can be loaded via the “STYLE FILE LOAD” function described in the “Style File Load” section (page 80).



Your custom styles must be stored to internal memory before they can be saved to disk (see step 10 of the basic custom style recording procedure). If a custom style has not been stored and you attempt to save it to

disk, the “**Please store to memory before saving to disk**” alert display will appear. If this happens press **OK** to return to the previous display (CUSTOM STYLE display page 3), store the custom style, then try saving again.

■ Delete from Disk

Saved custom styles can also be deleted from disk via CUSTOM STYLE page 5.

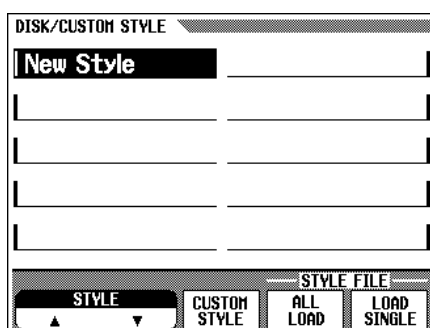


After making sure that the disk containing the custom style files is inserted in the Clavinova disk drive, press the **DELETE** LCD button. Use the **FILE** **▲** **▼** LCD buttons to select the custom style file you want to delete from disk. The “Are you sure?” confirmation prompt will appear. Press **YES** to delete the custom style file or **NO** to abort.

Press the **[EXIT]** button to exit from the Custom Style mode and return to the normal play mode.

Playing Back Your Custom Styles

Once created, your original custom styles can be selected for playback by pressing the **[DISK/CUSTOM]** button (its LED will light), and then using the **STYLE** **▲** and **▼** LCD buttons — or the data dial or **[-/+]** buttons — to select the custom style you want to play. The selected style can then be played and used with ABC auto accompaniment in exactly the same way as the preset styles (page 47).



NOTE

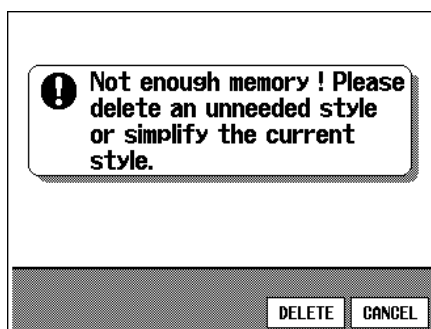
- Since only one type of **INTRO**, **FILL IN**, and **ENDING** section can be recorded for each Custom Style, no “A/B” variations are produced during playback.

Custom Style Alert & Error Displays

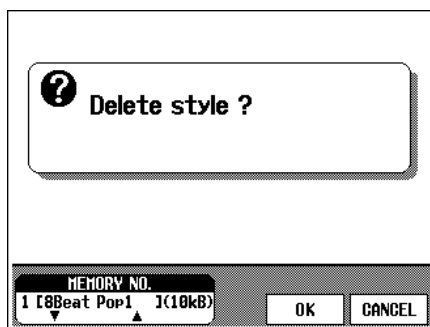
The following alert and error displays may appear in the corresponding situations.

■ Insufficient Memory To Store

This alert message will appear if there is not enough memory to perform a store operation.



In this case it will be necessary to either delete a style you don't need or simplify the style you are currently recording. Press **CANCEL** to return to CUSTOM STYLE display page 1, at which point you can simplify the current style (by clearing a part, etc.), or **DELETE** to go to the "Delete style ?" display:



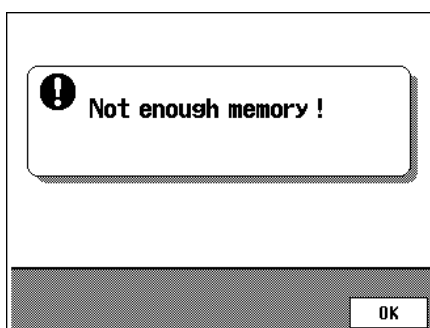
Use the **MEMORY No.** ▲ and ▼ buttons to select the number of the style you want to delete, then press **OK** to delete the style, or **CANCEL** to abort.

■ Memory Full During Recording

This alert message will appear if the memory becomes full during recording or editing.

NOTE

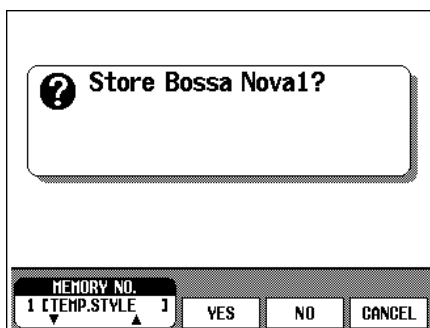
- The amount of memory being used for the selected style is also shown on the display (in approximate kilobytes) so as to set up the approximate standard which style to delete in relation to the total 300 KB memory space.



Press **OK** to return to CUSTOM STYLE display page 1 and simplify the style by clearing a part, etc.

■ Exit Before Store

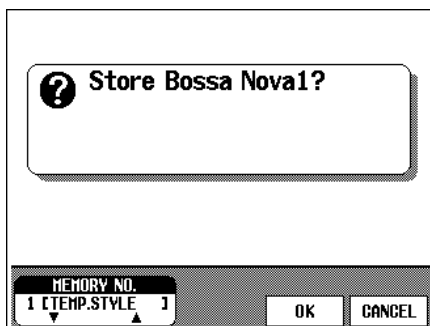
If you press **[EXIT]** button to exit from the Custom Style function before storing the style the following display will appear.



Select a memory number and press **YES** to store the style and then exit, press **NO** to exit without storing the style, or press **CANCEL** to return to the Custom Style mode.

■ Style Change Before Store.....

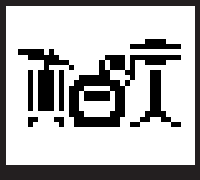
If you attempt to select a different source style before storing the current style you recorded, the following display will appear.



Select a memory number and press **OK** to store the style and then select the new source style, or press **CANCEL** to return to the Custom Style mode.

NOTE

- If you want to select a different source style without storing the current style, exit from the CUSTOM STYLE mode without storing the style (see "Exit Before Store" above), and then re-enter the CUSTOM STYLE mode.



Style File Load

Style files from optional Yamaha “Style File” disks, or disks containing custom style files you’ve created yourself, can be loaded into the CVP-98/96 and played as required.

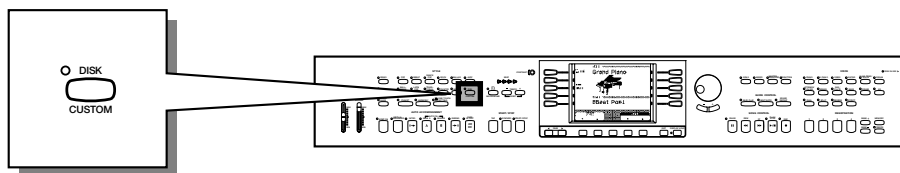


About the Yamaha Style File Format

• The Style File Format is Yamaha’s original auto-accompaniment format which has evolved through years of development and refinement. Style File Format allows you to use exceptionally high quality accompaniments with a variety of chord types through its unique conversion system. In addition to the internal styles, the optional style disks let you use different sophisticated styles created with the Style File Format.



- Loaded disk styles will be retained in memory only until the power is turned off.
- One pre-programmed temporary style is automatically loaded into the [DISK/CUSTOM] memory whenever the power is turned on.



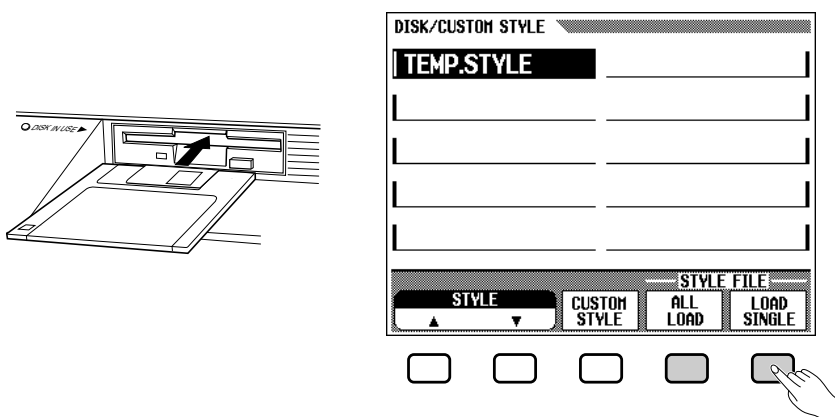
Loading Disk Styles

1 Insert the Style Disk.....

Insert the Style File Disk into the disk drive with the sliding door on the disk facing the drive slot and the label side facing upward. The disk should click into place and the DISK IN USE lamp will light briefly while the Clavinova reads and identifies the disk. When an appropriate Style File disk is inserted, the STYLE FILE LOAD display (see step 2 below) will appear automatically. If the disk is already inserted and the STYLE FILE LOAD display is not showing, press the [DISK/CUSTOM] selector to call the DISK/CUSTOM STYLE display and press the **LOAD SINGLE** button.



- If a disk containing both song and style files is loaded, the SONG PLAY mode will automatically be selected. In this case press the SONG [PLAY] button so that its indicator goes out to exit from the SONG PLAY mode, then press the [DISK/CUSTOM] button.



A set of 12 files saved by using the Custom Style save “ALL” function (page 76) can be loaded by pressing the **ALL LOAD** LCD button rather than the **LOAD SINGLE** button. The rest of the ALL LOAD procedure is essentially the same as the LOAD SINGLE procedure, as follows.

2 Select a Style File

To select the desired style, use the left/right LCD buttons. You can also use the **STYLE ▲ ▼** buttons, data dial, or [–/+] buttons.

You can “preview” the selected style by pressing the **LISTEN** LCD button (the “LISTEN” function is not available in the ALL LOAD display).

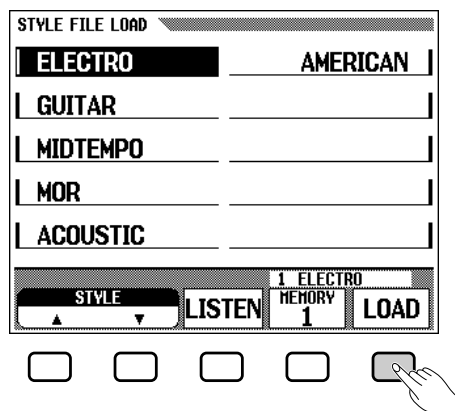


Press the **LISTEN** LCD button again or the [START/STOP] button to stop listening.

3 Select a Memory Number & Load the Style

Use the **MEMORY** LCD button to select the memory number to which the selected style file is to be loaded (1 through 12), then press the **LOAD** LCD button to load the style file.

Repeat Step 2 and 3 to select and load more style files as you like.



NOTE

- If a tempo is set prior to loading the style, that tempo becomes the default for the loaded style.
- Some styles are too large for the LISTEN function. In this case the “Too much data for LISTEN function! Please load data.” alert display will appear. In this case load the style directly as in step 3.
- ABC is automatically turned on when the LOAD SINGLE button is pressed and the style is played back automatically with the ABC accompaniment in C Major when the LISTEN LCD button is pressed. You can also change the chord or try playing on the keyboard if you like.

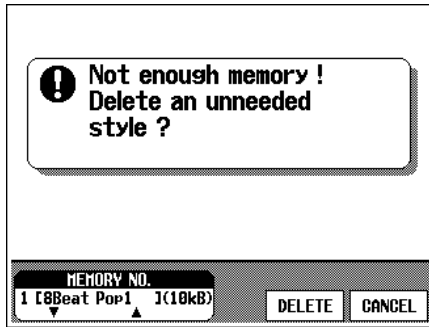
NOTE

- If the selected memory number already contains a style, the style name will appear at the lower right in the display. The existing style will be overwritten when a new style is loaded.

Style File Load

It is not necessary to select a memory number when ALL LOAD is selected in step 1. Simply press **OK** to load or **CANCEL** to abort.

If there is not enough memory to load the specified file the “**Not enough memory! Delete an unneeded style ?**” alert display will appear. In this case it will be necessary to delete a style you don’t need before loading the new style. Use the **MEMORY No.** ▲ and ▼ buttons to select the number of the style you want to delete, then press **DELETE** to delete the style, or **CANCEL** to abort.

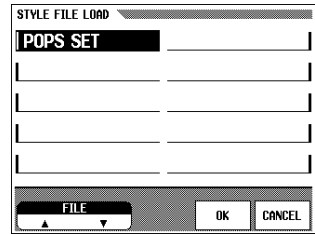


4 Eject the Disk When Done

When you’ve finished with the Style File disk, press the disk drive **EJECT** button to remove it and return to the normal play mode display. You can return to the normal play mode without removing the disk by pressing the **[EXIT]** button or a **STYLE** selector.

NOTE

- The ALL LOAD display is as follows:



When ALL LOAD is executed, all data in the 12 memories will be replaced by new data.

NOTE

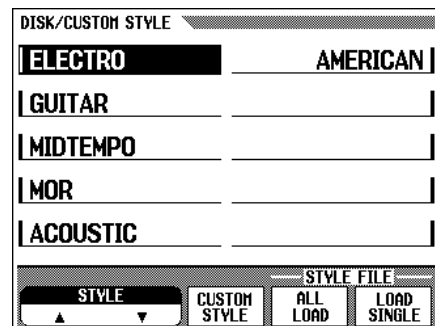
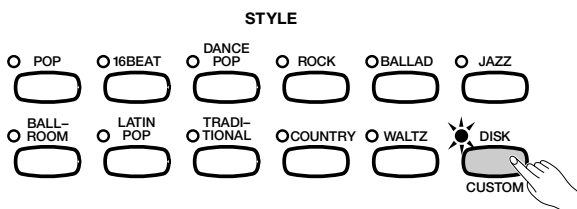
- The amount of memory being used for the selected style is also shown on the display (in approximate kilobytes) so as to set up the approximate standard which style to delete in relation to the total 300 KB memory space.

NOTE

- The **DISK IN USE** lamp will light while the style is being loaded. NEVER attempt to remove a disk while the **DISK IN USE** lamp is lit.
- The **LISTEN**, **LOAD**, **[EXIT]** and style buttons will not function while the style data is being loaded (i.e. while the **DISK IN USE** lamp is lit).

Using Loaded Style Files

Once loaded, style files can be selected for playback by pressing the **[DISK/CUSTOM]** button (its LED will light), and then using the **STYLE** ▲ and ▼ LCD buttons — or the data dial or **[-/+]** buttons — to select the style you want to play. The selected style can then be played and used with ABC auto accompaniment in exactly the same way as the preset styles (page 47).



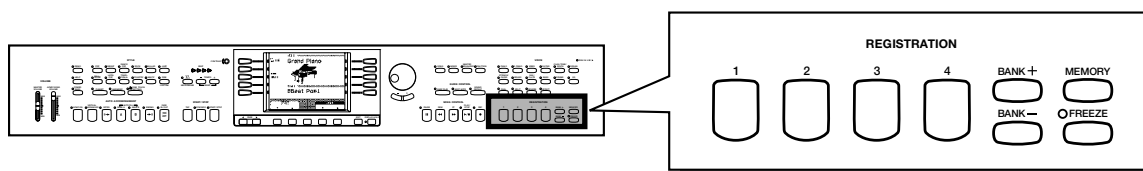
CHAPTER 5: Registrations



Registrations

(Registering/Recalling Panel Setups)

The Registration feature can be used to memorize a number of complete panel setups that you can recall whenever needed. A total of 20 setups (5 banks x 4 memories) can be registered.



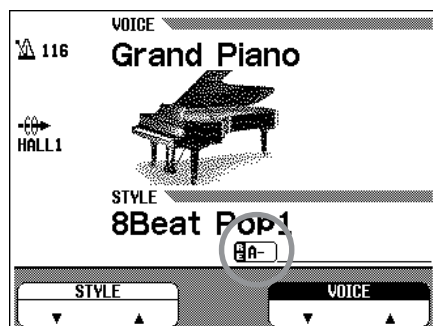
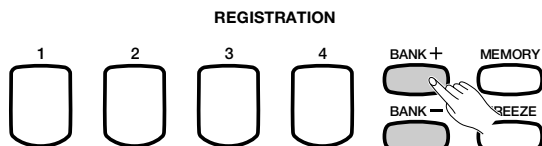
1 Set up the controls as required.....

For a list of the parameter settings memorized by the Registration function, refer to page 35 of the Reference Manual.

2 Select a Registration bank.....

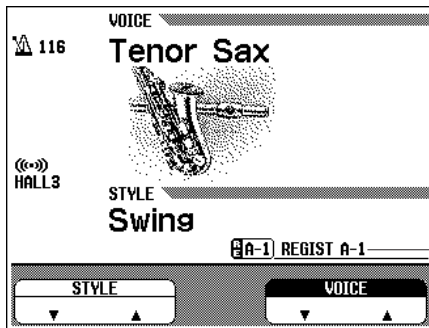
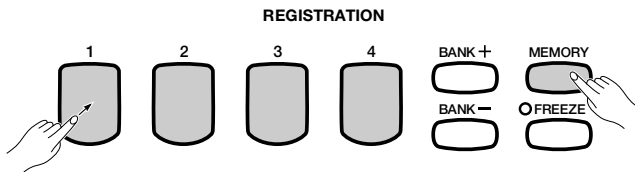
Press the BANK [-] [+] buttons to display the banks below and to the right of the style name in the main display.

Select one of the five banks: **A** — **E**.



3 Register the panel setup.

While holding the [MEMORY] button, simultaneously press one of the REGISTRATION [1] — [4] buttons. Any data that was previously in the selected location is erased and replaced by the new settings. The corresponding Registration number (bank/button number) and the Registration name will appear below and to the right of the style name in the main display. “A-1 (number 1 of bank A)” and “REGIST A-1” (temporary Registration name) will appear next to the RE mark.



Registered Registration number and name

NOTE

Registration

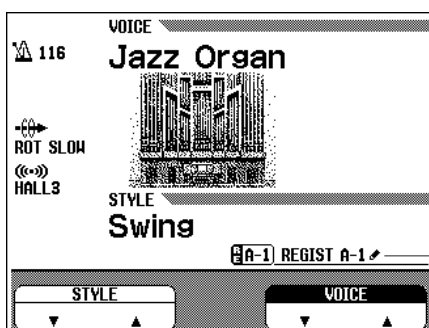
- Range: Bank: A— E, Button: 1 — 4
- Basic setting: Pre-programmed settings are registered in all Registration numbers.
- Backup of last settings: ON

NOTE

- The REGISTRATION [NAME] pop-up display appears when pressing the [MEMORY] button; however, this display is not necessary in registering the panel setup.
- The data for each Registration or a group of 20 Registrations can be saved to floppy disk, for future recall. (See page 139.)

Recalling the Registered Panel Settings

Press the BANK [-] [+] buttons as described above (in step #2) to select the bank corresponding to the desired Registration. Then, simply press the corresponding REGISTRATION [1] — [4] button to recall the desired Registration. The recalled Registration number (bank/button number) and the Registration name will appear below and to the right of the style name in the LCD display. A pencil icon appears at the right of the Registration name in the display as soon as any change is made to the panel buttons or settings. In other words, if the pencil icon is displayed, the current panel settings are different from those stored in memory.



Edit Symbol

NOTE

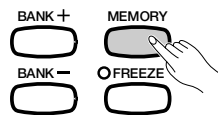
- Only selecting a different bank will not change the Registration settings.
- The Registration settings are recalled only when one of the REGISTRATION [1] — [4] buttons is pressed.
- If the Left Pedal function is set to “Registration” (see page 133), the left pedal can be used to step through the Registrations, letting you recall a different Registration each time the pedal is pressed. However, other left pedal settings assigned to each Registration cannot be recalled in this case.

Naming the Registration

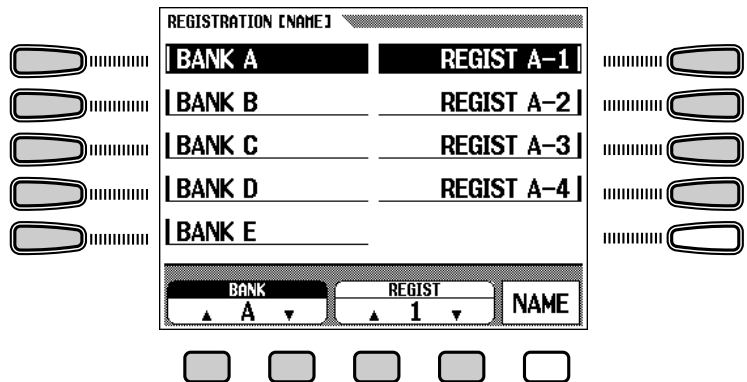
A temporary name is given to the Registration setup when you register the panel settings; however, you can change this name freely with this function.

1 Press the [MEMORY] button to call up the REGISTRATION [NAME] pop-up display.

- Select the number of the Registration whose name you wish to change by using the left/right LCD buttons. The data dial and [-/+] buttons also can be used.



You can also select the Registration number by using the **BANK ▼ ▲** or **REGIST ▼ ▲** buttons.



2 Press the NAME button to call up the display for entering the name.

Use the **CHAR ▶** button to move the underline cursor to the desired character position in the file name display. (File names can be up to 12 characters in length).

- Use the data dial or [-/+] buttons to select and highlight the character or mark you wish to enter. Press the **CHAR SET** button to enter the selected character to the current cursor position in the file name. Continue entering other characters or marks in this way until you complete the name.

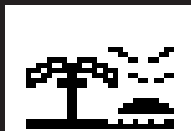


To delete the character at the previous position, press the **BACK SPACE** button. The character before the underline cursor is deleted and the cursor moves back to the deleted position.

To abort the Registration naming operation and return to the main display, press the **CANCEL** button.

When the Registration name is complete, press the **OK** button to register it. The display will return to the main display and the Registration name is indicated below and to the right of the style name.

CHAPTER 6: Song Control



Song Playback

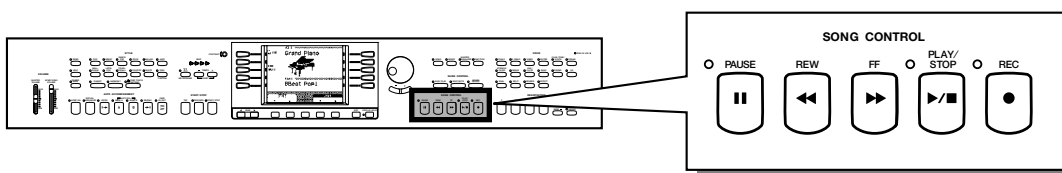
In this manual, the recorded music data of your performance, and the song data of various disk software are all referred to as “songs.”

The CVP-98/96 can play back songs you’ve recorded yourself using the Song Record function (page 105), and other songs of various musical styles. You can also play along on the keyboard with the songs as they play back. Moreover, with song data software that includes lyrics, you can view the lyrics in the display during playback.

NOTE • Consult your Yamaha dealer for information on song data that is compatible with the Lyric Display function of the CVP-98/96.

NOTE • See the section “Handling Floppy Disks” (page 7) for information on using floppy disks.
• Playback data cannot be output via MIDI.

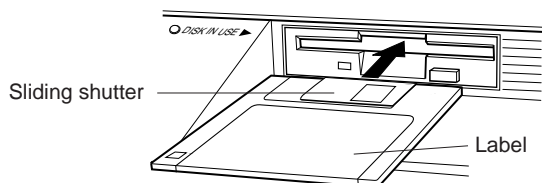
NOTE **Playback of Different Disks**
• In addition to songs you’ve recorded yourself, the CVP-98/96 can play back commercially available disks of Yamaha DOC software, XG software, and Disklavier PianoSoft as well as GM software. See the section “Playing Other Types of Music Data” on page 99.



Playback

1 Enter the Song Play mode.

Gently insert the included “Music Software Collection” disk or a disk containing songs you’ve recorded yourself into the disk drive. Make sure to insert the disk face up in correct direction, as shown in the illustration, until it clicks into place. The Song Play mode is automatically called up when a song disk is inserted in the disk drive.



NOTE • The Song Play mode is not automatically engaged from the disk-related FUNCTION displays, or the CUSTOM STYLE display — even when inserting the disk.

Song Playback

- The DISK IN USE lamp lights while the CVP-98/96 reads and identifies the disk. Once the disk has been identified, the SONG PLAY [MAIN] display (display page 1) appears in the display and the [SONG] lamp lights.

If a song disk is already inserted but the Song Play mode is not engaged, press the [SONG] button.

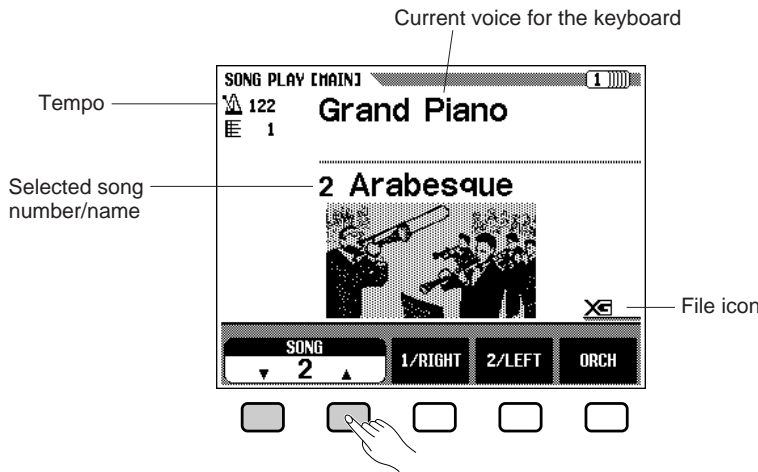
- The [SONG] lamp lights. Press the PAGE [◀] [▶] buttons to select the first page, if the SONG PLAY [MAIN] display is not shown.

2 Select a song number.

Select the desired song number for playback by using the **SONG ▼** or **▲** buttons, data dial or [-/+] buttons.

- The selected song number, name, current tempo and the file icon which indicates the type of the file are displayed.

Select “ALL” if you want all songs on the disk to be played in order. Select “RANDOM” if you want all songs on the disk to be played at random. For either selection “ALL” or “RANDOM” the songs will be repeated until playback is stopped.



NOTE

- Song numbers 1 - 60 are displayed, including song numbers that contain no song data. However, no song names are displayed for song numbers that contain no data.

● File Icons

There are four icons (shown below) that indicate the type of the file.

	XG/SMF format file
	DOC/ESEQ format file
	Yamaha Disklavier PianoSoft or XG/ESEQ file
	Song data recorded with the CVP-98/96

NOTE

- Refer to the section “MIDI and Data Compatibility” (page 8 in the Reference Manual) for information on file formats.
- Icons are not shown for song data file recorded with other CVP models, excepting the CVP-98/96 and CVP-94/92.

Use the PAGE [◀] [▶] buttons to call up the SONG PLAY [LIST] display (display page 3), to view the entire list of the song names in the disk. The desired song can be selected easily by using the left/right LCD buttons, data dial, or [-/+] buttons. You can also select the song by pressing the **SONG** ▼ ▲ buttons. Up to ten song titles are shown in the display at a time. If more songs are on the disk, the next ten titles will appear when you scroll past the last title shown in the display.

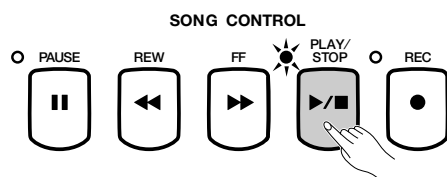


3 Start and stop playback.

Start playback of the selected song by pressing the panel [PLAY/STOP] button.

- Playback of the selected song starts. Unless **ALL** or **RANDOM** is selected, the selected song will play through to the end and playback will stop automatically. The current measure number and tempo will be shown in the display during playback.

You can also start playback of the selected song by pressing the [START/STOP] button.



Press the panel [PLAY/STOP] button to stop playback.

- Song playback stops.

You can also stop playback by pressing the [START/STOP] button.

You can exit from the song play mode by pressing the [SONG] button. The lamp turns off and the previous display appears.

NOTE

When nothing appears in the song name location...

- This indicates that there is no song data for this song number.

NOTE

Repeat Playback from Specific Songs

- If you first select **ALL** in the SONG PLAY [MAIN] display, and then select a song in the SONG PLAY [LIST] display (display page 3), all songs will be repeatedly played back starting from the selected song.

NOTE

Repeat Playback of a Single Song

- If you select a song in the SONG PLAY [MAIN] display or in the SONG PLAY [LIST] display (display page 3), and then select the **1 SONG** in the SONG PLAY **REPEAT** display (display page 4), only the selected song will be played back repeatedly until stopped.

NOTE

Voice Selection During Playback

- The voice you play from the keyboard can be changed during song playback by selecting a voice in the normal way (page 27). The voices of the 1/RIGHT & 2/LEFT part being played back can be changed in the SONG PLAY [PART] display (page 92).

NOTE

- Please note that the song may not start immediately after pressing [PLAY/STOP].

NOTE

Turning off the Keyboard Guide Lamp

- The keyboard guide lamps corresponding to the keys being played by the 1/RIGHT and 2/LEFT part will light in real time. These guide lamps can be turned off in the SONG PLAY [GUIDE MODE] display (display page 5). (See page 103.)

NOTE

Turning Off the Lyric Display

- The lyrics are shown in the display when playing back software which contains lyric data. If you want to stop the lyrics from appearing, you can disable the function from display page 5 of the SONG PLAY [GUIDE MODE] display.

NOTE

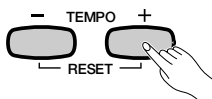
Using the Pedal to Start/Stop Playback

- By setting the Left Pedal Function to **START/STOP** in the FUNCTION [PEDAL] display (display page 3), the left pedal can function the same as the [START/STOP] button. (See page 133.)

● Adjusting the Tempo

The playback tempo of the song can be changed freely as desired. (See page 49.) The preset tempo for the selected song can be restored at any time by simultaneously pressing the TEMPO [-/+] buttons.

Usually the tempo is indicated by numbers. However in case of the free tempo software, “- - -” will appear in place of the tempo on the display, and the measure numbers shown on the display will not correspond to the actual measure; this only serves as a reference as to much of the song has been played back. The increase or decrease of the tempo based on the basic tempo is indicated by a percentage figure in the display when the tempo is changed (from -99 to +99 at maximum; the range differs depending on the software).



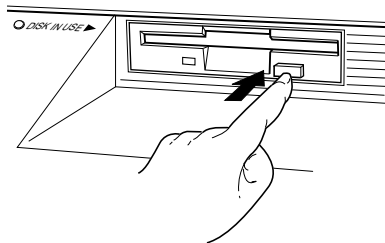
NOTE

- The beat lamp may not flash for songs not having rhythm.
- With some songs, the displayed measure numbers may not match those marked on the score.

4 Eject the disk

When you've finished with the currently loaded disk, simply press the disk drive's EJECT button to remove it.

➔ The LCD display returns to the main display.



CAUTION

- Make sure not to take out the disk while the DISK IN USE lamp is lit or while a song is being played back.

NOTE

Volume Adjustment for Each Part

- The volume of each Part can be adjusted in the MIXER display.

NOTE

Adjusting the Level Balance of Song Playback and the Keyboard Voices

- Use the [ACMP/SONG VOLUME] control (page 17) to adjust the volume.

NOTE

- When playing back a song recorded with the Auto Accompaniment function, Auto Accompaniment cannot be turned on by pressing the [ACMP ON] button.

Part Cancel

The **1/RIGHT** (right hand), **2/LEFT** (left hand) and **ORCH** (accompaniment) buttons in the SONG PLAY [MAIN] display can be used to turn playback of the corresponding parts on or off. The buttons are highlighted when the parts are turned on. For example, you can turn off the right- and/or left-hand parts so you can practice them on the keyboard.



In this example, 1/RIGHT is cancelled.

The track assignment for each button can be changed in display page 6 of the SONG PLAY [PART] display (page 92).

Turning Individual Accompaniment Parts On or Off

Normally, pressing the **ORCH** (accompaniment) LCD button turns all orchestra parts (tracks 3 — 16) — or all parts other than 1/RIGHT and 2/LEFT — on or off at once. You can, however, turn these parts on or off individually from the SONG PLAY [TRACK PLAY] display (display page 2).

1 Select the SONG PLAY TRACK PLAY page.

Use the PAGE [◀] [▶] buttons to select the SONG PLAY [TRACK PLAY] display (display page 2).

- Tracks which contain data are indicated above **TRACK** ◀ / ▶.
- Tracks enabled for playback are indicated by a box surrounding the track number. Tracks which do not contain data are not displayed.



NOTE

- Part ON/OFF can be switched during playback.
- Parts not having any data cannot be turned on. [This applies when there is actually no data in the assigned track (page 92), or when the assigned track is set to "TRK - - (OFF)."]

NOTE

- In the case of Yamaha Disklavier PianoSoft files, DOC files and XG/ESEQ files, the part indication does not appear for the parts without data.

NOTE

- All track numbers appear whether the tracks contain data or not when a Standard MIDI file song is selected (excepting songs recorded on the CVP-98/96/94/92).

2 Select the desired track for playback (PLAY/OFF, SOLO).

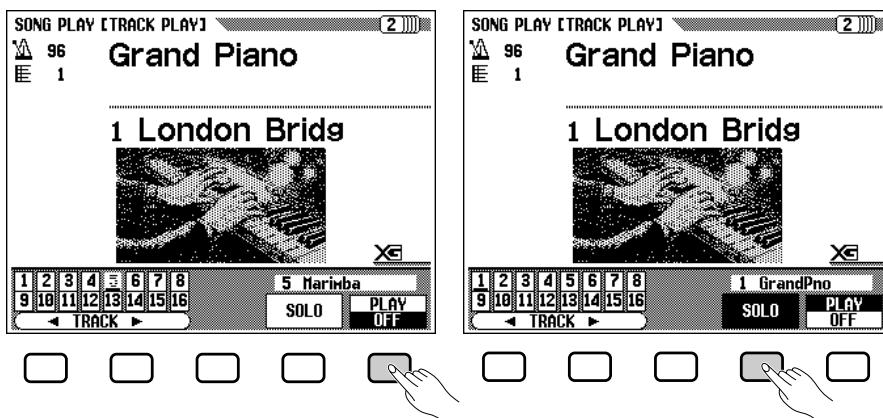
Select the track by using **TRACK** ◀ or ▶, or the data dial, or the [-/+] buttons.

→ The selected track is indicated by an underline mark.

Select playback or off for the selected track by pressing one of the far right LCD buttons **PLAY** (playback) or **OFF**.

When a track is muted, the track number is “ghosted” (shown in lighter indication) in the display. The voice used by the currently selected track is shown above **PLAY/OFF**.

Select a track, then press and highlight the **SOLO** LCD button to hear only the selected track. Press the **SOLO** LCD button again to cancel the Solo function.



Assignment of Tracks to 1 /RIGHT and 2 /LEFT, and Voice Assignment

■ Assigning Tracks to 1 /RIGHT and 2 /LEFT

Specific tracks can be assigned to the **1 /RIGHT** and **2 /LEFT** in the SONG PLAY [MAIN] display, allowing you to selectively turn playback of assigned tracks on or off. TRACK - - (OFF) can be assigned to **2 /LEFT**. The same track cannot be assigned to both parts.

Select the SONG PLAY [PART] display (display page 6) by using the PAGE [◀] [▶] buttons.

➤ Press the **1 /RIGHT** or **2 /LEFT** button to highlight the section in the display, then use the data dial or [-/+] buttons to assign the desired track.

You can also select the track by pressing the **1 /RIGHT** or **2 /LEFT** button.

NOTE

- The track assignments of DOC files and Yamaha Disklavier PianoSoft files are fixed, and therefore cannot be changed.

NOTE

- Tracks cannot be assigned during playback.



NOTE

About Track Assignments

- Basic setting: Differs depending on the file type (The [2/LEFT] parameter may sometimes be set to "TRK - - (OFF).")

NOTE

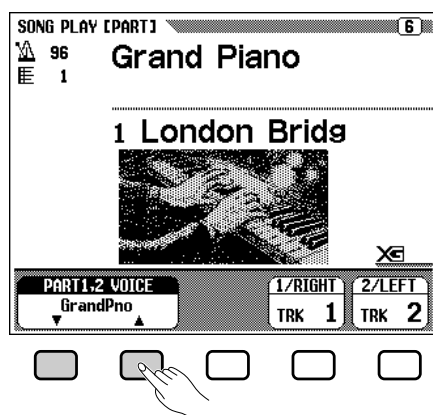
- The playback voice cannot be assigned during playback.

■ Selecting Voices for 1/RIGHT and 2/LEFT Parts

The playback voices for the 1/RIGHT and 2/LEFT parts can be selected in the SONG PLAY [PART] display.

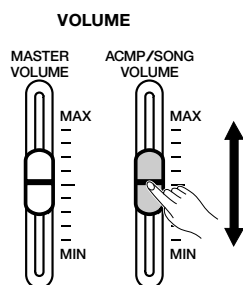
Press **PART1,2 VOICE** ▼ or ▲ to highlight the corresponding section of the display, then select the playback voice for 1/RIGHT and 2/LEFT parts by using the data dial or [-/+] buttons.

Or you can also select it by using the **PART1,2 VOICE** ▼ or ▲.



Overall Song Playback Volume Control

The [ACMP/SONG VOLUME] button can be used to control the overall volume of song playback.

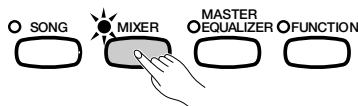


NOTE

- If Auto Accompaniment is turned on during the playback of an original song that was recorded without Auto Accompaniment, the [ACMP/SONG VOLUME] control will affect the level of the Auto Accompaniment rather than that of song playback. However, Auto Accompaniment cannot be turned on when playing back data transformed with the Transform function (page 142).
- The Auto Accompaniment function cannot be used when playing back commercially available disk software or songs recorded with Auto Accompaniment.

Individual Part Volume Control

To adjust the playback volume of individual parts, press the [MIXER] button while in the Song Play mode to call up the MIXER display. The display corresponding to the software being played back appears in display page 1, and you can control the volume balance of the keyboard sound and the orchestra accompaniment. Each track can be adjusted in display page 2.

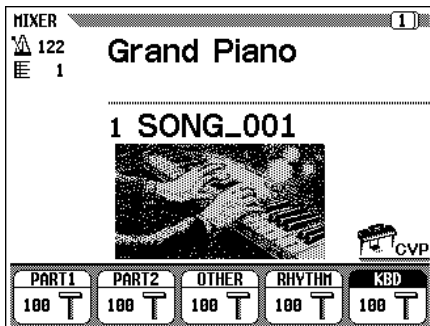


■ Page 1.....

Press one of the LCD buttons to highlight the desired parameter, then use the data dial or [-/+] buttons to adjust the volume of each part.

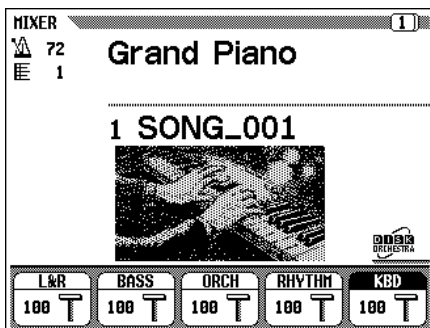
Several parts can be selected at once by simultaneously pressing the corresponding LCD buttons. The volume of all selected parts can then be adjusted together. Values can be adjusted in two-unit steps.

● When Playing Back XG/SMF Files or Original Song Data



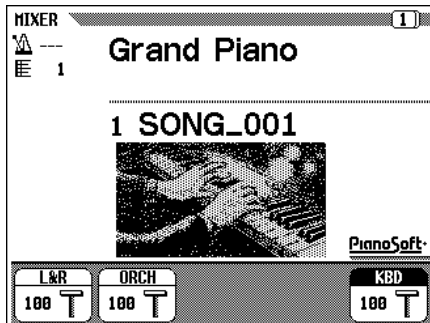
PART1	Part 1
PART2	Part 2
OTHER	Parts 3 — 8, 11 — 16
RHYTHM	Parts 9 and 10
KBD	Volume of your keyboard performance

● When Playing Back DOC Files



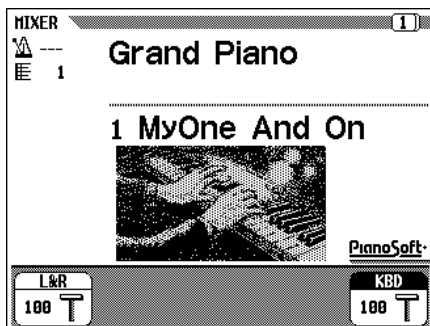
L&R	Right- and left-hand parts (piano part)
BASS	Bass part
ORCH	Orchestra part
RHYTHM	Rhythm part
KBD	Volume of your keyboard performance

● When Playing Back XG/ESEQ Files



L&R	Right- and left-hand parts (piano part)
ORCH	Accompaniment part
KBD	Volume of your keyboard performance

● When Playing Back Yamaha Disklavier PianoSoft Files

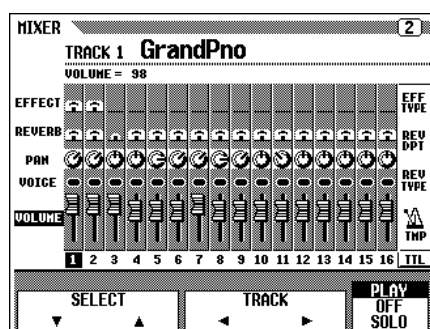


L&R	Right- and left-hand parts (piano part)
KBD	Volume of your keyboard performance

■ Page 2.....

Use the PAGE [◀] [▶] buttons to call up display page 2 of the TRACK MIXER display so that all sixteen tracks appear. From this page you can change the volume, voice, Reverb Depth, etc.

The parameters below can be changed. See the indicated reference pages for each parameter.



Available parameters in the TRACK MIXER display

● When track 1 — 16 is selected:

- VOLUME (See page 94.)
- VOICE (See page 27.)
- PAN (See page 132.)
- REVERB DEPTH (See page 43.)
- EFFECT DEPTH (See page 46.)

● When TTL (Total) is selected:

- TEMPO (See page 49.)
- REVERB TYPE (See page 41.)
- REVERB DEPTH (See page 42.)
- EFFECT TYPE (See page 46.)

NOTE

- The parameters Program Change Number (**PRG#**), Bank LSB (**BNK LSB**), and Bank MSB (**BNK MSB**), which are used to select voices via MIDI, are displayed when VOICE is selected.

NOTE

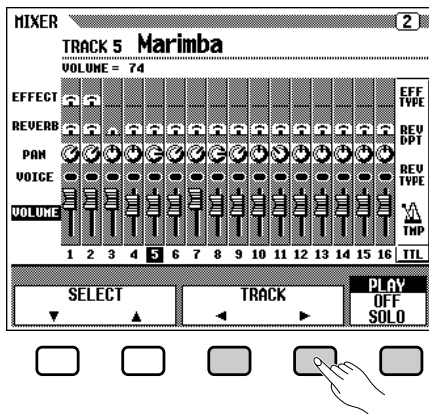
- Depending on the file type, some parameters cannot be changed. For such parameters, a "Fixed" indication is shown.

Changing Settings in the TRACK MIXER Display

1 Select the track to be changed.

Select the desired track by pressing **TRACK** ◀ or ▶. Selecting **TTL** (Total) will change the overall settings of the song rather than the settings of individual tracks.

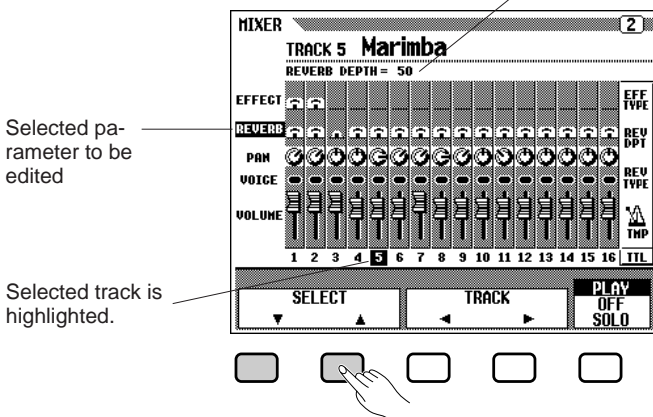
Press the far right LCD button to select **PLAY** (playback), **OFF**, or **SOLO** for the selected track. Select **SOLO** if you want to play only the selected track.



2 Select the parameter to be edited.

Press **SELECT** ▼ or ▲ to select the desired parameter.

Current value of the selected track



3 Edit the value or setting.

Use the data dial or [-/+] buttons to change the value or setting. You can make changes to the parameters while the song is playing back, letting you immediately hear the results of your edits.

NOTE

- Depending on the file type, voice changes may only be possible for tracks 1 and 2.

NOTE

- Selecting **TTL** and changing the **REVERB DEPTH** value will also affect the sound of your keyboard performance.
- The voices of tracks to which data of Auto Accompaniment, rhythm and/or harmony have been recorded can also be changed.
- Volume range: 0 — 100
- One **EFFECT TYPE** can be set to a single song. If another song is selected, all settings will return to the basic settings for the song (or the settings used for recording the song).
- If Auto Accompaniment is turned on during playback of an original song that was recorded without the Auto Accompaniment function, the **MIXER** display will function as Auto Accompaniment Part Volume Control instead of Song Track Volume Control.

Repeat Functions

The CVP-98/96 has convenient repeat functions that let you repeated play back the same song or sections within the song. This function is useful if you want to practice a difficult phrase repeatedly.

Select the desired mode from the available four Repeat modes from the SONG PLAY [REPEAT] display (display page 4).

Four Repeat modes

- OFF (Repeat function is turned off)
- PHRASE (Phrase Repeat)
- 1 SONG (1 Song Repeat)
- AB mode (AB Repeat)



NOTE

- The **ALL** or **RANDOM** playback mode (in the SONG PLAY [MAIN] display) will be disengaged when any of the Repeat modes are selected.
- Any previously set Repeat mode will be reset to OFF when a different song is selected.

■ Phrase Repeat (DOC files only)

For commercially available DOC files, you can select specific phrase numbers (as indicated on the accompanying sheet music) and repeatedly practice only the selected phrase. (Phrase Repeat can be used for the four songs for which notation is provided in the included Music Book.)

If you select **PHRASE** by using the **REPEAT MODE** ▼ or ▲ buttons, the **PHRASE** display for selection of the phrase number will appear at the right of the button. Press **PHRASE** ▼ or ▲ to highlight the corresponding section of the display, then select the phrase number by using the data dial or [-/+] buttons.

You can also select the phrase number by pressing **PHRASE** ▼ or ▲.

Once song playback is started, the selected phrase will be played back repeatedly until playback is stopped.



NOTE

- Parts can be turned on/off even during the performance.
- The Guide function can also be used simultaneously with Phrase Repeat.
- When Phrase Repeat is started, a lead-in count automatically plays before the phrase. However, for free-tempo songs, a lead-in count is not available.

■ 1 Song Repeat

When **1 SONG** is selected by pressing the **REPEAT MODE** ▼ or ▲ button, any song selected and played as described above will play repeatedly until stopped.



■ AB Repeat

This function allows you to specify any section (between point A and point B) of a song, letting you repeatedly play back the selected section for practice.

When **AB mode** is selected by the **REPEAT MODE** ▼ or ▲ buttons, **A →** and **B** will appear at the right of the buttons in the display to specify points A and B.



While the song is playing back, press the **A →** button once at the beginning of the section to be repeated.

- Then, press the **B** button at the end of the section to be repeated. Repeat playback of the specified section (from point A to point B) will begin automatically.

The programmed A and B points are retained until a different song or a different Repeat mode is selected. The same section can be played back repeatedly as many times as you desire by using the **[PLAY/STOP]** button.

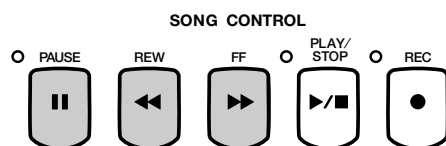
NOTE

- Lead-in count is not played.

NOTE

- The specified A — B points will be erased when a new song number or another Repeat mode is selected.
- A lead-in count automatically plays before the specified section A — B Repeat playback is started. However, for free-tempo songs, a lead-in count is not available.
- To specify the A point as the beginning of the song, press **A →** before playback starts. In this case a lead-in count is not available.
- When both the A and B points are specified, pressing the **B** button clears only the B point, resulting in repeat playback between the A point and the end of the song.
- When both the A and B points are specified, pressing the **A →** button clears both A and B points, allowing you to specify other A and B points within the song.
- The B point cannot be selected unless an A point is selected.

Other Playback Controls



Pause

Press the **[PAUSE]** button during song playback to temporarily stop song playback. Press **[PAUSE]** again or the **[PLAY/STOP]** button to resume playback from the same point.

Rewind and Fast Forward

Use the **[REW]** and **[FF]** buttons to rewind or fast forward to the playback point of the song.

- While playback is stopped or paused, the **[REW]** and **[FF]** buttons can be used to step backward or forward through the song a measure at a time. Holding down either button continuously moves through the song in the corresponding direction.
- During playback, the **[REW]** and **[FF]** buttons allow you to move the playback point of the song rapidly as long as the button is held. No sound is produced during **[REW]** operation.

NOTE

- Using the **[REW]** button may cause the voice, tempo, and/or volume to change.

Playing Other Types of Music Data

About Compatible Software

The CVP-98/96 can playback the following types of software.

- **Sequence formats: SMF (format 0 and 1), ESEQ**
- **Voice allocation formats: GM System Level 1, XG, DOC**

Refer to the section “MIDI and Data Compatibility” (page 8 in the Reference Manual) for information on the voice allocation formats and sequence formats.

The internal tone generator of the CVP-98/96 automatically resets for compatibility with song data of the Yamaha XG format (including GM System Level 1) (page 8 in the Reference Manual) or of Yamaha DOC voice allocation (page 8 in the Reference Manual), depending on the playback data. (However, the selected voice allocation on the panel will not change.)

Song Data Recorded on Other Instruments

Song data recorded on other Clavinovas (CVP-50/70/55/65/75/83S/85A/87A/59S/69A/69/79A/89/92/94 and CLP-705) will normally be played back with the correct voices even though the volume balance may be slightly different. However, data recorded using the Auto Accompaniment function of the CVP-50/70 cannot be played back properly.

Song data recorded on the Yamaha Disklavier can also be played back.

NOTE

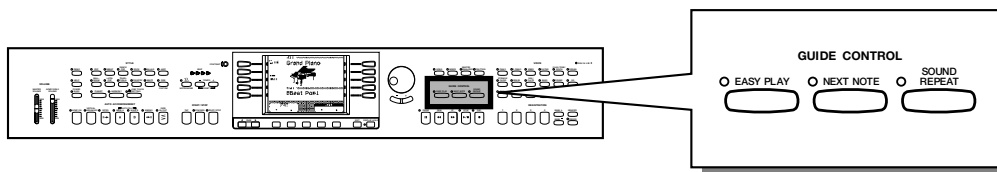
- Regardless of the type of software, only the following disk formats can be used: 3.5" 2DD 720 kilobyte format and 3.5" 2HD 1.44 megabyte format.



Guide Control

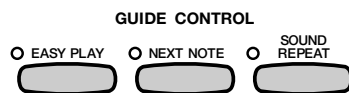
The CVP-98/96 has a special Guide function which allows you to practice by using the appropriate disk software. The “piano roll” display and the keyboard guide lamp indicate which keys you should play, and when you should play them. You can even practice at your own pace since the CVP-98/96 pauses playback of the accompaniment until you play the correct keys.

The Guide function can also be used during playback of the “4. GUIDE Demo” song in the Demo mode. Press one of the GUIDE CONTROL buttons during playback of the “4. GUIDE Demo” song in the Demo mode, and use the Guide function to play the melody part.



Guide Methods and Piano Roll

The CVP-98/96 has three different Guide methods that can be selected depending on your playing experience or preferences. Beginning players should practice first with Easy Play, then go on to Next Note, then Sound Repeat.



■ Practicing the Timing: Easy Play

Since the Easy Play method lets you practice only the timing of the notes, you can play anywhere on the keyboard. The melody will play back smoothly when you play with the correct timing. (The accompaniment plays back normally in tempo.)

■ Practicing the Notes: Next Note

The Next Note method lets you check which notes to play by looking at the piano roll display and the keyboard guide lamps. Since the CVP-98/96 waits to play the accompaniment until you play the correct note, you can practice at your own pace.

The keyboard guide lamps indicate the timing in which to play, by changing from lit-up to flashing.

NOTE

When the keyboard guide lamps do not flash...

- The guide lamps may not flash in the case of a few songs because of a special guide system. In case of such songs, however, you can switch to the Next Note method so that the lamps flash, if you like. See the “Other Guide-related Functions” on page 103.

■ Practicing Phrase-by-phrase with the Playback: Sound Repeat

In the Sound Repeat method, the CVP-98/96 plays back a short phrase. Listen to the phrase and practice.

Playback of one phrase repeats three times, then is followed automatically by the next phrase.

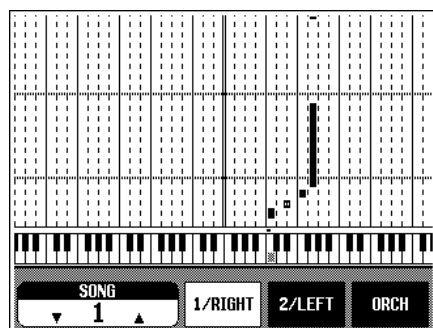
NOTE

Number of Repeats

- You can set the number of times the phrase will be repeated from the SONG PLAY [GUIDE MODE] display (display page 5). (See page 104.)
- The keyboard guide lamps can be turned on or off as desired.

● Piano Roll

To show the piano roll in the display, press any GUIDE CONTROL button, then press the [PLAY/STOP] button to start playback. A bar of the same length as the note to be played scrolls down from the top of the display toward the bottom. You should play the note at the time the bar reaches the bottom of the display. In order to play the note with the correct duration, hold the note for as long as the bar remains in the display.



NOTE

Piano Roll On/Off

- The piano roll display can be turned on or off from the SONG PLAY [GUIDE MODE] display (display page 5). (See page 104.)

Using the Guide Function

1 Set up the desired song for practicing.....

Check that the disk is properly inserted in the disk drive before calling up the Guide function.

- > Select the song and cancel the part that you wish to practice yourself from the SONG PLAY [MAIN] display (display page 1).

NOTE

Before Practicing

- Before starting to practice, playback the entire song without cancelling the part to be practiced and listen to it carefully. This will give you a clear idea of how the song should be played, and will make your practice sessions progress more smoothly.

NOTE

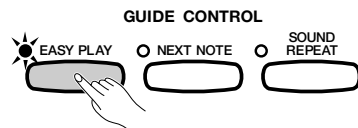
Auto Part Cancel

- If you turn on the Guide function without cancelling playback of the part to be practiced, 1/RIGHT part is guided (or the 2/LEFT part is guided when the 1/RIGHT part contains no data). However, when you cancel the part before turning on Guide, the setting will be kept until the song is changed.

2 Select the Guide method.

Press one of the GUIDE CONTROL buttons: [EASY PLAY], [NEXT NOTE] or [SOUND REPEAT].

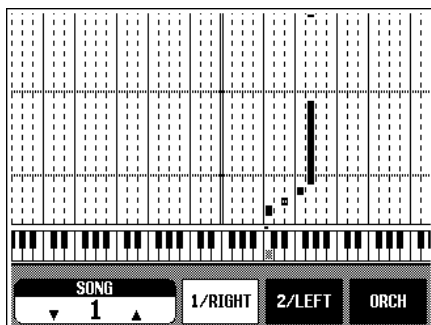
→ The lamp of the corresponding button lights.



3 Practice the part.

Press the [PLAY/STOP] button to start playback.

→ The piano roll will appear. Practice along with the accompaniment.



4 Stop your practice session.

The Guide function stops automatically when playback reaches the end of the song. You can also stop song playback by pressing the [PLAY/STOP] button.

To turn off the Guide function, press the appropriate button — [EASY PLAY], [NEXT NOTE] or [SOUND REPEAT] — so that the lamp turns off.

NOTE

Turning Off the Keyboard Guide Lamps

- The keyboard guide lamp can be turned on and off in the SONG PLAY [GUIDE MODE] display. (See page 104.)

NOTE

When the GUIDE CONTROL buttons cannot be turned on...

- The GUIDE CONTROL buttons can be used only in the Song Play mode or when the "4. GUIDE Demo" song is selected in the Demo mode. Only one Guide mode can be selected at a time.

NOTE

Piano Roll On/Off

- The piano roll display can be turned on or off from the SONG PLAY [GUIDE MODE] display (display page 5). (See page 104.)

NOTE

- The correct melody plays back no matter which note you play in the EASY PLAY mode.

NOTE

The Guide method can be changed during playback.

- (However, the Guide mode cannot be changed for songs in which **SPECIAL** is indicated in the GUIDE MODE location in SONG PLAY [GUIDE MODE] display page 5.)

NOTE

- The [PAUSE] button cannot be used in the Next Note or Sound Repeat methods.

NOTE

- The keyboard guide lamps light corresponding to the notes played by the 1/RIGHT and 2/LEFT parts during song playback, even when Guide is set to off — unless the **LAMP** button is turned off in the SONG PLAY [GUIDE MODE] display. The guide lamps indicate the notes to be played by both the 1/RIGHT and 2/LEFT parts when both are turned on or off; when only one of the parts is turned off, the lamps indicate the notes to be played by the part that is turned off.
- The guide part can be selected, the guide lamps can be turned on and off, and the Guide function itself can be turned on or off during playback.

NOTE

- Playback tempo can be set to any desired value after a song has been selected by using the TEMPO [–/+] buttons.
- The positions of the guide lamps will not change, even if the Transpose function (page 130) is used to transpose the pitch of the keyboard.
- The Guide function may not work properly with software which was not produced for independent left- and right-hand playback.
- Since the Guide phrases used in the Sound Repeat method are automatically determined by the CVP-98/96, they may not precisely match the actual musical phrases. Also, the phrases may become shorter when the Guide function is used for both the left- and right-hand parts.

Other Guide-related Functions

Various settings related to the Guide functions can be made in the SONG PLAY [GUIDE MODE] display (display page 5).

NOTE

- The settings made in this display will also be effective in the Guide function during playback of the “4. GUIDE Demo” song in the Demo mode.

GUIDE MODE

NORMAL is usually displayed in the location of the **GUIDE MODE**. Change the indication to **ENSEMBLE** by pressing the **GUIDE MODE** button; the part which was set to Part Cancel in the SONG PLAY [MAIN] display (display page 1) can then be played with the regular Part Cancel function and the other part (not set to Part Cancel) can be played with the Easy Play function.

NOTE

- The **ENSEMBLE** mode is effective only for songs which have data in both the [1/RIGHT] and [2/LEFT] parts.
- The **ENSEMBLE** mode cannot be used when Next Note or Sound Repeat is selected.

When Next Note is selected and **SPECIAL** is indicated in the **GUIDE MODE** display, a special Guide method is engaged for the selected song. To return the normal Next Note mode, press the **GUIDE MODE** button so that the indication changes to **NORMAL**.

NOTE

- The **SPECIAL** indication appears automatically depending on the song being played back. The **SPECIAL** indication will not appear, even when pressing the **GUIDE MODE** button, when playing back songs that do not feature the special method.
- When using the Easy Play or Sound Repeat method, the respective method is still active, even if the **SPECIAL** indication is shown.



NOTE

Guide Modes

- Settings: NORMAL/ENSEMBLE/(SPECIAL)
- Basic setting: Auto indication of NORMAL/(SPECIAL)
- Backup of last settings: OFF

■ Setting the Sound Repeat Number

To set the number of times the phrase is repeated in the Sound Repeat mode, press the **SOUND REPEAT** button. When **AUTO** is selected, only the notes which have not been played correctly are repeated; the Guide function will automatically go on to the next phrase once the previous one has been played properly.

NOTE

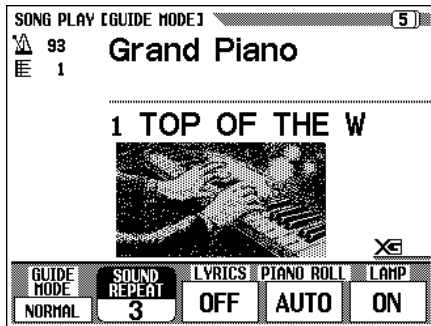
- Sound Repeat Number**
- Settings: *AUTO, 2 - 10*
 - Basic setting: *3*
 - Backup of last settings: *OFF*

■ Lyric Display ON/OFF

To turn lyric display off, press the **LYRICS** button to set the function to OFF.

NOTE

- Lyric Display**
- Setting: *ON/OFF*
 - Basic setting: *ON*
 - Backup of last settings: *OFF*



■ Setting the Piano Roll Indication

The piano roll settings **AUTO/ON/OFF** can be changed by pressing the **PIANO ROLL** button. When **AUTO** is selected, the piano roll will appear by turning on one of the **GUIDE CONTROL** buttons. When this is set to **ON**, the piano roll is always shown during playback; when set to **OFF**, the piano roll is not displayed.

NOTE

- Piano Roll**
- Settings: *AUTO/ON/OFF*
 - Basic setting: *AUTO*
 - Backup of last settings: *OFF*



■ Keyboard Guide Lamp ON/OFF

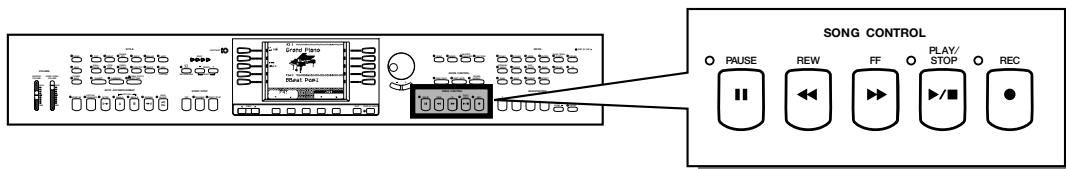
To turn off the keyboard guide lamps, press the **LAMP** button to set the function to OFF.



Song Recording

The CVP-98/96 features comprehensive song recording functions that allow you to record your own performances to floppy disks. Three recording methods are available: Quick Recording (page 107), which lets you record quickly and easily; Track Recording (page 110), with which you can record multiple instrumental parts; and Chord Sequence (page 116), which lets you step-record Auto Accompaniment chords.

The music you create by recording is called a song. Up to approximately 60 songs can be recorded on a single disk, depending on the amount of data contained in each song. Before you can record, however, you must “format” a new disk. (See page 106).



● Structure of a Song

A song can be made up of several instrumental parts, each assigned to a different track, as shown in the example below.

Song Recording track chart

Track 1	Piano Part (right-hand)
Track 2	Piano Part (left-hand)
Track 3	Bass Part
Track 4	Strings Part
:	:
Track 9	Rhythm Part
Track 10	Rhythm Part
:	:
Track 16	Organ Part

(Up to a maximum of 16 tracks.)

Various confirmation, alert, and error messages may appear in the display during operation. Refer to the “Messages” section (page 2 in the Reference Manual) for information on the messages.

NOTE

- Refer to “Handling Floppy Disks” (page 7) for information on using floppy disks.
- Songs recorded by the CVP-98/96 are saved as XG/SMF (format 0) files. See page 8 in the Reference Manual for information on the XG/SMF (format 0) format.
- Recorded song data is not output through the MIDI OUT terminal when played back.

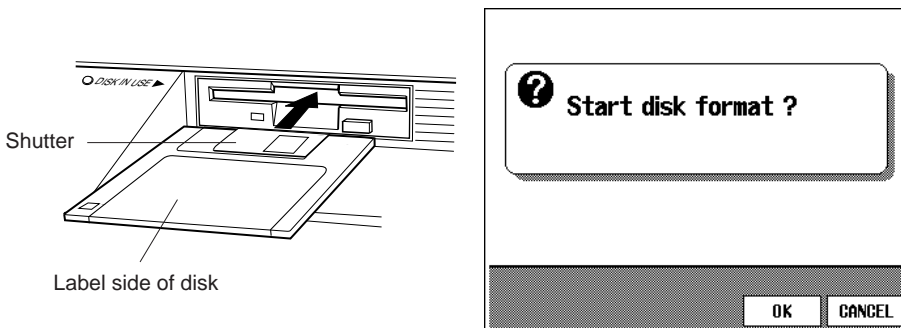
Recording Setup: Disk Format

Before you can record to the included blank disk, you will have to format it. Commercially available blank disks must also be formatted before using. Refer to Format in the Function section (page 135) to re-format floppy disks that have already been used for recording.

1 Insert a disk.

Gently insert the included blank disk for recording into the disk drive face up as shown in the illustration until it clicks into place.

- ➔ A few seconds after inserting the disk into the disk drive, a “Start disk format?” message appears in the display. To start formatting, press the **OK** button. To cancel the format operation, press **CANCEL**.



NOTE

- The same display appears when inserting blank unformatted disks, or disks of different formats.

NOTE

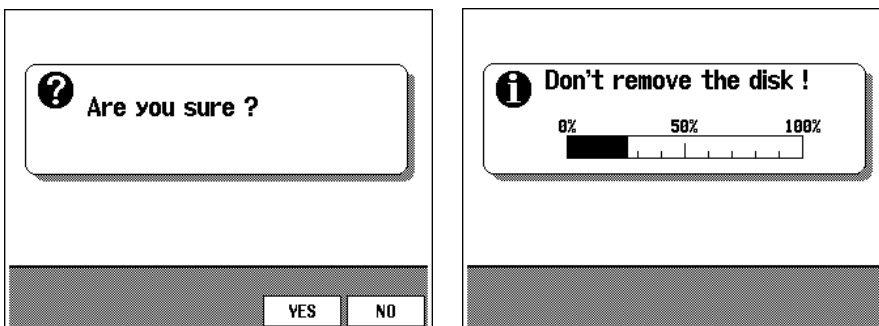
Format Types

- 2DD disks are formatted to 720 KB, while 2HD disks are formatted to 1.44 MB.

2 Execute the format operation.

An “Are you sure?” message appears in the LCD display; press **YES** to execute the operation, or **NO** button to cancel it.

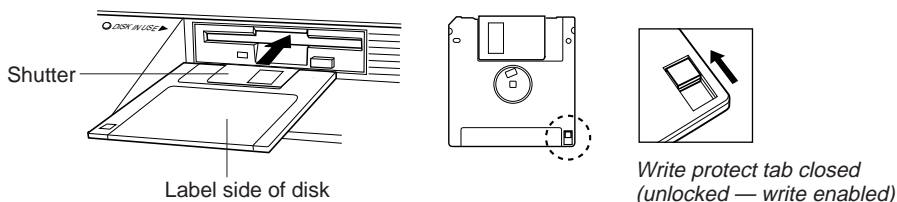
A bar graph appears in the LCD display during formatting to indicate progress of the operation. The display automatically returns to the previous display when formatting is completed.



Quick Recording

1 Insert a formatted disk.

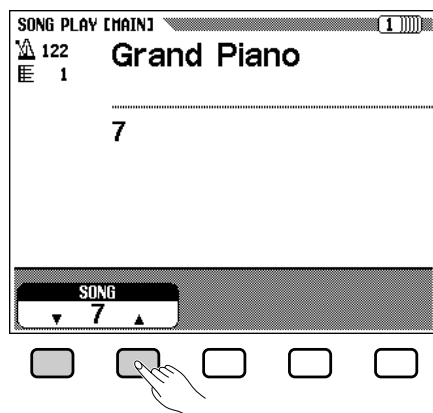
Make sure that the disk's write protect tab is set to the "write" position, then insert the disk face up with the shutter forward until it clicks into place.



- ➔ The DISK IN USE lamp stays lit until the CVP-98/96 reads and recognizes the disk. If the Song Play mode is not automatically called up, press the [SONG] button.
- ➔ The lamp lights and the SONG PLAY MAIN display appears. If the SONG PLAY MAIN display is not shown, use the PAGE [◀] [▶] buttons to select display page 1.

2 Select the song number to be recorded.

Select the desired song number for recording by using the SONG ▼ or ▲ buttons, data dial or [-/+] buttons. The song number can be selected from between 1 and 60. The selected number becomes the location that the song will be recorded. If a song name appears beside the song number, the selected song already contains data, and another song number must be selected.



NOTE

- The SONG PLAY mode will not automatically be called up, even after inserting the disk, in disk-related Function operations and the CUSTOM STYLE display.

NOTE

Using Style File Disks

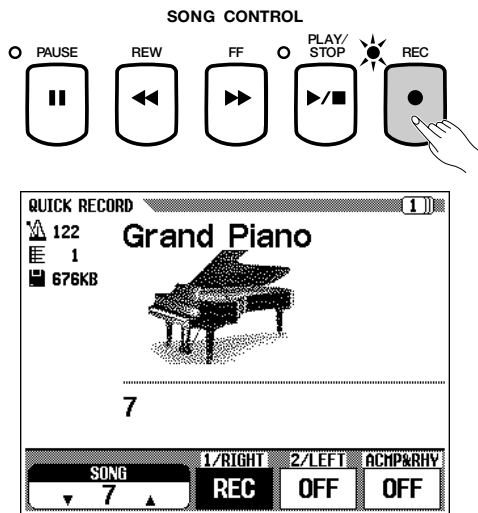
- When using Style File disks, first load the desired data from the Style File disk (page 80), then insert the recording disk.

3 Select the record mode.

Press the [REC] button.

➔ The [REC] lamp lights and the QUICK RECORD display of record mode page 1 appears.

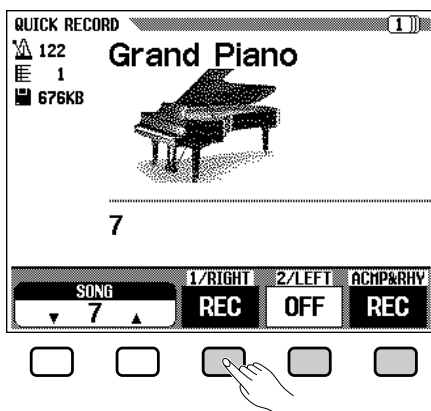
Call up page 1 by using the PAGE [◀] [▶] buttons if the lamp is lit but the QUICK RECORD display is not shown.



4 Select the part for recording.

In Quick Recording, three parts can be recorded: the right hand part (1/RIGHT), the left hand part (2/LEFT) and the Auto Accompaniment & rhythm part (ACMP & RHY). Press the appropriate button — **1/RIGHT**, **2/LEFT** or **ACMP&RHY** — to set the part to **REC** (record enable) or **OFF** (record/playback disabled). The **PLAY** (playback) setting can be selected only for parts which already contain data.

The **ACMP&RHY** part can automatically be set to **REC** by pressing the panel [ACMP ON] button. To record only the rhythm, leave **ACMP&RHY** set to **REC**, then press the [ACMP ON] button so that the lamp goes out.



When a part is set to **REC** (record enable), recording is set to stand-by and automatically starts when you play the keyboard.

NOTE

- The song number for recording can be changed in the QUICK RECORD display.
- If Auto Accompaniment is turned on when entering the record mode, the **ACMP&RHY** track will automatically change to the **REC** display.

NOTE

- Both **1/RIGHT** and **2/LEFT** cannot be set to **REC** at the same time.

NOTE

Tracks Recorded with Harmony, Dual or Split Functions

- You can record your performance with harmony parts using the Harmony function, or record two different parts by using the Dual or Split functions. Harmony is recorded to tracks 6, 7 and 8. When using Dual with recording of the 1/RIGHT part, data is recorded to tracks 1 and 3; when using Split with recording of the 1/RIGHT part, data is recorded to tracks 1 and 5. When using Dual with the 2/LEFT part, data is recorded to tracks 2 and 4; when using Split with the 2/LEFT part, data is recorded to tracks 2 and 5.

NOTE

Tracks Recorded Using Auto Accompaniment

- When recording Auto Accompaniment, the rhythm is recorded to tracks 9 - 10, bass to track 11, and chordal backing to tracks 12 - 16.

NOTE

- When any part is displayed in **REC**, the remaining memory capacity of the disk (in kilobytes) will appear directly below the measure indication in the display. Empty 2DD and 2HD disks should have about 690KB and 1400KB, respectively. This is room enough for about 50,000/100,000 notes if no other data is recorded.

NOTE

- When the **ACMP&RHY** part is set to **REC**, the metronome will sound to provide a timing guide in the Synchronized Start mode before recording is started. (The metronome doesn't sound when Synchronized Start is released.)
- The Chord Sequence recording method (page 116) lets you record Auto Accompaniment without having to play chord parts in tempo.

5 Select the desired voices and accompaniment style, etc.

Select the voices and accompaniment style and set the tempo in the normal way, and other settings needed. (If you want to try out the selected voices, style and tempo, etc., make sure to do so before entering the SONG PLAY mode, since the recording will start as soon as you play the keyboard or press the [START/STOP] button.)

6 Start recording.

There are several ways to start recording, as described below.

- **Recording your keyboard performance (1 / RIGHT or 2 / LEFT)**

Start playing the keyboard or press the [PLAY/STOP] button.

- **Recording the Auto Accompaniment or rhythm (ACMP&RHY)**

Start playing the keyboard (in the left range when the keyboard is split) with the Synchronized Start function or press the [START/STOP] button.

- **Recording your keyboard performance together with the Auto Accompaniment or rhythm**

Start recording in the same way as described in “Recording the Auto Accompaniment or rhythm (ACMP&RHY)” above to start recording your keyboard performance together with the Auto Accompaniment or rhythm.

- **Recording the Auto Accompaniment or rhythm in the middle of recording your keyboard performance**

Start recording your keyboard performance as in “Recording your keyboard performance (1 / RIGHT or 2 / LEFT)” above, then start recording the Auto Accompaniment or rhythm while you play as described in “Recording the Auto Accompaniment or rhythm (ACMP&RHY)” above.

NOTE

When Using Style File Disks

- When using Style File disks, make sure to load the data from the Style File disk (page 80) before inserting the disk for recording.

NOTE

- The Auto Accompaniment functions — INTRO, AUTO FILL, ENDING, and FADE IN/OUT — can be also recorded. Press the INTRO button before starting to record, press the AUTO FILL button during recording, press the ENDING button at the end of recording, and press the FADE IN/OUT button at the beginning or ending of the recording. When the ENDING button or the FADE IN/OUT button is pressed at the ending, recording stops automatically after playing the ending pattern or fade out.

NOTE

Recording Along with the Metronome

1. After selecting the voice, press the [METRONOME] button, and set the Beat parameter in the METRONOME display. → The metronome will start sounding.
2. The recording starts as soon as you play the keyboard. The metronome sound is not recorded.

When a disk is not inserted..

- A song can be recorded to internal memory if it is short enough. A maximum of approximately 2500 notes 25KB can be recorded; however, this amount may be less if other functions are used. The internally recorded song will be deleted when the power is turned off or when another song is loaded. See “Recording Without a Disk” (page 127) for more information.

NOTE

Adjusting the Volume During Recording

- During recording, you can adjust the volume of the recorded Auto Accompaniment and/or keyboard part from the [ACMP/SONG VOLUME] control and the MIXER display. When entering the record mode, [ACMP/SONG VOLUME] is automatically reset to the default value (MAX), regardless of the current slider position.

Turning Harmony or Split On/Off During Recording

- When recording the 1/RIGHT part, [HARMONY] or [SPLIT] can be set to on and recorded for only this part. When the 2/LEFT part is selected, the Harmony sound and the left range of the split cannot be recorded. When the recording part is changed, [HARMONY] and [SPLIT] are automatically turned off.

NOTE

- The keyboard guide lamps do not light up during recording.

7 Stop recording.

Press the [PLAY/STOP] button.

- ➔ Recording stops. When the recorded data has been written to disk, the [REC] lamp goes out and the song play display appears. You can also stop recording by pressing the [REC] button.

When pressing the [START/STOP] button, only the recording of the Auto Accompaniment or rhythm will stop. You can continue recording your keyboard performance, without the Auto Accompaniment and rhythm. Press either the [PLAY/STOP] or [REC] button in order to actually stop recording.

8 Play back the recording.

Press the [PLAY/STOP] button.

- ➔ The recorded data will be played back. During playback you can use the [REW], [FF] and [PAUSE] buttons to control the playback, and use the TEMPO [-/+] buttons to change the tempo. You can also play along on the keyboard.

Playback will stop automatically when the end of the recording is reached, or you can press the [PLAY/STOP] button again to stop it at anytime.

NOTE

- The CVP-98/96 may continue to write data to the disk for a short time after you stop recording. DO NOT eject the disk while the DISK IN USE lamp of the disk drive is lit.
- When a song has been recorded, a temporary name **SONG ***** (***) is the number) will automatically be given to the song. You can change the name as desired. (See page 120.)
- The [ACMP ON] and/or [HARMONY] lamp(s) automatically go out when recording of these parts has finished.
- When recording is finished, [ACMP/SONG VOLUME] is automatically reset to the default setting (MAX), regardless of the current slider position.

Track Recording (Multi-track Recording)

1 Set up the instrument for recording.

The first three steps in the Track Recording process are exactly the same as those for Quick Recording. (See page 107.)

2 Select the TRACK RECORD Page

Use the PAGE [◀] [▶] buttons to select the TRACK RECORD page (RECORD display page 2). Each track will be displayed in the **TRACK** section. Tracks which are enabled for playback are indicated by a box surrounding the track number, and tracks which are record-enabled are indicated by highlighted number. Tracks which do not contain data are not displayed.

NOTE

- When the Rhythm track(s) contain data, an "■" indication appears at the right below "RHYTHM" in the display.



3 Select the desired track for recording.

Press the **TRACK** ◀ or ▶ buttons or use the data dial or [-/+] buttons to select the track.

→ The selected track is indicated by an underline mark.

Use the LCD button at the far right to set the selected tracks to **RECORD** (record enable) or **OFF** (record/playback disable). **PLAY** can only be selected for tracks which contain data. When a track is muted, the track number is “ghosted” (shown in lighter indication) in the display.



Three separate tracks can be set to record simultaneously when recording keyboard parts.

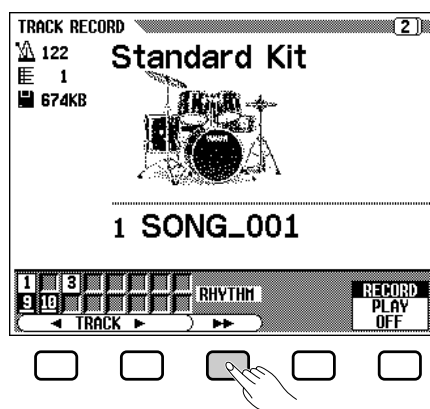
If you intend to record using the Dual or Split functions, two tracks must be record-enabled.

If you intend to use both the Dual and Split functions simultaneously, three tracks must be selected.

If Auto Accompaniment and/or Harmony are turned on, the recording track numbers are automatically fixed, as described below.

- * If Auto Accompaniment is turned on, tracks 9 through 16 are automatically record-enabled for recording the Auto Accompaniment data. If the Harmony function is turned on, tracks 6 through 8 are automatically record-enabled for recording the Harmony data.

When the **RHYTHM** button is pressed, tracks 9 and 10 are automatically selected for the rhythm data. Set tracks 9 and 10 to **RECORD**, **PLAY**, or **OFF** by using the LCD button at the far right.



NOTE

- Track 10 (and 9, in some cases) can only be used to record the rhythm sound of the accompaniment style and cannot be used to record keyboard part. Also, the keyboard part should be recorded on a track other than those used for Harmony or Auto Accompaniment.
- When Auto Accompaniment is turned on, Synchronized Start recording is automatically set to stand-by.
- When the RHYTHM tracks (9 and 10) are set to **RECORD**, the metronome will sound to provide a timing guide in the Synchronized Start mode.

4 Set all performance features as required.

After setting the tracks to be recorded, set up all necessary performance features as required: voice, accompaniment style, tempo, reverb, etc.

5 Start recording.

There are several ways to start recording, as described below.

• Recording your keyboard performance

Start playing the keyboard or press the [PLAY/STOP] button.

• Recording the Auto Accompaniment or rhythm

Start playing the keyboard (in the left range when the keyboard is split) with the Synchronized Start function or press the [START/STOP] button.

• Recording your keyboard performance together with the Auto Accompaniment or rhythm

Start recording in the same way as described in “Recording the Auto Accompaniment or rhythm“ above to start recording your keyboard performance together with the Auto Accompaniment or rhythm.

• Recording the Auto Accompaniment or rhythm in the middle of recording your keyboard performance

Start recording your keyboard performance as in “Recording your keyboard performance” above, then start recording the Auto Accompaniment or rhythm while you play as described in “Recording the Auto Accompaniment or rhythm” above.

The current measure number is shown in the display as you record. The parameters listed below will be recorded in addition to notes you play. (Recorded parameters differ depending on the play styles and settings.)

Parameters Recorded for Each Track

- Notes
- Voice
- Volume (initially maximum)
- Pan
- Damper pedal
- Soft pedal
- Sostenuito pedal
- Reverb depth
- Effect depth
- Individual part volume
- Fade-in/out (converted into volume data)

Other Recorded Parameters

Accompaniment style data which is recorded but not listed above includes:

- Individual part volume

Parameters Recorded for the Entire Song

- Tempo
- Reverb type
- Reverb depth
- Effect type*
- Accompaniment style
- Intro
- Main A/B
- Fill-in
- Ending

* The last recorded track effect takes priority.

NOTE

- If Auto Accompaniment and/or Harmony are already on when the Track Recording page is selected, the corresponding tracks are automatically record-enabled and the Synchronized Start mode is automatically turned on.
- If you want to re-record part of the song (for example, if you've made a mistake in the recording), you can easily do so with the Punch-in /out Recording function (page 113).

NOTE

Backing Up Your Data

- Any time you have recorded some amount of data, you should copy the data to another song number for backup purposes (see page 136 for information on the Copy operation). Doing this prevents accidental loss of important data, should you inadvertently delete the data during recording.

6 Stop recording.

Press the [PLAY/STOP] button.

- ➔ Recording stops. The [REC] lamp goes out when the data has been written to the disk, and the song play display appears.

You can also stop recording by pressing the [REC] button.

When pressing the [START/STOP] button, only the recording of the Auto Accompaniment or rhythm will stop. You can continue recording your keyboard performance without the Auto Accompaniment or rhythm. Press either the [PLAY/STOP] or [REC] button in order to actually stop recording.

NOTE

- When recording is finished, [ACMP/ SONG VOLUME] is automatically reset to the default setting (MAX), regardless of the current slider position.

Adding New Tracks

You can add a new track to your song by selecting a new record track(s) and voice(s) for recording as described above. You can record while playing back and monitoring the previously recorded tracks, letting you assemble a complete song by repeating this process.

NOTE

- If you record on a track that has already been recorded, the previous material will be erased and the new material will be recorded in its place.

Punch-in/out Recording

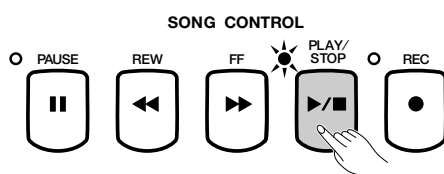
With the Punch-in/out Recording function, you can selectively re-record specified sections of the song. Punch-in/out recording allows you to start recording from any “Punch-in” point within a previously recorded track and stop recording at any “Punch-out” point, leaving intact all recorded material up to the Punch-in point and following the Punch-out point.

NOTE

- Punch-in/out recording cannot be used on tracks to which Auto Accompaniment, rhythm and/or Harmony are recorded.

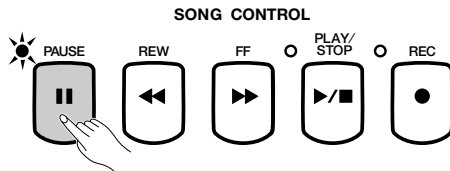
1 Play back the song.

Play back the song in order to locate the point you want to Punch-in (re-record) from .



2 Pause before the Punch-in point.

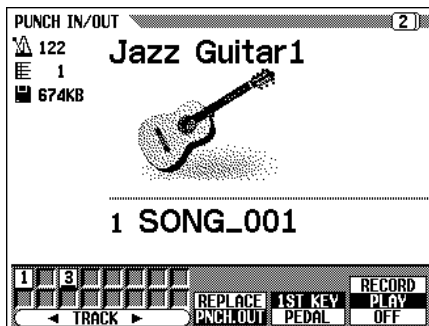
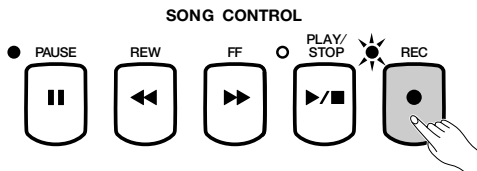
Press the [PAUSE] button to pause play back a bit before the point at which you want to start recording. Leave a measure or more before the Punch-in point so you'll be able to grasp the timing for the Punch in.



3 Turn on the Punch-in/out function.

Press the [REC] button.

→ The PUNCH IN/OUT display appears.



4 Select a track.

Press the **TRACK** ◀ or ▶ buttons or use the data dial or [-/+] buttons to select the track.

→ The selected track is indicated by an underline mark.

Use the LCD button at the far right to set the selected track to **RECORD** (record enable) or **OFF** (record/playback disable). **PLAY** can only be selected for tracks which contain data. When a track is muted, the track number is “ghosted” (shown in lighter indication) in the display.

NOTE

- Only tracks which allow Punch-in/out Recording will appear and can be selected. The rhythm, Auto Accompaniment and Harmony tracks cannot be selected.

NOTE

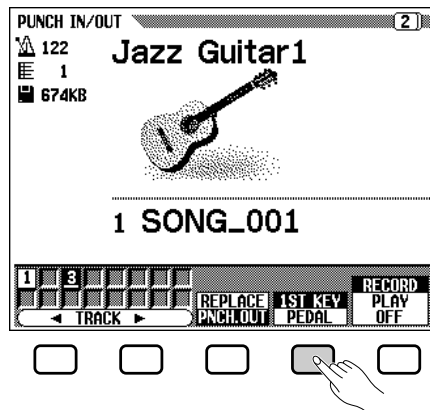
Auto Setting of Punch-in/out

- If no other track is selected, the last recorded track is automatically selected for Punch-in/out.

5 Select the Punch-in mode.

Select the desired Punch-in mode by using the LCD button located second from the right. Two modes are available, as described below.

1ST KEY	Recording begins as soon as the first key is played, after Punch-in playback is started in step 7 (below).
PEDAL	Recording begins as soon as the left pedal is pressed, after Punch-in playback is started in step 7 (below).



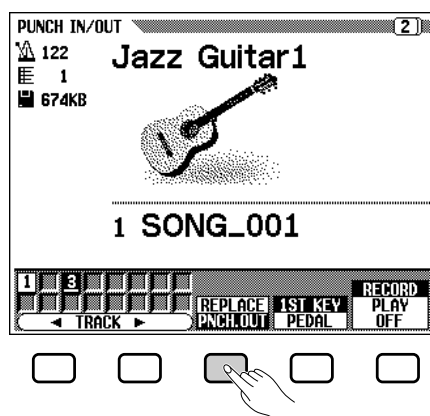
NOTE

- When the PEDAL Punch-in mode is selected, the left pedal is automatically assigned for this function only (the normal pedal function is canceled).

6 Select the Punch-out mode.

Select the desired Punch-out mode by using the center LCD button. Two modes are available, as described below.

REPLACE	When recording is stopped, all data following the stopped point will be erased.
PNCH.OUT	When recording is stopped, all data following the stopped point will remain intact.



7 Start playback and recording.

Press the [PLAY/STOP] or [PAUSE] button to start playback from the current paused location.

To start Punch-in record when the 1ST KEY mode is selected, simply begin playing at the point from which you want to record.

To start Punch-in record when the PEDAL mode is selected, press the left pedal at the point from which you want to record.

NOTE

- When the PEDAL Punch-in mode is selected, recording can be started directly by pressing the left pedal, without having to start playback by pressing the [PLAY/STOP] or [PAUSE] button.

8 Stop recording.

Press the [PLAY/STOP] button.

- ➔ Recording stops. When the data has been written to disk, the [REC] lamp goes out and the SONG PLAY [MAIN] display appears.

You can also stop recording by pressing the [REC] button.

NOTE

- When the PEDAL mode is selected, recording can also be stopped by pressing the left pedal.

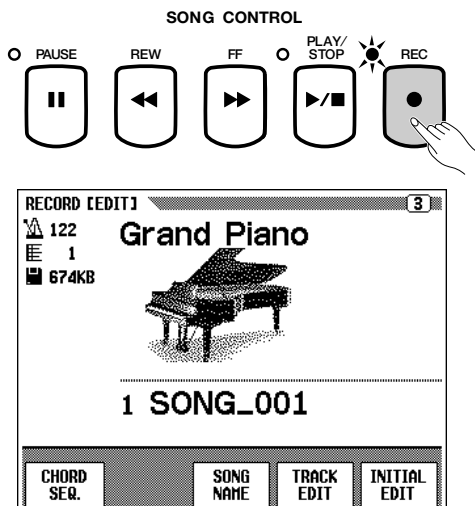
Chord Sequence

The Chord Sequence function allows you to enter Auto Accompaniment data step-by-step according to chord names, and lets you record the accompaniment part without having to play the song in time with the rhythm or at a certain tempo.

1 Set up the instrument for recording.

Just as you did in steps 1 through 3 of Quick Recording, insert a formatted disk, select a song number, then press the [REC] button to enter the Record mode.

- Select the RECORD [EDIT] display, page 3 of the Record mode, by using the PAGE [◀] [▶] buttons.



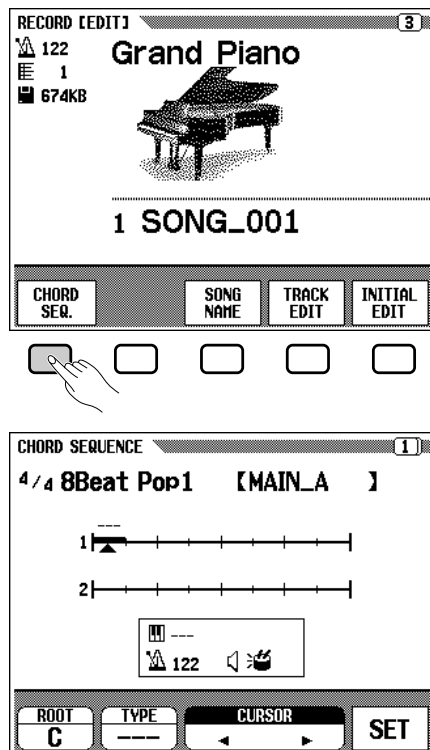
● Set Up for Step Recording of the Data

You can enter the chords with the **SINGLE FINGER**, **MULTI FINGER**, or **FINGERED** Auto Accompaniment modes, or by specifying the chord name manually from the LCD display. If you wish to enter chords with one of the Auto Accompaniment modes, select the desired mode at this point.

2 Turn on the Chord Sequence function.

Press the **CHORD SEQ.** button in the RECORD [EDIT] display.

- ➔ The CHORD SEQUENCE display appears and Auto Accompaniment is turned on. If the Full Keyboard mode is currently active, the Fingered Chord mode will be selected instead.

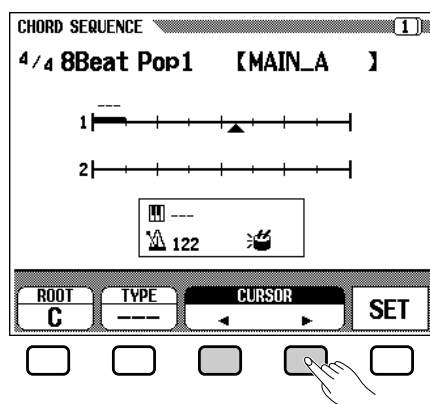


3 Move the cursor to the entry point.

The display shows measures as a horizontal line with 8th-note divisions.

To move the triangular cursor along the measure indication to the point at which you want to enter a chord or style change, press one of the **CURSOR** ◀▶ buttons (the section is highlighted), then use the data dial or [–/+] buttons.

You can also move the triangular cursor by pressing the **CURSOR** ◀▶ buttons.



NOTE

Changing the Auto Accompaniment Mode

- Auto Accompaniment cannot be turned off while the Chord Sequence function is active. However, you can select from among the Multi Finger, Fingered, and Single Finger Auto Accompaniment modes from the pop-up display by pressing the [ACMP ON] button. The split point can also be changed.

NOTE

When Chord Sequence cannot be turned on...

- The chord sequence function cannot be used when no disk has been inserted in the disk drive.

NOTE

- The Chord Sequence data will automatically replace any previous data in the Auto Accompaniment and rhythm tracks that was recorded in the Quick Record or Track Record modes.
- Up to 999 measures can be recorded using the Chord Sequence function.
- The chord input resolution will be automatically selected according to the current style. For styles of 2/4, 3/4, 4/4, 5/4, 6/8, 9/8 and 12/8 time signatures, one chord can be entered on every 8th note or 8th-note triplet. For other time signatures, one chord can be entered for each measure.

NOTE

Entering Accompaniment Style and Section Changes

- One style change or section change (page 118) can be made at the beginning of each measure (The Intro pattern can only be entered at the beginning of a song.). However, Auto Fill data can be entered anywhere you desire.

NOTE

Adjusting the Volume of Auto Accompaniment

- You can also enter volume changes for the Auto Accompaniment. Used judiciously, these can help you create professional-sounding dynamic changes in the Auto Accompaniment of your song. To do this, first enter the Auto Accompaniment part volume data from the MIXER display; the volume event symbol (V) will appear in the box in the middle of the display. To actually record the volume data at the current position, press the **SET** button in the CHORD SEQUENCE display. (An initial volume event is automatically entered at the beginning of a song.)

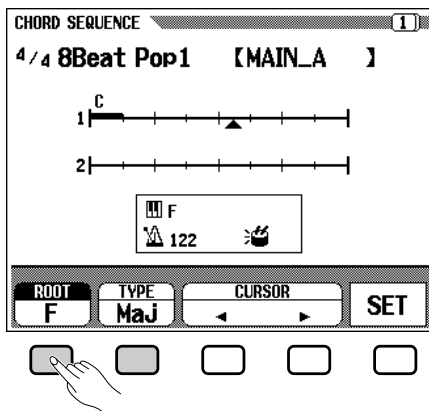
4 Enter and set the chords and/or style changes.

To enter a chord, either play the chord with appropriate fingering on the left range of the Auto Accompaniment section of the keyboard (lower than the split point), or highlight **ROOT** or **TYPE** in the LCD display and use the data dial or [-/+] buttons.

You can also select the chord by pressing the **ROOT** or **TYPE** button.

- To enter a style change (style, section and tempo) simply make the appropriate selections in the normal way.
- Once the chord and/or style has been selected, press the **SET** button. The data is recorded to the current location, and a black box and the recorded chord name appear in the measure indication. The cursor automatically moves to the next position.

The entered data of the recorded style will be shown in the display: the time signature, the style name and section appear at the top of the display, and the chord name and tempo in the box at the middle of the display.



Continue moving the cursor to other positions and enter chords and style changes in this manner. You can always check the entered data during the operation by playing back the sequence using the **[PLAY/STOP]** button.

The data recorded by the Chord Sequence function is listed below.

Data Recorded By the Chord Sequence Function

- Accompaniment style
- Section (MAIN A/B, Intro, Ending, Auto-fill, Fade-in/out, Break)
- Chord name
- Auto accompaniment part volume (MIXER settings)
- Tempo
- Rhythm on/off
- ACMP/SONG volume (as an initial setting only)
- SMALL ACMP
- VIRTUAL ARRANGER (one ON/OFF setting for an entire song only)

NOTE

- The input chord name also appears in the **ROOT** and **TYPE** sections of the display when a chord is entered via the keyboard.

NOTE

- The chord name is indicated only at the first beat of the measure line, with the exception of 4/4 and 12/8 time signatures, for which indications appear at the first and third beats.

NOTE

- Fade-out cannot be entered during Fade-in.

NOTE

Entering Rhythm-only Sections

- You can also record the rhythm alone (without accompaniment) to your song. To do this, record a blank chord in the desired measure by leaving the **TYPE** parameter set to " - - -".

NOTE

Entering a Break

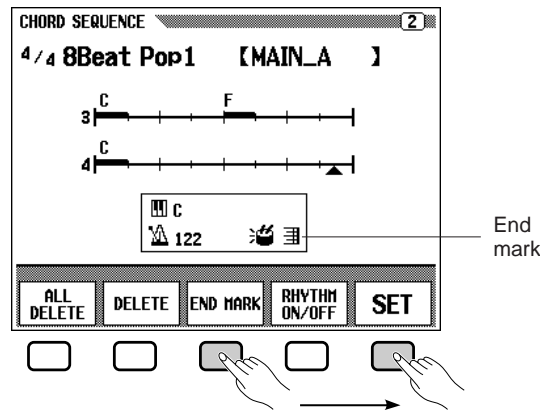
- A complete break can be created by setting the chord type to " - - -" and setting rhythm sound to "OFF" (see "RHYTHM ON/OFF" below).

NOTE

- The types of chords that can be entered are the same as those listed for the fingered mode (page 59). On-bass chords can be entered via the keyboard.
- The measure number is indicated at the left of the measure indication.
- For information on other useful editing features, see the section "Chord Sequence Page 2 Functions" below.
- The same chord, as set previously (i.e., the same chord shown in the box at the middle of the display), cannot be entered even if the **SET** button is pressed.

5 Stop recording.

When all recording has been finished, select page 2 of the CHORD SEQUENCE display, then press the **END MARK** and **SET** buttons and input an “end mark” which determines the location of the ending. The end mark will be displayed in the box at the middle of the display.



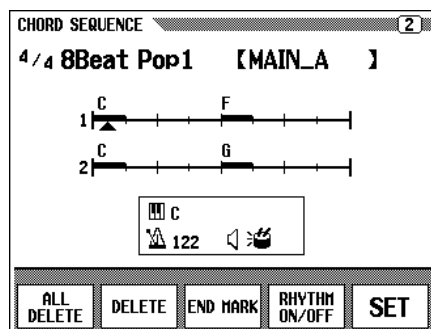
Finally, press the **[REC]** button and a “Save recorded data?” message will appear. Press **YES** to store the recorded data and automatically leave the Chord Sequence function; the display returns to the SONG PLAY display. To leave without saving the data, press **NO**. To continue editing the sequence without saving the data, press **CANCEL**.

NOTE

- The chord sequence data now resides in tracks 9 through 16, and can be played back in the normal way. Add other tracks as desired by using the standard track selection and recording procedure. You can also record over the Auto Accompaniment parts and replace them with original material if you like by using the standard track selection and record procedure.
- The song recorded via the Chord Sequence function can be modified later by re-entering the Chord Sequence mode and making the desired changes. However, keep in mind that any data recorded over the Auto Accompaniment parts (with normal track recording) will be replaced by the preset accompaniment style data. (For example, even if you've recorded your own bass part, it will be erased and replaced by the original bass pattern if you correct the data in the Chord Sequence display.)

Other Chord Sequence Functions

Page 2 of the CHORD SEQUENCE display contains a number of versatile functions that help you enter chords more efficiently.



ALL DELETE

To delete all sequence data, press the **ALL DELETE** button. An “Are you sure?” confirmation prompt appears. Press **YES** to execute the operation, or **NO** to cancel.

DELETE

To delete the data at the current cursor location, press the **DELETE** button. An “Are you sure?” confirmation prompt appears. Press **YES** to execute the operation, or **NO** to cancel.

END MARK

To enter an “end mark” at the current cursor location, press the **END MARK** button followed by the **SET** button. An end mark signifies the end of the song, and should always be entered to properly end each song. (An end mark is unnecessary when ending with an Ending pattern or Fade-out.) The cursor cannot be moved past an end mark. You can delete an end mark by using the **DELETE** button, just as with other normal data.

RHYTHM ON/OFF

To turn the rhythm sound on or off, press the **RHYTHM ON/OFF** button followed by the **SET** button. No rhythm sound is produced following the location to which a “rhythm off” event is entered; the rhythm starts sounding again from the location to which a “rhythm on” event is entered.

NOTE

End Mark

- Unless an end mark is entered, the song will end one measure after the last entered data. If an Ending pattern or Fade-out is input, the song will end at the last measure of the Ending or Fade-out.

NOTE

- The rhythm on/off status can be checked by  mark in the box at the middle of the display.

Record Edit Function

The Record mode also features a number of convenient edit functions that provide even greater control over the song data. The Record Edit functions include: Song Name, which lets you name a recorded song file; Track Edit, which gives you a variety of track-related editing controls, such as Track Mix and Track Delete; and Initial Edit, which lets you change the data at the beginning of a song, such as voice, reverb, and effect settings.

To select the Record Edit function, call up the RECORD [EDIT] display (Record display page 3) after selecting the song you wish to edit.

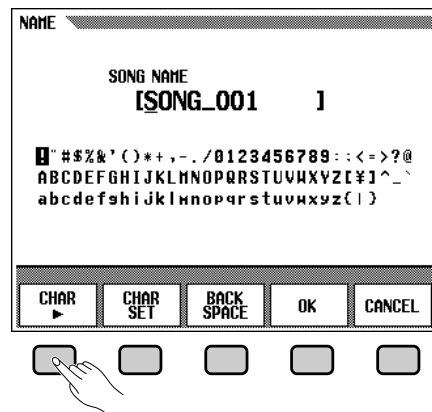
NOTE

- The Record Edit functions can only be used for song data recorded with the CVP-98/96 (or 94/92).



Song Name

This function is used to name song files recorded with the CVP-98/96 or to change existing names. To call up the Song Name function, press the **SONG NAME** button in the RECORD [EDIT] display.



NOTE

- The Song Name function cannot be used when a disk has not been inserted in the disk drive.

1 Enter the desired name.

Use the **CHAR ►** button to move the underline cursor to the desired character position in the file name display. (File names can be up to 12 characters in length).

- Use the data dial or [-/+] buttons to select and highlight the character or mark you wish to enter.

Press the **CHAR SET** button to enter the selected character to the current cursor position and move to the next position. Continue entering other characters or marks in this way.

To delete the character at the previous position, press the **BACK SPACE** button. The character before the underline cursor is deleted and the cursor moves back to the deleted position.

To abort the Song Name operation and return to the RECORD EDIT display, press the **CANCEL** button.

2 Register the name.

When the song file name is complete, press the **OK** button to register it. The new name is registered as the current song file name. To cancel the operation, press the **CANCEL** button.

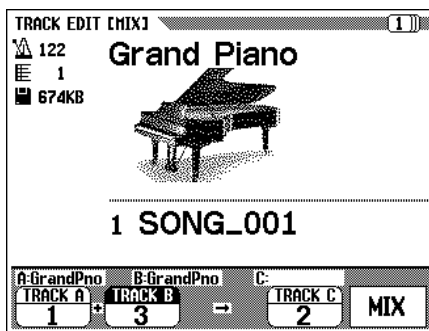
To exit from the Song Name function, press the [REC] button (the lamp goes out).

Track Edit

Press the **TRACK EDIT** button in the RECORD [EDIT] display to call up the TRACK EDIT display. There are three pages in the TRACK EDIT display: TRACK EDIT [MIX], TRACK EDIT [DELETE], and TRACK EDIT [QUANTIZE].

■ Track Mix — Track Edit Page 1

The Track Mix function combines the data from two specified tracks and copies the result to a third specified track.



1 Specify the two tracks to be mixed.

Press the **TRACK A** and **TRACK B** buttons to highlight the parameters, and use the data dial or [-/+] buttons to select the two track numbers to be mixed. The voices which are used for the selected tracks are indicated at the side of A/B:, located at the left of the LCD display.

2 Specify the destination track.

Use the **TRACK C** parameter to specify the track to which you want to record the mixed data. You can also specify the track for the mixed data by highlighting the appropriate section using the **TRACK C** button, then using the data dial or [-/+] buttons.

Any previous data in the destination track will be erased.

3 Execute the Track Mix operation.

Press the **MIX** button to begin execution of the Track Mix operation. An "Are you sure?" confirmation prompt will appear. Press **YES** to execute the Track Mix operation or press **NO** to cancel.

When this is completed, the **MIX** button will change to **UNDO**, allowing you to undo the Track Mix operation and restore the previous data (before mixing).

Press the **[REC]** button (the lamp goes out) to exit the Track Mix function.

You can also exit the Track Mix function by pressing the **[EXIT]** button.

NOTE

Track Copy

- Only tracks containing data will appear and can be selected for **TRACK A** and **TRACK B**. In addition, "--" (no track) can also be selected for **TRACK B**. In this case, the data of **TRACK A** will simply be copied to **TRACK C**.

NOTE

- For the Track Mix function, the selected track voice and volume data, etc. (i.e., all data except note data) of **TRACK A** will be effective for the track after the mix operation.

NOTE

- The previous data of the mixed track will remain even after executing Track Mix. If the old data is not needed, you should delete it. (See "Track Delete" below.)
- A bar graph indicating the progress of the Track Mix operation will appear while the data is being processed.
- You can check if the results are as you expected or not, by starting and stopping playback with the **[PLAY/STOP]** button before performing the **UNDO** operation.
- The Undo function cannot be used if you've selected another track or exited from this mode.
- The Undo feature cannot be used for data recorded to internal RAM (see page 127).

Track Delete — Track Edit, Page 2

The Track Delete function can be used to delete the data from any specified track.



1 Specify the track to be deleted.

Use the **TRACK** ▼ or ▲ button to highlight the Track parameter, then use the data dial or [-/+] buttons to select the track to be deleted.

2 Execute the Delete operation.

Press the **DELETE** button. At the “Are You Sure?” confirmation prompt, press **YES** to execute the Delete operation or **NO** to cancel.

The **DELETE** display will change to the **UNDO** display after the Delete operation is executed. If the result is not what you expected, press the **UNDO** button to restore the data of the deleted track to what it was before performing the Delete operation.

To exit the Track Delete function, press the **[REC]** button (the lamp goes out).

You can also press the **[EXIT]** button to exit the Track Delete function.

Track Quantize

You can “tighten up” the timing of a recorded part by aligning all notes to specified beats with the Track Quantize function. For example, you can accurately align the recorded notes to 8th- or 16th-note resolution.



NOTE

- Only tracks containing data will appear and can be selected.

NOTE

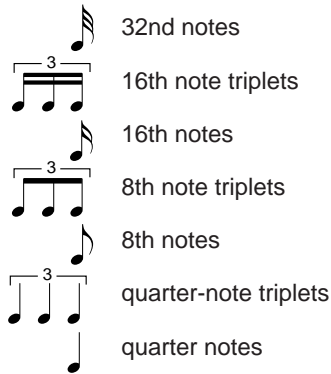
- A bar graph indicating the progress of the Track Delete operation will appear while the data is being processed.
- You can check if the results are as you expected or not, by starting and stopping playback with the **[PLAY/STOP]** button before performing the **UNDO** operation.
- The Undo function cannot be used if you've selected another track or exited from this mode.
- The Undo feature cannot be used for data recorded to internal RAM (see page 127).

1 Specify the track to be quantized.

Use the **TRACK** ▼ or ▲ button to highlight the Track parameter, then use the data dial or [-/+] buttons to select the track to be quantized.

2 Specify the quantize “size.”

Press the LCD button below the note symbol to select the desired quantize “size” as shown below.



3 Execute the Quantize operation.

Press the **QUANTIZE** button. At the “Are you sure?” confirmation prompt, press the **YES** button to execute the Quantize operation or **NO** button to cancel.

The **QUANTIZE** display will be changed to the **UNDO** display after the Quantize operation is executed. If the result is not what you expected, press the **UNDO** button to restore the data of the quantized track to what it was before performing the Quantize operation.

To exit the Track Quantize function, press the **[REC]** button (the lamp goes out).

You can also press the **[EXIT]** button to exit the Track Quantize function.

NOTE

- Only tracks containing data will appear and can be selected.

NOTE

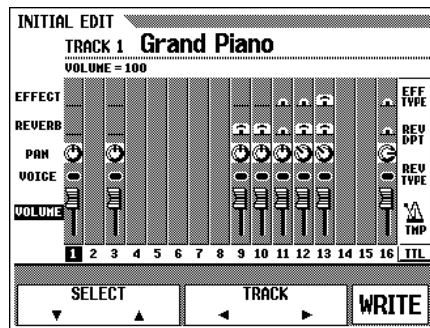
- Only the note data and voice data are quantized.
- A bar graph indicating the progress of the Quantize operation will appear while the data is being processed.
- You can check if the results are as you expected or not, by starting and stopping playback with the **[PLAY/STOP]** button before performing the **UNDO** operation.
- The Undo function cannot be used if you've changed the quantize “size,” selected another track, or exited from this mode.
- The Undo feature cannot be used for data recorded to internal RAM (see page 127).

Initial Edit (Changing the Initial Data)

The Initial Edit function allows you to change the volume level of each track or the initial data set for the entire song after you've finished recording. The INITIAL EDIT display appears when you press the **INITIAL EDIT** button in the RECORD [EDIT] display. All sixteen tracks are displayed simultaneously in this display and the settings such as volume, voices and reverb depth can be changed.

NOTE

- Any voice changes entered in the middle of the original song will be erased when the voice parameter is changed in the Initial Edit mode.
- Depending on the data type, some parameters cannot be changed. For such parameters, a “Fixed” indication is shown.
- For songs recorded to 1/RIGHT or 2/LEFT of the copied DOC files, voice changes can only be made to track 1 or 2.



The following parameters can be changed in the Initial Edit display. Refer to the indicated page for details on each parameter.

Parameters which can be changed with Initial Edit:

- When one of tracks 1 - 16 is selected
 - Volume (page 94)
 - Voice (page 27)
 - Pan (page 132)
 - Reverb Depth (page 43)
 - Effect Depth (page 46)
- When [TTL] (Total) is selected
 - Tempo (page 49)
 - Reverb Type (page 41)
 - Reverb Depth (page 42)
 - Effect Type (page 46)

NOTE

- The parameters Program Change Number (**PRG#**), Bank LSB (**BNK LSB**), and Bank MSB (**BNK MSB**), which are used to select voices via MIDI, are also displayed when VOICE is selected.

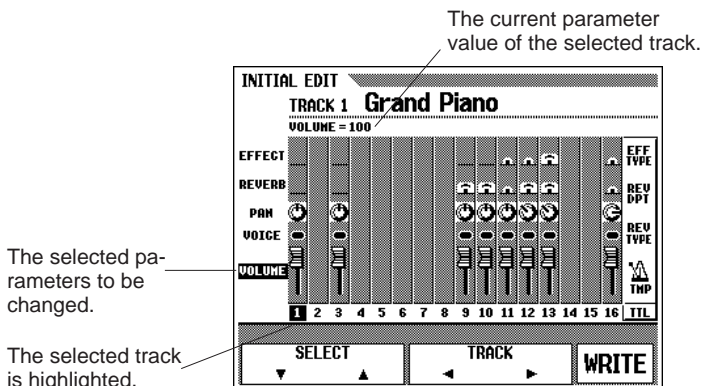
Making Settings in the INITIAL EDIT Display

1 Select the track to be edited.

Select the track whose parameters you wish to change by pressing the **TRACK** ◀ or ▶ button. If **TTL** (Total) is selected, the setting change will be made not for each track but for the entire song.

2 Select the parameters to be changed.

Select the parameters to be changed by pressing the **SELECT** ▼ or ▲ button.



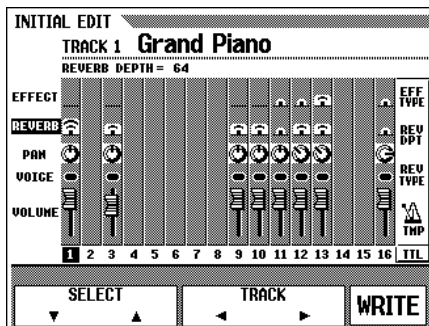
3 Change the settings.

Use the data dial or [-/+] buttons to change the settings. You can instantly check the effect of the changes, since the settings can be changed during playback.

4 Write the changes.

When all the Initial Data changes have been made as desired, press the **WRITE** button. At the “Are you sure?” confirmation prompt, press the **YES** button to actually make the specified changes, or **NO** to cancel.

When this is completed, the **WRITE** button will change to **UNDO**, allowing you to undo the Write operation and restore the data of the edited track to what it was before you made any edits.



5 Exit the Initial Edit function.

To do this, press the **[REC]** button.

- ➔ The **[REC]** lamp goes out and the Initial Edit operation is completed.

You can also exit the Initial Edit function by pressing the **[EXIT]** button.

If you do this after making any edits that you have not yet written to disk, a “Write edited data?” confirmation prompt will appear. Press **YES** to write the edited data and exit from the Initial Edit mode, **NO** to exit without writing the data, or **CANCEL** to return to the Initial Edit mode and continue editing.

NOTE

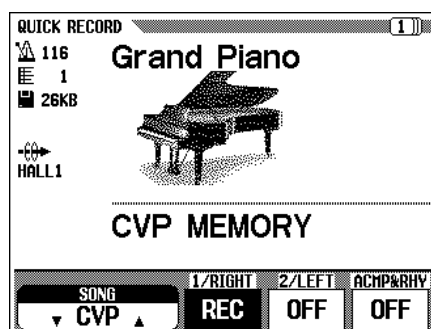
- If **[TTL]** is selected and the value of the reverb depth is changed, the new setting will also affect the keyboard sound.
- The voices of the tracks to which Auto Accompaniment, rhythm and/or Harmony data have been recorded, can also be changed.
- The volume parameter's initial default value is 100 for each track. The value can only be decreased.
- Only one effect type can be set for each song.
- The data may not be played back accurately if you use the **[REW]** button while editing the data.

NOTE

- All edited data for any number of tracks within a single song can be written in a one-time Write operation, by pressing the **WRITE** button.
- You can check if the results of the Initial Edit are as you expected or not, by starting and stopping playback with the **[PLAY/STOP]** button before performing the **UNDO** operation.
- The Undo function cannot be used if you've selected another track or exited from the Initial Edit mode.
- The Undo feature cannot be used for data recorded to internal RAM (see page 127).

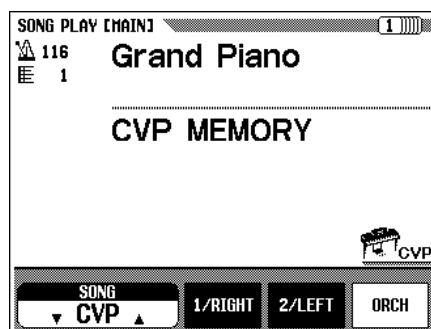
Recording Without a Disk

The CVP-98/96 has internal RAM memory (about 25KB) that allows a limited amount of recording — even if a disk is not loaded — up to approximately 2,500 notes, if no other data is recorded. If you enter the Song Record mode without inserting a disk, **CVP MEMORY** will be indicated in the **SONG** display as shown below, and the Quick Recording, Track Recording and Punch-in/out Recording functions will become available.



Quick Record display when using the internal RAM.

When entering the Song Play mode after recording the song to internal RAM, the **CVP** indication is shown in the **SONG** section of the display, allowing you to playback normally.



Song PLAY MAIN display when playing back the internal RAM song.

If you insert a song disk (and select a song number) when the internal RAM contains recorded song data, a “Delete CVP MEMORY?” confirmation prompt will appear. Press **YES** to delete the song data recorded to the internal RAM. The song data recorded to internal RAM also can be erased by turning the power off. If you wish to keep the recorded data, use the Song Copy function (page 136) to copy the recorded data to disk.

■ Playback.....

The recorded song can be played back in the normal way.

NOTE

- Chord Sequence data cannot be recorded to internal RAM memory.
- The Song Name function cannot be engaged for data recorded to internal RAM. However, the Track Edit function (page 122) and the Initial Edit function (page 124) can be engaged for data recorded to internal RAM.

NOTE

- Song data recorded to internal RAM is deleted when entering the Demo mode or Custom Style mode, or when loading Style Files. In such cases, a confirmation prompt does not appear.

CHAPTER 7: The Utility Functions

The Function mode provides various advanced functions that, for example, let you make various MIDI settings, or give you greater, more convenient control over disk-related operations. These sophisticated functions let you customize the CVP-98/96 to your own musical needs and preferences.

The following functions are available:

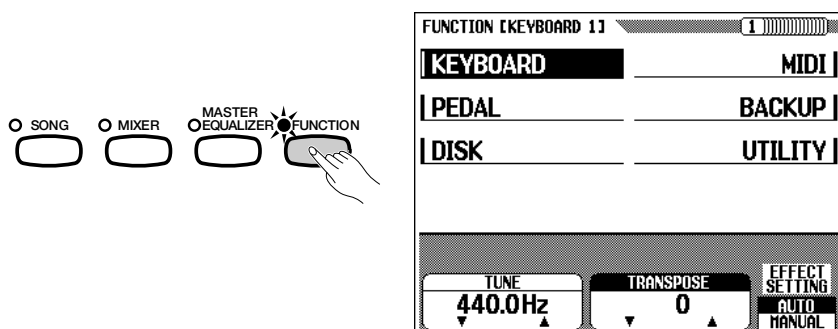
Keyboard Group	Tune	Page 130
	Transpose	Page 130
	Effect Setting	Page 131
	Key Touch	Page 131
	Pan	Page 132
Pedal Group	Left Pedal	Page 133
	Damper Range	Page 134
	Damper Mode	Page 134
	Soundboard (CVP-98 only)	Page 134
Disk Group	Format	Page 135
	Song Copy	Page 136
	Song Delete	Page 138
	Registration	Page 139
	Transform	Page 142
MIDI Group	Send Channel	Page 143
	Local Control	Page 144
	Sync	Page 144
	MIDI Filter	Page 144
	MIDI Transpose	Page 146
	Auto Accompaniment & Harmony Transmission	Page 146
	Remote Keyboard	Page 146
Backup Group	Backup	Page 147
	Recall	Page 148
Utility Group	Micro Tuning	Page 149
	Scale Tuning	Page 150
	Pop-up Time	Page 153
	Alert Sound	Page 153

■ Selecting and Operating the Functions

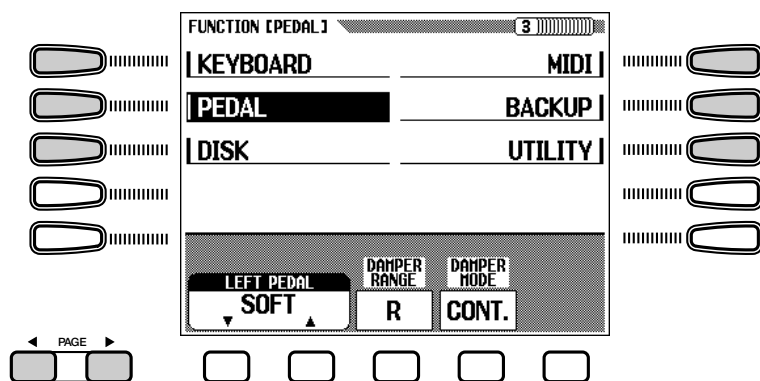
All functions in this mode can be selected and set by using the following procedure.

1 Press the [FUNCTION] button.

→ The lamp lights and the Function mode display appears.



2 Select the group by using the left/right LCD buttons, and call up the page of the desired function by using the PAGE [◀] [▶] buttons. You can also select the page from all the display pages by using the PAGE [◀] [▶].



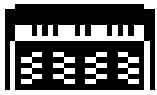
3 For the round-edged parameter box, press the appropriate LCD button to highlight the desired section of the display, then use the data dial or [-/+] button to change the settings.

For the sharp-edged parameter box, you can use the appropriate LCD button to select and execute the functions.

4 Press the [FUNCTION] button when finished.

→ The [FUNCTION] lamp will go out.

You can also exit by pressing the [EXIT] button.

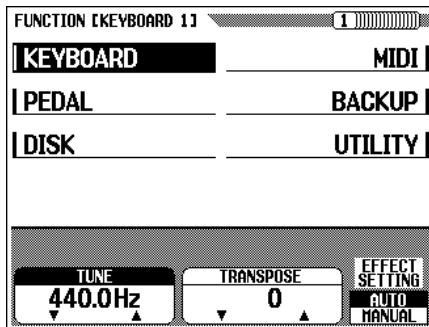


Keyboard

Keyboard 1 (KEYBOARD 1) Display — PAGE 1

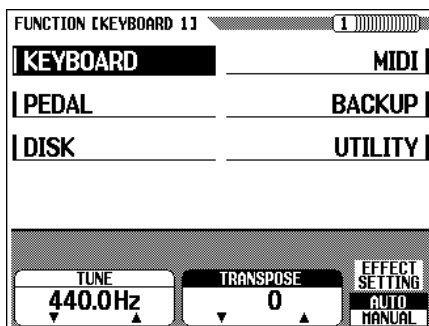
■ Tune

The Tune function lets you make fine adjustments to the pitch, allowing you to accurately match the tuning with that of other instruments. The frequency (in Hz) of A3 is displayed in the **TUNE** section. It can be set in approximately 0.2-Hz steps over a range of +/- approximately 26 Hz (+/- approximately 100 cents).



■ Transpose

The Transpose function makes it possible to shift the pitch of the keyboard in semitone units, allowing you to match the pitch of the keyboard to the range of other instruments or singers, or letting you easily play in a different key without having to change your fingering. For example, if the Transpose amount is set to “+5” semitones, playing C results in a pitch of F, or in other words, you can play in the key of C major on the keyboard and automatically have the pitch transposed to F major.



NOTE

Tune

- Range: 414.8 Hz (-102.1 cent) — 466.6Hz (+101.62 cents)
- Initial value : 440 Hz
- Backup of last settings: OFF

Restoring the Basic Setting

- To restore the basic setting, simultaneously press both the **TUNE** ▼▲ buttons or both the [-/+] buttons.

Hz (Hertz)

- Pitch is measured in units of Hertz (abbreviated Hz), which represents the number of times the sound wave vibrates in a second.

Cent

- Cent is a unit of pitch, equal to 1/100 of a semitone. (100 cents = 1 semitone)

NOTE

- Tune has no effect on the Drum Kit voices.
- The XG Master Tune setting is effective when playing back songs containing XG Master Tune data. The corresponding value is indicated in the Keyboard 1 display (Function display page 1).

NOTE

Transpose

- Range: -24 semitone (-2 octaves) — +24 semitone (+2 octaves)
- Initial Value: 0
- Backup of last settings: OFF

Restoring the Basic Setting

- To restore the basic setting, simultaneously press both the **TRANSPOSE** ▼▲ buttons or both the [-/+] buttons.

Soundable Range of Transpose

- Notes below and above the original 88-key range (A-1 to C7) sound one or two octave(s) higher and lower, respectively.

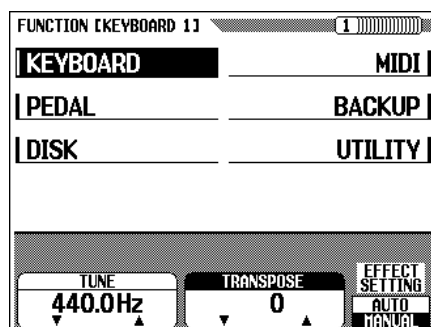
NOTE

- The Transpose function does not affect the Drum Kit voices.
- When playing back songs containing XG Transpose data, the XG Transpose data is effective only for the data playback sound. The value set on the panel affects the keyboard sound.
- The value set here affects the play data transmitted via MIDI.

■ Effect Setting

This feature determines whether the basic effect setting (page 44) for each voice is automatically selected or not, when the voice is selected.

To change the setting, press the **EFFECT SETTING** button. When set to **AUTO**, the basic effect setting for each voice is automatically selected when the voice is selected; when set to **MANUAL**, effect settings are not changed when voices are selected.



NOTE

Effect Setting

- Settings: *AUTO, MANUAL*
- Basic Setting: *AUTO*
- Backup of last setting: *OFF*

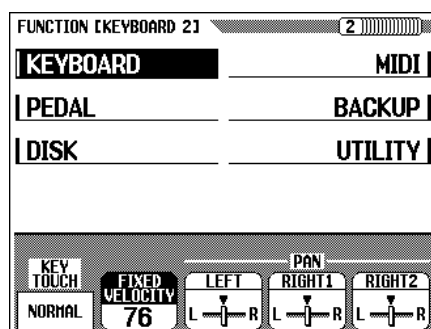
Effect Setting

- The effect type, effect depth and effect ON/OFF parameters are set for each voice.

Keyboard 2 (KEYBOARD 2) Display — PAGE 2

■ Key Touch

Key Touch determines how your playing strength (velocity) affects the volume of the voices. Four types are available for tailoring the keyboard response to the selected voice, type of song, or your own playing preferences. Select the type by pressing the **KEY TOUCH** button. The data dial and [-/+] buttons cannot be used.



Settings

HARD	This setting requires you to play the keys quite strongly to produce maximum loudness.
NORMAL	This is the standard keyboard response and is used as the basic setting.
SOFT	This setting lets you produce a relatively loud sound even when playing the keys softly.
FIXED	This setting produces the same degree of loudness, no matter how strongly or softly you play the keys. You can set the fixed loudness by pressing the FIXED VELOCITY button to highlight the parameter, then using the data dial or [-/+] buttons to set the level (range: 1 — 127, basic setting: 76).

NOTE

- This function does not affect the actual weight of the keys.

NOTE

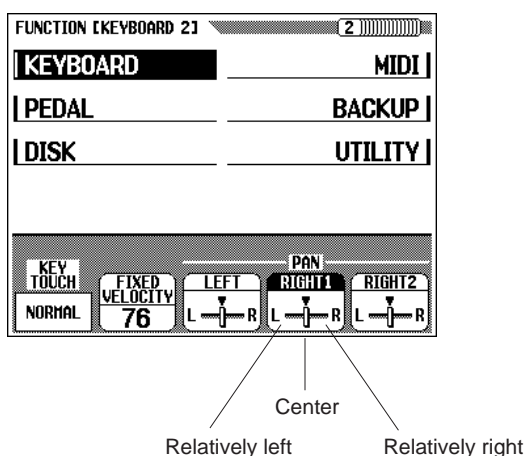
Key Touch

- Basic setting: *NORMAL*
- Basic setting (of *FIXED VELOCITY*): *76*
- Backup of last settings: *OFF*

■ Pan

Pan determines the stereo image of the voices, or in other words, where the sound of the voice appears to come from — left, center, or right. The Pan position can be set individually for the following three voice assignments:

LEFT	Left voice in the Split mode
RIGHT1	Right voice in the Split mode/1st voice in the Dual mode/voice for normal keyboard performance
RIGHT2	2nd voice in the Dual mode



The default Pan position for some voices features keyboard scaling. This shifts the Pan position depending on what keys you play. The lower you play on the keyboard, the more the sound shifts to the left; the higher you play, the more the sound shifts to the right.

The Drum Kit voices have special pan settings for each individual instrument. The Pan setting in this function moves the sound relatively left or right of the special pan setting for each sound.

NOTE

Pan

- Settings: **L** (left) — Center — **R** (right) (21 steps)
- Basic setting: Settings for each voice (center, key scale pan, drum kit pan)
 - * However, the basic settings of each voice is displayed in the center position in the LCD display.
- Backup of last settings: OFF

Restoring the Basic Setting

- To restore the basic setting, simultaneously press both [-/+] buttons.

NOTE

- The Pan setting affects all voices globally.
- The Pan setting affects the keyboard-played voices only.
- In the normal play mode (single voice mode) only the **RIGHT1** (right range/1st voice) setting is effective.

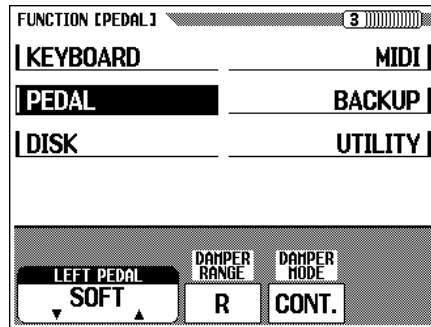


Pedal

Pedal (PEDAL) Display — PAGE 3

■ Left Pedal

This function conveniently lets you set the left pedal to control one of various functions.



CVP-96

Controllable Functions and Data

SOFT	The left pedal functions as the soft pedal (basic setting). (See page 40.)
START/STOP	The left pedal functions the same as the [START/STOP] button. (See page 89.)
HARMONY	When the Harmony function is set to on, Harmony is applied only while the left pedal is held down. (See page 62.)
REGISTRATION	The panel settings registered to the next Registration number are recalled each time the left pedal is pressed. (See page 84.)
MAIN A	The left pedal performs the same function as the [MAIN A] button. (See page 50.)
MAIN B	The left pedal performs the same function as the [MAIN B] button. (See page 50.)
ENDING/RIT.	The left pedal performs the function same as the ENDING button. You can have the song end ritardando (slow down gradually) by pressing the left pedal twice in succession. (See page 53.)
BREAK	Pressing the left pedal during the style playback produces a break in the accompaniment and rhythm for as long as the pedal is held. When the pedal is released, normal playback resumes from the next measure. (See page 53.) If you press the left pedal a second time within one measure, normal playback resumes immediately.
FADE IN/OUT	The left pedal performs the function same as the [FADE IN/OUT] button. (See pages 52 and 53.)

NOTE

Left Pedal

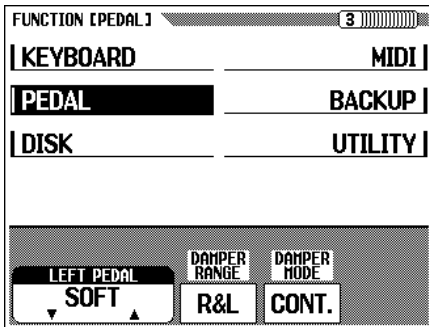
- Basic setting: *SOFT*
- Backup of the last settings: *OFF*

NOTE

- If the left pedal is set to *REGISTRATION*, the setting of the left pedal function in Registration memory is not recalled.

■ Damper Range

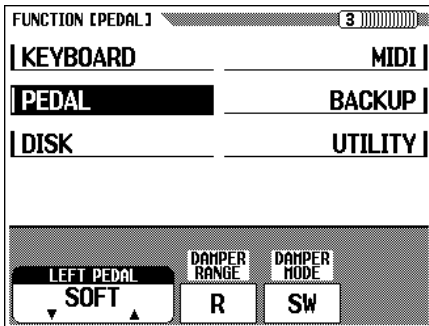
This determines whether the damper pedal affects the right-hand, left-hand, or both voices in a Split setup. Press the **DAMPER RANGE** button to set. The data dial and the [-/+] buttons cannot be used.



CVP-96

■ Damper Mode

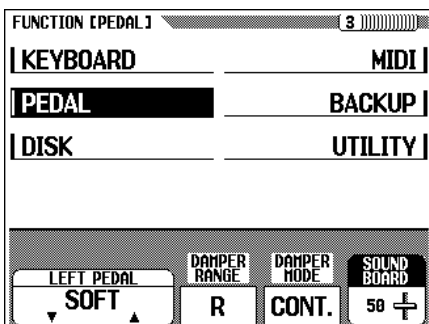
This function lets you set how the damper pedal affects the sustain sound. Pedal-controlled sustain can be done as a simple on/off switch, or as a continuously changing sustain (in eight-step gradations) in which the further down you press the pedal the longer the sound sustains. To set the function, press the **DAMPER MODE** button. In this case, the data dial and the [-/+] buttons cannot be used.



CVP-96

■ Soundboard Depth (CVP-98 only)

Certain piano voices (Grand Piano, Bright Piano, Mellow Piano, and Mono Piano) feature a special effect which recreates the soundboard resonance of an actual acoustic piano. A string resonance effect can also be applied when pressing the damper pedal. This function lets you adjust the depth of these effects.



NOTE

Damper Range

- Settings: R (the damper pedal affects only the right-hand voice), L (the damper pedal affects only the left-hand voice), R&L (the damper affects both the left-and right-hand voices)
- Basic setting: R
- Backup of last settings: OFF

NOTE

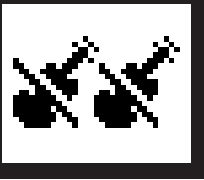
Damper Mode

- Settings: CONT. (continous changing system)/SW (ON/OFF switch system)
- Basic Setting: CONT.
- Backup of the last settings: OFF

NOTE

Soundboard Depth

- Value: 0 — 100
- Basic value: 50
- Backup of last settings: OFF



Disk

When using the disk-related function, make sure to first set the [FUNCTION] button to on and call up the appropriate page before inserting the floppy disk. Disk functions cannot be used — even when pressing the [FUNCTION] button — if a floppy disk has been inserted and the [SONG] button is set to on. In this case, press the [SONG] button again so that the lamp goes out, then use the Disk functions.

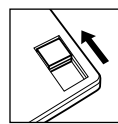
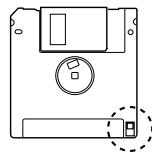
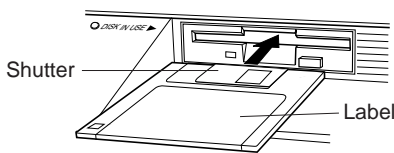
Format (FORMAT) Display — PAGE 4

Format the floppy disk for the use with the CVP-98/96. Refer to page 106 for information on formatting a new, blank disk or disks of different formats.

The operation explained here is for re-formatting a disk that has already been used with the CVP-98/96 and deleting all data on the disk.

1 Insert the disk to be formatted.....

Make sure that the disk's write protect tab is set to the "write" position, and insert the disk into the disk drive face up with the shutter forward until it clicks into place.

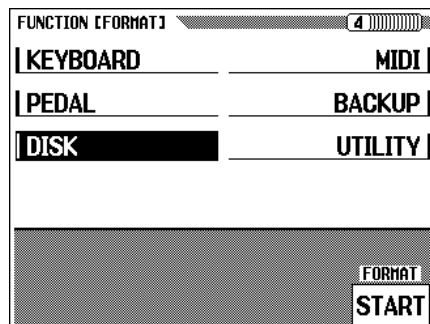


Write protect tab closed (unlocked — write enabled)

2 Execute the format operation.....

Press the **START** button.

- ➔ An "Are you sure" confirmation prompt will appear. Press **YES** to execute the format or **NO** to cancel.



A bar graph appears in the LCD display during format to indicate the process of format. Once a disk has been formatted, song data and other data can be recorded, saved, or copied to it.

CAUTION

- **Formatting a disk erases all the data on the disk.**

NOTE

Types of Format

- 2DD disks are formatted into 720 KB, while 2HD disks are formatted into 1.44 MB.

Song Copy (SONG COPY) Display — PAGE 5

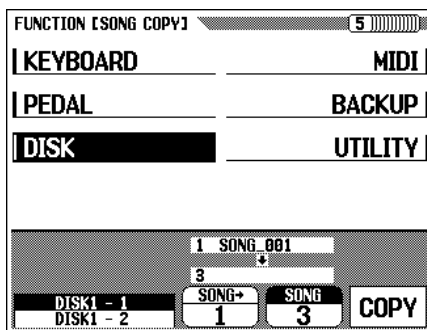
This function allows you to copy song data (data files on disk) recorded by the CVP-98/96 to a different song number on the same disk, or to a different disk.

1 Set up the disk(s).....

Insert the disk containing the source song.

➤ Press either of the left-most two LCD buttons to select the copy type. Two copy types are available.

DISK 1 - 1	This function allows you to copy the song to a different song number on the same disk.
DISK 1 - 2	This function allows you to copy the song to a different disk.



2 Select the source song.....

Press the **SONG** ➔ button to highlight the parameter, then use the data dial or [-/+] buttons to select the source song.

➔ The selected song name will appear in the upper section of the LCD display.

3 Select the destination song number (DISK1 - 1 only).....

This step is only for the **DISK1 - 1** copy type. If you have selected the **DISK1 - 2** type copy, go on to step 4.

Press the **SONG** button to highlight the parameter, then use the data dial or [-/+] buttons to select the destination song number.

➔ If the destination song number already contains data, the name of the song file will appear in the middle section of the LCD display. In this case, the original data of the destination song number will be erased and overwritten by the source song data when executing the copy operation.

NOTE

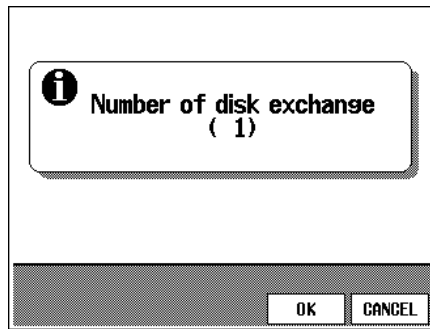
- If the CVP-98/96's internal memory contains song data recorded without a disk, the **CUP** mode will be automatically selected for copying the internal memory data to disk (see page 138), and the **DISK1 - 1** or **DISK1 - 2** copy mode cannot be selected. In this case if you want to keep the data of internal memory, copy it to disk first, and delete the internal memory data by using the Song Delete function (page 138). Then, attempt the **DISK1 - 1** or **DISK1 - 2** copy operation again.
- When using the Copy function within the same disk, the operation cannot be performed if the destination song is set to the same number as the source song. In this case, a "Select a different number!" message appears.

4 Execute the Copy operation.

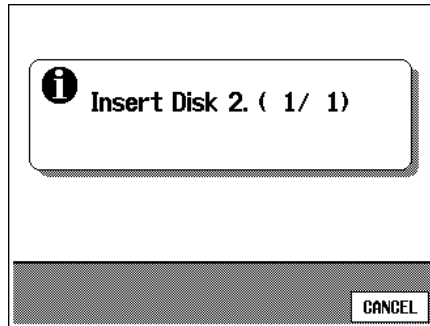
Press the **COPY** button.

- ➔ The Copy operation begins. If you are copying to the same disk, an “Are you sure?” confirmation prompt will appear. Press the **YES** button to continue or the **NO** button to cancel.

If you are copying the data to a different disk, a “Number of disk exchange (**)” message appears to indicate the number of times the disk will have to be changed. Press the **OK** button to continue, or the **CANCEL** button to abort the operation.

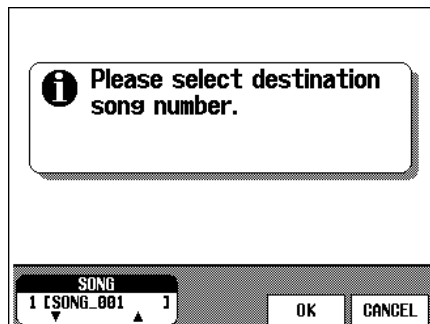


When copying to a different disk, follow the instructions in the LCD display, changing the source and destination disks as necessary.



The first time the destination disk is inserted, the following LCD display will appear. Use the data dial or [-/+] buttons to select the destination song number.

- If the destination song number already contains data, the song name will appear in the LCD display. In this case, the original data of the destination song number will be erased and overwritten by the source song data when executing the copy operation. Press the **OK** button to continue, or **CANCEL** to abort.



NOTE

- The copy operation is not effective if the same song numbers are selected as the source song and the destination song in the **DISK 1 - 1** type copy. In this case, a “Select a different number!” message will appear.

NOTE

Caution on Copying Commercial Software

- Copying of commercially available software is strictly prohibited, except for your personal use.

NOTE

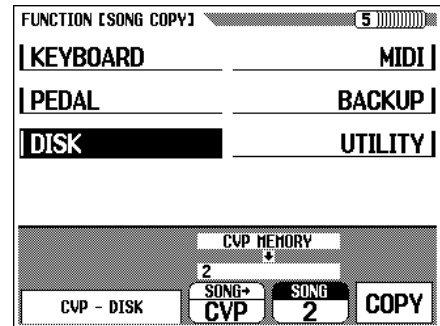
- Data files (other than those made with the CVP-98/96/94/92) that have been copied once cannot be copied a second time to another disk. Also, additional data can be recorded only to the right-hand/left-hand parts of the copied DOC files.
- Song data of the CVP-94/92/79A/69/69A/59S can be copied by the CVP-98/96.

● Copying Data Recorded Without a Disk

If you've recorded a song without inserting a disk, the song data is automatically recorded to the CVP-98/96's internal RAM. To copy the data to the disk, first select the Song Copy display and insert a formatted disk.

- Select the destination song number, then copy to disk in the normal way.

The **CUP - DISK** parameter is automatically selected, with the internal RAM data as the source data for copying.



Song Delete (SONG DELETE) Display — PAGE 6

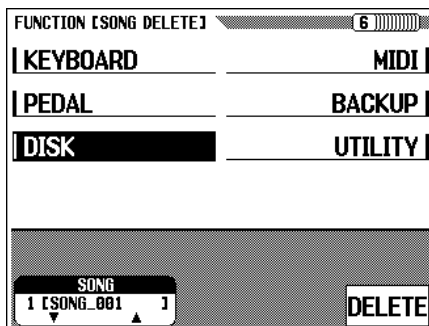
You can delete unneeded song data from the disk in this display. Be careful not to delete any important data on the disk; once the Delete operation is performed, it cannot be undone.

1 Set up the disk.

Insert the disk containing the song data to be deleted into the disk drive.

2 Select the song to be deleted.

Use the data dial or [-/+] buttons to select the song to be deleted. The song data in the CVP-98/96's internal RAM can be also deleted with this operation. To do this, select the **CUP MEMORY** parameter instead of the song number (**CUP MEMORY** appears only when the internal RAM contains song data).



3 Execute the Delete operation.

Press the **DELETE** button.

- ➔ An "Are you sure?" confirmation prompt will appear. Press the **YES** button to delete the selected song, or press the **NO** button to cancel the operation.

Registration (REGISTRATION) Display — PAGE 7

This function allows you to save the panel settings registered using the Registration function to disk, load Registration data from disk, delete Registration data from a disk, or name Registration files.

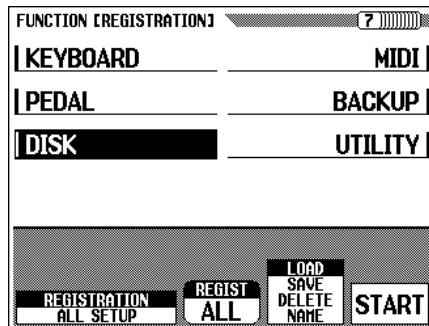
Before executing the Registration function, make sure that the disk you want to use for this operation is inserted in the disk drive.

Refer to page 35 in the Reference Manual for a list of settings registered by the Registration function.

1 Select the file type.

Press either of the two left-most LCD buttons to select the file type to be loaded, saved, deleted or named.

REGISTRATION	Contains each or all Registration file(s) in 20 Registration memory locations.
ALL SETUP	An All Setup file contains all panel setting data in the list on page 35 in the Reference Manual.



To save or load the data of **REGISTRATION**, first set the **REGIST** (Registration number) parameter. When saving, press the **REGIST** button to select the desired Registration file number from **ALL** or **A-1 – E-4** to save to disk. When loading, select the internal destination location from **ALL** or **A-1 – E-4**.

2 Select the file operation.

Use the second LCD button from the right to select the desired file operation: **LOAD**, **SAVE**, **DELETE** or **NAME**.

3 Press the **START** button.

→ Operation begins.

The subsequent steps for each file operation depend on the operation you've selected. Refer to the corresponding instructions for each operation below.

■ **SAVE**

When you select **SAVE**, the name entry function display for the file to be saved will appear.



Press the **CHAR ►** button to move the underline cursor, and select the character position of the file name. (File names can contain up to twelve characters.)

- Use the data dial or [-/+] buttons to highlight the characters to be input.

Press the **CHAR SET** button to input the selected characters at the current underline position of the file name. Continue moving the cursor to other characters or marks and entering them in this way.

To delete the character at the previous position, press the **BACK SPACE** button. The character before the underline cursor is deleted and the cursor moves back to the deleted position.

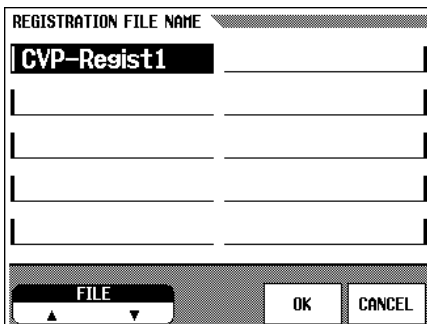
To abort the name entry operation and return to the FUNCTION [REGISTRATION] display, press the **CANCEL** button.

When the file name has been completely entered, press the **SAVE** button to execute the Save operation.

If you enter a name that already exists on the disk, a “Same name! Overwrite?” message will appear. Press the **OK** button to overwrite the original file with the new file, or **CANCEL** to abort the Save operation.

■ **NAME**

When you select **NAME**, the Name function display will appear.



First, select the desired file to be named. Press either of the two left-most LCD buttons to select the file, then press the **OK** button.

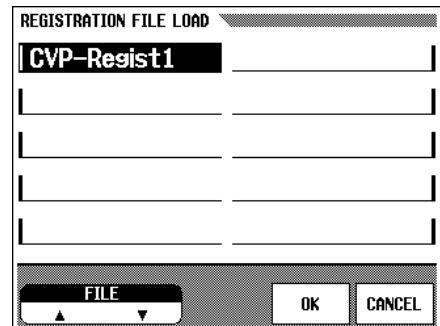
- The name entry display will appear. Enter a new file name in the same way as described above for the Save function.
- Pressing the **OK** button changes the current name to the newly entered name. Press the **CANCEL** button to abort. If you enter a name that already exists on the disk, a “Same name! Overwrite?” message will appear. In this case, press the **OK** button to overwrite the original file with the renamed file, or **CANCEL** to abort the Name operation.

■ **LOAD**

When you select **LOAD**, the Load function display will appear. The original internal data will be erased and overwritten when executing the Load operation. Make sure to save all important data to disk (see page 140) before using the Load operation.

First, select the desired file to be loaded. Press either of the two left-most LCD buttons to select the file, then press the **OK** button.

- ➔ An “Are you sure?” confirmation prompt will appear. Press the **YES** button to load the selected file, or the **NO** button to abort the Load operation.

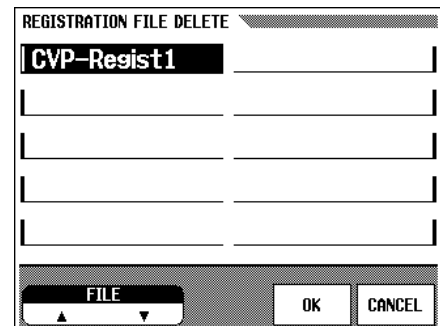


■ **DELETE**

When you select **DELETE**, the Delete function display will appear.

First, select the desired file to be deleted. Press either of the two left-most LCD buttons to select the file, then press the **OK** button.

- ➔ An “Are you sure?” confirmation prompt will appear. Press the **YES** button to delete the selected file, or the **NO** button to abort the Delete operation.



Transform (TRANSFORM) Display — PAGE 8

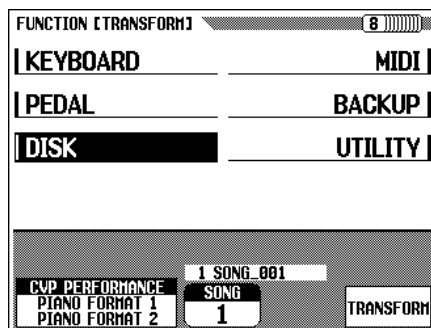
This function allows you to convert song data recorded on the CVP-98/96 so that the data can be played back on other Clavinova models or a Disklavier.

Make sure to insert a proper disk (2DD disk containing the data to be converted) in the disk drive.

1 Select the conversion type.

Use either of the two left-most LCD buttons to select the target format of the file (the instrument for which the converted data is to be used). The following three types are available.

CVP PERFORMANCE	This type converts the selected data for playback on the CVP-50/70/55/65/75/83S/85A/87A/89, CLP-705, DOM-30, and DOU-10.
PIANO FORMAT 1	This type converts the data for playback on the Disklavier, excepting the MX100A and MX100B.
PIANO FORMAT 2	This type converts the data for playback on the Disklavier MX100A or MX100B.



2 Select the song to be converted by using the data dial or [-/+] buttons.

3 Press the TRANSFORM button.

An “Are you sure?” confirmation prompt will appear. Press the **YES** button to start data conversion of the selected song, or the **NO** button to cancel the operation. When the conversion process is finished, a “Completed! SONG No.**” message appears to indicate the song number to which the data was saved.

If the conversion was executed by using CVP PERFORMANCE, “C)” is added to the beginning of the original name, and if the conversion was executed by the PIANO FORMAT 1/2, “P)” is added to the beginning of the original name.

NOTE

Compatible Disk Types for Data Conversion

- Only 2DD type disks can be used for this operation. If a 2HD disk is used a “2HD disk is not valid! Please copy to 2DD disk.” message will appear. In this case, first copy the song you wish to convert to a 2DD disk by using the Song Copy function (page 136), then attempt the conversion again.
- Data in the Clavinova’s internal memory cannot be converted until it is saved to disk.

NOTE

About the CVP-94/92/59S/69A/69/79A Clavinovas

- The CVP-94/92/59S/69A/69/79A Clavinovas can play back the song data recorded on the CVP-98/96 without conversion.
- The original pre-converted data remains intact even after the conversion has been executed.

NOTE

- If data converted to PIANO FORMAT 1/2 is played back on the CVP series, DOM-30 or DOU-10 instruments, tracks 1 and 2 will not sound.

NOTE

- Recording or editing cannot be performed on the converted songs.



MIDI

Functions related to MIDI (Musical Instrument Digital Interface) can be called up from pages 9 through 11.

NOTE

- If you are using the MIDI terminals, set the HOST SELECT switch to "MIDI".

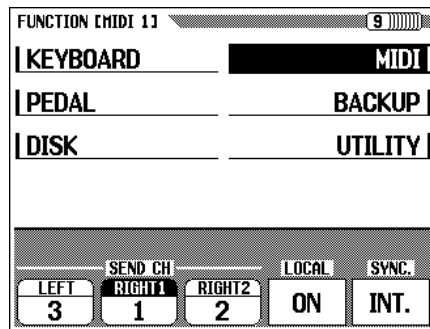
MIDI 1 Display — PAGE 9

■ Set the Send Channel SEND CH

In any MIDI control setup, the MIDI channels of the transmitting and receiving equipment must be matched for proper data transfer (channels 1 through 16). This function sets the MIDI transmit channels of the CVP-98/96.

Independent MIDI channels can be set for the following three different types of play data.

LEFT	Left voice in the Split mode
RIGHT1	Right voice in the Split mode/1st voice in the Dual mode/voice for normal keyboard performance
RIGHT2	2nd voice in the Dual mode



NOTE

Transmission Channel

- **LEFT** setting: OFF (no transmission), channels 1 — 16
- Basic setting: 3
- Backup of last settings: OFF
- **RIGHT 1** setting: OFF (no transmission), channels 1 — 16
- Basic setting: 1
- Backup of last settings: OFF
- **RIGHT 2** setting: OFF (no transmission), channels 1 — 16
- Basic setting: 2
- Backup of last settings: OFF

● MIDI Reception

The CVP-98/96 always receives MIDI data in the "Multi Timbre" mode. This is a mode in which the CVP-98/96 voices can be independently controlled on different MIDI channel numbers (1 through 16) by an external MIDI device. This means that you can produce the sound of a full band or ensemble on the CVP-98/96 by using a computer or MIDI sequencer.

■ Local Control ON/OFF LOCAL

“Local Control” refers to the fact that, normally, the CVP-98/96 keyboard controls its internal tone generator, allowing the internal voices to be played directly from the keyboard. This situation is called “Local Control ON”. When the local control is set to off, the “keyboard” and “sound source” are separated and no sound is output through the CVP-98/96 when playing the keyboard. However, the data of the keyboard performance is output through MIDI. By setting Local Control to off, you can play an external MIDI tone generator from the keyboard of the CVP-98/96 without sounding the internal voices.

To set this, press the **LOCAL** button. The data dial and [-/+] buttons cannot be used.

■ Sync

Playback of songs and Auto Accompaniment is normally controlled by the internal clock (INT.) of the CVP-98/96 at a specific tempo. By setting this clock to “EXT.”, the CVP-98/96’s tempo can be controlled by an external sequencer or rhythm machine. For example, this lets you play the Auto Accompaniment of the CVP-98/96 in perfect synchronization with an external sequencer.

To set this, press the **SYNC.** button. The data dial and the [-/+] buttons cannot be used.

NOTE

Local Control

- Settings: ON/OFF
- Basic setting: ON
- Backup of last settings: OFF

NOTE

Sync

- Settings: INT. (internal clock)/EXT. (external clock)
- Basic setting: INT.
- Backup of last settings: OFF

NOTE

- If the clock mode is set to EXT. and a MIDI clock signal is not being received from an external source, features related to the Auto Accompaniment and the accompaniment styles cannot be used.

MIDI 2 Display — PAGE 10

The MIDI 2 function display contains the MIDI filter settings which can be used to turn transmission and reception of certain types of MIDI data on or off.

■ Program ON/OFF

Normally the CVP-98/96 will respond to MIDI program change numbers received from an external keyboard or another MIDI device. For example, the CVP-98/96 can change voices in response to MIDI program change messages received from a connected MIDI sequencer. (These messages do not affect the keyboard-played voices.) The voices of connected external MIDI devices can also be changed by program change messages transmitted from the CVP-98/96. (Program change messages are transmitted when changing voices on the panel of the CVP-98/96.)

Depending on your particular MIDI setup, you may find that this feature is convenient in some cases and not in others. Set **PROGRAM** to off if you wish to disable the program change transmission/reception. Set **PROGRAM** to “Tx&Rx” to turn on transmission/reception of program change messages.

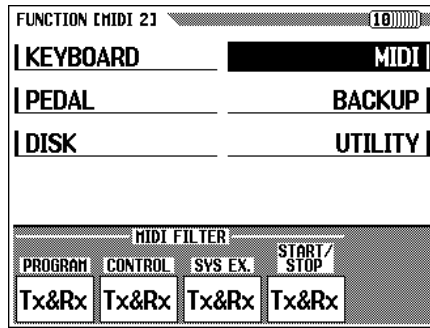
NOTE

Program

- Settings: Tx&Rx (transmitted/received), OFF (not transmitted/received)
- Basic setting: Tx&Rx
- Backup of last settings: OFF

NOTE

- Bank MSB and LSB messages can be transmitted and received even when Program is set to off.



The program numbers of the CVP-98/96’s voices are standardized according to the XG voice allocation. See the Voice List on page 26 in the Reference Manual for details.

■ Control ON/OFF

Control change messages are used for various non-keyboard performance controls, such as the damper pedal, or for expressive control of the sound of a connected MIDI device, such as effects and volume. For example, the CVP-98/96 can respond to control change messages transmitted from an external MIDI sequencer. (These messages do not affect the keyboard-played voices.) Similarly, an external MIDI device can be controlled by sending control change messages from the CVP-98/96 to that device. (Control change messages are transmitted when operating the damper pedal, etc. on the CVP-98/96.) Set **CONTROL** to off if you want control change messages not to be transmitted or received.

Control change data recognized by the CVP-98/96 is listed in detail on page 10 in the Reference Manual.

■ System Exclusive ON/OFF

System exclusive messages are used for more advanced or detailed MIDI control, or for controls related to specific manufacturer’s devices. Set **SYS EX.** to off if you desire not to transmit/receive the system exclusive messages. Set **SYS EX.** to “Tx&Rx” enable transmission and reception of these messages.

System exclusive data recognized by the CVP-98/96 is listed in detail on page 12 in the Reference Manual.

■ Start/Stop ON/OFF

By using the Start/Stop command, the rhythm and performance of the receiving device can be started/stopped from the sending device via MIDI. For example, you can transmit the start/stop command from an external MIDI sequencer to start and stop the Auto Accompaniment or song playback on the CVP-98/96. Also, the playback of an external MIDI sequencer or rhythm machine can be started/stopped by starting/stopping the Auto Accompaniment on the CVP-98/96. Set **START/STOP** to off if you want to disable transmission/reception of start/stop. Set it to on to enable transmission/reception.

NOTE

Control

- Settings: Tx&Rx (transmitted/received), OFF (not transmitted/received)
- Basic setting: Tx&Rx
- Backup of last settings: OFF

NOTE

System Exclusive

- Settings: Tx&Rx (transmitted/received), OFF (not transmitted/received)
- Basic setting: Tx&Rx
- Backup of last settings: OFF

NOTE

Start/Stop

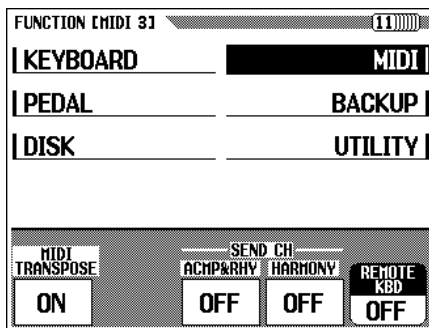
- Settings: Tx&Rx (transmitted/received), OFF (not transmitted/received)
- Basic setting: Tx&Rx
- Backup of last settings: OFF

MIDI 3 Display — PAGE 11

From the MIDI 3 display you can set whether or not MIDI data received from an external device is affected by the Transpose setting (page 130) or not, whether or not the Auto Accompaniment, rhythm and Harmony data is transmitted, and whether or not the MIDI data received from an external device affects the keyboard-played voices.

■ MIDI Transpose Receive

When **MIDI TRANSPOSE** is set to on, the Transpose setting (page 130) will affect the MIDI data received by the CVP-98/96.



■ Transmitting Auto Accompaniment /Harmony Data

When the **ACMP&RHY** parameter is set to on, accompaniment data is transmitted via the MIDI [OUT] terminal when playing back the Auto Accompaniment. The data is transmitted over MIDI channels 9 - 16.

If the **HARMONY** parameter is set to on, Harmony data is transmitted via the MIDI [OUT] terminal when using the Harmony function. The data is transmitted over MIDI channels 6 - 8.

The Auto Accompaniment or Harmony can be recorded to a computer or external sequencer by using these functions.

■ Remote Keyboard

MIDI data received over the channel set in the **REMOTE KBD** parameter will affect your keyboard performance. The received data also can be recorded. Select OFF to prevent external MIDI data from affecting your keyboard performance. The following four data types can be received.

- Key ON/OFF
- Control Change (performance expression data; only those listed below)

#1 Modulation	#66 Soft Pedal
#7 Volume	#123 All notes off
#11 Expression	BANK Select MSB
#64 Sustain Pedal	BANK Select LSB
#65 Sostenuto Pedal	
- Program Change (voice change data)
- Pitch Bend

NOTE

Transpose Receive

- Settings: ON (enabled), OFF (disabled)
- Basic setting: ON
- Backup of last settings: OFF

NOTE

- The Transpose setting made in the KEYBOARD 1 Page 1 in the Function section is effective for data transmitted via MIDI.

NOTE

Auto Accompaniment/ Harmony Transmission

- Setting of **ACMP&RHY**: OFF (not transmitted), 9 - 16 ch (transmitted)
- Basic setting: OFF (not transmitted)
- Backup of last settings: OFF
- Setting of **HARMONY**: OFF (not transmit), 6 - 8 ch (transmit)
- Basic setting: OFF (not transmit)
- Backup of last settings: OFF

NOTE

- When transmitting the Auto Accompaniment or Harmony data via MIDI, do not select the Auto Accompaniment/ Harmony MIDI channels 6 - 8 or 9 - 16 for transmitting the data of your keyboard performance. Doing so may result in your keyboard performance data being mixed with the Auto Accompaniment or Harmony data.
- If either the **ACMP&RHY** or **HARMONY** is turned on, the Auto Accompaniment or Harmony playback data is transmitted via MIDI, even if the **RIGHT 1** transmission channel (page 143) is turned off.

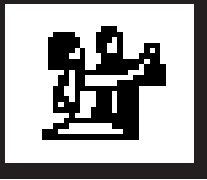
NOTE

Remote Keyboard

- Settings: OFF (not received), 1 - 16 (received over the specified channel)
- Basic setting: OFF
- Backup of last settings: OFF

NOTE

- MIDI data received by the remote keyboard function cannot be output via the MIDI [OUT] terminal.

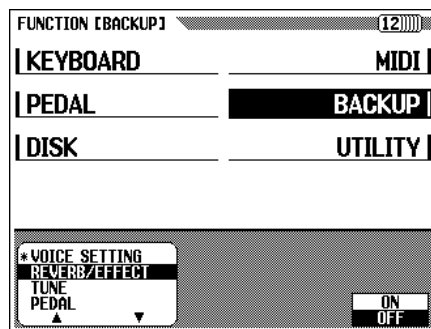


Backup

Backup (BACKUP) Display — PAGE 12

This function allows you to set the backup of various parameter groups on or off. When set to on, the corresponding settings will not be reset to the basic settings (default settings) when power is turned off.

Press the ▼ or ▲ button or use the data dial or [-/+] buttons to select the desired group, then use the right-most LCD button to set the selected group to backup on/off. The (“*”) mark at the beginning of the group name indicates that the backup setting of the group is turned on. The settings of groups whose backup settings are set to off will return to the basic settings (default settings) when the power is turned off.



Backup is used for the following groups on the CVP-98/96.

- VOICE SETTING
- REVERB/EFFECT
- TUNE (master tuning, micro tuning, scale tuning)
- PEDAL
- ACMP SETTING (Auto Accompaniment-related settings)
- SONG SETTING
- REGISTRATION
- MIDI SETTING
- UTILITY (pop-up time, alert sound)

Refer to the list on page 35 in the Reference Manual for the specific parameters of each group.

Parameters that are backed up will be retained in memory for about a week if the Clavinova is not turned on during this time. All parameters will be reset to their default values if the power remains off for longer than about a week. To ensure that your backed-up settings are maintained, turn the power on for a few minutes at least once a week.

NOTE

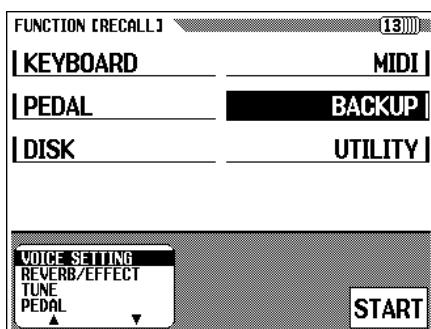
- The basic settings (default settings) for the BACKUP function are as follows: REGISTRATION and UTILITY are set to ON, all other parameter groups are set to OFF.
- The Help language and backup on/off setting itself are always backed up.

Recall (RECALL) Display — PAGE 13

This function can be used to recall the initial factory settings (basic settings) for a range of parameters — individually or all at once.

Press the ▼ or ▲ buttons or use the data dial or [-/+] buttons to select the group you want to recall, then press the **START** button.

- An “Are you sure?” confirmation prompt will appear. Press the **YES** button to recall or **NO** to cancel.



The following parameter groups of the CVP-98/96 can be recalled.

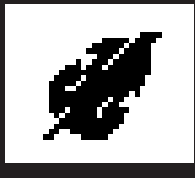
- VOICE SETTING
- REVERB/EFFECT
- TUNE (master tuning, micro tuning, scale tuning)
- PEDAL
- ACMP SETTING (Auto Accompaniment-related settings)
- SONG SETTING
- REGISTRATION
- MIDI SETTING
- UTILITY (pop-up time, alert sound)
- ALL (all the above settings)

Refer to the list on page 35 in the Reference Manual for the specific parameters of each group.

NOTE

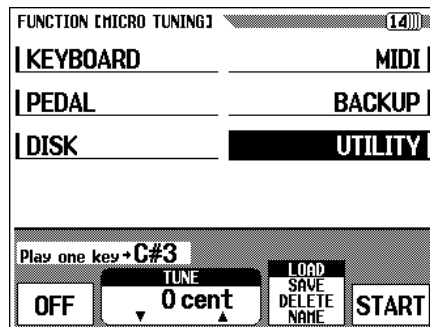
- The initial settings (basic settings) for the Help language and the above backup on/off settings are not recalled by this function.

However, these and all other settings can be reset to the initial factory values by turning the power on while holding the right-most key on the keyboard (C7). When this is done, a “Back up data erased and replaced by Factory data” message appears to indicate that all backed up data is erased and all factory settings are recalled. After this message, the main display will appear.



Micro Tuning (MICRO TUNING) Display — PAGE 14

The Micro Tuning Feature makes it possible to individually tune each key of the keyboard. The created tuning can be saved to a disk and loaded whenever necessary. The set tuning can be turned on or off at anytime by using the left-most LCD button in this display.



1 Select the desired key.....

Press any desired key to be tuned.

- ➔ The note name and the current tuning value of the pressed key will appear in the display.

2 Set the tuning.....

Press the **TUNE** ▼ or ▲ buttons or use the data dial or [-/+] to tune the pitch of the selected key. If you set the parameter at the left-most LCD button to ON, you can play the key being tuned in order to check the sound during this operation. The normal tuning of ±0 cents for the selected key can be instantly recalled by simultaneously pressing both the **TUNE** ▼ or ▲ buttons.

NOTE

- Range: -100 cents (- 1 semitone) — +100 cents (+ 1 semitone)
- Basic Value: 0 (for all keys)
- Backup of last settings: OFF

3 Repeat steps 1 and 2.....

Repeat steps 1 and 2 until all the required keys have been tuned.

The completed tuning can be named as a tuning file and saved to disk. It can also be loaded whenever necessary or deleted if not needed.

Make sure that a proper disk (either containing the micro tuning data or set up for saving) is inserted in the disk drive before executing these file operations.

1 Select the desired file operation.

Use the LCD button located second from right to select the desired file operation: **LOAD**, **SAVE**, **DELETE** or **NAME**.

2 Press the START button.

After the **START** button is pressed, the display corresponding to the selected file operation appears.

The subsequent steps are the same as those explained on pages 140 and 141. Refer to the pages below, depending on the selected file operation.

SAVE	See page 140.
NAME	See page 140.
LOAD	See page 141.
DELETE	See page 141.

Scale Tuning (SCALE TUNING) Display — PAGE 15

This feature allows you to select from various tuning (temperament) configurations, when selecting **PRESET** in this display. By selecting **USER**, you can create your own user scale, in which the tuning you set for a single octave takes effect for the entire keyboard. The created tuning can be saved to disk for future recall.

■ Preset Scale

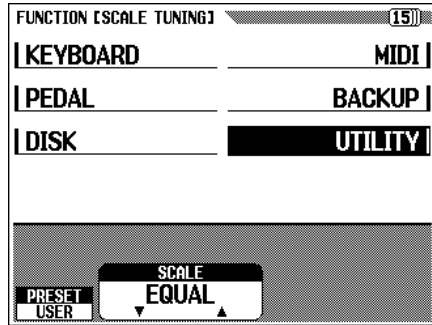
This function lets you select from various pre-programmed tunings or temperaments.

Until equal temperament — the most commonly used tuning at present — was accepted, various tunings have been created over the years for use with the particular music and instruments of the era. This feature lets you play in historically authentic tunings, and get a better feeling for the music of the corresponding eras.

The CVP-98/96 contains the following seven temperaments.

- EQUAL
- PURE(MAJOR)
- PURE(MINOR)
- MEANTONE
- PYTHAGOREAN
- WERCKMEISTER
- KIRNBERGER

- 1 Select **PRESET** with the left-most LCD button, and the following display appears.



- 2 Press the **SCALE** ▼ or ▲ to highlight the parameter, then use the data dial or [-/+] buttons to select the temperament type.
When selecting temperaments other than equal (**EQUAL**) temperament, the central key (reference pitch for the temperament) must be set. This allows you to produce the proper temperament in the desired key.
- 3 Press the **KEY** button to highlight the parameter, then use the data dial or [-/+] buttons to select the central key.

NOTE

Central Key

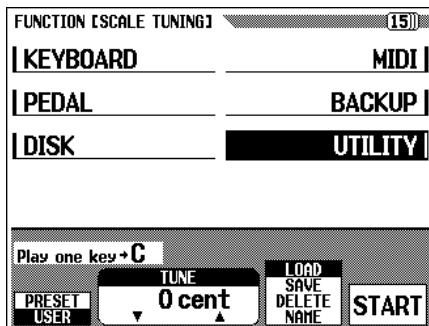
- Settings: C, C#, D, D#, E, F, F#, G, G#, A, A#, B
- Basic setting: C

■ **User Scale**

This function allows you to individually tune each key within an octave.

The setting made for one key is automatically assigned to the same key in all other octaves.

- 1 Select **USER** with the left-most LCD button left; the following display will appear.



- 2 Press the desired key to be tuned.
 - The note name and the current tuning value of the pressed key appears.
- 3 Set the pitch by pressing the **TUNE ▼** or **▲** buttons, or by using the data dial or **[-/+]** buttons. You can play the key being tuned to check the sound during this operation. The default tuning of ± 0 cents can be instantly recalled for the selected key by simultaneously pressing the **TUNE ▼** and **▲** buttons.
- 4 Repeat steps 2 and 3 until all the required keys have been tuned.

The completed tuning can be named as a tuning file and saved to disk. It can also be loaded whenever necessary or deleted if not needed.

Make sure that a proper disk (either containing the scale tuning data or set up for saving) is inserted in the disk drive before executing these file operations.

- 1 Select the desired file operation.

Use the LCD button located second from right to select the desired file operation: **LOAD**, **SAVE**, **DELETE** or **NAME**.
- 2 Press the **START** button.

After the **START** button is pressed, the display corresponding to the selected file operation appears.

The subsequent steps are the same as those explained on pages 140 and 141. Refer to the pages below, depending on the selected file operation.

SAVE	See page 140.
NAME	See page 140.
LOAD	See page 141.
DELETE	See page 141.



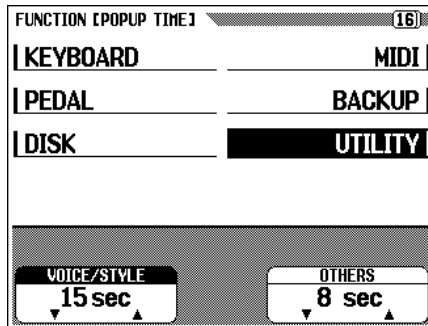
Scale Tuning — User

- Range: -64 cents — +63 cents
- Basic Value: 0 (for all keys)
- Backup of last settings: OFF

Pop-up Time (POPUP TIME) Display — PAGE 16

This determines the amount of time the pop-up displays remain on the display screen before disappearing. The pop-up time of the voice/accompaniment style displays can be set independently from all other pop-up displays.

To set the pop-up time of voice/accompaniment style, first press the **VOICE/STYLE** button to highlight the parameter, then use the data dial or [-/+] buttons. To set the pop-up time for the other displays, use the same method as above, pressing the **OTHERS** button instead of the **VOICE/STYLE** button. The default pop-up time can be recalled by pressing the corresponding ▼ and ▲ buttons simultaneously.



NOTE

Pop-up Time

- Range: 0sec (0 second) — 30sec (30 seconds), ∞sec (remains indefinitely)
- Basic settings: 15 seconds for voice/accompaniment style, 8 seconds for others
- Backup of last settings: ON

NOTES

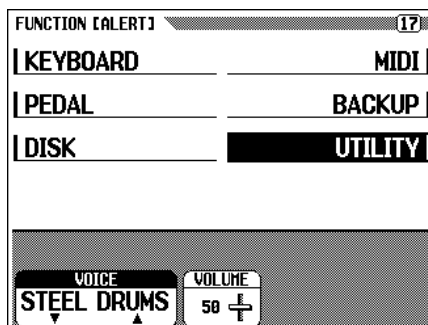
- When 0sec (0 seconds) is selected, the the popup display will be displayed only while the operating button is held. If ∞sec is selected, the [DISPLAY HOLD] lamp will not flash and the pop-up display will not close automatically. In this case, press the [EXIT] button to close the display.

Alert Sound (ALERT) Display — PAGE 17

This function allows you to select one of six “Alert Voices” which will sound when an error is encountered, and set the alert volume.

Press the **VOICE** ▼ or ▲ button to highlight the parameter, then use the data dial or [-/+] buttons to select the desired alert sound. The alert sound automatically plays when it is selected, allowing you to check the sound during the operation. The default alert sound can be recalled instantly by pressing the [-/+] buttons simultaneously.

To set the alert volume, press the **VOLUME** button to highlight the parameter, then use the data dial or [-/+] buttons. The default volume level of 50 can be recalled instantly by pressing the [-/+] buttons simultaneously.

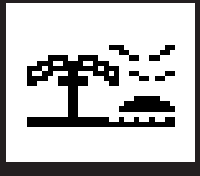


NOTE

Alert Sound

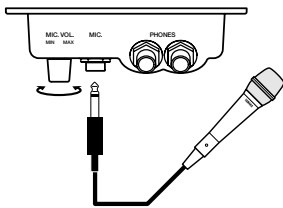
- Settings: STEEL DRUMS, AGOGO, WOOD BLOCK, TIMPANI, CELESTA 4FT, KALIMBA
- Basic setting: STEEL DRUMS
- Backup of last settings: ON
- Volume range: 0 — 100
- Basic setting: 50
- Backup of last setting: ON

CHAPTER 8: Others



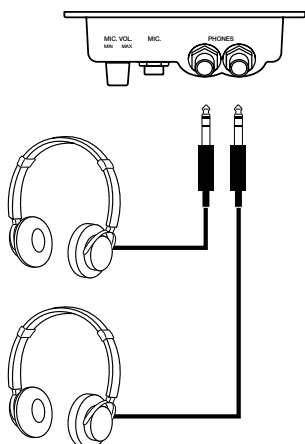
The Connectors

■ [MIC.VOL.] Dial and [MIC.] Jack



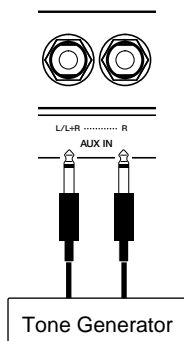
By connecting a microphone to the [MIC.] jack (standard 1/4" phone), you can enjoy singing along with your own performance or with song playback. The sound input from the microphone is output through the CVP-98/96's speakers. The microphone volume can be adjusted with the [MIC.VOL.] dial.

■ [PHONES] Jacks



To use headphones, connect them to one of the [PHONES] jacks (standard 1/4" phone jacks). The internal speaker system of the CVP-98/96 is automatically shut off when a pair of headphones are connected. Two people can enjoy the sound together by connecting two pairs of headphones to the two available terminals.

■ AUX IN [L/L+R] Jacks



The sounds of other instruments or tone generator modules can be output through the speaker system of the CVP-98/96 by connecting audio cables to the jacks as shown below.

NOTE

Recommended Headphones:
• Yamaha HPE-160 headphones

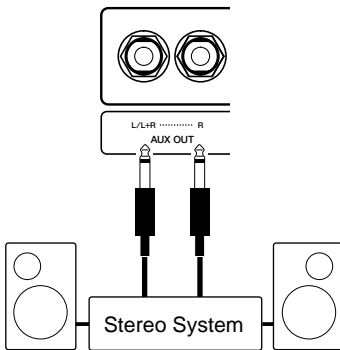
CAUTION

• Do not return the sound output through AUX OUT [L/L+R] [R] jacks to the AUX IN [L/L+R] [R] jacks. Also, when connecting the AUX OUT [L/L+R] [R] jacks to external audio equipment, do not connect these devices back into the CVP-98/96's AUX IN [L/L+R] [R] jacks. Since the input sound from the CVP-98/96's AUX IN [L/L+R] [R] is output through the CVP-98/96's AUX OUT [L/L+R] [R] as is, connecting as described above may result in feedback, making normal playback impossible and even resulting in damage to the instrument.

NOTE

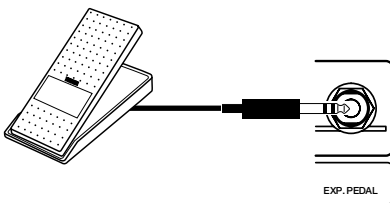
• Internal [MASTER VOLUME] and [REVERB] settings cannot be applied to the input sound received at the AUX IN [L/L+R] [R] jacks.
• Use the AUX IN [L/L+R] and AUX OUT [L/L+R] jacks for mono input and mono output, respectively.

■ AUX OUT [L/L+R] [R] Jacks



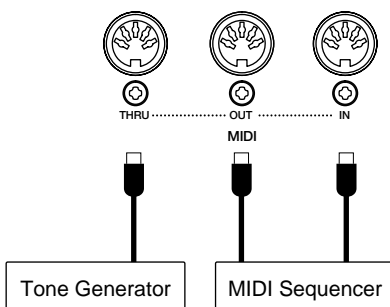
By connecting audio cables to the jacks as shown below, output the sound of the CVP-98/96 to a stereo system, amplifier, mixing console, or recording equipment. Set the [MASTER VOLUME] of the CVP-98/96 to around the middle position and adjust the volume level from the connected equipment.

■ [EXP.PEDAL] Terminal



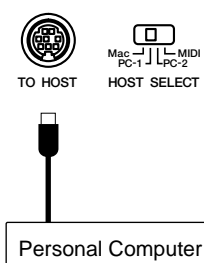
An optional Yamaha FC7 Foot Controller can be connected to this terminal for controlling the volume of your keyboard performance with your foot.

■ MIDI [IN] [OUT] [THRU] Terminals



Connect the CVP-98/96 to external MIDI devices by using MIDI connecting cables. Set the HOST SELECT switch below to “MIDI” when using the MIDI terminals.

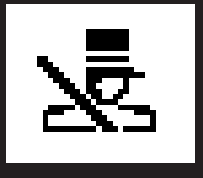
■ HOST SELECT switch and [TO HOST] terminals



[TO HOST] terminal is connected directly to the personal computer.

Set the HOST SELECT switch to match the corresponding computer or connected MIDI device.

See the section “Connecting to a Personal Computer” for details.



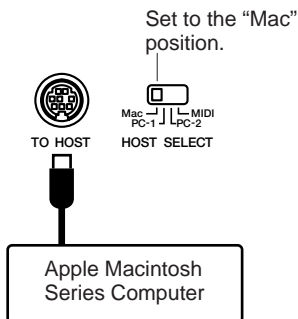
Connecting to a Personal Computer ...

Although the CVP-98/96 can be connected to a personal computer via the MIDI IN/OUT connectors and a MIDI interface, the TO HOST connector and HOST SELECT switch allow direct connection to Apple Macintosh, IBM-PC/AT, or NEC PC-9801/9821 series personal computers for sequencing and other music applications without the need for a separate MIDI interface.

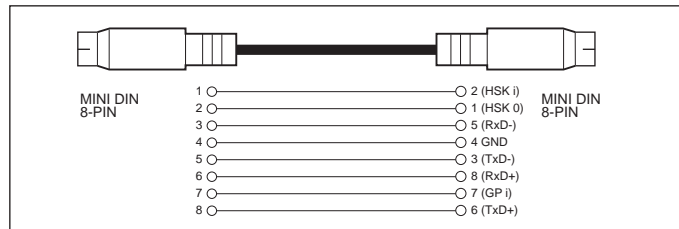
■ Connecting to an Apple Macintosh Series Computer

Connect the TO HOST connector of the Clavinova to the modem or printer port on your Macintosh, depending on which port your MIDI software is using for MIDI data communication, using a standard Macintosh 8-pin system peripheral cable. Set the HOST SELECT switch to the "Mac" position.

You may also have to make other MIDI interface settings on the computer side, depending on the type of software you use (refer to your software owner's manual). In any case the clock speed should be set to 1 MHz.



● "Mac" Cable Connections

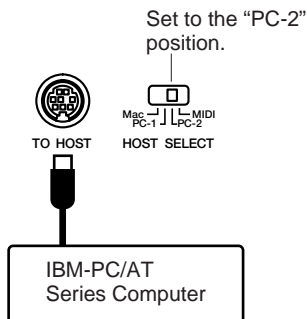


- 8-pin system peripheral cable.
- Data transfer rate: 31,250 bps.

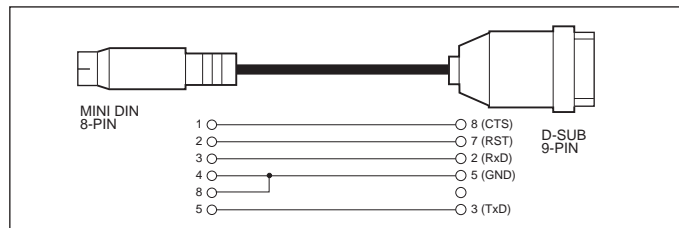
■ Connecting to an IBM-PC/AT Series Computer

Connect the TO HOST connector of the Clavinova to the RS-232C port on your IBM computer, using a standard 8-pin MINI DIN → 9-pin D-SUB cross cable. Set the HOST SELECT switch to the "PC-2" position.

Refer to your software owner's manual for information on any settings you might have to make on the computer side.



● "PC-2" Cable Connections



- 8-pin mini DIN → 9-pin D-SUB cable. Use a "PC-1" type cable if your computer uses a 25-pin serial port.
- Data transfer rate: 38,400 bps.

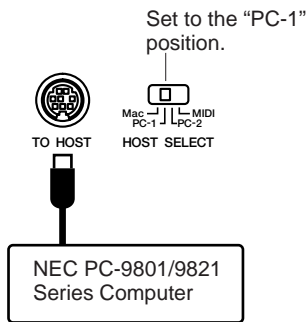
NOTE

- When using the [TO HOST] terminal of the CVP-98/96, first turn the power off on both the CVP-98/96 and the computer before connecting the cable. After connecting the cable, turn the power of the computer on first, then the CVP-98/96.
- When not using the [TO HOST] terminal of the CVP-98/96, make sure the cable is disconnected from the [TO HOST] terminal. If the cable is left connected, the CVP-98/96 may not function properly.
- When the HOST SELECT switch is set to "Mac", "PC-1", or "PC-2, no data transfer occurs via the MIDI connectors. To use the MIDI connectors for connection via a standard MIDI interface, set the HOST SELECT switch to "MIDI".
- If your system doesn't work properly with the connections and settings listed above, your software may require different settings. Check your software operation manual and set the HOST SELECT switch to the position that provides the appropriate data transfer rate.

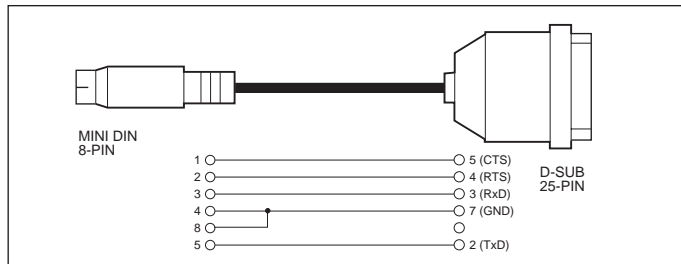
■ Connecting to an NEC PC-9801/9821 Series Computer

The NEC PC-9801/9821 computers are widely used in Japan. Connect the TO HOST connector of the Clavinova to the RS-232C port on your NEC computer, using a standard 8-pin MINI DIN → 25-pin D-SUB cross cable. Set the HOST SELECT switch to the “PC-1” position.

Refer to your software owner’s manual for information on any settings you might have to make on the computer side.

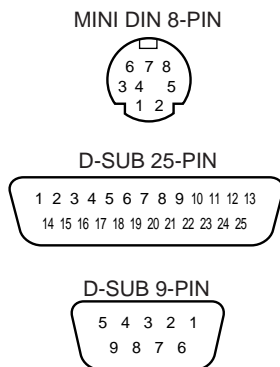


● “PC-1” Cable Connections



- 8-pin mini DIN → 25-pin D-SUB cable. Use a “PC-2” type cable if your computer uses a 9-pin serial port.
- Data transfer rate: 31,250 bps.

● Connector Pin Numbers



● MIDI Driver

The included Music Software Collection disk also contains special MIDI Driver software, which may be necessary when using computer software with the CVP-98/96. Install the MIDI driver from the disk to your computer if necessary. Refer to the text files on the disks listed below for installation instructions.

Windows 95:

A:\driver\win95\readme.txt
 A:\driver\win95\license.txt

Windows 3.1 (IBM PC Series):

A:\driver\win31\ibmpc\cbxt3.txt

“A:” is the disk directory.

Trademarks

- Apple and Macintosh are trademarks of Apple Computer, Inc.
- IBM-PC/AT is a trademark of International Business Machines Corporation.
- PC-9801/9821 is a trademark of NEC Corporation.
- Windows is the registered trademark of Microsoft® Corporation.
- All other trademarks are the property of their respective holders.

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FCC INFORMATION (U.S.A.)

1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.

2. IMPORTANT: When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product **MUST** be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

3. NOTE: This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices.

Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures: Relocate either this product or the device that is being affected by the interference.

Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s.

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to co-axial type cable.

If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Corporation of America, Electronic Service Division, 6600 Orangethorpe Ave, Buena Park, CA90620

The above statements apply **ONLY** to those products distributed by Yamaha Corporation of America or its subsidiaries.

* This applies only to products distributed by YAMAHA CORPORATION OF AMERICA.

IMPORTANT NOTICE FOR THE UNITED KINGDOM

Connecting the Plug and Cord

IMPORTANT. The wires in this mains lead are coloured in accordance with the following code:

BLUE : NEUTRAL
BROWN : LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Making sure that neither core is connected to the earth terminal of the three pin plug.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

- This applies only to products distributed by Yamaha Canada Music Ltd.
- Ceci ne s'applique qu'aux produits distribués par Yamaha Canada Musique Ltée.

IMPORTANT SAFETY INSTRUCTIONS

INFORMATION RELATING TO PERSONAL INJURY, ELECTRICAL SHOCK, AND FIRE HAZARD POSSIBILITIES HAS BEEN INCLUDED IN THIS LIST.

WARNING- When using any electrical or electronic product, basic precautions should always be followed. These precautions include, but are not limited to, the following:

- 1.** Read all Safety Instructions, Installation Instructions, Special Message Section items, and any Assembly Instructions found in this manual **BEFORE** making any connections, including connection to the main supply.
- 2.** Main Power Supply Verification: Yamaha products are manufactured specifically for the supply voltage in the area where they are to be sold. If you should move, or if any doubt exists about the supply voltage in your area, please contact your dealer for supply voltage verification and (if applicable) instructions. The required supply voltage is printed on the name plate. For name plate location, please refer to the graphic found in the Special Message Section of this manual.
- 3.** This product may be equipped with a polarized plug (one blade wider than the other). If you are unable to insert the plug into the outlet, turn the plug over and try again. If the problem persists, contact an electrician to have the obsolete outlet replaced. Do **NOT** defeat the safety purpose of the plug.
- 4.** Some electronic products utilize external power supplies or adapters. Do **NOT** connect this type of product to any power supply or adapter other than one described in the owner's manual, on the name plate, or specifically recommended by Yamaha.
- 5.** **WARNING:** Do not place this product or any other objects on the power cord or place it in a position where anyone could walk on, trip over, or roll anything over power or connecting cords of any kind. The use of an extension cord is not recommended! If you must use an extension cord, the minimum wire size for a 25' cord (or less) is 18 AWG. **NOTE:** The smaller the AWG number, the larger the current handling capacity. For longer extension cords, consult a local electrician.
- 6.** Ventilation: Electronic products, unless specifically designed for enclosed installations, should be placed in locations that do not interfere with proper ventilation. If instructions for enclosed installations are not provided, it must be assumed that unobstructed ventilation is required.
- 7.** Temperature considerations: Electronic products should be installed in locations that do not significantly contribute to their operating temperature. Placement of this product close to heat sources such as; radiators, heat registers and other devices that produce heat should be avoided.
- 8.** This product was **NOT** designed for use in wet/damp locations and should not be used near water or exposed to rain. Examples of wet/damp locations are; near a swimming pool, spa, tub, sink, or wet basement.
- 9.** This product should be used only with the components supplied or; a cart, rack, or stand that is recommended by the manufacturer. If a cart, rack, or stand is used, please observe all safety markings and instructions that accompany the accessory product.
- 10.** The power supply cord (plug) should be disconnected from the outlet when electronic products are to be left unused for extended periods of time. Cords should also be disconnected when there is a high probability of lightning and/or electrical storm activity.
- 11.** Care should be taken that objects do not fall and liquids are not spilled into the enclosure through any openings that may exist.
- 12.** Electrical/electronic products should be serviced by a qualified service person when:
 - a. The power supply cord has been damaged; or
 - b. Objects have fallen, been inserted, or liquids have been spilled into the enclosure through openings; or
 - c. The product has been exposed to rain; or
 - d. The product does not operate, exhibits a marked change in performance; or
 - e. The product has been dropped, or the enclosure of the product has been damaged.
- 13.** Do not attempt to service this product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.
- 14.** This product, either alone or in combination with an amplifier and headphones or speaker/s, may be capable of producing sound levels that could cause permanent hearing loss. **DO NOT** operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist. **IMPORTANT:** The louder the sound, the shorter the time period before damage occurs.
- 15.** Some Yamaha products may have benches and/or accessory mounting fixtures that are either supplied as a part of the product or as optional accessories. Some of these items are designed to be dealer assembled or installed. Please make sure that benches are stable and any optional fixtures (where applicable) are well secured **BEFORE** using. Benches supplied by Yamaha are designed for seating only. No other uses are recommended.

PLEASE KEEP THIS MANUAL

For details of products, please contact your nearest Yamaha or the authorized distributor listed below.

Pour plus de détails sur les produits, veuillez-vous adresser à Yamaha ou au distributeur le plus proche de vous figurant dans la liste suivante.

Die Einzelheiten zu Produkten sind bei Ihrer unten aufgeführten Niederlassung und bei Yamaha Vertragshändlern in den jeweiligen Bestimmungsländern erhältlich.

Para detalles sobre productos, contacte su tienda Yamaha más cercana o el distribuidor autorizado que se lista debajo.

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Yamaha Canada Music Ltd.
135 Milner Avenue, Scarborough, Ontario,
M1S 3R1, Canada
Tel: 416-298-1311

U.S.A.

**Yamaha Corporation of America,
Keyboard Division**
6600 Orangethorpe Ave., Buena Park, Calif. 90620,
U.S.A.
Tel: 714-522-9011

MIDDLE & SOUTH AMERICA

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**Yamaha De Mexico S.A. De C.V.,
Departamento de ventas**
Javier Rojo Gomez No.1149, Col. Gpe Del
Moral, Deleg. Iztapalapa, 09300 Mexico, D.F.
Tel: 686-00-33

BRASIL

Yamaha Musical Do Brasil LTDA.
Ave. Reboucas 2636, São Paulo, Brasil
Tel: 011-853-1377

PANAMA

Yamaha De Panama S.A.
Edificio Interseco, Calle Elvira Mendez no.10,
Piso 3, Oficina #105, Ciudad de Panama, Panama
Tel: 507-69-5311

OTHER LATIN AMERICAN COUNTRIES AND CARIBBEAN COUNTRIES

Yamaha Music Latin America Corp.
6101 Blue Lagoon Drive, Miami, Florida 33126,
U.S.A.
Tel: 305-261-4111

EUROPE

THE UNITED KINGDOM

Yamaha-Kemble Music (U.K.) Ltd.
Sherbourne Drive, Tilbrook, Milton Keynes,
MK7 8BL, England
Tel: 01908-366700

IRELAND

Danfay Ltd.
61D, Sallynoggin Road, Dun Laoghaire, Co. Dublin
Tel: 01-2859177

GERMANY/SWITZERLAND

Yamaha Europa GmbH.
Siemensstraße 22-34, 25462 Rellingen,
F.R. of Germany
Tel: 04101-3030

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Yamaha Music Austria
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Tel: 01-60203900

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Yamaha Music Nederland
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Tel: 030-2828411

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Yamaha Music Belgium
Keiberg Imperiastraat 8, 1930 Zaventem, Belgium
Tel: 02-7258220

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**Yamaha Musique France,
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BP 70-77312 Marne-la-Vallée Cedex 2, France
Tel: 01-64-61-4000

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**Yamaha Musica Italia S.P.A.,
Home Keyboard Division**
Viale Italia 88, 20020 Lainate (Milano), Italy
Tel: 02-935-771

SPAIN

Yamaha-Hazen Electronica Musical, S.A.
Jorge Juan 30, 28001, Madrid, Spain
Tel: 91-577-7270

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Valentim de Carvalho CI SA
Estrada de Porto Salvo, Paço de Arcos 2780 Oeiras,
Portugal
Tel: 01-443-3398/4030/1823

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**PT. Yamaha Music Indonesia (Distributor)
PT. Nusantik**
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Subroto Kav. 4, Jakarta 12930, Indonesia
Tel: 21-520-2577

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16-28, Jalan SS 2/72, Petaling Jaya, Selangor,
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Makati, Metro Manila, Philippines
Tel: 819-7551

SINGAPORE

Yamaha Music Asia Pte., Ltd.
Blk 17A Toa Payoh #01-190 Lorong 7
Singapore 1231
Tel: 354-0133

TAIWAN

Kung Hsue She Trading Co., Ltd.
No. 322, Section 1, Fu Hsing S. Road,
Taipei 106, Taiwan. R.O.C.
Tel: 02-709-1266

THAILAND

Siam Music Yamaha Co., Ltd.
865 Phornprapha Building, Rama I Road,
Patumwan, Bangkok 10330, Thailand
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AUSTRALIA

Yamaha Music Australia Pty. Ltd.
17-33 Market Street, South Melbourne, Vic. 3205,
Australia
Tel: 3-699-2388

NEW ZEALAND

Music Houses of N.Z. Ltd.
146/148 Captain Springs Road, Te Papapa,
Auckland, New Zealand
Tel: 9-634-0099

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International Marketing Division**
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YAMAHA
YAMAHA CORPORATION

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Messages




● Common Messages



 No disk !	<p>This prompt appears when there is no disk in the disk drive.</p> <p>➤ Put the proper disk in the drive and attempt the operation again.</p>
 No songs !	<p>When renaming the original song or converting the data this prompt will warn you in the event that there is no song data.</p> <p>➤ Select a data-containing song, or insert a disk with song data into the floppy disk drive.</p>
 No file !	<p>This message appears if there is no Registration Memory, Micro Tuning, or related data on the currently inserted disk when you attempt a file-related operation.</p> <p>➤ Create a file or insert a disk with a proper file.</p>
 Start disk format ? <input type="button" value="OK"/> <input type="button" value="CANCEL"/>	<p>This message appears when a new disk or a non-Clavinova formatted disk has been inserted into the disk drive. (See page 106 in the Owner's Manual.)</p> <p>➤ Press OK if you want to format the disk. Press CANCEL if you want to abort the formatting process.</p>
 Protected disk !	<p>This message appears when you attempt to record or perform other file operations to a disk whose write-protect tab is set to "write protect."</p> <p>➤ Set the write-protect tab to the recordable position (page 7 in the Owner's Manual) then try the operation again. If the operation still cannot be performed, the disk itself has internal write protection, making it impossible to perform recording or file operations on the disk.</p>
 Protected songs !	<p>This message appears when you attempt to record over parts or perform other operations on files that are incompatible or do not allow such operations. Depending on the file type, operations such as additional recording, copying, deleting, etc. may not be possible on the CVP-98/96.</p>
 Disk read/write error ! <input type="button" value="OK"/>	<p>An error occurred while writing to (as in recording or storing files) or reading from the disk.</p> <p>➤ Try the operation again after pressing the OK button. If the error occurs a second time, the disk or the disk drive unit may be faulty. If you suspect the drive to be at fault, refer the problem to your Yamaha dealer.</p>
 Completed !	<p>This appears for a few seconds when a time consuming operation such as format, song copy, etc. is finished.</p>
 Don't remove the disk !	<p>This message appears when data is being transferred between the Clavinova and the disk.</p> <p>➤ The message disappears automatically when the operation is finished.</p>
 Are you sure ? <input type="button" value="YES"/> <input type="button" value="NO"/>	<p>When operations such as Song Delete or Format are selected, this prompts you to confirm whether you want to go ahead with the operation or not.</p> <p>➤ Press YES to execute the operation. Press NO to return to the previous display.</p>
 Disk full ! <input type="button" value="OK"/>	<p>The currently loaded disk is full and cannot hold any more data.</p> <p>➤ Press the OK button, then delete any unnecessary data in the disk (page 138 in the Owner's Manual), or use a disk that has more available space. If this appears during song recording, recording will stop and recorded data up to that point will be saved automatically.</p>

Messages












 Too many files ! <input type="button" value="OK"/>	<p>A 2DD and a 2HD disk can hold up to 60 song files each. A 2DD disk can hold about 110 files (of various types), and a 2HD disk can hold up to about 220 files. This message appears when you try to produce more files than the disk is capable of storing.</p> <p>➤ Press the OK button, then delete any unnecessary files in the disk (page 138 in the Owner's Manual), or use a disk that has more available space.</p>
 Same name ! Overwrite ? <input type="button" value="OK"/> <input type="button" value="CANCEL"/>	<p>A file with the same name exists.</p> <p>➤ Press the OK button if you wish to overwrite the original file with new data, or press CANCEL to abort the operation.</p>
 This button can't be used during recording or playback !	<p>This message appears when you try to perform operations which cannot be done during recording or playback, such as data conversion, etc.</p> <p>➤ Stop song recording or playback, or exit from the recording/playback mode, then perform the operation again.</p>
 This button can't be used during playback !	<p>This appears when you try to execute operations that cannot be performed during playback, such as changing the number of repeats of the Guide function.</p> <p>➤ Stop song playback, or exit from the playback mode, then perform the operation again.</p>
 Button not valid !	<p>A button that does not have a function in the current mode has been pressed.</p>
 Disk read/write operation in process !	<p>This message appears when you try to execute other operations while reading data from the disk or saving data.</p> <p>➤ Wait until the data read/write operation is completed, then perform the operation again.</p>
 Memory write operation in process !	<p>This message appears when you attempt to execute another operation while writing edited data of a song recorded to internal RAM.</p> <p>➤ Complete the data write operation, then perform the other operation.</p>
 Delete CVP MEMORY ? <input type="button" value="YES"/> <input type="button" value="NO"/>	<p>This message appears when executing an operation that results in deleting data recorded to the internal RAM, such as playback of disk software.</p> <p>➤ Press YES to delete the data recorded to the internal RAM, then perform the desired operation. Press the NO button if you want to keep the data.</p>
 Convert to CVP songs ? <input type="button" value="YES"/> <input type="button" value="NO"/>	<p>This message appears when you attempt to record over or edit data of commercially available software or data recorded on Clavinovas other than the CVP-94/92/98/96.</p> <p>➤ Press YES to convert the data for recording/editing on the CVP-94/92/98/96. Press NO if you don't want to convert the data.</p>

● Song Copy Related Messages



 Number of disk exchange (1) <input type="button" value="OK"/> <input type="button" value="CANCEL"/>	<p>This message informs you of the number of times the disks must be exchanged when copying a song to a different disk before starting the song copy operation. (See page 137 in the Owner's Manual.)</p>
 Insert Disk 2. (1 / 3) <input type="button" value="CANCEL"/>	<p>Insert the destination disk to be copied. (See page 137 in the Owner's Manual.)</p>
 Please select destination song number. <div style="border: 1px solid black; padding: 2px; display: inline-block;">SONG 1 [v]</div> <input type="button" value="OK"/> <input type="button" value="CANCEL"/>	<p>When copying a song from the source disk to another disk, this message prompts you to specify the song number in the destination disk to which the song is to be copied, when the disk is first inserted. (See page 137 in the Owner's Manual.)</p>

 Insert Disk 1. (2/ 3) <div style="text-align: right;"><input type="button" value="CANCEL"/></div>	<p>This message prompts you to insert the source disk when copying songs to a second disk. (See page 137 in the Owner's Manual.)</p>
 Select a different number !	<p>This appears when the same song number is selected for both source and destination in the song copy operation.</p> <p>➤ Change the destination song number.</p>


● Custom Style Related Messages

 CUSTOM STYLE Please select a source style.	<p>This message appears for a few seconds when the Custom Style mode is engaged. (See page 68 in the Owner's Manual.)</p>
 Clear style ? <div style="text-align: right;"><input type="button" value="OK"/> <input type="button" value="CANCEL"/></div>	<p>This confirmation prompt appears when you attempt to change the beat parameter in the Custom Style mode. (See page 70 in the Owner's Manual.)</p>
 Clear section ? <div style="text-align: right;"><input type="button" value="OK"/> <input type="button" value="CANCEL"/></div>	<p>This confirmation prompt appears when you attempt to change the number of measures in the Custom Style mode. (See page 70 in the Owner's Manual.)</p>
 Clear part ? <div style="text-align: right;"><input type="button" value="OK"/> <input type="button" value="CANCEL"/></div>	<p>This confirmation prompt appears when you attempt to perform operations which can only be done after deleting the part of the original style in the Custom Style mode. (See page 71 in the Owner's Manual.)</p>
 Store Bossa NovaX ? <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> MEMORY No. 1 (TEMP. STYLE) </div> <div style="text-align: right;"><input type="button" value="OK"/> <input type="button" value="CANCEL"/></div>	<p>This confirmation prompt appears when you attempt a store operation in the Custom Style mode. (See page 74 in the Owner's Manual.)</p> <p>This also appears when you attempt to change styles before storing. (See page 79 in the Owner's Manual.)</p>
 Store Bossa NovaX ? <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> MEMORY No. 1 (TEMP. STYLE) </div> <div style="text-align: right;"><input type="button" value="YES"/> <input type="button" value="NO"/> <input type="button" value="CANCEL"/></div>	<p>This confirmation prompt appears when you attempt to exit from the Custom Style mode before storing data. (See page 79 in the Owner's Manual.)</p> <p>➤ Select YES to store. Press NO to exit without storing data. Press CANCEL to return to the previous display without storing data. (See page 79 in the Owner's Manual.)</p>
 Can't recall ! <div style="text-align: right;"><input type="button" value="OK"/></div>	<p>This message appears when the Recall Section operation in the Custom Style mode cannot be performed, due to changes in the time signature (beat). (See page 74 in the Owner's Manual.)</p>
 Please store to memory before saving to disk <div style="text-align: right;"><input type="button" value="OK"/></div>	<p>If the data has not been stored to memory before saving to disk in the Custom Style mode, this message prompts you to store the data before proceeding. (See page 76 in the Owner's Manual.)</p>
 Not enough memory ! Please delete an unneeded style or simplify the current style. <div style="text-align: right;"><input type="button" value="DELETE"/> <input type="button" value="CANCEL"/></div>	<p>This message appears if there is not enough internal memory space left when storing data in the Custom Style mode. (See page 78 in the Owner's Manual.)</p>
 Delete style ? <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;"> MEMORY No. 1 (Beat Pop1) (17KB) </div> <div style="text-align: right;"><input type="button" value="OK"/> <input type="button" value="CANCEL"/></div>	<p>This message appears when DELETE is selected from the display shown above.</p> <p>➤ Select the style to be deleted and press the OK button. Press CANCEL if you do not want to delete the style.</p>
 Not enough memory ! <div style="text-align: right;"><input type="button" value="OK"/></div>	<p>This message appears when memory capacity has become full during recording in the Custom Style mode (page 78 in the Owner's Manual). This also appears when memory has become full during recording of a song to internal RAM. In this case, recording will stop and data recorded up to that point will be saved automatically.</p>



● Recorded Data Conversion Related Messages

 2HD disk not valid ! Please copy to 2DD disk. <input type="button" value="OK"/>	<p>This message appears if a 2HD disk is used when performing conversion of the recorded data.</p> <ul style="list-style-type: none"> ➤ Press OK and copy the song data to be converted to a 2DD disk, then perform the data conversion using the disk.
 Completed ! SONG No. 2	<p>Following conversion of the song data, this message displays the song number to which the data was saved.</p>



● Initial Data Change Related Messages

 Write edited data ? <input type="button" value="YES"/> <input type="button" value="NO"/> <input type="button" value="CANCEL"/>	<p>This confirmation message appears if you attempt to exit the Initial Edit function without writing the data.</p> <ul style="list-style-type: none"> ➤ Press YES to write the changed data. Press NO to exit without writing. Press CANCEL to return to the Initial Edit display without writing.
--	---





● Chord Sequence Related Messages

 Save recorded data ? <input type="button" value="YES"/> <input type="button" value="NO"/> <input type="button" value="CANCEL"/>	<p>This confirmation message appears if you attempt to exit the Chord Sequence function during recording.</p> <ul style="list-style-type: none"> ➤ Press YES to store the recorded data. Press NO to exit without storing. Press CANCEL to return to the Chord Sequence display without storing.
 Button not valid ! Enter at the top of measure.	<p>This message appears during Chord Sequence recording when you attempt to enter an accompaniment style or section change at a position other than the beginning of a measure.</p> <ul style="list-style-type: none"> ➤ Record changes of accompaniment style or section only at the beginning of the measure. (See page 118 in the Owner's Manual.)

● Style File Load Related Messages

 Not enough memory ! Delete an unneeded style ? MEMORY No. 118Beat Pop1 (17KB) <input type="button" value="DELETE"/> <input type="button" value="CANCEL"/>	<p>This message appears when you attempt to load a Style file without there being enough memory to hold the specified file. (See page 82 in the Owner's Manual.)</p>
 Too much data for LISTEN function ! Please load data.	<p>Some Style Files are too large to be handled by the LISTEN feature in the Style File Load function. (See page 81 in the Owner's Manual.)</p>

● Other Messages

 HOST is offline !	<p>This message appears when the host computer is not turned on, the connecting cable is not properly connected, or the sequencing software is not active. In this case, turn the power off on both the CVP-98/96 and the computer, and check the cable connection. Once the connection is secure, turn the power of the computer on first, then the CVP-98/96, to check if the driver and MIDI application function properly.</p>
 Back up data erased and replaced by factory data.	<p>As long as the Clavinova is regularly used, data is retained in memory. If the instrument is left unused for a week or longer before being turned on again, the data is erased and this message appears. This message also appears when you recall all factory data. (See page 147 in the Owner's Manual.)</p>
 Hardware error !	<p>A problem has been detected in the hardware system during power on.</p> <ul style="list-style-type: none"> ➤ Refer the problem to your Yamaha dealer.
 Clean the disk head ! <input type="button" value="OK"/>	<p>The disk head is dirty. Clean the disk head using a commercially available head cleaning disk.</p>

Troubleshooting

Problem	Cause	Solution
The power of the CVP-98/96 does not turn on.	The power cable plugs are not inserted either in the CVP-98/96 or a proper AC outlet.	Securely insert one of the cable plugs into the instrument itself, and the other plug into a proper AC outlet.
A click or pop sound is produced when turning on/off the power.	Electrical current is flowing into the instrument.	This is normal, and is no cause for concern.
The LCD display is too bright or too dark to read.	The brightness may be changed by the surrounding temperature.	Adjust the contrast of the display by using the [CONTRAST] control. (See page 15 in the Owner's Manual.)
The pop-up display does not open.	The [DISPLAY HOLD] lamp is lit.	Press the [DISPLAY HOLD] button so that the lamp goes out. (See page 15 in the Owner's Manual.)
The keyboard sound volume is low compared to that of the Auto Accompaniment or disk playback.	The independent volume level of the keyboard performance sound is too low.	Raise the volume of the keyboard performance in the Mixer display. (See page 94 in the Owner's Manual.)
The sound of the Auto Accompaniment or disk playback is low compared to that of the keyboard.	The [ACMP/SONG VOLUME] is low.	Raise the [ACMP/SONG VOLUME] level.
The entire sound is low or no sound comes out.	The [MASTER VOLUME] is low.	Raise the [MASTER VOLUME].
	Headphones are connected.	Unplug the headphones.
	Local Control is set to off.	Set Local Control to on. (See page 144 in the Owner's Manual.)
The damper pedal has no effect, or the sound continuously sustains even when the damper pedal is not pressed.	The pedal cord plug is not connected.	Securely insert the pedal cord plug into the proper jack. (See page 40 in this Manual.)
Auto Accompaniment or disk playback does not start.	MIDI Sync is set to "EXT."	Set MIDI Sync to "INT.". (See page 144 in the Owner's Manual.)
When the keyboard is played, not all of the notes sound.	Notes have been played beyond the total simultaneous polyphonic capacity (maximum number of notes).	The tone generation system is configured such that later notes have priority, occasionally resulting in previous notes being cut off. See the "Specifications" section on page 37 in this Manual for information on the simultaneous polyphonic capacity.
Auto Accompaniment does not play back.	Auto Accompaniment is not turned on.	Press the [ACMP ON] button to turn on Auto Accompaniment.

Troubleshooting

Problem	Cause	Solution
The desired chord cannot be recognized or output by the Auto Accompaniment.	The keys are not being played correctly.	Refer to the “Fingering Chart” (page 36 in this Manual).
	The keys are not being played according to the selected Auto Accompaniment type.	Check the Auto Accompaniment type, and play the keys according to the selected type. (See page 56 in the Owner’s Manual.)
The maximum of 60 songs cannot be recorded.	The memory capacity is full because the playing time of one or more songs is long, or many functions were used.	Delete unnecessary songs (page 138 in the Owner’s Manual) or record to a new disk.
Some tracks do not played back when playing back data.	Playback of the track(s) is set to off.	Set playback for the non-sounding tracks to on. (See pages 91 and 94 in the Owner’s Manual.)



* If a “Hardware Error!” message appears in the display when turning on the power, contact your local Yamaha dealer immediately, since this indicates some sort of internal damage to the instrument.

MIDI and Data Compatibility

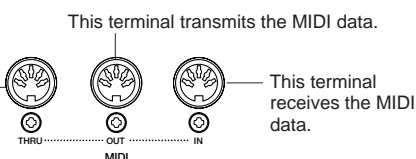
■ MIDI

MIDI (Musical Instrument Digital Interface) is a worldwide standard communication interface that allows MIDI-compatible musical instruments and equipment to share musical information and control one another.

- Depending on the MIDI device, the transmittable/receivable data differs, and only data which is commonly recognized among the connected MIDI devices can be transmitted or received. You can check whether your instrument supports certain data types by referring to the MIDI Implementation Chart in the owner's manual for that instrument. The MIDI Implementation Chart for the CVP-98/96 is found on page 25 in this Manual.

MIDI Terminals

Data received via the MIDI IN terminal is re-transmitted unchanged through this terminal.



MIDI Cable

Connect MIDI devices with special MIDI cables.

- The various MIDI settings can be made from the Function section's MIDI 1 - 3 pages.
- Further information on MIDI and its applications is available in various music books and magazines.

■ Data Compatibility

This section covers basic information on data compatibility: whether or not other MIDI devices can playback the data recorded by CVP-98/96, and whether or not the CVP-98/96 can playback commercially available song data or song data created for other instruments or on a computer.

Depending on the MIDI device or data characteristics, you may be able to play back the data without any problem, or you may have to perform some special operations before the data can be played back. If you run into problems playing back data, please refer to the information below.

● Basic Check Points

The data and the MIDI device must match in regards to the items below.

- Disk Format
- Sequence format
- Voice allocation format

● Disk format

Floppy disks are the main storage medium for data used with various devices, including computers. Different devices have different systems of storing data, therefore it is necessary to first configure the floppy disk to the system of the device being used. This operation is called "formatting."

- There are two types of floppy disks: MF2DD (double sided, double density) and MF2HD (double sided, high density), and each type has different formatting systems.
- CVP-98/96 can record and playback with both types of floppy disks.
- When formatted by the CVP-98/96, a 2DD disk stores up to 720 KB (kilobytes) and a 2HD disk stores up to 1.44 MB (megabytes). (The figures "720 KB" and "1.44 MB" indicate the data memory capacity. They are also used to indicate the format type of disk.)
- Playback is only possible when the MIDI device to be used is compatible with the format of the disk.

● Sequence Format

The system which records song data is called "sequence format."

- Playback is only possible when the sequence format of the disk matches that of the MIDI device.

[Common Sequence Formats] SMF (Standard MIDI File)

This is the most common sequence format.

- Standard MIDI Files are generally available as one of two types: Format 0 or Format 1.
- Many MIDI devices are compatible with Format 0, and most commercially available software is recorded as Format 0.
- The CVP-98/96 is compatible with both Format 0 and Format 1 (for Format 1, up to a maximum of 17 chunks).
- Song data recorded on the CVP-98/96 is automatically recorded as SMF Format 0.

ESEQ

This sequence format is compatible with many of Yamaha's MIDI devices, including the Clavinova series instruments.

This is a common format used with various Yamaha software.

- The CVP-98/96 is compatible with ESEQ.

● Voice Allocation Format

With MIDI, voices are assigned to specific numbers, called "program numbers." The numbering standard (order of voice allocation) is referred to as the "voice allocation format."

- Voices may not play back as expected unless the voice allocation format of the song data matches that of the compatible MIDI device used for playback.

[Main Voice Allocation Formats]

GM System Level 1

This is one of the most common voice allocation formats.

- Many MIDI devices are compatible with GM System Level 1, as is most commercially available software.
- The CVP-98/96 is compatible with GM System Level 1.

XG

XG is a major enhancement of the GM System Level 1 format, and was developed by Yamaha specifically to provide more voices and variations, as well as greater expressive control over voices and effects, and to ensure compatibility of data well into the future.

- The CVP-98/96 is compatible with XG.
- Song data recorded on the CVP-98/96 is automatically given XG voice allocation.

DOC

This voice allocation format is compatible with many of Yamaha's MIDI devices, including the Clavinova series instruments.

This is also a common format used with various Yamaha software.

- The CVP-98/96 is compatible with DOC.

Even if the devices and data used satisfy all the conditions above, the data may still not be completely compatible, depending on the specifications of the devices and particular data recording methods.

MIDI Data Format

Many MIDI messages listed in the MIDI Data Format are expressed in decimal numbers, binary numbers and hexadecimal numbers. Hexadecimal numbers may include the letter "H" as a suffix. Also, "n" can freely be defined as any whole number.

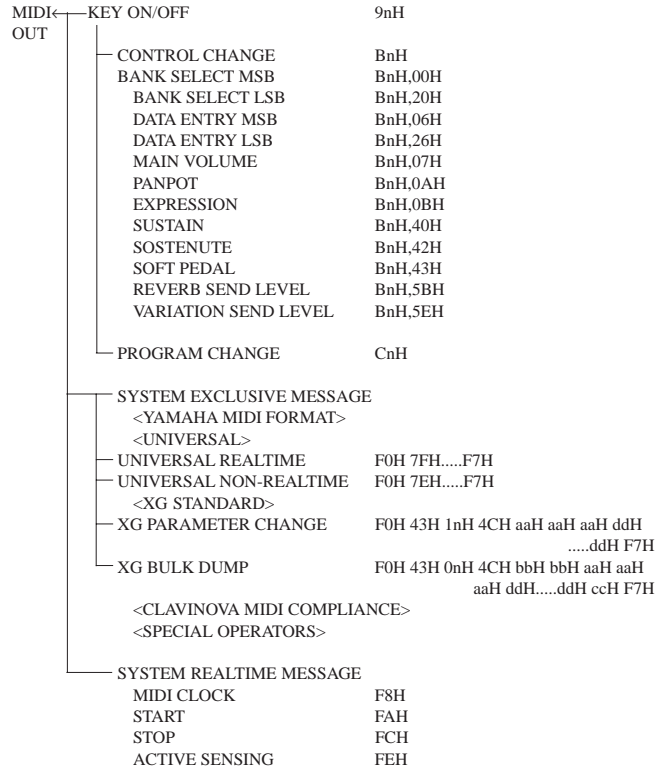
To enter data/values, refer to the table below.

Decimal	Hexadecimal	Binary
0	00	0000 0000
1	01	0000 0001
2	02	0000 0010
3	03	0000 0011
4	04	0000 0100
5	05	0000 0101
6	06	0000 0110
7	07	0000 0111
8	08	0000 1000
9	09	0000 1001
10	0A	0000 1010
11	0B	0000 1011
12	0C	0000 1100
13	0D	0000 1101
14	0E	0000 1110
15	0F	0000 1111
16	10	0001 0000
17	11	0001 0001
18	12	0001 0010
19	13	0001 0011
20	14	0001 0100
21	15	0001 0101
22	16	0001 0110
23	17	0001 0111
24	18	0001 1000
25	19	0001 1001
26	1A	0001 1010
27	1B	0001 1011
28	1C	0001 1100
29	1D	0001 1101
30	1E	0001 1110
31	1F	0001 1111
32	20	0010 0000
33	21	0010 0001
34	22	0010 0010
35	23	0010 0011
36	24	0010 0100
37	25	0010 0101
38	26	0010 0110
39	27	0010 0111
40	28	0010 1000
41	29	0010 1001
42	2A	0010 1010
43	2B	0010 1011
44	2C	0010 1100
45	2D	0010 1101
46	2E	0010 1110
47	2F	0010 1111
48	30	0011 0000
49	31	0011 0001
50	32	0011 0010
51	33	0011 0011
52	34	0011 0100
53	35	0011 0101
54	36	0011 0110
55	37	0011 0111
56	38	0011 1000
57	39	0011 1001
58	3A	0011 1010
59	3B	0011 1011
60	3C	0011 1100
61	3D	0011 1101
62	3E	0011 1110
63	3F	0011 1111

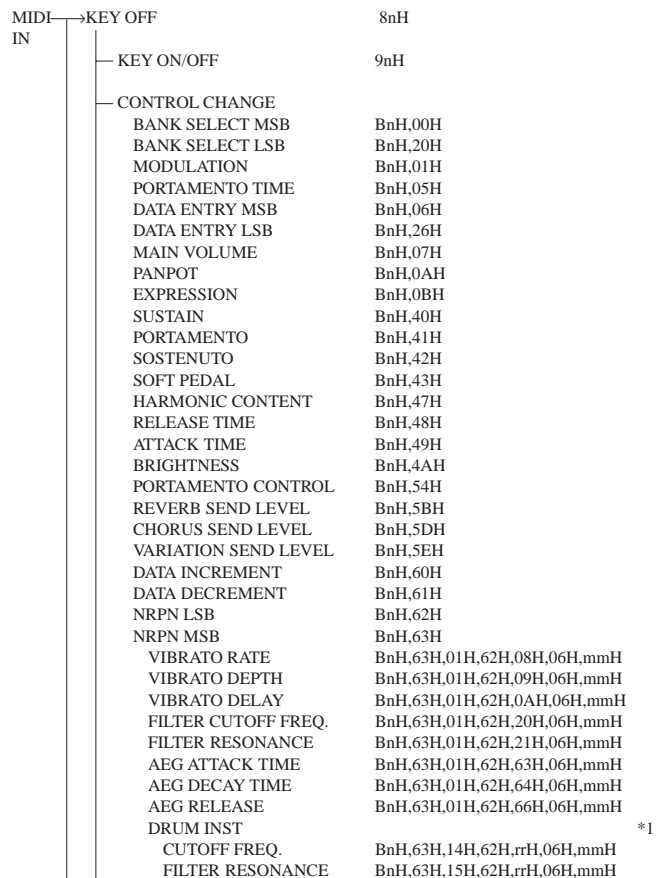
Decimal	Hexadecimal	Binary
64	40	0100 0000
65	41	0100 0001
66	42	0100 0010
67	43	0100 0011
68	44	0100 0100
69	45	0100 0101
70	46	0100 0110
71	47	0100 0111
72	48	0100 1000
73	49	0100 1001
74	4A	0100 1010
75	4B	0100 1011
76	4C	0100 1100
77	4D	0100 1101
78	4E	0100 1110
79	4F	0100 1111
80	50	0101 0000
81	51	0101 0001
82	52	0101 0010
83	53	0101 0011
84	54	0101 0100
85	55	0101 0101
86	56	0101 0110
87	57	0101 0111
88	58	0101 1000
89	59	0101 1001
90	5A	0101 1010
91	5B	0101 1011
92	5C	0101 1100
93	5D	0101 1101
94	5E	0101 1110
95	5F	0101 1111
96	60	0110 0000
97	61	0110 0001
98	62	0110 0010
99	63	0110 0011
100	64	0110 0100
101	65	0110 0101
102	66	0110 0110
103	67	0110 0111
104	68	0110 1000
105	69	0110 1001
106	6A	0110 1010
107	6B	0110 1011
108	6C	0110 1100
109	6D	0110 1101
110	6E	0110 1110
111	6F	0110 1111
112	70	0111 0000
113	71	0111 0001
114	72	0111 0010
115	73	0111 0011
116	74	0111 0100
117	75	0111 0101
118	76	0111 0110
119	77	0111 0111
120	78	0111 1000
121	79	0111 1001
122	7A	0111 1010
123	7B	0111 1011
124	7C	0111 1100
125	7D	0111 1101
126	7E	0111 1110
127	7F	0111 1111

- Except the table above, for example 144-159(decimal)/9nH/1001 0000-1001 1111(binary) displays the Note On Message for each channel (1-16). 176-191/ BnH/1011 0000-1011 1111 displays the Control Change Message for each channel (1-16). 192-207/CnH/1100 0000-1100 1111 displays the Program Change Message for each channel (1-16). 240/FOH/1111 0000 denotes the start of a System Exclusive Message. 247/F7H/1111 0111 denotes the end of a System Exclusive Message.
- aaH (hexadecimal)/0aaaaaaa (binary) denotes the data address. The address contains High, Mid, and Low.
- bbH/0bbbbbbb denotes the byte count.
- ccH/0ccccccc denotes the check sum.
- ddH/0ddddddd denotes the data/value.

(1) TRANSMIT FLOW



(2) RECEIVE FLOW



*1

AEG ATTACK RATE	BnH,63H,16H,62H,rrH,06H,mmH
AEG DECAY RATE	BnH,63H,17H,62H,rrH,06H,mmH
PITCH COARSE	BnH,63H,18H,62H,rrH,06H,mmH
PITCH FINE	BnH,63H,19H,62H,rrH,06H,mmH
LEVEL	BnH,63H,1AH,62H,rrH,06H,mmH
PANPOT	BnH,63H,1CH,62H,rrH,06H,mmH
REVERB SEND	BnH,63H,1DH,62H,rrH,06H,mmH
CHORUS SEND	BnH,63H,1EH,62H,rrH,06H,mmH
VARIATION SEND	BnH,63H,1FH,62H,rrH,06H,mmH
RPN LSB	BnH,64H
RPN MSB	BnH,65H
PITCH BEND SENS.	BnH,65H,00H,64H,00H,06H,mmH
FINE TUNING	BnH,65H,00H,64H,01H,06H,mmH, 26H,llH
COARSE TUNING	BnH,65H,00H,64H,02H,06H,mmH
NULL	BnH,65H,7FH,64H,7FH
ALL SOUND OFF	BnH,78H,00H
RESET ALL CONTROLLERS	BnH,79H,00H
ALL NOTES OFF	BnH,7BH,00H
OMNI OFF	BnH,7CH,00H
OMNI ON	BnH,7DH,00H
MONO	BnH,7EH
POLY	BnH,7FH
PROGRAM CHANGE	CnH
CHANNEL AFTER TOUCH	DnH
PITCH BEND CHANGE	EnH
SYSTEM EXCLUSIVE MESSAGE	
<YAMAHA MIDI FORMAT>	
<UNIVERSAL>	
UNIVERSAL REALTIME	F0H 7FH.....F7H
UNIVERSAL NON-REALTIME	F0H 7EH.....F7H
<XG STANDARD>	
XG PARAMETER CHANGE	F0H 43H 1nH 4CH aaH aaH aaH ddHddH F7H
XG BULK DUMP	F0H 43H 0nH 4CH bbH bbH aaH aaH aaH ddH.....ddH ccH F7H
PARAMETER REQUEST	F0H 43H 3nH 4CH aaH aaH aaH F7H
DUMP REQUEST	F0H 43H 2nH 4CH aaH aaH aaH F7H
<CLAVINOVA MIDI COMPLIANCE>	
<SPETIAL OPERATORS>	
<Others>	
SYSTEM REALTIME MESSAGE	
MIDI CLOCK	F8H
START	FAH
STOP	FCH
ACTIVE SENSING	FEH

*** PROGRAM NUMBER: XG SFX KIT number correspondence**

P = 1 SFX1 Kit
P = 2 SFX2 Kit

When DRUM VOICE is selected and program change data for a different DRUM VOICE is received, the currently selected DRUM VOICE will be replaced with the new DRUM VOICE.

(3-1-4) CHANNEL AFTER TOUCH (Recive only)

STATUS 1101nnnn(DnH) n = 0 - 15 VOICE CHANNEL NUMBER
VALUE 0vvvvvvv v = 0 - 127 AFTER TOUCH VALUE

(3-1-5) PITCH BEND CHANGE

STATUS 1110nnnn(EnH) n = 0 - 15 VOICE CHANNEL NUMBER
LSB 0vvvvvvv PITCH BEND CHANGE LSB
MSB 0vvvvvvv PITCH BEND CHANGE MSB

(3-1-6) CONTROL CHANGE

STATUS 1011nnnn(BnH) n = 0 - 15 VOICE CHANNEL NUMBER
CONTROL NUMBER 0ccccccc
CONTROL VALUE 0vvvvvvv

*** Transmit CONTROL NUMBER.**

c = 0 BANK SELECT MSB ; v = 0:XG NORMAL,
64:SFX NORMAL,
126:XG SFX KIT,
127:XG DRUM

c = 32 BANK SELECT LSB ; v = 0 - 127 *3
c = 6 DATA ENTRY MSB ; v = 0 - 127 *1
c = 38 DATA ENTRY LSB ; v = 0 - 127 *1
c = 7 MAIN VOLUME ; v = 0 - 127
c = 10 PANPOT ; v = 0 - 127
c = 11 EXPRESSION ; v = 0 - 127
c = 64 SUSTAIN ; v = 0-63:OFF , 64-127:ON *2
c = 66 SOSTENUTO ; v = 0-63:OFF , 64-127:ON *2
c = 67 SOFT PEDAL ; v = 0-63:OFF , 64-127:ON *2
c = 91 REVERB SEND LEVEL ; v = 0 - 127
c = 94 VARIATION SEND LEVEL ; v = 0 - 127
(When only Connection = 1[System])

*** Receive CONTROL NUMBER.**

c = 0 BANK SELECT MSB ; v = 0:XG NORMAL,
64:SFX NORMAL,
126:XG SFX KIT,
127:XG DRUM

c = 32 BANK SELECT LSB ; v = 0 - 127 *3
c = 1 MODULATION ; v = 0 - 127 *2
c = 5 PORTAMENTO TIME ; v = 0 - 127 *2
c = 6 DATA ENTRY MSB ; v = 0 - 127 *1
c = 38 DATA ENTRY LSB ; v = 0 - 127 *1
c = 7 MAIN VOLUME ; v = 0 - 127
c = 10 PANPOT ; v = 0 - 127
c = 11 EXPRESSION ; v = 0 - 127
c = 64 SUSTAIN ; v = 0-63:OFF , 64-127:ON *2
c = 65 PORTAMENTO ; v = 0-63:OFF , 64-127:ON *2
c = 66 SOSTENUTO ; v = 0-63:OFF , 64-127:ON *2
c = 67 SOFT PEDAL ; v = 0-63:OFF , 64-127:ON *2
c = 71 HARMONIC CONTENT ; v = 0:-64 - 64:0 - 127:+63 *2
c = 72 RELEASE TIME ; v = 0:-64 - 64:0 - 127:+63 *2
c = 73 ATTACK TIME ; v = 0:-64 - 64:0 - 127:+63 *2
c = 74 BRIGHTNESS ; v = 0:-64 - 64:0 - 127:+63 *2
c = 84 PORTAMENT CONTROL ; v = 0 - 127 *2
c = 91 REVERB SEND LEVEL ; v = 0 - 127
c = 93 CHORUS SEND LEVEL ; v = 0 - 127
c = 94 VARIATION SEND LEVEL ; v = 0 - 127
(When only Connection = 1[System])
c = 96 DATA INCREMENT ; v = 127 *1
c = 97 DATA DECREMENT ; v = 127 *1

*1 Only when setting the appointed parameter with RPN, NRPN.

*2 Does not effect Rhythm Voice.

*3 MSB=0, anything other than 63 is 0.

- Until a PROGRAM CHANGE message is received, the BANK SELECT operation will be suspended. When a Voice, including VOICE BANK, is changed, set the BANK SELECT and Program Change Message, and transmit in the following order, BANK SELECT MSB, LSB, PROGRAM CHANGE.

- MODULATION controls the Vibrato Depth.

- PORTAMENTO TIME controls the Pitch Change Speed when the Portamento Switch = ON. 0 being the shortest time, and 127 being the longest.

(3) TRANSMIT/RECEIVE DATA

(3-1) CHANNEL VOICE MESSAGES

(3-1-1) KEY OFF(Recive only)

STATUS 1000nnnn(8nH) n = 0 - 15 VOICE CHANNEL NUMBER
NOTE NUMBER 0kkkkkkk k = 0 (C-2) - 127 (G8)
VELOCITY 0vvvvvvv v: ignored

(3-1-2) KEY ON/OFF

STATUS 1001nnnn(9nH) n = 0 - 15 VOICE CHANNEL NUMBER
NOTE NUMBER 0kkkkkkk k = 0 (C-2) - 127 (G8)
VELOCITY 0vvvvvvv (v ≠ 0) NOTE ON
00000000 (v = 0) NOTE OFF

(3-1-3) PROGRAM CHANGE

STATUS 1100nnnn(CnH) n = 0 - 15 VOICE CHANNEL NUMBER
PROGRAM NUMBER 0ppppppp p = 0 - 127

*** PROGRAM NUMBER: XG DRUM VOICE number correspondence**

P = 0 Standard Kit
P = 1 Standard2 Kit
P = 8 Room Kit
P = 16 Rock Kit
P = 24 Elctmic Kit
P = 25 Analog Kit
P = 27 Dance Kit
P = 32 Jazz Kit
P = 40 Brush Kit
P = 48 Classic Kit

- PANPOT changes the value for the melody voice and rhythm voice in relation to the preset value.
- Portamento time is fixed to 0 when the PORTAMENTO CONTROL is used.
- HARMONIC CONTENT applies adjustment to the resonance value that is set by the voice. This parameter specifies relative change with the value of 64 producing 0 adjustment. As values get higher the sound becomes increasingly eccentric. Note that for some voices the effective parameter range is narrower than the legal parameter range.
- RELEASE TIME applies adjustment to the envelope release time set by the voice. This parameter specifies relative change with the value of 64 producing 0 adjustment.
- ATTACK TIME applies adjustment to the envelope attack time set by the voice. This parameter specifies relative change with the value of 64 producing 0 adjustment.
- BRIGHTNESS applies adjustment to the cut-off frequency set by the voice. This parameter specifies relative change with the value of 64 producing 0 adjustment. Lower voices produce a softer sound. For some voices the effective parameter range is narrower than the legal parameter range.

(3-2) CHANNEL MODE MESSAGES

STATUS	1011nnnn(BnH)	n = 0 - 15 VOICE CHANNEL NUMBER
CONTROL NUMBER	0ccccccc	c = CONTROL NUMBER
CONTROL VALUE	0vvvvvvv	v = DATA VALUE

(3-2-1) ALL SOUND OFF (Recv only)

(CONTROL NUMBER = 78H , DATA VALUE = 0)

Switches off all sound from the channel. Does not reset Note On and Hold On conditions established by Channel Messages.

(3-2-2) RESET ALL CONTROLLERS (Recv only)

(CONTROL NUMBER = 79H , DATA VALUE = 0)

Resets controllers as follows.

PITCH BEND CHANGE	0 (Center)
AFTER TOUCH	0 (min.)
MODULATION	0 (min.)
EXPRESSION	127 (max.)
SUSTAIN	0 (off)
SOSTENUTO	0 (off)
SOFT PEDAL	0 (off)
NRPN	Sets number to null. (Internal data remains unchanged)
RPN	Sets number to null. (Internal data remains unchanged)
PORTAMENT CONTROL	Resets portamento source note number
PORTAMENTO	0 (off)

(3-2-3) ALL NOTES OFF (Recv only)

(CONTROL NUMBER = 7BH , DATA VALUE = 0)

Switches off all of the channel's "on" notes. However, any notes being held by SUSTAIN or SOSTENUTO continue to sound until SUSTAIN/SOSTENUTO goes off.

(3-2-4) OMNI OFF (Recv only) (CONTROL NUMBER = 7CH , DATA VALUE = 0)

Same processing as for All Notes Off.

(3-2-5) OMNI ON (Recv only) (CONTROL NUMBER = 7DH , DATA VALUE = 0)

Same processing as for All Notes Off. Omni On is not executed.

(3-2-6) MONO (Recv only) (CONTROL NUMBER = 7EH , DATA VALUE = 0)

Same processing as for All Notes Off. If the 3rd byte is in a range of 0-16 the corresponding channel will be changed to Mode 4 (m=1).

(3-2-7) POLY (Recv only) (CONTROL NUMBER = 7FH , DATA VALUE = 0)

Same processing as for All Sounds Off and the corresponding channel will be changed to Mode 3.

(3-3) REGISTERED PARAMETER NUMBER(RPN)

STATUS	1011nnnn(BnH)	n = 0 - 15 VOICE CHANNEL NUMBER
RPN LSB	01100100(64H)	
RPN LSB NUMBER	0ppppppp	p = RPN LSB(refer to the list below)
RPN MSB	01100101(65H)	
RPN MSB NUMBER	0qqqqqqq	q = RPN MSB(refer to the list below)
DATA ENTRY MSB	00000110(06H)	
DATA VALUE	0mmmmmmm	m = Data Value
DATA ENTRY LSB	00100110(26H)	
DATA VALUE	0lllllll	l = Data Value

First appoints the parameter for RPN MSB/LSB, then sets the parameter value for data entry MSB/LSB.

RPN	D.ENTRY	LSB MSB	MSB LSB	PARAMETER NAME	DATA RANGE
00H 00H	mmH —			PITCH BEND SENSITIVITY	00H - 18H (0 - 24 semitones)
01H 00H	mmH llH			FINE TUNE	{mmH,llH} = {00H,00H} - {40H,00H} - {7FH,7FH} (-8192*100/8192) - 0 - (+8192*100/8192)
02H 00H	mmH —			COARSE TUNE	28H - 40H - 58H (-24 - 0 +24 semitones)
7FH 7FH	— —			NULL	

Clears the current RPN number setting. Does not change the internal parameter settings.

(3-4) NON-REGISTERED PARAMETER NUMBER(NRPN) (Recv only)

STATUS	1011nnnn(BnH)	n = 0 - 15 VOICE CHANNEL NUMBER
NRPN LSB	01100010(62H)	
NRPN LSB NUMBER	0ppppppp	p = NRPN LSB(refer to the list below)
NRPN MSB	01100011(63H)	
NRPN MSB NUMBER	0qqqqqqq	q = NRPN MSB(refer to the list below)
DATA ENTRY MSB	00000110(06H)	
DATA VALUE	0mmmmmmm	m = Data Value

First appoints the parameter for NRPN MSB/LSB, then sets the parameter value for data entry MSB/LSB.

NRPN	D.ENTRY	MSB LSB	MSB LSB	PARAMETER NAME	DATA RANGE
01H 08H	mmH —			VIBRATO RATE	00H - 40H - 7FH (-64 - 0 +63)
01H 09H	mmH —			VIBRATO DEPTH	00H - 40H - 7FH (-64 - 0 +63)
01H 0AH	mmH —			VIBRATO DELAY	00H - 40H - 7FH (-64 - 0 +63)
01H 20H	mmH —			FILTER CUTOFF FREQUENCY	00H - 40H - 7FH (-64 - 0 +63)
01H 21H	mmH —			FILTER RESONANCE	00H - 40H - 7FH (-64 - 0 +63)
01H 63H	mmH —			EG ATTACK TIME	00H - 40H - 7FH (-64 - 0 +63)
01H 64H	mmH —			EG DECAY TIME	00H - 40H - 7FH (-64 - 0 +63)
01H 66H	mmH —			EG RELEASE	00H - 40H - 7FH (-64 - 0 +63)
14H rrH	mmH —			DRUM FILTER CUTOFF FREQ.	00H - 40H - 7FH (-64 - 0 +63)
15H rrH	mmH —			DRUM FILTER RESONANCE	00H - 40H - 7FH (-64 - 0 +63)
16H rrH	mmH —			DRUM AEG ATTACK RATE	00H - 40H - 7FH (-64 - 0 +63)
17H rrH	mmH —			DRUM AEG DECAY RATE	00H - 40H - 7FH (-64 - 0 +63)
18H rrH	mmH —			DRUM PITCH COARSE	00H - 40H - 7FH (-64 - 0 +63)
19H rrH	mmH —			DRUM PITCH FINE	00H - 40H - 7FH (-64 - 0 +63)
1AH rrH	mmH —			DRUM LEVEL	00H - 7FH (0 - max.)
1CH rrH	mmH —			DRUM PANPOT	00H ,01H - 40H - 7FH (random,left - center - right)
1DH rrH	mmH —			DRUM REVERB SEND LEVEL	00H - 7FH (0 - max.)
1EH rrH	mmH —			DRUM CHORUS SEND LEVEL	00H - 7FH (0 - max.)
1FH rrH	mmH —			DRUM VARIATION SEND LEVEL	00H - 7FH (0 - max.)

The MSG14H-1FH (for drums) message is accepted as long as the channel is set with a drum voice.

rrH : drum instrument note number

(3-5) SYSTEM REALTIME MESSAGES

(3-5-1) MIDI CLOCK

STATUS 11111000 (F8H)

Transmission: 96 clocks per measure are transmitted.

Reception: If the instrument's clock is set to external, after FAH is received from the external device the instrument's clock will sync with the 96 beats per measure received from the external device.

Decides whether the internal clock, or Timing Clocks received via the MIDI IN will be used.

(3-5-2) START

STATUS 11111010 (FAH)

Transmission: Transmitted when instrument's Rhythm or Song playback is started.

Reception: Depending upon the condition, Rhythm, Song Playback, or Song Rec will start.

(3-5-3) STOP

STATUS 11111100 (FCH)

Transmission: Transmitted when instrument's Rhythm or Song playback is stopped.

Reception: Depending upon the condition, Rhythm, Song Playback, or Song Rec will stop.

(3-5-4) ACTIVE SENSING

STATUS 11111110 (FEH)

Transmission: Transmitted approximately once every 200msec.

Reception: Sensing is started once this Code is received. If Status or Data is not received within 400ms, the MIDI Receive Buffer will be cleared, and all notes, including those being sustained, will be cut OFF. Also, all control values will be reset to their factory defaults.

(3-6) SYSTEM EXCLUSIVE MESSAGE

(3-6-1) YAMAHA MIDI FORMAT

(3-6-1-1) SECTION CONTROL

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01111110	7E	Style
00000000	00	
0sssssss	SS	Switch No.
		00H : INTRO A
		01H~07H : INTRO B
		08H : MAIN A
		09H~0FH : MAIN B
		10H : FILL IN AA
		11H~17H : FILL IN BB
		18H : FILL IN AB
		19H~1FH : FILL IN BA
		20H : ENDING A
		21H~27H : ENDING B
0ddddd	DD	Switch On/Off: 00H(Off),7FH(On)
11110111	F7	End of Exclusive

When an ON code is received, the appointed section will be changed.

(3-6-1-2) TEMPO CONTROL

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01111110	7E	Style
00000000	01	
0tttttt	TT	Tempo4
0tttttt	TT	Tempo3
0tttttt	TT	Tempo2
0tttttt	TT	Tempo1
11110111	F7	End of Exclusive

The internal clock will be set to the received Tempo value.

Tempo Meta Event is a large data block (24-bit), it is divided into 4 groups with 7-bits going into each of the Tempos 1-4 (4 receives the remaining 3 bits).

(3-6-2) UNIVERSAL SYSTEM EXCLUSIVE

(3-6-2-1) UNIVERSAL REALTIME MESSAGE

(3-6-2-1-1) MIDI MASTER VOLUME (Recive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01111110	7F	Universal Realtime
01111111	7F	ID of target Device
00001001	04	Sub-ID #1=Device Control Message
00000001	01	Sub-ID #2=Master Volume
0sssssss	SS	Volume LSB
0tttttt	TT	Volume MSB
11110111	F7	End of Exclusive
or		
11110000	F0	Exclusive status
01111110	7F	Universal Realtime
0xxxxxxx	XN	When N is received N=0-F, whichever is received. When N is transmitted N always=0. X = don't care
00001001	04	Sub-ID #1=Device Control Message
00000001	01	Sub-ID #2=Master Volume
0sssssss	SS	Volume LSB
0tttttt	TT	Volume MSB
11110111	F7	End of Exclusive

The volume for all channels will be changed simultaneously.

The TT value is used as the MIDI Master Volume value. (the ss value is ignored.)

(3-6-2-2) UNIVERSAL NON REALTIME MESSAGE

(3-6-2-2-1) GENERAL MIDI SYSTEM ON

binary	hexadecimal	
11110000	F0	Exclusive status
01111110	7E	Universal Non-Realtime
01111111	7F	ID of target Device
00001001	09	Sub-ID #1=General MIDI Message
00000001	01	Sub-ID #2=General MIDI On
11110111	F7	End of Exclusive
or		

11110000	F0	Exclusive status
01111110	7E	Universal Non-Realtime
0xxxxxxx	XN	When N is received N=0-F, whichever is received. When N is transmitted N always=0. X = don't care
00001001	09	Sub-ID #1=General MIDI Message
00000001	01	Sub-ID #2=General MIDI On
11110111	F7	End of Exclusive

Depending upon the received ON message, the System Mode will be changed to XG.

Except MIDI Master Tuning, all control data be reset to default values.

This message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

(3-6-3) XG STANDARD

(3-6-3-1) XG PARAMETER CHANGE

(3-6-3-1-1) XG SYSTEM ON

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1N	Device Number
01001100	4C	Model ID
00000000	00	Address High
00000000	00	Address Mid
01111110	7E	Address Low
00000000	00	Data
11110111	F7	End of Exclusive

Depending upon the received ON message, the SYSTEM MODE will be changed to XG. Controllers will be reset, all values of Multi Part and Effect, and All System values denoted by "XG" data within All System will be reset to default values in the table.

This message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

(3-6-3-1-2) XG PARAMETER CHANGE

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1N	Device Number
01001100	4C	Model ID
0aaaaaaa	AA	Address High
0aaaaaaa	AA	Address Mid
0aaaaaaa	AA	Address Low
0ddddd	DD	Data
11110111	F7	End of Exclusive

For parameters with data size of 2 or 4, transmit the appropriate number of data bytes.

For more information on Address and Parameters, refer to < Table 1-2 > (page 14) and < Table 1-4 > ~ < Table 1-8 > (pages 15-19).

The 4 data types listed below are transmitted and received.

(These are transmitted only after a Parameter change request is received.)

XG System Data
Multi Effect Data
Multi EQ Data
Multi Part Data
Drums Setup Data

(3-6-3-2) XG BULK DUMP

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0000nnnn	0N	Device Number
01001100	4C	Model ID
0bbbbbbb	BB	ByteCount
0bbbbbbb	BB	ByteCount
0aaaaaaa	AA	Address High
0aaaaaaa	AA	Address Mid
0aaaaaaa	AA	Address Low
0ddddd	DD	Data
0ccccccc	CC	Check sum
11110111	F7	End of Exclusive

For more information on Address and Byte Count, refer to < Table 1-2 > ~ < Table 1-8 > (pages 14-19).

The Check Sum value is set such that the sum of Byte Count, Address, Data, and Check Sum has value zero in its seven least significant bits.

If the top of the block is appointed to the Address the XG Bulk Dump, Bulk Request will be received.

The Block is a unit that consists of the data, arranged in the list, as the Total Size.

The 5 data types listed below are transmitted and received.
(These are transmitted only after a Bulk Dump request is received.)

System Data
Multi Effect Data(Individual effect unit)
Multi EQ Data
Multi Part Data(Individual part unit)
Drums Setup Data(Individual note unit)
System Information(Individual only)

(3-6-3-3) XG PARAMETER REQUEST (Recv only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0011nnnn	3n	Device Number
01001100	4C	Model ID
0aaaaaaa	AA	Address High
0aaaaaaa	AA	Address Mid
0aaaaaaa	AA	Address Low
11110111	F7	End of Exclusive

For more information on Address and Byte Count refer to < Table 1-2 > (page 14) and < Table 1-4 > ~ < Table 1-8 > (pages 15-19).

The 4 data types listed below are received.

System Data
Multi Effect Data
Multi EQ Data
Multi Part Data
Drums Setup Data

(3-6-3-4) XG DUMP REQUEST (Recv only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0010nnnn	2n	Device Number
01001100	4C	Model ID
0aaaaaaa	AA	Address High
0aaaaaaa	AA	Address Mid
0aaaaaaa	AA	Address Low
11110111	F7	End of Exclusive

For more information on Address and Byte Count refer to < Table 1-2 > ~ < Table 1-8 > (pages 14-19).

The 5 data types listed below are received.

System Data
Multi Effect Data(Individual module unit)
Multi EQ Data
Multi Part Data(Individual part unit)
Drums Setup Data(Individual note unit)
System Information

(3-6-4) CLAVINOVA MIDI COMPLIANCE

(3-6-4-1) INTERNAL CLOCK / EXTERNAL CLOCK (Recv only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
0000001n	0N	N: 2(Internal Clock),3(External Clock)
11110111	F7	End of Exclusive

(3-6-4-2) DOC MULTI TIMBRE ON / OFF (Recv only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
00000110	1N	N: 3(DOC Multi Timbre Off),4(DOC Multi Timbre On)
11110111	F7	End of Exclusive

(3-6-4-3) PANEL LED ON / OFF (Recv only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	45	CVP-98/96/94/92
00011010	1A	PANEL LED On/Off
0mmmmmmm	MM	MM: 00H(LED Off),01H(LED On),02H(The LED flashes) 03H (LED All off), 04H (Panel LED returns to normal operation)
00000000	00	
0nnnnnnn	NN	LED No.
11110111	F7	End of Exclusive

Remotely switches the Panel LED On/Off.

(3-6-4-4) STYLE NUMBER

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	45	CVP-98/96/94/92
00011101	1D	Style No.
00000000	00	
0ccccccc	CC	Style No. MSB
0ddddd	DD	Style No. LSB
11110111	F7	End of Exclusive

(3-6-4-5) MIDI FA CANCEL (Recv only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
01100001	61	MIDI FA Cancel
11110111	F7	End of Exclusive

If this message is received, even if FAH is received the Rhythm will not start.

(3-6-5) SPECIAL OPERATORS

(3-6-5-1) SPLIT POINT

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00010001	11	Sub ID
00000000	00	
00010100	14	Split Point
0ddddd	DD	Split Key No.
11110111	F7	End of Exclusive

(3-6-5-2) FINGERING

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00010001	11	Sub ID
00000000	00	
01000000	40	Fingering
0000dddd	0D	0D: 00H(Off),01H(Single Finger),02H(Fingered), 04H(Full Keyboard),07H(Multi Finger)
11110111	F7	End of Exclusive

(3-6-5-3) ACCOMP VOLUME

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00010001	11	Sub ID
0000nnnn	0N	Part: 00H(All Part),05H(Rhythm),0AH(Bass), 06H(Chord),0DH(Pad),07H(Phrase)
01000000	42	Accomp Volume
0ddddd	DD	Volume Data: 00H~7FH
11110111	F7	End of Exclusive

(3-6-5-4) CHANNEL DETUNE

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	45	CVP-98/96/94/92 ID
00010001	11	Sub ID
0000nnnn	0N	N = MIDI Channel
01000011	43	Dual Detune
0vvvvvvv	VV	Value VV: 00H - 40H - 7FH (-64 - 0 - +63)
11110111	F7	End of Exclusive

The Channel Detune message only affects the specified channel.

(3-6-5-5) VOLUME ,EXPRESSION AND PAN REALTIME CONTROL OFF

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	45	CVP-98/96/94/92 ID
00010001	11	Sub ID
0000nnnn	0N	N = MIDI Channel
01001001	45	Volume and Expression Realtime Control Off
0vvvvvvv	VV	Value VV: off=7FH, on=00H
11110111	F7	End of Exclusive

When "On" is received, subsequent volume, expression, and PAN changes are only valid after the reception of the next key on. Normal operation resumes when "Off" is received.

(3-6-5-6) MIDI KEY LED MODE ON / OFF (Recive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	
00010001	11	Sub ID
0000nnnn	0N	N = MIDI Channel
01000111	47	MIDI Key LED Mode On / Off
0ddddd	DD	DD: 00H(Key LED Mode Off),01H(Key LED Mode On + no tone), 02H(Key LED Mode On + tone)
11110111	F7	End of Exclusive

(3-6-6) Others

(3-6-6-1) MIDI MASTER TUNING (Recive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1N	When N is received N=0-F, whichever is received.
00100111	27	Model ID
00110000	30	Sub ID
00000000	00	
00000000	00	
0mmmmmmm	MM	Master Tune MSB
0lllllll	LL	Master Tune LSB
0ccccccc	CC	don't care
11110111	F7	End of Exclusive

Changes tuning of all channels.

MM, LL values are used to define the MIDI Master Tuning value.

T = M-128

T : Tuning value (-99cent - +99cent)

M : A single byte value (28-228) consists of bytes 0-3 of MM = MSB, bytes 0-3 of LL = LSB.

In this setting, GM System ON, XG System ON will not be reset.

< Table 1-1 >

Parameter Basic Address

SYSTEM	Parameter Change Address			Description
	(H)	(M)	(L)	
	00	00	00	System
	00	00	7D	Drum Setup Reset
	00	00	7E	XG System On
	00	00	7F	All Parameter Reset
INFORMATION	01	00	00	System Information
EFFECT 1	02	01	00	Effect1(Reverb,Chorus,Variation)
MULTI PART	08	00	00	Multi Part 1
	:	:	:	
	08	0F	00	Multi Part 16
	08	10	00	Reserved
	:	:	:	
DRUM	30	0D	00	Drum Setup 1
	31	0D	00	Drum Setup 2
	32	0D	00	Reserved
	:	:	:	
	3F	nn	nn	Reserved

Address	Parameter
3n 0D 00	note number 13
3n 0E 00	note number 14
:	:
3n 5B 00	note number 91

< Table 1-2 >

MIDI Parameter Change table (SYSTEM)

Address (H)	Size	Data (H)	Parameter Name (H)	Description	Default	Value(H)
00	00	00	0000	Master Tune	-102.4..+102.3[cent]	00 04 00 00
		01	..07FF		1st bit3-0 -> bit15-12	(0400)
		02			2nd bit3-0 -> bit11-8	(With XG, GM On, it will not reset.)
		03			3rd bit3-0 -> bit7-4	
					4th bit3-0 -> bit3-0	
	04	1	00..7F	Master Volume	0..127	7F
	05	1		Not Used		
	06	1	28..58	Transpose	-24..+24[semitones]	40
	7D	n		Drum Setup Reset	n=Drum Setup Number	
	7E	00		XG System On	00=XG System on	
	7F	00		All Parameter Reset	00=on (receive only)	

TOTAL SIZE 6

< Table 1-3 >

MIDI Parameter table (System information)

Address (H)	Size	Data (H)	Parameter Name (H)	Description
01	00	E	20..7F	Model Name
		:		32..127(ASCII)
		0D		
		0E	1 00	
		0F	1 00	

TOTAL SIZE 10

(Transmitted by Dump Request. Not received. Bulk Dump Only)

< Table 1-4 >

MIDI Parameter Change table (EFFECT 1)

Address (H)	Size	Data (H)	Parameter Name (H)	Description	Default	Value(H)	
02	01	00	2	00..7F	Reverb Type MSB	Refer to the Effect Type List	01(=HALL1)
				00..7F	Reverb Type LSB	00 : basic type	00
		02	1	00..7F	Reverb Parameter 1	Refer to the Ef. Parameter List	Depend on Reverb type
		03	1	00..7F	Reverb Parameter 2	Refer to the Ef. Parameter List	Depend on Reverb type
		04	1	00..7F	Reverb Parameter 3	Refer to the Ef. Parameter List	Depend on Reverb type
		05	1	00..7F	Reverb Parameter 4	Refer to the Ef. Parameter List	Depend on Reverb type
		06	1	00..7F	Reverb Parameter 5	Refer to the Ef. Parameter List	Depend on Reverb type
		07	1	00..7F	Reverb Parameter 6	Refer to the Ef. Parameter List	Depend on Reverb type
		08	1	00..7F	Reverb Parameter 7	Refer to the Ef. Parameter List	Depend on Reverb type
		09	1	00..7F	Reverb Parameter 8	Refer to the Ef. Parameter List	Depend on Reverb type
		0A	1	00..7F	Reverb Parameter 9	Refer to the Ef. Parameter List	Depend on Reverb type
		0B	1	00..7F	Reverb Parameter 10	Refer to the Ef. Parameter List	Depend on Reverb type
		0C	1	00..7F	Reverb Return	-∞..0..+6dB(0..96..127)	60
		0D	1	01..7F	Reverb Pan	L63..C..R63(1..64..127)	40
TOTAL SIZE 0E							
02	01	10	1	00..7F	Reverb Parameter 11	Refer to the Ef. Parameter List	Depend on Reverb type
		11	1	00..7F	Reverb Parameter 12	Refer to the Ef. Parameter List	Depend on Reverb type
		12	1	00..7F	Reverb Parameter 13	Refer to the Ef. Parameter List	Depend on Reverb type
		13	1	00..7F	Reverb Parameter 14	Refer to the Ef. Parameter List	Depend on Reverb type
		14	1	00..7F	Reverb Parameter 15	Refer to the Ef. Parameter List	Depend on Reverb type
		15	1	00..7F	Reverb Parameter 16	Refer to the Ef. Parameter List	Depend on Reverb type
TOTAL SIZE 6							
02	01	20	2	00..7F	Chorus Type MSB	Refer to the Effect Type List	41(=Chorus1)
				00..7F	Chorus Type LSB	00 : basic type	00
		22	1	00..7F	Chorus Parameter 1	Refer to the Ef. Parameter List	Depend on Chorus Type
		23	1	00..7F	Chorus Parameter 2	Refer to the Ef. Parameter List	Depend on Chorus Type
		24	1	00..7F	Chorus Parameter 3	Refer to the Ef. Parameter List	Depend on Chorus Type
		25	1	00..7F	Chorus Parameter 4	Refer to the Ef. Parameter List	Depend on Chorus Type
		26	1	00..7F	Chorus Parameter 5	Refer to the Ef. Parameter List	Depend on Chorus Type
		27	1	00..7F	Chorus Parameter 6	Refer to the Ef. Parameter List	Depend on Chorus Type
		28	1	00..7F	Chorus Parameter 7	Refer to the Ef. Parameter List	Depend on Chorus Type
		29	1	00..7F	Chorus Parameter 8	Refer to the Ef. Parameter List	Depend on Chorus Type
		2A	1	00..7F	Chorus Parameter 9	Refer to the Ef. Parameter List	Depend on Chorus Type
		2B	1	00..7F	Chorus Parameter 10	Refer to the Ef. Parameter List	Depend on Chorus Type
		2C	1	00..7F	Chorus Return	-∞..0..+6dB(0..96..127)	60
		2D	1	01..7F	Chorus Pan	L63..C..R63(1..64..127)	40
		2E	1	00..7F	Send Chorus To Reverb	-∞..0..+6dB(0..96..127)	00
TOTAL SIZE 0F							
02	01	30	1	00..7F	Chorus Parameter 11	Refer to the Ef. Parameter List	Depend on Chorus Type
		31	1	00..7F	Chorus Parameter 12	Refer to the Ef. Parameter List	Depend on Chorus Type
		32	1	00..7F	Chorus Parameter 13	Refer to the Ef. Parameter List	Depend on Chorus Type
		33	1	00..7F	Chorus Parameter 14	Refer to the Ef. Parameter List	Depend on Chorus Type
		34	1	00..7F	Chorus Parameter 15	Refer to the Ef. Parameter List	Depend on Chorus Type
		35	1	00..7F	Chorus Parameter 16	Refer to the Ef. Parameter List	Depend on Chorus Type
TOTAL SIZE 6							
02	01	40	2	00..7F	Variation Type MSB	Refer to the Effect Type List	"05(=DELAY L,C,R)"
				00..7F	Variation Type LSB	00 : basic type	00
		42	2	00..7F	Vari. Param. 1 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 1 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		44	2	00..7F	Vari. Param. 2 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 2 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		46	2	00..7F	Vari. Param. 3 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 3 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		48	2	00..7F	Vari. Param. 4 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 4 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type

4A	2	00..7F	Vari. Param. 5 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type		
		00..7F	Vari. Param. 5 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type		
4C	2	00..7F	Vari. Param. 6 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type		
		00..7F	Vari. Param. 6 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type		
4E	2	00..7F	Vari. Param. 7 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type		
		00..7F	Vari. Param. 7 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type		
50	2	00..7F	Vari. Param. 8 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type		
		00..7F	Vari. Param. 8 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type		
52	2	00..7F	Vari. Param. 9 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type		
		00..7F	Vari. Param. 9 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type		
54	2	00..7F	Vari. Param. 10 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type		
		00..7F	Vari. Param. 10 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type		
56	1	00..7F	Variation Return	-∞..0..+6dB(0..96..127)	60		
57	1	01..7F	Variation Pan	L63..C..R63(1..64..127)	40		
58	1	00..7F	Send Vari. To Reverb	-∞..0..+6dB(0..96..127)	00		
59	1	00..7F	Send Vari. To Chorus	-∞..0..+6dB(0..96..127)	00		
5A	1	00..01	Variation Connection	0:insertion,1:system	00		
5B	1	00..1F	Variation Part	part1..32(0..31),off(127)	7F		
5C	1	01..7F	MW Vari. Ctrl Depth	-63..+63	40		
5D	1	01..7F	PB Vari. Ctrl Depth	-63..+63	40		
5E	1	01..7F	CAT Vari. Ctrl Depth	-63..+63	40		
5F	1	01..7F	Not Used				
60	1	01..7F	Not Used				
TOTAL SIZE 21							
02	01	70	1	00..7F	Variation Parameter 11	option Parameter	Depend on Variation Type
		71	1	00..7F	Variation Parameter 12	option Parameter	Depend on Variation Type
		72	1	00..7F	Variation Parameter 13	option Parameter	Depend on Variation Type
		73	1	00..7F	Variation Parameter 14	option Parameter	Depend on Variation Type
		74	1	00..7F	Variation Parameter 15	option Parameter	Depend on Variation Type
		75	1	00..7F	Variation Parameter 16	option Parameter	Depend on Variation Type
TOTAL SIZE 6							

< Table 1-5 >

MIDI Parameter Change table (MULTI EQ)

Address (H)	Size (H)	Data (H)	Parameter Name (H)	Description	Default	Value(H)	
02	40	00	1	34..4C	EQ Type	0:FLAT	0
					1:JAZZ		
					2:POPS		
					3:ROCK		
					4:CLASSIC		
		01	1	34..4C	EQ Gain1	-12..+12[dB]	40
		02	1	04..28	EQ Frequency1	32..2000[Hz]	0C
		03	1	01..78	EQ Q1	0.1..12.0	07
		04	1	00..01	EQ Shape1	00:Shelving,01:Peaking	00
		05	1	34..4C	EQ Gain2	-12..+12[dB]	40
		06	1	0E..36	EQ Frequency2	0.1..10[KHz]	1C
		07	1	01..78	EQ Q2	0.1..12.0	07
		08	1		Not Used		
		09	1	34..4C	EQ Gain3	-12..+12[dB]	40
		0A	1	0E..36	EQ Frequency3	0.1..10[KHz]	22
		0B	1	01..78	EQ Q3	0.1..12.0	07
		0C	1		Not Used		
		0D	1	34..4C	EQ Gain4	-12..+12[dB]	40
		0E	1	0E..36	EQ Frequency4	0.1..10[KHz]	2E
		0F	1	01..78	EQ Q4	0.1..12.0	07
		10	1		Not Used		
		11	1	34..4C	EQ Gain5	-12..+12[dB]	40
		12	1	1C..3A	EQ Frequency5	0.5..16.0[KHz]	3C
		13	1	01..78	EQ Q5	0.1..12.0	07
		14	1	00..01	EQ Shape5	00:Shelving,01:Peaking	00
TOTAL SIZE 15							

< Table 1-6 >

MIDI Parameter Change table (EFFECT 2)

Address (H)	Size (H)	Data (H)	Parameter Name (H)	Description	Default	Value(H)	
03	00	00	2	00..7F	Insertion Type MSB	Refer to the Ef. Type List	"49(=DISTORTION)"
				00..7F	Insertion Type LSB	00 : basic type	00
		02	1	00..7F	Insertion Parameter1	Refer to the Ef. Parameter List	Depend on Ins. Type
		03	1	00..7F	Insertion Parameter2	Refer to the Ef. Parameter List	Depend on Ins. Type
		04	1	00..7F	Insertion Parameter3	Refer to the Ef. Parameter List	Depend on Ins. Type

05	1	00..7F	Insertion Parameter4	Refer to the Ef. Parameter List	Depend on Ins. Type
06	1	00..7F	Insertion Parameter5	Refer to the Ef. Parameter List	Depend on Ins. Type
07	1	00..7F	Insertion Parameter6	Refer to the Ef. Parameter List	Depend on Ins. Type
08	1	00..7F	Insertion Parameter7	Refer to the Ef. Parameter List	Depend on Ins. Type
09	1	00..7F	Insertion Parameter8	Refer to the Ef. Parameter List	Depend on Ins. Type
0A	1	00..7F	Insertion Parameter9	Refer to the Ef. Parameter List	Depend on Ins. Type
0B	1	00..7F	Insertion Parameter10	Refer to the Ef. Parameter List	Depend on Ins. Type
0C	1	00..7F	Insertion Part	Part1..16,OFF	7F
0D	1	00..7F	MW INS CTRL DPT		
0E	1	00..7F	BEND INS CTRL DPT		
0F	1	00..7F	CAT INS CTRL DPT		
10	1	00..7F	Not Used		
11	1	00..7F	Not Used		

TOTAL SIZE 12

03	00	20	1	00..7F	Insertion Parameter11	Refer to the Ef. Parameter List	Depend on Ins. Type
		21	1	00..7F	Insertion Parameter12	Refer to the Ef. Parameter List	Depend on Ins. Type
		22	1	00..7F	Insertion Parameter13	Refer to the Ef. Parameter List	Depend on Ins. Type
		23	1	00..7F	Insertion Parameter14	Refer to the Ef. Parameter List	Depend on Ins. Type
		24	1	00..7F	Insertion Parameter15	Refer to the Ef. Parameter List	Depend on Ins. Type
		25	1	00..7F	Insertion Parameter16	Refer to the Ef. Parameter List	Depend on Ins. Type

TOTAL SIZE 06

03	00	30	2	00..7F	Ins. Param.1 MSB	Refer to the Ef. Parameter List	Depend on Ins. Type
				00..7F	Ins. Param.1 LSB	Refer to the Ef. Parameter List	Depend on Ins. Type
03	00	32	2	00..7F	Ins. Param.2 MSB	Refer to the Ef. Parameter List	Depend on Ins. Type
				00..7F	Ins. Param.2 LSB	Refer to the Ef. Parameter List	Depend on Ins. Type
03	00	34	2	00..7F	Ins. Param.3 MSB	Refer to the Ef. Parameter List	Depend on Ins. Type
				00..7F	Ins. Param.3 LSB	Refer to the Ef. Parameter List	Depend on Ins. Type
03	00	36	2	00..7F	Ins. Param.4 MSB	Refer to the Ef. Parameter List	Depend on Ins. Type
				00..7F	Ins. Param.4 LSB	Refer to the Ef. Parameter List	Depend on Ins. Type
03	00	38	2	00..7F	Ins. Param.5 MSB	Refer to the Ef. Parameter List	Depend on Ins. Type
				00..7F	Ins. Param.5 LSB	Refer to the Ef. Parameter List	Depend on Ins. Type
03	00	3A	2	00..7F	Ins. Param.6 MSB	Refer to the Ef. Parameter List	Depend on Ins. Type
				00..7F	Ins. Param.6 LSB	Refer to the Ef. Parameter List	Depend on Ins. Type
03	00	3C	2	00..7F	Ins. Param.7 MSB	Refer to the Ef. Parameter List	Depend on Ins. Type
				00..7F	Ins. Param.7 LSB	Refer to the Ef. Parameter List	Depend on Ins. Type
03	00	3E	2	00..7F	Ins. Param.8 MSB	Refer to the Ef. Parameter List	Depend on Ins. Type
				00..7F	Ins. Param.8 LSB	Refer to the Ef. Parameter List	Depend on Ins. Type
03	00	40	2	00..7F	Ins. Param.9 MSB	Refer to the Ef. Parameter List	Depend on Ins. Type
				00..7F	Ins. Param.9 LSB	Refer to the Ef. Parameter List	Depend on Ins. Type
03	00	42	2	00..7F	Ins. Param.10 MSB	Refer to the Ef. Parameter List	Depend on Ins. Type
				00..7F	Ins. Param.10 LSB	Refer to the Ef. Parameter List	Depend on Ins. Type

TOTAL SIZE 14

For effect types that do not require MSB, the Parameters for Address 02-0B will be received. Address 30-42 will not be received.

For effect types that require MSB, the Parameters for Address 30-42 will be received. Address 02-0B will not be received.

When Bulk Dumps that include Effect Type data are transmitted, the Parameters for Address 02 - 0B will always be transmitted. But, effects that require MSB, when the bulk dump is received the Parameters for Address 02 - 0B will not be received.

< Table 1-7 >

MIDI Parameter Change table (MULTI PART)

Address (H)	Size	Data (H)	Parameter Name (H)	Description	Default	Value(H)	
08	nn	00	1	00..20	Element Reserve	0..32	0(Part10),2(Others)
	nn	01	1	00..7F	Bank Select MSB	0..127	7F(Part10),00(Others)
	nn	02	1	00..7F	Bank Select LSB	0..127	00
	nn	03	1	00..7F	Program Number	1..128	00
	nn	04	1	00..0F, 7F	Rcv Channel	0..16;1..16,127;off	Part No.
	nn	05	1	00..01	Mono/Poly Mode	0:mono,1:poly	01
	nn	06	1	00..02	Same Note Number	0:single	00
				Key On Assign	1:multi		
					2:inst (for DRUM)		
	nn	07	1	00..02	Part Mode	0:normal	00 (Except Part10)
					1..3:drum thru,drum1..2		01 (Part10)
	nn	08	1	28..58	Note Shift	-24..+24[semitones]	40
	nn	09	2	00..FF	Detune	-128..+12.7[Hz]	08 00
	nn	0A			1st bit3..0 -> bit7..4		(80)
					2nd bit3..0 -> bit3..0		
	nn	0B	1	00..7F	Volume	0..127	64
	nn	0C	1	00..7F	Velocity Sense Depth	0..127	40
	nn	0D	1	00..7F	Velocity Sense Offset	0..127	40
	nn	0E	1	00..7F	Pan	0:random	40
					L63..C..R63(1..64..127)		

nn	0F	1	00..7F	Note Limit Low	C-2..G8	00
nn	10	1	00..7F	Note Limit High	C-2..G8	7F
nn	11	1	00..7F	Dry Level	0..127	7F
nn	12	1	00..7F	Chorus Send	0..127	00
nn	13	1	00..7F	Reverb Send	0..127	28
nn	14	1	00..7F	Variation Send	0..127	00
nn	15	1	00..7F	Vibrato Rate	-64..+63	40
nn	16	1	00..7F	Vibrato Depth	-64..+63	40
nn	17	1	00..7F	Vibrato Delay	-64..+63	40
nn	18	1	00..7F	Filter Cutoff Freq.	-64..+63	40
nn	19	1	00..7F	Filter Resonance	-64..+63	40
nn	1A	1	00..7F	EG Attack Time	-64..+63	40
nn	1B	1	00..7F	EG Decay Time	-64..+63	40
nn	1C	1	00..7F	EG Release Time	-64..+63	40
nn	1D	1	28..58	MW Pitch Control	-24..+24[semitones]	40
nn	1E	1	00..7F	MW Filter Control	-9600..+9450[cent]	40
nn	1F	1	00..7F	MW Amp. Control	-100..+100[%]	40
nn	20	1	00..7F	MW LFO PMod Depth	0..127	0A
nn	21	1	00..7F	MW LFO FMod Depth	0..127	00
nn	22	1	00..7F	MW LFO AMod Depth	0..127	00
nn	23	1	28..58	Bend Pitch Control	-24..+24[semitones]	42
nn	24	1	00..7F	Bend Filter Control	-9600..+9450[cent]	40
nn	25	1	00..7F	Bend Amp. Control	-100..+100[%]	40
nn	26	1	00..7F	Bend LFO PMod Depth	0..127	00
nn	27	1	00..7F	Bend LFO FMod Depth	0..127	00
nn	28	1	00..7F	Bend LFO AMod Depth	0..127	00

TOTAL SIZE 29

nn	30			Not Used		
	:			:		
nn	40			Not Used		
nn	41	1	00..7F	Scale Tuning C	-64..+63[cent]	40
nn	42	1	00..7F	Scale Tuning C#	-64..+63[cent]	40
nn	43	1	00..7F	Scale Tuning D	-64..+63[cent]	40
nn	44	1	00..7F	Scale Tuning D#	-64..+63[cent]	40
nn	45	1	00..7F	Scale Tuning E	-64..+63[cent]	40
nn	46	1	00..7F	Scale Tuning F	-64..+63[cent]	40
nn	47	1	00..7F	Scale Tuning F#	-64..+63[cent]	40
nn	48	1	00..7F	Scale Tuning G	-64..+63[cent]	40
nn	49	1	00..7F	Scale Tuning G#	-64..+63[cent]	40
nn	4A	1	00..7F	Scale Tuning A	-64..+63[cent]	40
nn	4B	1	00..7F	Scale Tuning A#	-64..+63[cent]	40
nn	4C	1	00..7F	Scale Tuning B	-64..+63[cent]	40
nn	4D	1	28..58	CAT Pitch Control	-24..+24[semitones]	40
nn	4E	1	00..7F	CAT Filter Control	-9600..+9450[cent]	40
nn	4F	1	00..7F	CAT Amplitude Control	-100..+100[%]	40
nn	50	1	00..7F	CAT LFO PMod Depth	0..127	00
nn	51	1	00..7F	CAT LFO FMod Depth	0..127	00
nn	52	1	00..7F	CAT LFO AMod Depth	0..127	00

nn	53			Not Used		
	:			:		
	66			Not Used		

nn	67	1	00..01	Portamento Switch	off/on	00
nn	68	1	00..7F	Portamento Time	0..127	00

nn	69			Not Used		
	:			:		
	6E			Not Used		

TOTAL SIZE 3F

nn = PartNumber

If there is a Drum Voice assigned to the Part, the following parameters are ineffective.

- Bank Select LSB
- Amp EG
- Portamento
- Soft Pedal
- Mono/Poly
- Scale Tuning

<Table 1-8 >

MIDI Parameter Change table (DRUM SETUP)

Address (H)	Size	Data (H)	Parameter Name (H)	Description	Default	Value(H)	
3n	rr	00	1	00..7F	Pitch Coarse	-64..+63	40
3n	rr	01	1	00..7F	Pitch Fine	-64..+63[cent]	40
3n	rr	02	1	00..7F	Level	0..127	Depend on the Note
3n	rr	03	1	00..7F	Alternate Group	0:off,1..127	Depend on the Note
3n	rr	04	1	00..7F	Pan	0:random L63..C..R63(1..64..127)	Depend on the Note
3n	rr	05	1	00..7F	Reverb Send Level	0..127	Depend on the Note
3n	rr	06	1	00..7F	Chorus Send Level	0..127	Depend on the Note
3n	rr	07	1	00..7F	Variation Send Level	0..127	7F
3n	rr	08	1	00..01	Key Assign	0:single,1:multi	00
3n	rr	09	1	00..01	Rcv Note Off	off/on	Depend on the Note
3n	rr	0A	1	00..01	Rcv Note On	off/on	01
3n	rr	0B	1	00..7F	Filter Cutoff Freq.	-64..63	40
3n	rr	0C	1	00..7F	Filter Resonance	-64..63	40
3n	rr	0D	1	00..7F	EG Attack Rate	-64..63	40
3n	rr	0E	1	00..7F	EG Decay1 Rate	-64..63	40
3n	rr	0F	1	00..7F	EG Decay2 Rate	-64..63	40
TOTAL SIZE 10							

n:Drum Setup Number(0 - 1)

rr:note number(0DH - 54H)

If XG SYSTEM ON and/or GM On message is received, all Drum Setup Parameter will be reset to default values.

According to the Drum Setup Reset message, individual Drum Setup Parameters can be reset to default values.

< Table 1-9 > Effect Type List

	XG ESSENTIAL EFFECT
	Same as LSB=0
	XG OPTION EFFECT

* If the received value does not contain an effect type in the TYPE LSB, The LSB will be directed to TYPE 0.

* Panel Effects are based on the "[Number] Effect Name".

REVERB TYPE

TYPE	TYPE LSB	01	02	03..07	08	09..15	16	17	18	19	20	21..
MSB	00											
000	NO EFFECT											
001	[1]HALL1	[2]HALL2					[3]HALL3	[4]HALL4	[5]HALL5			
002	[6]ROOM1	ROOM2	[7]ROOM2				[8]ROOM3	ROOM	ROOM	[9]ROOM4		
003	[10]STAGE1	[11]STAGE2					STAGE	[12]STAGE3				
004	[13]PLATE						PLATE	PLATE				
005..015	NO EFFECT											
016	[14]WHITE ROOM											
017	[15]TUNNEL											
018	CANYON											
019	[16]BASEMENT											
020..127	NO EFFECT											

CHORUS TYPE

TYPE	TYPE LSB	01	02	03..07	08	09..15	16	17	18	19	20	21..
MSB	00											
000	NO EFFECT											
001..064	NO EFFECT											
065	CHORUS1	CHORUS2	CHORUS3		CHORUS4							
066	CELESTE1	CELESTE2	CELESTE3		CELESTE4		CELESTE	CELESTE				
067	FLANGER 1	FLANGER2			FLANGER3		FLANGER	FLANGER				
068	SYMPHONIC											
069..071	NO EFFECT											
072	PHASER 1											
073..086	NO EFFECT											
087	ENSEMBLE DETUNE											
088..127	NO EFFECT											

VARIATION EFFECT TYPE

TYPE	TYPE LSB											
MSB	00	01	02	03..07	08	09..15	16	17	18	19	20	21..
000	NO EFFECT											
001	[1]HALL1	[2]HALL2					[3]HALL3	HALL	HALL			
002	[4]ROOM1	ROOM2	[5]ROOM2				[6]ROOM3	ROOM	ROOM	ROOM		
003	[7]STAGE1	[8]STAGE2					STAGE	[9]STAGE3				
004	PLATE						PLATE	PLATE				
005	DELAY L,C,R						[17]DELAY LCR					
006	[18]DELAY L,R											
007	[19]ECHO											
008	[20]CROSS DELAY											
009	ER1	ER2										
010	GATE REVERB											
011	REVERS GATE											
012..015	NO EFFECT											
016	WHITE ROOM											
017	TUNNEL											
018	CANYON											
019	BASEMENT											
020	KARAOKE 1	KARAOKE 2	KARAOKE 3									
021..063	NO EFFECT											
064	THRU											
065	CHORUS1	CHORUS2	CHORUS		CHORUS							
066	[13]CELESTE	[12]CHORUS3	CELESTE3		[11]CHORUS2		CHORUS	[10]CHORUS1	[22] [23]ROTARY			
067	FLANGER 1	FLANGER			FLANGER		[14]FLANGER	FLANGER				
068	SYMPHONIC						[15]SYMPHONIC					
069	ROTARY SP.						Rotary Sp					
070	TREMOLO						[21]TREMOLO	Rotary Sp				
071	AUTO PAN						[16]AUTO PAN	Rotary Sp	Rotary Sp	Rotary Sp	Tremolo	Gtr Tremolo
072	[24]PHASER				PHASER							
073	DISTORTION	COMP+DISTORTION										
074	OVER DRIVE											
075	AMP SIM.						DIST.HARD	DIST.SOFT				
076	3BAND EQ						EQ DISCO	EQ TEL				
077	2BAND EQ											
078	AUTO WAH	AUTO WAH+DIST	AUTO WAH+OVERDRIVE				[25]WAH					
079	THRU											
080	PITCH CHANGE	PITCH CHANGE2										
081	THRU											
082	TOUCH WAH 1	TOUCH WAH+DIST	TOUCH WAH+OVERDRIVE		TOUCH WAH 2							
083	COMPRESSOR											
084	NOISE GATE											
085	VOICE CANCEL											
086	2WAY ROTARY SP											
087	ENSEMBLE DETUNE											
088	AMBIENCE											
089..127	THRU											

INSERTION EFFECT TYPE

TYPE	TYPE LSB											
MSB	00	01	02	03..07	08	09..15	16	17	18	19	20	21..
000	THRU											
001	HALL 1	HALL 2					HALL	HALL	HALL			
002	ROOM 1	ROOM 2	ROOM 3				ROOM	ROOM	ROOM	ROOM		
003	STAGE 1	STAGE 2					STAGE	STAGE				
004	PLATE						PLATE	PLATE				
005	DELAY L,C,R						Delay LCR					
006	DELAY L,R											
007	ECHO											
008	CROSS DELAY											
009..019	THRU											
020	KARAOKE 1	KARAOKE 2	KARAOKE 3									
021..064	THRU											
065	CHORUS 1	CHORUS 2	CHORUS 3		CHORUS 4							
066	CELESTE 1	CELESTE 2	CELESTE 3		CELESTE 4		CHORUS	CHORUS	Rotary Sp			
067	FLANGER 1	FLANGER 2			FLANGER 3		FLANGER	FLANGER				
068	SYMPHONIC						Symphonic					
069	ROTARY SPEAKER 1						Rotary Sp					
070	TREMOLO						Tremolo	Rotary Sp				
071	AUTO PAN						AutoPan	Rotary Sp	Rotary Sp	Tremolo	Gtr Tremolo	
072	PHASER 1											
073	DISTORTION											
074	OVER DRIVE											
075	AMP SIMULATOR						DIST.HARD	DIST.SOFT				
076	3BAND EQ						EQ DISCO	EQ TEL				
077	2-BAND EQ											
078	AUTO WAH(LFO)						Auto Wah					
079..081	THRU											
082	TOUCH WAH 1				TOUCH WAH 2							
083	COMPRESSOR											
084	NOISE GATE											
085..086	THRU											
087	ENSEMBLE DETUNE											
088..127	THRU											

< Table 1-10 > Effect Parameter List

HALL1,HALL2, ROOM1,ROOM2,ROOM3, STAGE1,STAGE2 PLATE (reverb, variation, insertion block)

No.	Parameter	Value	See Table	Control
1	Reverb Time	0.3-30.0s	0-69	table#4
2	Diffusion	0-10	0-10	
3	Initial Delay	0-63	table#5	
4	HPF Cutoff	Thru-8.0kHz	0-52	table#3
5	LPF Cutoff	1.0k-Thru	34-60	table#3
6				
7				
8				
9				
10	Dry/Wet	D63>W - D=W - D<W63	1-127	●
11	Rev Delay	0-63	table#5	
12	Density	0-4 (reverb, variation block) 0-2 (insertion block)	0-4 0-2	
13	Er/Rev Balance	E63>R - E=R - E<R63	1-127	
14	High Damp	0.1-1.0	1-10	
15	Feedback Level	-63+63	1-127	
16				

WHITE ROOM, TUNNEL, CANYON, BASEMENT (reverb, variation block)

No.	Parameter	Value	See Table	Control
1	Reverb Time	0.3-30.0s	0-69	table#4
2	Diffusion	0-10	0-10	
3	Initial Delay	0-63	table#5	
4	HPF Cutoff	Thru-8.0kHz	0-52	table#3
5	LPF Cutoff	1.0k-Thru	34-60	table#3
6	Width	0.5-10.2m	0-37	table#11
7	Height	0.5-20.2m	0-73	table#11
8	Depth	0.5-30.2m	0-104	table#11
9	Wall Vary	0-30	0-30	
10	Dry/Wet	D63>W - D=W - D<W63	1-127	●
11	Rev Delay	0-63	table#5	
12	Density	0-4	0-4	
13	Er/Rev Balance	E63>R - E=R - E<R63	1-127	
14	High Damp	0.1-1.0	1-10	
15	Feedback Level	-63+63	1-127	
16				

DELAY L,C,R (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	Lch Delay	0.1-1486.0ms (variation block) 0.1-742.9ms (insertion block)	1-14860 1-7429	
2	Rch Delay	0.1-1486.0ms (variation block) 0.1-742.9ms (insertion block)	1-14860 1-7429	
3	Cch Delay	0.1-1486.0ms (variation block) 0.1-742.9ms (insertion block)	1-14860 1-7429	
4	Feedback Delay	0.1-1486.0ms (variation block) 0.1-742.9ms (insertion block)	1-14860 1-7429	
5	Feedback Level	-63+63	1-127	
6	Cch Level	0-127	0-127	
7	High Damp	0.1-1.0	1-10	
8				
9				
10	Dry/Wet	D63>W - D=W - D<W63	1-127	●
11				
12				
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3
14	EQ Low Gain	-12+12dB	52-76	
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3
16	EQ High Gain	-12+12dB	52-76	

DELAY L,R (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	Lch Delay	0.1-1486.0ms (variation block) 0.1-742.9ms (insertion block)	1-14860 1-7429	
2	Rch Delay	0.1-1486.0ms (variation block) 0.1-742.9ms (insertion block)	1-14860 1-7429	
3	Feedback Delay 1	0.1-1486.0ms (variation block) 0.1-742.9ms (insertion block)	1-14860 1-7429	
4	Feedback Delay 2	0.1-1486.0ms (variation block) 0.1-742.9ms (insertion block)	1-14860 1-7429	
5	Feedback Level	-63+63	1-127	
6	High Damp	0.1-1.0	1-10	
7				
8				
9				
10	Dry/Wet	D63>W - D=W - D<W63	1-127	●
11				
12				
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3
14	EQ Low Gain	-12+12dB	52-76	
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3
16	EQ High Gain	-12+12dB	52-76	

ECHO (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	Lch Delay1	0.1-743.0ms (variation block) 0.1-371.4ms (insertion block)	1-7430 1-3714	
2	Lch Feedback Level	-63+63	1-127	
3	Rch Delay1	0.1-743.0ms (variation block) 0.1-371.4ms (insertion block)	1-7430 1-3714	
4	Rch Feedback Level	-63+63	1-127	
5	High Damp	0.1-1.0	1-10	
6	Lch Delay2	0.1-743.0ms (variation block) 0.1-371.4ms (insertion block)	1-7430 1-3714	
7	Rch Delay2	0.1-743.0ms (variation block) 0.1-371.4ms (insertion block)	1-7430 1-3714	
8	Delay2 Level	0-127	0-127	
9				
10	Dry/Wet	D63>W - D=W - D<W63	1-127	●
11				
12				
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3
14	EQ Low Gain	-12+12dB	52-76	
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3
16	EQ High Gain	-12+12dB	52-76	

CROSS DELAY (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	L->R Delay	0.1-743.0ms (variation block) 0.1-371.4ms (insertion block)	1-7430 1-3714	
2	R->L Delay	0.1-743.0ms (variation block) 0.1-371.4ms (insertion block)	1-7430 1-3714	
3	Feedback Level	-63+63	1-127	
4	Input Select	L,R,L&R	0-2	
5	High Damp	0.1-1.0	1-10	
6				
7				
8				
9	Dry/Wet	D63>W - D=W - D<W63	1-127	●
10				
11				
12				
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3
14	EQ Low Gain	-12+12dB	52-76	
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3
16	EQ High Gain	-12+12dB	52-76	

EARLY REF1,EARLY REF2(variation block)

No.	Parameter	Value	See Table	Control
1	Type	S-H, L-H, Rdm, Rvs, Plt, Spr	0-5	
2	Room Size	0.1-7.0	0-44	table#6
3	Diffusion	0-10	0-10	
4	Initial Delay	0-63	0-63	table#5
5	Feedback Level	-63+63	1-127	
6	HPF Cutoff	Thru-8.0kHz	0-52	table#3
7	LPF Cutoff	1.0k-Thru	34-60	table#3
8				
9				
10	Dry/Wet	D63>W - D=W - D<W63	1-127	●
11	Liveness	0-10	0-10	
12	Density	0-3	0-3	
13	High Damp	0.1-1.0	1-10	
14				
15				
16				

GATE REVERB, REVERSE GATE (variation block)

No.	Parameter	Value	See Table	Control
1	Type	TypeA, TypeB	0-1	
2	Room Size	0.1-20.0	0-127	table#6
3	Diffusion	0-10	0-10	
4	Initial Delay	0-127	0-127	table#5
5	Feedback Level	-63+63	1-127	
6	HPF Cutoff	Thru-8.0kHz	0-52	table#3
7	LPF Cutoff	1.0k-Thru	34-60	table#3
8				
9				
10	Dry/Wet	D63>W - D=W - D<W63	1-127	●
11	Liveness	0-10	0-10	
12	Density	0-3	0-3	
13	High Damp	0.1-1.0	1-10	
14				
15				
16				

KARAOKE1,2,3 (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	Delay Time	0-127	0-127	table#7
2	Feedback Level	-63+63	1-127	
3	HPF Cutoff	Thru-8.0kHz	0-52	table#3
4	LPF Cutoff	1.0k-Thru	34-60	table#3
5				
6				
7				
8				
9				
10	Dry/Wet	D63>W - D=W - D<W63	1-127	●
11				
12				
13				
14				
15				
16				

CHORUS1,2,3,4, CELESTE1,2,3,4 (chorus, variation, insertion block)

No.	Parameter	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1
2	LFO Depth	0-127	0-127	
3	Feedback Level	-63+63	1-127	
4	Delay Offset	0-127	0-127	table#2
5				
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3
7	EQ Low Gain	-12+12dB	52-76	
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3
9	EQ High Gain	-12+12dB	52-76	
10	Dry/Wet	D63>W - D=W - D<W63	1-127	●
11				
12	EQ Mid Frequency	100Hz-10.0kHz (variation block)	14-54	table#3
13	EQ Mid Gain	-12+12dB (variation block)	52-76	
14	EQ Mid Width	1.0-12.0 (variation block)	10-120	
15				
16	Input Mode	mono/stereo	0-1	

FLANGER1,2,3 (chorus, variation, insertion block)

No.	Parameter	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1
2	LFO Depth	0-127	0-127	
3	Feedback Level	-63+63	1-127	
4	Delay Offset	0-127	0-127	table#2
5				
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3
7	EQ Low Gain	-12+12dB	52-76	
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3
9	EQ High Gain	-12+12dB	52-76	
10	Dry/Wet	D63>W - D=W - D<W63	1-127	●
11				
12	EQ Mid Frequency	100Hz-10.0kHz (variation block)	14-54	table#3
13	EQ Mid Gain	-12+12dB (variation block)	52-76	
14	EQ Mid Width	1.0-12.0 (variation block)	10-120	
15	LFO Phase Difference	-180+180deg(resolution=3deg.)	4-124	
16				

SYMPHONIC (chorus, variation, insertion block)

No.	Parameter	Value	See Table	Control
1	LFO Frequency	0.00Hz–39.7Hz	0–127	table#1
2	LFO Depth	0–127	0–127	
3	Delay Offset	0–127	table#2	
4				
5				
6	EQ Low Frequency	32Hz–2.0kHz	4–40	table#3
7	EQ Low Gain	-12→+12dB	52–76	
8	EQ High Frequency	500Hz–16.0kHz	28–58	table#3
9	EQ High Gain	-12→+12dB	52–76	
10	Dry/Wet	D63>W – D=W – D<W63	1–127	●
11	EQ Mid Frequency	100Hz–10.0kHz (variation block)	14–54	table#3
12	EQ Mid Gain	-12→+12dB (variation block)	52–76	
13	EQ Mid Width	1.0–12.0 (variation block)	10–120	
14				
15				
16				

ENSEMBLE DETUNE (chorus, variation, insertion block)

No.	Parameter	Value	See Table	Control
1	Detune	-50→+50cent	14–114	
2	Lch Init Delay	0–127	0–127	table#2
3	Rch Init Delay	0–127	0–127	table#2
4				
5				
6				
7				
8				
9				
10	Dry/Wet	D63>W – D=W – D<W63	1–127	●
11	EQ Low Frequency	32Hz–2.0kHz (variation, insertion block)	4–40	table#3
12	EQ Low Gain	-12→+12dB (variation, insertion block)	52–76	
13	EQ High Frequency	500Hz–16.0kHz (variation, insertion block)	28–58	table#3
14	EQ High Gain	-12→+12dB (variation, insertion block)	52–76	
15				
16				

AMBIENCE (variation block)

No.	Parameter	Value	See Table	Control
1	Delay Time	0–127	0–127	table#2
2	Output Phase	normal/invers	0–1	
3				
4				
5				
6	EQ Low Frequency	32Hz–2.0kHz	4–40	table#3
7	EQ Low Gain	-12→+12dB	52–76	
8	EQ High Frequency	500Hz–16.0kHz	28–58	table#3
9	EQ High Gain	-12→+12dB	52–76	
10	Dry/Wet	D63>W – D=W – D<W63	1–127	●
11				
12				
13				
14				
15				
16				

ROTARY SPEAKER (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	LFO Frequency	0.00Hz–39.7Hz	0–127	table#1
2	LFO Depth	0–127	0–127	
3				
4				
5				
6	EQ Low Frequency	32Hz–2.0kHz	4–40	table#3
7	EQ Low Gain	-12→+12dB	52–76	
8	EQ High Frequency	500Hz–16.0kHz	28–58	table#3
9	EQ High Gain	-12→+12dB	52–76	
10	Dry/Wet	D63>W – D=W – D<W63	1–127	●
11	EQ Mid Frequency	100Hz–10.0kHz (variation block)	14–54	table#3
12	EQ Mid Gain	-12→+12dB (variation block)	52–76	
13	EQ Mid Width	1.0–12.0 (variation block)	10–120	
14				
15				
16				

2WAY ROTARY SPEAKER (variation block)

No.	Parameter	Value	See Table	Control
1	Rotor Speed	0.0Hz–39.7Hz	0–127	table#1
2	Drive Low	0–127	0–127	
3	Drive High	0–127	0–127	
4	Low/High	L63>H – L=H – L<H63	1–127	
5				
6	EQ Low Frequency	32Hz–2.0kHz	4–40	table#3
7	EQ Low Gain	-12→+12dB	52–76	
8	EQ High Frequency	500Hz–16.0kHz	28–58	table#3
9	EQ High Gain	-12→+12dB	52–76	
10				
11	Crossover Frequency	100Hz–10.0kHz	14–54	table#3
12	Mic L-R Angle	0deg–180deg(resolution=3deg.)	0–60	
13				
14				
15				
16				

TREMOLO (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	LFO Frequency	0.00Hz–39.7Hz	0–127	table#1
2	AM Depth	0–127	0–127	
3	PM Depth	0–127	0–127	
4				
5				
6	EQ Low Frequency	32Hz–2.0kHz	4–40	table#3
7	EQ Low Gain	-12→+12dB	52–76	
8	EQ High Frequency	500Hz–16.0kHz	28–58	table#3
9	EQ High Gain	-12→+12dB	52–76	
10				
11	EQ Mid Frequency	100Hz–10.0kHz (variation block)	14–54	table#3
12	EQ Mid Gain	-12→+12dB (variation block)	52–76	
13	EQ Mid Width	1.0–12.0 (variation block)	10–120	
14	LFO Phase Difference	-180→+180deg(resolution=3deg.)	4–124	
15	Input Mode	mono/stereo	0–1	
16				

AUTO PAN (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	LFO Frequency	0.00Hz–39.7Hz	0–127	table#1
2	L/R Depth	0–127	0–127	
3	F/R Depth	0–127	0–127	
4	PAN Direction	L<->R,L->R,L<-R,Lturn,Rturn,L/R	0–5	
5				
6	EQ Low Frequency	32Hz–2.0kHz	4–40	table#3
7	EQ Low Gain	-12→+12dB	52–76	
8	EQ High Frequency	500Hz–16.0kHz	28–58	table#3
9	EQ High Gain	-12→+12dB	52–76	
10				
11	EQ Mid Frequency	100Hz–10.0kHz (variation block)	14–54	table#3
12	EQ Mid Gain	-12→+12dB (variation block)	52–76	
13	EQ Mid Width	1.0–12.0 (variation block)	10–120	
14				
15				
16				

PHASER 1 (chorus, variation, insertion block)

No.	Parameter	Value	See Table	Control
1	LFO Frequency	0.00Hz–39.7Hz	0–127	table#1
2	LFO Depth	0–127	0–127	
3	Phase Shift Offset	0–127	0–127	
4	Feedback Level	-63→+63	1–127	
5				
6	EQ Low Frequency	32Hz–2.0kHz	4–40	table#3
7	EQ Low Gain	-12→+12dB	52–76	
8	EQ High Frequency	500Hz–16.0kHz	28–58	table#3
9	EQ High Gain	-12→+12dB	52–76	
10	Dry/Wet	D63>W – D=W – D<W63	1–127	●
11	Stage	4, 5, 6 (chorus, insertion block)	4–6	
12	Diffusion	4–12 (variation block)	4–12	
13		mono/stereo	0–1	
14				
15				
16				

PHASER 2 (variation block)

No.	Parameter	Value	See Table	Control
1	LFO Frequency	0.00Hz–39.7Hz	0–127	table#1
2	LFO Depth	0–127	0–127	
3	Phase Shift Offset	0–127	0–127	
4	Feedback Level	-63→+63	1–127	
5				
6	EQ Low Frequency	32Hz–2.0kHz	4–40	table#3
7	EQ Low Gain	-12→+12dB	52–76	
8	EQ High Frequency	500Hz–16.0kHz	28–58	table#3
9	EQ High Gain	-12→+12dB	52–76	
10	Dry/Wet	D63>W – D=W – D<W63	1–127	●
11	Stage	3, 4, 5, 6	3–6	
12				
13	LFO Phase Difference	-180deg→+180deg(resolution=3deg.)	4–124	
14				
15				
16				

DISTORTION, OVERDRIVE (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	Drive	0–127	0–127	table#1
2	EQ Low Frequency	32Hz–2.0kHz	4–40	table#3
3	EQ Low Gain	-12→+12dB	52–76	
4	LPF Cutoff	1.0k–Thru	34–60	table#3
5	Output Level	0–127	0–127	
6				
7	EQ Mid Frequency	100Hz–10.0kHz	14–54	table#3
8	EQ Mid Gain	-12→+12dB	52–76	
9	EQ Mid Width	1.0–12.0	10–120	
10	Dry/Wet	D63>W – D=W – D<W63	1–127	●
11	Edge(Clip Curve)	0–127	0–127	mild-sharp
12				
13				
14				
15				
16				

COMP+DIST (variation block)

No.	Parameter	Value	See Table	Control
1	Drive	0–127	0–127	table#1
2	EQ Low Frequency	32Hz–2.0kHz	4–40	table#3
3	EQ Low Gain	-12→+12dB	52–76	
4	LPF Cutoff	1.0k–Thru	34–60	table#3
5	Output Level	0–127	0–127	
6				
7	EQ Mid Frequency	100Hz–10.0kHz	14–54	table#3
8	EQ Mid Gain	-12→+12dB	52–76	
9	EQ Mid Width	1.0–12.0	10–120	
10	Dry/Wet	D63>W – D=W – D<W63	1–127	●
11	Edge(Clip Curve)	0–127	0–127	mild-sharp
12	Attack	1ms–40ms	0–19	table#8
13	Release	10ms–680ms	0–15	table#9
14	Threshold	-48dB–6dB	79–121	
15	Ratio	1.0–20.0	0–7	table#10
16				

AMP SIMULATOR (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	Drive	0-127		●
2	AMP Type	Off,Stack,Combo,Tube		
3	LPF Cutoff	1.0k-Thru	table#3	
4	Output Level	0-127		
5				
6				
7				
8				
9	Dry/Wet	D63>W - D=W - D<W63		
10				
11	Edge(Clip Curve)	0-127		mild-sharp
12				
13				
14				
15				
16				

3BAND EQ(MONO) (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	EQ Low Gain	-12+12dB		
2	EQ Mid Frequency	100Hz-10.0kHz	table#3	
3	EQ Mid Gain	-12+12dB		
4	EQ Mid Width	1.0-12.0		
5	EQ High Gain	-12+12dB		
6	EQ Low Frequency	50Hz-2.0kHz	table#3	
7	EQ High Frequency	500Hz-16.0kHz	table#3	
8				
9				
10				
11				
12				
13				
14				
15	Input Mode	mono/stereo		0-1
16				

2BAND EQ(STEREO) (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	EQ Low Frequency	32Hz-2.0kHz	table#3	
2	EQ Low Gain	-12+12dB		
3	EQ High Frequency	500Hz-16.0kHz	table#3	
4	EQ High Gain	-12+12dB		
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

AUTO WAH (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	table#1	
2	LFO Depth	0-127		
3	Cutoff Frequency Offset	0-127		●
4	Resonance	1.0-12.0		
5				
6	EQ Low Frequency	32Hz-2.0kHz	table#3	
7	EQ Low Gain	-12+12dB		
8	EQ High Frequency	500Hz-16.0kHz	table#3	
9	EQ High Gain	-12+12dB		
10	Dry/Wet	D63>W - D=W - D<W63		
11	Drive	0-127		
12				
13				
14				
15				
16				

AUTO WAH+DIST, AUTO WHA+ODRV (variation block)

No.	Parameter	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	table#1	
2	LFO Depth	0-127		
3	Cutoff Frequency Offset	0-127		●
4	Resonance	1.0-12.0		
5				
6	EQ Low Frequency	32Hz-2.0kHz	table#3	
7	EQ Low Gain	-12+12dB		
8	EQ High Frequency	500Hz-16.0kHz	table#3	
9	EQ High Gain	-12+12dB		
10	Dry/Wet	D63>W - D=W - D<W63		
11	Drive	0-127		
12	EQ Low Gain(distortion)	-12+12dB		
13	EQ Mid Gain(distortion)	-12+12dB		
14	LPF Cutoff	1.0kHz-thru	table#3	
15	Output Level	0-127		
16				

TOUCH WAH 1 (variation, insertion block), TOUCH WAH+DIST (variation block)

No.	Parameter	Value	See Table	Control
1	Sensitive	0-127		
2	Cutoff Frequency Offset	0-127		●
3	Resonance	1.0-12.0		
4				
5				
6	EQ Low Frequency	32Hz-2.0kHz	table#3	
7	EQ Low Gain	-12+12dB		
8	EQ High Frequency	500Hz-16.0kHz	table#3	
9	EQ High Gain	-12+12dB		
10	Dry/Wet	D63>W - D=W - D<W63		
11	Drive	0-127		
12				
13				
14				
15				
16				

TOUCH WAH 2 (variation, insertion block), TOUCH WAH+ODRV (variation block)

No.	Parameter	Value	See Table	Control
1	Sensitive	0-127		
2	Cutoff Frequency Offset	0-127		●
3	Resonance	1.0-12.0		
4				
5				
6	EQ Low Frequency	32Hz-2.0kHz	table#3	
7	EQ Low Gain	-12+12dB		
8	EQ High Frequency	500Hz-16.0kHz	table#3	
9	EQ High Gain	-12+12dB		
10	Dry/Wet	D63>W - D=W - D<W63		
11	Drive	0-127		
12	EQ Low Gain(distortion)	-12+12dB		
13	EQ Mid Gain(distortion)	-12+12dB		
14	LPF Cutoff	1.0kHz-thru	table#3	
15	Output Level	0-127		
16				

PITCH CHANGE 1 (variation block)

No.	Parameter	Value	See Table	Control
1	Pitch	-24+24		
2	Initial Delay	0-127	table#7	
3	Fine 1	-50Hz+50Hz		
4	Fine 2	-50Hz+50Hz		
5	Feedback Level	-99+99%		
6				
7				
8				
9				
10	Dry/Wet	D63>W - D=W - D<W63		●
11	Pan 1	L63-R63		
12	Output Level 1	0-127		
13	Pan 2	L63-R63		
14	Output Level 2	0-127		
15				
16				

PITCH CHANGE 2 (variation block)

No.	Parameter	Value	See Table	Control
1	Pitch	-24+24		
2	Initial Delay	0-127	table#7	
3	Fine 1	-50+50cent		
4	Fine 2	-50+50cent		
5	Feedback Level	-99+99%		
6				
7				
8				
9				
10	Dry/Wet	D63>W - D=W - D<W63		●
11	Pan 1	L63-R63		
12	Output Level 1	0-127		
13	Pan 2	L63-R63		
14	Output Level 2	0-127		
15				
16				

COMPRESSOR (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	Attack	1-40ms		
2	Release	10-680ms	table#8	
3	Threshold	-48-6dB	table#9	
4	Ratio	1.0-20.0		
5	Output Level	0-127	table#10	
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

NOISE GATE (variation, insertion block)

No.	Parameter	Value	See Table	Control
1	Attack	1-40ms	table#8	
2	Release	10-680ms	table#9	
3	Threshold	-72-30dB		
4	Output Level	0-127		
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

< Table 1-11 > Effect Data Value Assign Table

Table#1
LFO Frequency

Data	Value	Data	Value	Data	Value	Data	Value
0	0.00	32	1.35	64	2.69	96	8.41
1	0.04	33	1.39	65	2.78	97	8.75
2	0.08	34	1.43	66	2.86	98	9.08
3	0.13	35	1.47	67	2.94	99	9.42
4	0.17	36	1.51	68	3.03	100	9.76
5	0.21	37	1.56	69	3.11	101	10.1
6	0.25	38	1.60	70	3.20	102	10.8
7	0.29	39	1.64	71	3.28	103	11.4
8	0.34	40	1.68	72	3.37	104	12.1
9	0.38	41	1.72	73	3.45	105	12.8
10	0.42	42	1.77	74	3.53	106	13.5
11	0.46	43	1.81	75	3.62	107	14.1
12	0.51	44	1.85	76	3.70	108	14.8
13	0.55	45	1.89	77	3.87	109	15.5
14	0.59	46	1.94	78	4.04	110	16.2
15	0.63	47	1.98	79	4.21	111	16.8
16	0.67	48	2.02	80	4.37	112	17.5
17	0.72	49	2.06	81	4.54	113	18.2
18	0.76	50	2.10	82	4.71	114	19.5
19	0.80	51	2.15	83	4.88	115	20.9
20	0.84	52	2.19	84	5.05	116	22.2
21	0.88	53	2.23	85	5.22	117	23.6
22	0.93	54	2.27	86	5.38	118	24.9
23	0.97	55	2.31	87	5.55	119	26.2
24	1.01	56	2.36	88	5.72	120	27.6
25	1.05	57	2.40	89	6.06	121	28.9
26	1.09	58	2.44	90	6.39	122	30.3
27	1.14	59	2.48	91	6.73	123	31.6
28	1.18	60	2.52	92	7.07	124	33.0
29	1.22	61	2.57	93	7.40	125	34.3
30	1.26	62	2.61	94	7.74	126	37.0
31	1.30	63	2.65	95	8.08	127	39.7

Table#4
Reverb time

Data	Value	Data	Value	Data	Value
0	0.3	32	3.5	64	17.0
1	0.4	33	3.6	65	18.0
2	0.5	34	3.7	66	19.0
3	0.6	35	3.8	67	20.0
4	0.7	36	3.9	68	25.0
5	0.8	37	4.0	69	30.0
6	0.9	38	4.1		
7	1.0	39	4.2		
8	1.1	40	4.3		
9	1.2	41	4.4		
10	1.3	42	4.5		
11	1.4	43	4.6		
12	1.5	44	4.7		
13	1.6	45	4.8		
14	1.7	46	4.9		
15	1.8	47	5.0		
16	1.9	48	5.5		
17	2.0	49	6.0		
18	2.1	50	6.5		
19	2.2	51	7.0		
20	2.3	52	7.5		
21	2.4	53	8.0		
22	2.5	54	8.5		
23	2.6	55	9.0		
24	2.7	56	9.5		
25	2.8	57	10.0		
26	2.9	58	11.0		
27	3.0	59	12.0		
28	3.1	60	13.0		
29	3.2	61	14.0		
30	3.3	62	15.0		
31	3.4	63	16.0		

Table#7
Delay Time(400.Oms)

Data	Value	Data	Value	Data	Value	Data	Value
0	0.1	32	100.9	64	201.6	96	302.4
1	3.2	33	104.0	65	204.8	97	305.5
2	6.4	34	107.2	66	207.9	98	308.7
3	9.5	35	110.3	67	211.1	99	311.8
4	12.7	36	113.5	68	214.2	100	315.0
5	15.8	37	116.6	69	217.4	101	318.1
6	19.0	38	119.8	70	220.5	102	321.3
7	22.1	39	122.9	71	223.7	103	324.4
8	25.3	40	126.1	72	226.8	104	327.6
9	28.4	41	129.2	73	230.0	105	330.7
10	31.6	42	132.4	74	233.1	106	333.9
11	34.7	43	135.5	75	236.3	107	337.0
12	37.9	44	138.6	76	239.4	108	340.2
13	41.0	45	141.8	77	242.6	109	343.3
14	44.2	46	144.9	78	245.7	110	346.5
15	47.3	47	148.1	79	248.9	111	349.6
16	50.5	48	151.2	80	252.0	112	352.8
17	53.6	49	154.4	81	255.2	113	355.9
18	56.8	50	157.5	82	258.3	114	359.1
19	59.9	51	160.7	83	261.5	115	362.2
20	63.1	52	163.8	84	264.6	116	365.4
21	66.2	53	167.0	85	267.7	117	368.5
22	69.4	54	170.1	86	270.9	118	371.7
23	72.5	55	173.3	87	274.0	119	374.8
24	75.7	56	176.4	88	277.2	120	378.0
25	78.8	57	179.6	89	280.3	121	381.1
26	82.0	58	182.7	90	283.5	122	384.3
27	85.1	59	185.9	91	286.6	123	387.4
28	88.3	60	189.0	92	289.8	124	390.6
29	91.4	61	192.2	93	292.9	125	393.7
30	94.6	62	195.3	94	296.1	126	396.9
31	97.7	63	198.5	95	299.2	127	400.0

Table#11
Reverb Width;Depth;Height

Data	Value	Data	Value	Data	Value	Data	Value
0	0.5	32	8.8	64	17.6	96	27.5
1	0.8	33	9.1	65	17.9	98	28.1
2	1.0	34	9.4	66	18.2	99	28.5
3	1.3	35	9.6	67	18.5	100	28.8
4	1.5	36	9.9	68	18.8	101	29.2
5	1.8	37	10.2	69	19.1	102	29.5
6	2.0	38	10.4	70	19.4	103	29.9
7	2.3	39	10.7	71	19.7	104	30.2
8	2.6	40	11.0	72	20.0		
9	2.8	41	11.2	73	20.2		
10	3.1	42	11.5	74	20.5		
11	3.3	43	11.8	75	20.8		
12	3.6	44	12.1	76	21.1		
13	3.9	45	12.3	77	21.4		
14	4.1	46	12.6	78	21.7		
15	4.4	47	12.9	79	22.0		
16	4.6	48	13.1	80	22.4		
17	4.9	49	13.4	81	22.7		
18	5.2	50	13.7	82	23.0		
19	5.4	51	14.0	83	23.3		
20	5.7	52	14.2	84	23.6		
21	5.9	53	14.5	85	23.9		
22	6.2	54	14.8	86	24.2		
23	6.5	55	15.1	87	24.5		
24	6.7	56	15.4	88	24.9		
25	7.0	57	15.6	89	25.2		
26	7.2	58	15.9	90	25.5		
27	7.5	59	16.2	91	25.8		
28	7.8	60	16.5	92	26.1		
29	8.0	61	16.8	93	26.5		
30	8.3	62	17.1	94	26.8		
31	8.6	63	17.3	95	27.1		

Table#2
Modulation Delay Offset

Data	Value	Data	Value	Data	Value	Data	Value
0	0.0	32	3.2	64	6.4	96	9.6
1	0.1	33	3.3	65	6.5	97	9.7
2	0.2	34	3.4	66	6.6	98	9.8
3	0.3	35	3.5	67	6.7	99	9.9
4	0.4	36	3.6	68	6.8	100	10.0
5	0.5	37	3.7	69	6.9	101	11.1
6	0.6	38	3.8	70	7.0	102	12.2
7	0.7	39	3.9	71	7.1	103	13.3
8	0.8	40	4.0	72	7.2	104	14.4
9	0.9	41	4.1	73	7.3	105	15.5
10	1.0	42	4.2	74	7.4	106	17.1
11	1.1	43	4.3	75	7.5	107	18.6
12	1.2	44	4.4	76	7.6	108	20.2
13	1.3	45	4.5	77	7.7	109	21.8
14	1.4	46	4.6	78	7.8	110	23.3
15	1.5	47	4.7	79	7.9	111	24.9
16	1.6	48	4.8	80	8.0	112	26.5
17	1.7	49	4.9	81	8.1	113	28.0
18	1.8	50	5.0	82	8.2	114	29.6
19	1.9	51	5.1	83	8.3	115	31.2
20	2.0	52	5.2	84	8.4	116	32.8
21	2.1	53	5.3	85	8.5	117	34.3
22	2.2	54	5.4	86	8.6	118	35.9
23	2.3	55	5.5	87	8.7	119	37.5
24	2.4	56	5.6	88	8.8	120	39.0
25	2.5	57	5.7	89	8.9	121	40.6
26	2.6	58	5.8	90	9.0	122	42.2
27	2.7	59	5.9	91	9.1	123	43.7
28	2.8	60	6.0	92	9.2	124	45.3
29	2.9	61	6.1	93	9.3	125	46.9
30	3.0	62	6.2	94	9.4	126	48.4
31	3.1	63	6.3	95	9.5	127	50.0

Table#5
Delay Time(200.Oms)

Data	Value	Data	Value	Data	Value	Data	Value
0	0.1	32	50.5	64	100.8	96	151.2
1	1.7	33	52.0	65	102.4	97	152.8
2	3.2	34	53.6	66	104.0	98	154.4
3	4.8	35	55.2	67	105.6	99	155.9
4	6.4	36	56.8	68	107.1	100	157.5
5	8.0	37	58.3	69	108.7	101	159.1
6	9.5	38	59.9	70	110.3	102	160.6
7	11.1	39	61.5	71	111.9	103	162.2
8	12.7	40	63.1	72	113.4	104	163.8
9	14.3	41	64.6	73	115.0	105	165.4
10	15.8	42	66.2	74	116.6	106	166.9
11	17.4	43	67.8	75	118.2	107	168.5
12	19.0	44	69.4	76	119.7	108	170.1
13	20.6	45	70.9	77	121.3	109	171.7
14	22.1	46	72.5	78	122.9	110	173.2
15	23.7	47	74.1	79	124.4	111	174.8
16	25.3	48	75.7	80	126.0	112	176.4
17	26.9	49	77.2	81	1		

Voice List

Category	Voice Name	Voice #			
		MSB #	LSB #	Program Change #	
Piano	Grand Piano	0	112	0	
	Bright Piano	0	112	1	
	Mellow Piano	0	114	0	
	Rock Piano	0	113	1	
	Mono Piano	0	113	0	
	Piano EP	0	115	2	
	Honky Tonk	0	112	3	
	Harpsichord1	0	112	6	
	Harpsichord2	0	113	6	
	Grand Harpsi	0	115	6	
	E.Piano	Elec. Piano	0	113	4
DX EP		0	112	5	
CP80		0	116	2	
Jazz EP 1		0	116	4	
DX EP Modern		0	115	5	
Stage EP		0	117	4	
Galaxy EP		0	113	5	
Funky EP		0	114	4	
Hyper EP		0	115	4	
Dream EP		0	114	5	
Jazz EP 2		0	112	4	
Wire EP		0	113	5	
Tremolo EP		0	118	4	
Clavi.		0	112	7	
Vibes		Vibes	0	112	11
	Jazz Vibes	0	113	11	
	Celesta	0	112	8	
	Marimba	0	112	12	
	Glockenspiel	0	112	9	
	Xylophone	0	112	13	
	TubularBells	0	112	14	
	Music Box	0	112	10	
	Steel Drums	0	112	114	
	Guitar	Gut Guitar	0	112	24
		Folk Guitar	0	112	25
Jazz Guitar1		0	112	26	
Banjo		0	112	105	
Harp		0	112	46	
Nylon Guitar		0	113	24	
Steel Guitar		0	113	25	
Jazz Guitar2		0	113	26	
Clean Guitar		0	112	27	
Dist. Guitar		0	112	30	
12Str.Guitar		0	115	25	
Mute Guitar		0	112	28	
HawaiianGtr.		0	114	26	
OctaveGuitar		0	115	26	
Clavi. Tone / Synth	Clavinova T.	0	112	88	
	NewAge Pad1	0	113	88	
	NewAge Pad2	0	115	88	
	Square Lead	0	112	80	
	Saw. Lead	0	112	81	
	Synth Pf	0	114	88	

Category	Voice Name	Voice #			
		MSB #	LSB #	Program Change #	
Clavi. Tone / Synth	Strings Pad	0	112	51	
	Atmosphere	0	112	99	
	Brass Bells	0	112	93	
	SynthCrystal	0	112	96	
	Synth Bell	0	116	88	
	Brass Pad	0	112	90	
	Choir Pad	0	112	91	
	Cosmic Pad	0	112	101	
	Quack Lead	0	112	87	
	Organ	Pipe Organ	0	112	19
		Class. Organ	0	113	19
Chapel Organ		0	115	19	
Jazz Organ		0	112	16	
Accordion		0	115	21	
Perc. Organ		0	112	17	
Trem. Organ		0	112	18	
Rock Organ		0	113	18	
Theatre Org.		0	114	16	
Organ Combi.		0	116	16	
Elec. Organ		0	113	16	
French Accrd		0	112	21	
Tango Accrd.		0	112	23	
Strings / Choir	Orch.Strings	0	115	48	
	Strings	0	112	48	
	Violin	0	112	40	
	Pizzicato	0	112	45	
	Choir	0	115	52	
	Class. Strs.	0	114	48	
	PopularStrs.	0	116	48	
	StringsSlow1	0	112	49	
	StringsSlow2	0	112	49	
	Choir Oohs	0	112	53	
	ChamberStrs.	0	113	48	
	Cello	0	112	42	
	Syn. Strings	0	112	50	
	Synth Choir	0	112	52	
OrchestraHit	0	112	55		
Brass	BigBnd Brass	0	115	61	
	Small Brass	0	113	61	
	Trumpet	0	112	56	
	Trombone	0	112	57	
	French Horn	0	112	60	
	BrassSection	0	112	61	
	Octave Brass	0	114	61	
	MuteTrumpet1	0	113	59	
	MuteTrumpet2	0	112	59	
	Tuba	0	112	58	
	Synth Brass1	0	112	62	
	Synth Brass2	0	112	63	
	Soft Trumpet	0	112	56	
	Flugel Horn	0	113	56	
	Brass&Sax	0	116	61	

Category	Voice Name	Voice #			
		MSB #	LSB #	Program Change #	
Sax / Flute	Tenor Sax	0	112	66	
	Alto Sax	0	112	65	
	Flute	0	112	73	
	Oboe	0	112	68	
	Clarinet	0	112	71	
	Soprano Sax	0	112	64	
	Baritone Sax	0	112	67	
	Pan Flute	0	112	75	
	Bassoon	0	112	70	
	Harmonica	0	112	22	
	Piccolo	0	112	72	
	Recorder	0	112	74	
	Sax&Clarinet	0	113	65	
	Sax Section	0	114	65	
Bass	WindEnsemble	0	113	73	
	Acous.Bass 1	0	112	32	
	Acous.Bass 2	0	113	32	
	E. Bass Slap	0	112	33	
	Finger Bass	0	114	33	
	Timpani	0	112	47	
	Elec. Bass	0	113	33	
	FretlessBass	0	112	35	
	Slap Bass	0	112	36	
	Synth Bass 1	0	112	38	
	Synth Bass 2	0	112	39	
	Pick Bass	0	112	34	
	Organ Bass	0	117	16	
	Bass&Cymbal	0	114	32	
	Drums	Standard Kit	127	0	0
		Standard2Kit	127	0	1
		Room Kit	127	0	8
Rock Kit		127	0	16	
Electro Kit		127	0	24	
Analog Kit		127	0	25	
Dance Kit		127	0	27	
Jazz Kit		127	0	32	
Brush Kit		127	0	40	
Classic Kit		127	0	48	
SFX1 Kit		126	0	0	
SFX2 Kit		126	0	1	
XG	GrandPno	0	0	0	
	GrndPnoK	0	1	0	
	MelloGrP	0	18	0	
	PianoStr	0	40	0	
	Dream	0	41	0	
	BritePno	0	0	1	
	BritPnoK	0	1	1	
	El.Grand	0	0	2	
	ElGrPnoK	0	1	2	
	Det.CP80	0	32	2	
	LayerCP1	0	40	2	
	LayerCP2	0	41	2	
	HnkyTonk	0	0	3	

Category	Voice Name	Voice #		
		MSB #	LSB #	Program Change #
XG	HnkyTnkK	0	1	3
	E.Piano1	0	0	4
	El.Pno1K	0	1	4
	MelloEP1	0	18	4
	Chor.EP1	0	32	4
	HardEl.P	0	40	4
	VX El.P1	0	45	4
	60sEl.P1	0	64	4
	E.Piano2	0	0	5
	El.Pno2K	0	1	5
	Chor.EP2	0	32	5
	DX Hard	0	33	5
	DXLegend	0	34	5
	DX Phase	0	40	5
	DX+Analg	0	41	5
	DXKotoEP	0	42	5
	VX El.P2	0	45	5
	Harpsi.	0	0	6
	Harpsi.K	0	1	6
	Harpsi.2	0	25	6
	Harpsi.3	0	35	6
	Clavi	0	0	7
	Clavi K	0	1	7
	ClaviWah	0	27	7
	PulseClv	0	64	7
	PierceCl	0	65	7
	Celesta	0	0	8
	Glocken	0	0	9
	MusicBox	0	0	10
	Orgel	0	64	10
	Vibes	0	0	11
	Vibes K	0	1	11
	HardVibe	0	45	11
	Marimba	0	0	12
	MarimbaK	0	1	12
	SineMrmb	0	64	12
	Balimba	0	97	12
	Log Drum	0	98	12
	Xylophon	0	0	13
	TubulBel	0	0	14
	ChrChBel	0	96	14
	Carillon	0	97	14
Dulcimer	0	0	15	
Dulcimer2	0	35	15	
Cimbalom	0	96	15	
Santur	0	97	15	
DrawOrgn	0	0	16	
DetDrwOr	0	32	16	
60sDrOr1	0	33	16	
60sDrOr2	0	34	16	
70sDrOr1	0	35	16	
DrawOrg2	0	36	16	
60sDrOr3	0	37	16	

Voice List

Category	Voice Name	Voice #		
		MSB #	LSB #	Program Change #
XG	EvenBar	0	38	16
	16+2'2/3	0	40	16
	Organ Ba	0	64	16
	70sDrOr2	0	65	16
	CheezOrg	0	66	16
	DrawOrg3	0	67	16
	PercOrgn	0	0	17
	70sPcOr1	0	24	17
	DetPrcOr	0	32	17
	Lite Org	0	33	17
	PercOrg2	0	37	17
	RockOrgn	0	0	18
	RotaryOr	0	64	18
	SloRotar	0	65	18
	FstRotar	0	66	18
	ChrchOrg	0	0	19
	ChurOrg3	0	32	19
	ChurOrg2	0	35	19
	NotreDam	0	40	19
	OrgFlute	0	64	19
	TrmOrgFl	0	65	19
	ReedOrgn	0	0	20
	Puff Org	0	40	20
	Acordion	0	0	21
	AccordIt	0	32	21
	Harmnica	0	0	22
	Harmo. 2	0	32	22
	TangoAcd	0	0	23
	TngoAcd2	0	64	23
	NylonGtr	0	0	24
	NylonGt2	0	16	24
	NylonGt3	0	25	24
	VelGtHrm	0	43	24
	Ukulele	0	96	24
	SteelGtr	0	0	25
	SteelGt2	0	16	25
	12StrGtr	0	35	25
	Nyln&Stl	0	40	25
	Stl&Body	0	41	25
	Mandolin	0	96	25
	Jazz Gtr	0	0	26
	MelloGtr	0	18	26
	Jazz Amp	0	32	26
	CleanGtr	0	0	27
	ChorusGt	0	32	27
	Mute Gtr	0	0	28
	FunkGtr1	0	40	28
	MuteStlG	0	41	28
FunkGtr2	0	43	28	
Jazz Man	0	45	28	
Ovrdrive	0	0	29	
Gt.Pinch	0	43	29	
Dist.Gtr	0	0	30	

Category	Voice Name	Voice #		
		MSB #	LSB #	Program Change #
XG	FeedbkGt	0	40	30
	FeedbGt2	0	41	30
	GtrHarmo	0	0	31
	GtFeedbk	0	65	31
	GtrHrmo2	0	66	31
	Aco.Bass	0	0	32
	JazzRthm	0	40	32
	VXUprght	0	45	32
	FngrBass	0	0	33
	FingrDrk	0	18	33
	FlangeBa	0	27	33
	Ba&DstEG	0	40	33
	FngrSlap	0	43	33
	FngBass2	0	45	33
	Mod.Bass	0	65	33
	PickBass	0	0	34
	MutePkBa	0	28	34
	Fretless	0	0	35
	Fretles2	0	32	35
	Fretles3	0	33	35
	Fretles4	0	34	35
	SynFretl	0	96	35
	SmthFrt1	0	97	35
	SlapBas1	0	0	36
	ResoSlap	0	27	36
	PunchThm	0	32	36
	SlapBas2	0	0	37
	VeloSlap	0	43	37
	SynBass1	0	0	38
	SynBa1Dk	0	18	38
	FastResB	0	20	38
	AcidBass	0	24	38
	Civ Bass	0	35	38
	TechnoBa	0	40	38
	Orbiter	0	64	38
	Sqr.Bass	0	65	38
	RubberBa	0	66	38
	Hammer	0	96	38
	SynBass2	0	0	39
	MelloSBa	0	6	39
	Seq Bass	0	12	39
	ClkSynBa	0	18	39
	SynBa2Dk	0	19	39
	SmthSynB	0	32	39
ModulrBa	0	40	39	
DX Bass	0	41	39	
X WireBa	0	64	39	
Violin	0	0	40	
Slow Vln	0	8	40	
Viola	0	0	41	
Cello	0	0	42	
Contrabs	0	0	43	
Trem.Str	0	0	44	

Category	Voice Name	Voice #		
		MSB #	LSB #	Program Change #
XG	SlwTrStr	0	8	44
	Susp. Str	0	40	44
	Pizz.Str	0	0	45
	Harp	0	0	46
	YangChin	0	40	46
	Timpani	0	0	47
	Strings1	0	0	48
	S.Strngs	0	3	48
	Slow Str	0	8	48
	Arco Str	0	24	48
	60sStrng	0	35	48
	Orchestr	0	40	48
	Orchstr2	0	41	48
	TremOrch	0	42	48
	Velo.Str	0	45	48
	Strings2	0	0	49
	S.SlwStr	0	3	49
	LegatoSt	0	8	49
	Warm Str	0	40	49
	Kingdom	0	41	49
	70s Str	0	64	49
	Strings3	0	65	49
	Syn Str1	0	0	50
	Reso Str	0	27	50
	Syn Str4	0	64	50
	Syn Str5	0	65	50
	Syn Str2	0	0	51
	ChoirAah	0	0	52
	S.Choir	0	3	52
	Ch.Aahs2	0	16	52
	MelChoir	0	32	52
	ChoirStr	0	40	52
	VoiceOoh	0	0	53
	SynVoice	0	0	54
	SyVoice2	0	40	54
	Choral	0	41	54
	AnaVoice	0	64	54
	Orch.Hit	0	0	55
	OrchHit2	0	35	55
	Impact	0	64	55
	Trumpet	0	0	56
	Trumpet2	0	16	56
	BriteTrp	0	17	56
	Warm Trp	0	32	56
	Trombone	0	0	57
	Trmbone2	0	18	57
	Tuba	0	0	58
	Tuba 2	0	16	58
	Mute Trp	0	0	59
	Fr.Horn	0	0	60
	FrHrSolo	0	6	60
	FrHorn 2	0	32	60
	HornOrch	0	37	60

Category	Voice Name	Voice #		
		MSB #	LSB #	Program Change #
XG	BrssSect	0	0	61
	Tp&TbSec	0	35	61
	BrssSec2	0	40	61
	HiBrass	0	41	61
	MelloBrs	0	42	61
	SynBrss1	0	0	62
	Quack Br	0	12	62
	RezSynBr	0	20	62
	PolyBrss	0	24	62
	SynBrss3	0	27	62
	JumpBrss	0	32	62
	AnVelBr1	0	45	62
	AnVelBr2	0	64	62
	SynBrss2	0	0	63
	Soft Brs	0	18	63
	SynBrss4	0	40	63
	ChoirBrs	0	41	63
	VelBrss2	0	45	63
	AnaBrss2	0	64	63
	SprnoSax	0	0	64
	Alto Sax	0	0	65
	Sax Sect	0	40	65
	HyprAlto	0	43	65
	TenorSax	0	0	66
	BrthTnSx	0	40	66
	SoftTenr	0	41	66
	TnrSax 2	0	64	66
	Bari.Sax	0	0	67
	Oboe	0	0	68
	Eng.Horn	0	0	69
	Bassoon	0	0	70
	Clarinet	0	0	71
	Piccolo	0	0	72
	Flute	0	0	73
	Recorder	0	0	74
	PanFlute	0	0	75
	Bottle	0	0	76
	Shakhchi	0	0	77
	Whistle	0	0	78
	Ocarina	0	0	79
	SquareLd	0	0	80
	SquarLd2	0	6	80
	LMSquare	0	8	80
	Hollow	0	18	80
	Shroud	0	19	80
	Mellow	0	64	80
	SoloSine	0	65	80
	SineLead	0	66	80
	Saw Lead	0	0	81
	Saw Ld 2	0	6	81
	ThickSaw	0	8	81
	Dyna Saw	0	18	81
	Digi Saw	0	19	81

Voice List

Category	Voice Name	Voice #		
		MSB #	LSB #	Program Change #
XG	Big Lead	0	20	81
	HeavySyn	0	24	81
	WaspySyn	0	25	81
	PulseSaw	0	40	81
	Dr. Lead	0	41	81
	VeloLead	0	45	81
	Seq Ana.	0	96	81
	CaliopLd	0	0	82
	PureLead	0	65	82
	Chiff Ld	0	0	83
	Rubby	0	64	83
	CharanLd	0	0	84
	DistLead	0	64	84
	WireLead	0	65	84
	Voice Ld	0	0	85
	SynthAah	0	24	85
	Vox Lead	0	64	85
	Fifth Ld	0	0	86
	Big Five	0	35	86
	Bass&Ld	0	0	87
	Big&Low	0	16	87
	Fat&Prky	0	64	87
	Soft Wrl	0	65	87
	NewAgePd	0	0	88
	Fantasy	0	64	88
	Warm Pad	0	0	89
	ThickPad	0	16	89
	Soft Pad	0	17	89
	Sine Pad	0	18	89
	Horn Pad	0	64	89
	RotarStr	0	65	89
	PolySyPd	0	0	90
	PolyPd80	0	64	90
	ClickPad	0	65	90
	Ana. Pad	0	66	90
	SquarPad	0	67	90
	ChoirPad	0	0	91
	Heaven	0	64	91
	Itopia	0	66	91
	CC Pad	0	67	91
	BowedPad	0	0	92
	Glacier	0	64	92
	GlassPad	0	65	92
	MetalPad	0	0	93
	Tine Pad	0	64	93
	Pan Pad	0	65	93
	Halo Pad	0	0	94
	SweepPad	0	0	95
	Shwimmer	0	20	95
	Converge	0	27	95
	PolarPad	0	64	95
	Celstial	0	66	95
	Rain	0	0	96

Category	Voice Name	Voice #		
		MSB #	LSB #	Program Change #
XG	ClaviPad	0	45	96
	HrmoRain	0	64	96
	AfrcnWnd	0	65	96
	Carib	0	66	96
	SoundTrk	0	0	97
	Prologue	0	27	97
	Ancestrl	0	64	97
	Crystal	0	0	98
	SynDrCmp	0	12	98
	Popcorn	0	14	98
	TinyBell	0	18	98
	RndGlock	0	35	98
	GlockChi	0	40	98
	ClearBel	0	41	98
	ChorBell	0	42	98
	SynMalet	0	64	98
	SftCryst	0	65	98
	LoudGlok	0	66	98
	ChrstBel	0	67	98
	VibeBell	0	68	98
	DigiBell	0	69	98
	AirBells	0	70	98
	BellHarp	0	71	98
	Gamelmba	0	72	98
	Atmosphr	0	0	99
	WarmAtms	0	18	99
	HollwRls	0	19	99
	Nylon EP	0	40	99
	NylnHarp	0	64	99
	Harp Vox	0	65	99
	AtmosPad	0	66	99
	Planet	0	67	99
	Bright	0	0	100
	FantaBel	0	64	100
	Smokey	0	96	100
	Goblins	0	0	101
	GobSynth	0	64	101
	Creeper	0	65	101
	Ring Pad	0	66	101
	Ritual	0	67	101
	ToHeaven	0	68	101
	Night	0	70	101
	Glisten	0	71	101
	BelChoir	0	96	101
	Echoes	0	0	102
	Echoes 2	0	8	102
	Echo Pan	0	14	102
	EchoBell	0	64	102
	Big Pan	0	65	102
	SynPiano	0	66	102
	Creation	0	67	102
	StarDust	0	68	102
	Reso&Pan	0	69	102

Category	Voice Name	Voice #		
		MSB #	LSB #	Program Change #
XG	Sci-Fi	0	0	103
	Starz	0	64	103
	Sitar	0	0	104
	DetSitar	0	32	104
	Sitar 2	0	35	104
	Tambra	0	96	104
	Tamboura	0	97	104
	Banjo	0	0	105
	MuteBnjo	0	28	105
	Rabab	0	96	105
	Gopichnt	0	97	105
	Oud	0	98	105
	Shamisen	0	0	106
	Koto	0	0	107
	Taisho-k	0	96	107
	Kanoon	0	97	107
	Kalimba	0	0	108
	Bagpipe	0	0	109
	Fiddle	0	0	110
	Shanai	0	0	111
	Shanai 2	0	64	111
	Pungi	0	96	111
	Hichriki	0	97	111
	TnklBell	0	0	112
	Bonang	0	96	112
	Altair	0	97	112
	Gamelan	0	98	112
	S.Gamlan	0	99	112
	Rama Cym	0	100	112
	AsianBel	0	101	112
	Agogo	0	0	113
	SteelDrm	0	0	114
	GlasPerc	0	97	114
	ThaiBell	0	98	114
	WoodBlok	0	0	115
	Castanet	0	96	115
	TaikoDrm	0	0	116
	Gr.Cassa	0	96	116
	MelodTom	0	0	117
	Mel Tom2	0	64	117
	Real Tom	0	65	117
	Rock Tom	0	66	117
	Syn Drum	0	0	118
	Ana Tom	0	64	118
	ElecPerc	0	65	118
	RevCymb1	0	0	119
	FretNoiz	0	0	120
	BrthNoiz	0	0	121
	Seashore	0	0	122
	Tweet	0	0	123
	Telephone	0	0	124
	Helicptr	0	0	125
	Applause	0	0	126

Category	Voice Name	Voice #		
		MSB #	LSB #	Program Change #
XG	Gunshot	0	0	127
	CuttngNz	64	0	0
	CttngNz2	64	0	1
	Str Slap	64	0	3
	Fl.KClik	64	0	16
	Shower	64	0	32
	Thunder	64	0	33
	Wind	64	0	34
	Stream	64	0	35
	Bubble	64	0	36
	Feed	64	0	37
	Dog	64	0	48
	Horse	64	0	49
	Tweet 2	64	0	50
	Ghost	64	0	54
	Maou	64	0	55
	Tel.Dial	64	0	64
	DoorSqek	64	0	65
	DoorSlam	64	0	66
	ScratchC	64	0	67
	ScratchS	64	0	68
	WindChim	64	0	69
	Telphon2	64	0	70
	CarElgnt	64	0	80
	CarTSqel	64	0	81
	Car Pass	64	0	82
	CarCrash	64	0	83
	Siren	64	0	84
	Train	64	0	85
	JetPlane	64	0	86
	Starship	64	0	87
	Burst	64	0	88
	Coaster	64	0	89
	Submarin	64	0	90
	Laugh	64	0	96
	Scream	64	0	97
	Punch	64	0	98
	Heart	64	0	99
	Footstep	64	0	100
	MchinGun	64	0	112
	LaserGun	64	0	113
	Xplosion	64	0	114
	Firework	64	0	115

Drum/key Assignment List

Bank Select MSB					127	127	127	127	127	127
Bank Select LSB					0	0	0	0	0	0
Program # (1-128)					1	2	9	17	25	26
Keyboard Note	MIDI		Key off	Alternate assign	Standard Kit	Standard Kit 2	Room Kit	Rock Kit	Electronic Kit	Analog Kit
	Note #	Note								
C# 1	13	C# -1		3	Surdo Mute	Surdo Mute	Surdo Mute	Surdo Mute	Surdo Mute	Surdo Mute
D 1	14	D -1		3	Surdo Open	Surdo Open	Surdo Open	Surdo Open	Surdo Open	Surdo Open
D# 1	15	D# -1			Hi Q	Hi Q	Hi Q	Hi Q	Hi Q	Hi Q
E 1	16	E -1			Whip Slap	Whip Slap	Whip Slap	Whip Slap	Whip Slap	Whip Slap
F 1	17	F -1		4	Scratch H	Scratch H	Scratch H	Scratch H	Scratch H	Scratch H
F# 1	18	F# -1		4	Scratch L	Scratch L	Scratch L	Scratch L	Scratch L	Scratch L
G 1	19	G -1			Finger Snap	Finger Snap	Finger Snap	Finger Snap	Finger Snap	Finger Snap
G# 1	20	G# -1			Click Noise	Click Noise	Click Noise	Click Noise	Click Noise	Click Noise
A 1	21	A -1			Mtrnm Click	Mtrnm Click	Mtrnm Click	Mtrnm Click	Mtrnm Click	Mtrnm Click
A# 1	22	A# -1			Mtrnm Bell	Mtrnm Bell	Mtrnm Bell	Mtrnm Bell	Mtrnm Bell	Mtrnm Bell
B 1	23	B -1			Seq Click L	Seq Click L	Seq Click L	Seq Click L	Seq Click L	Seq Click L
C 2	24	C 0			Seq Click H	Seq Click H	Seq Click H	Seq Click H	Seq Click H	Seq Click H
C# 2	25	C# 0			Brush Tap	Brush Tap	Brush Tap	Brush Tap	Brush Tap	Brush Tap
D 2	26	D 0	○		Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl
D# 2	27	D# 0			Brush Slap	Brush Slap	Brush Slap	Brush Slap	Brush Slap	Brush Slap
E 2	28	E 0	○		BrushTapSwrl	BrushTapSwrl	BrushTapSwrl	BrushTapSwrl	ReversCymbal	ReversCymbal
F 2	29	F 0	○		Snare Roll	Snare Roll 2	Snare Roll	Snare Roll	Snare Roll	Snare Roll
F# 2	30	F# 0			Castanet	Castanet	Castanet	Castanet	Hi Q 2	Hi Q 2
G 2	31	G 0			Snare Soft	Snare Soft 2	Snare Soft	Snare Noisy	SnrSnpylctr	SnareNoisy 4
G# 2	32	G# 0			Sticks	Sticks	Sticks	Sticks	Sticks	Sticks
A 2	33	A 0			Kick Soft	Kick Soft	Kick Soft	Kick Tight 2	Kick 3	Kick Tight 2
A# 2	34	A# 0			OpenRimShot	RimShotHSht	OpenRimShot	OpenRimShot	OpenRimShot	OpenRimShot
B 2	35	B 0			Kick Tight	KickTghtShrt	Kick Tight	Kick 2	Kick Gate	KickAnlgShrt
C 3	36	C 1			Kick	Kick Short	Kick	Kick Gate	KckGateHeavy	Kick Analog
C# 3	37	C# 1			Side Stick	Side Stick	Side Stick	Side Stick	Side Stick	SideStickAn
D 3	38	D 1			Snare	Snare Short	Snare Snappy	Snare Rock	SnareNoisy 2	SnareAnalog
D# 3	39	D# 1			Hand Clap	Hand Clap	Hand Clap	Hand Clap	Hand Clap	Hand Clap
E 3	40	E 1			Snare Tight	SnareTight H	SnrTightSnp	SnareRockRim	SnareNoisy 3	SnareAnalog2
F 3	41	F 1			Floor Tom L	Floor Tom L	Tom Room 1	Tom Rock 1	TomElectro 1	Tom Analog 1
F# 3	42	F# 1		1	Hi-HatClosed	Hi-HatClosed	Hi-HatClosed	Hi-HatClosed	Hi-HatClosed	HatCloseAnlg
G 3	43	G 1			Floor Tom H	Floor Tom H	Tom Room 2	Tom Rock 2	TomElectro 2	Tom Analog 2
G# 3	44	G# 1		1	Hi-Hat Pedal	Hi-Hat Pedal	Hi-Hat Pedal	Hi-Hat Pedal	Hi-Hat Pedal	HatCloseAn 2
A 3	45	A 1			Low Tom	Low Tom	Tom Room 3	Tom Rock 3	TomElectro 3	Tom Analog 3
A# 3	46	A# 1		1	Hi-Hat Open	Hi-Hat Open	Hi-Hat Open	Hi-Hat Open	Hi-Hat Open	HatOpen Anlg
B 3	47	B 1			Mid Tom L	Mid Tom L	Tom Room 4	Tom Rock 4	TomElectro 4	Tom Analog 4
C 4	48	C 2			Mid Tom H	Mid Tom H	Tom Room 5	Tom Rock 5	TomElectro 5	Tom Analog 5
C# 4	49	C# 2			CrashCymbal1	CrashCymbal1	CrashCymbal1	CrashCymbal1	CrashCymbal1	Crash Analog
D 4	50	D 2			High Tom	High Tom	Tom Room 6	Tom Rock 6	TomElectro 6	Tom Analog 6
D# 4	51	D# 2			RideCymbal 1	RideCymbal 1	RideCymbal 1	RideCymbal 1	RideCymbal 1	RideCymbal 1
E 4	52	E 2			Chinese Cym	Chinese Cym	Chinese Cym	Chinese Cym	Chinese Cym	Chinese Cym
F 4	53	F 2			Ride Cym Cup	Ride Cym Cup	Ride Cym Cup	Ride Cym Cup	Ride Cym Cup	Ride Cym Cup
F# 4	54	F# 2			Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine
G 4	55	G 2			SplashCymbal	SplashCymbal	SplashCymbal	SplashCymbal	SplashCymbal	SplashCymbal
G# 4	56	G# 2			Cowbell	Cowbell	Cowbell	Cowbell	Cowbell	Cowbell Anlg
A 4	57	A 2			CrashCymbal2	CrashCymbal2	CrashCymbal2	CrashCymbal2	CrashCymbal2	CrashCymbal2
A# 4	58	A# 2			Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap
B 4	59	B 2			RideCymbal 2	RideCymbal 2	RideCymbal 2	RideCymbal 2	RideCymbal 2	RideCymbal 2
C 5	60	C 3			Bongo H	Bongo H	Bongo H	Bongo H	Bongo H	Bongo H
C# 5	61	C# 3			Bongo L	Bongo L	Bongo L	Bongo L	Bongo L	Bongo L
D 5	62	D 3			Conga H Mute	Conga H Mute	Conga H Mute	Conga H Mute	Conga H Mute	Conga Anlg H
D# 5	63	D# 3			Conga H Open	Conga H Open	Conga H Open	Conga H Open	Conga H Open	Conga Anlg M
E 5	64	E 3			Conga L	Conga L	Conga L	Conga L	Conga L	Conga Anlg L
F 5	65	F 3			Timbale H	Timbale H	Timbale H	Timbale H	Timbale H	Timbale H
F# 5	66	F# 3			Timbale L	Timbale L	Timbale L	Timbale L	Timbale L	Timbale L
G 5	67	G 3			Agogo H	Agogo H	Agogo H	Agogo H	Agogo H	Agogo H
G# 5	68	G# 3			Agogo L	Agogo L	Agogo L	Agogo L	Agogo L	Agogo L
A 5	69	A 3			Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa
A# 5	70	A# 3			Maracas	Maracas	Maracas	Maracas	Maracas	Maracas 2
B 5	71	B 3	○		SambaWhistlH	SambaWhistlH	SambaWhistlH	SambaWhistlH	SambaWhistlH	SambaWhistlH
C 6	72	C 4	○		SambaWhistlL	SambaWhistlL	SambaWhistlL	SambaWhistlL	SambaWhistlL	SambaWhistlL
C# 6	73	C# 4			Guiro Short	Guiro Short	Guiro Short	Guiro Short	Guiro Short	Guiro Short
D 6	74	D 4	○		Guiro Long	Guiro Long	Guiro Long	Guiro Long	Guiro Long	Guiro Long
D# 6	75	D# 4			Claves	Claves	Claves	Claves	Claves	Claves 2
E 6	76	E 4			Wood Block H	Wood Block H	Wood Block H	Wood Block H	Wood Block H	Wood Block H
F 6	77	F 4			Wood Block L	Wood Block L	Wood Block L	Wood Block L	Wood Block L	Wood Block L
F# 6	78	F# 4			Cuica Mute	Cuica Mute	Cuica Mute	Cuica Mute	Scratch H 2	Scratch H 2
G 6	79	G 4			Cuica Open	Cuica Open	Cuica Open	Cuica Open	Scratch L 2	Scratch L 3
G# 6	80	G# 4		2	TriangleMute	TriangleMute	TriangleMute	TriangleMute	TriangleMute	TriangleMute
A 6	81	A 4		2	TriangleOpen	TriangleOpen	TriangleOpen	TriangleOpen	TriangleOpen	TriangleOpen
A# 6	82	A# 4			Shaker	Shaker	Shaker	Shaker	Shaker	Shaker
B 6	83	B 4			Jingle Bells	Jingle Bells	Jingle Bells	Jingle Bells	Jingle Bells	Jingle Bells
C 7	84	C 5			Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree
-	85	C# 5								
-	86	D 5								
-	87	D# 5								
-	88	E 5								
-	89	F 5								
-	90	F# 5								
-	91	G 5								

- Key Off: Keys marked "○" stop sounding the instant they are released.
- Alternate Assign: Playing any instrument within a numbered group will immediately stop the sound of any other instrument in the same group of the same number.

Drum/key Assignment List

Bank Select MSB					127	127	127	127	126	126
Bank Select LSB					0	0	0	0	0	0
Program # (1-128)					28	33	41	49	1	2
Keyboard Note	MIDI		Key off	Alternate assign	Dance Kit	Jazz Kit	Brush Kit	Symphony Kit	SFX Kit 1	SFX Kit 2
	Note #	Note								
C# 1	13	C# -1		3	Surdo Mute	Surdo Mute	Surdo Mute	Surdo Mute		
D 1	14	D -1		3	Surdo Open	Surdo Open	Surdo Open	Surdo Open		
D# 1	15	D# -1			Hi Q	Hi Q	Hi Q	Hi Q		
E 1	16	E -1			Whip Slap	Whip Slap	Whip Slap	Whip Slap		
F 1	17	F -1		4	Scratch H	Scratch H	Scratch H	Scratch H		
F# 1	18	F# -1		4	Scratch L	Scratch L	Scratch L	Scratch L		
G 1	19	G -1			Finger Snap	Finger Snap	Finger Snap	Finger Snap		
G# 1	20	G# -1			Click Noise	Click Noise	Click Noise	Click Noise		
A 1	21	A -1			Mtrnm Click	Mtrnm Click	Mtrnm Click	Mtrnm Click		
A# 1	22	A# -1			Mtrnm Bell	Mtrnm Bell	Mtrnm Bell	Mtrnm Bell		
B 1	23	B -1			Seq Click L	Seq Click L	Seq Click L	Seq Click L		
C 2	24	C 0			Seq Click H	Seq Click H	Seq Click H	Seq Click H		
C# 2	25	C# 0			Brush Tap	Brush Tap	Brush Tap	Brush Tap		
D 2	26	D 0	○		Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl		
D# 2	27	D# 0			Brush Slap	Brush Slap	Brush Slap	Brush Slap		
E 2	28	E 0	○		ReversCymbal	BrushTapSwrl	BrushTapSwrl	BrushTapSwrl		
F 2	29	F 0	○		Snare Roll	Snare Roll	Snare Roll	Snare Roll		
F# 2	30	F# 0			Hi Q 2	Castanet	Castanet	Castanet		
G 2	31	G 0			SnareTechno3	Snare Soft	Brush Slap 2	Brush Slap 2		
G# 2	32	G# 0			Sticks	Sticks	Sticks	Sticks		
A 2	33	A 0			KickTechno Q	Kick Soft	Kick Soft	Kick Soft 2		
A# 2	34	A# 0			Rim Gate	OpenRimShot	OpenRimShot	OpenRimShot		
B 2	35	B 0			KickTechno L	Kick Tight	Kick Tight	Gran Cassa		
C 3	36	C 1			KickTechno 2	Kick Jazz	Kick Small	GranCassa Mu	CuttingNoiz	Phone Call
C# 3	37	C# 1			SideStickAn	Side Stick	Side Stick	Side Stick	CuttingNoiz2	Door Squeak
D 3	38	D 1			Snare Clap	Snare	Brush Slap 3	Band Snare	DstCuttingNz	Door Slam
D# 3	39	D# 1			Hand Clap	Hand Clap	Hand Clap	Hand Clap	String Slap	Scratch Cut
E 3	40	E 1			Snare Dry 2	Snare Tight	Brush Tap 2	Band Snare 2	Bass Slide	Scratch H 3
F 3	41	F 1			Tom Analog 1	Tom Jazz 1	Tom Brush 1	Tom Jazz 1	Pick Scrape	Wind Chime
F# 3	42	F# 1		1	HiHatClose 3	Hi-HatClosed	Hi-HatClosed	Hi-HatClosed		Telephone 2
G 3	43	G 1			Tom Analog 2	Tom Jazz 2	Tom Brush 2	Tom Jazz 2		
G# 3	44	G# 1		1	HatCloseAn 2	Hi-Hat Pedal	Hi-Hat Pedal	Hi-Hat Pedal		
A 3	45	A 1			Tom Analog 3	Tom Jazz 3	Tom Brush 3	Tom Jazz 3		
A# 3	46	A# 1		1	HiHat Open 3	Hi-Hat Open	Hi-Hat Open	Hi-Hat Open		
B 3	47	B 1			Tom Analog 4	Tom Jazz 4	Tom Brush 4	Tom Jazz 4		
C 4	48	C 2			Tom Analog 5	Tom Jazz 5	Tom Brush 5	Tom Jazz 5		
C# 4	49	C# 2			Crash Analog	CrashCymbal1	CrashCymbal1	Hand Cymbal		
D 4	50	D 2			Tom Analog 6	Tom Jazz 6	Tom Brush 6	Tom Jazz 6		
D# 4	51	D# 2			RideCymbal 1	RideCymbal 1	RideCymbal 1	HandCymShort		
E 4	52	E 2			Chinese Cym	Chinese Cym	Chinese Cym	Chinese Cym	Fl.Key Click	Ignition
F 4	53	F 2			Ride Cym Cup	Ride Cym Cup	Ride Cym Cup	Ride Cym Cup		Squeal
F# 4	54	F# 2			Tambourine	Tambourine	Tambourine	Tambourine		Exhaust
G 4	55	G 2			SplashCymbal	SplashCymbal	SplashCymbal	SplashCymbal		Crash
G# 4	56	G# 2			Cowbell Anlg	Cowbell	Cowbell	Cowbell		Siren
A 4	57	A 2			CrashCymbal2	CrashCymbal2	CrashCymbal2	HandCymbal 2		Train
A# 4	58	A# 2			Vibraslap	Vibraslap	Vibraslap	Vibraslap		Jet Plane
B 4	59	B 2			RideCymbal 2	RideCymbal 2	RideCymbal 2	HandCym2Shrt		Starship
C 5	60	C 3			Bongo H	Bongo H	Bongo H	Bongo H		Burst
C# 5	61	C# 3			Bongo L	Bongo L	Bongo L	Bongo L		Coaster
D 5	62	D 3			Conga Anlg H	Conga H Mute	Conga H Mute	Conga H Mute		Submarine
D# 5	63	D# 3			Conga Anlg M	Conga H Open	Conga H Open	Conga H Open		
E 5	64	E 3			Conga Anlg L	Conga L	Conga L	Conga L		
F 5	65	F 3			Timbale H	Timbale H	Timbale H	Timbale H		
F# 5	66	F# 3			Timbale L	Timbale L	Timbale L	Timbale L		
G 5	67	G 3			Agogo H	Agogo H	Agogo H	Agogo H		
G# 5	68	G# 3			Agogo L	Agogo L	Agogo L	Agogo L		
A 5	69	A 3			Cabasa	Cabasa	Cabasa	Cabasa	Shower	Laugh
A# 5	70	A# 3			Maracas 2	Maracas	Maracas	Maracas	Thunder	Scream
B 5	71	B 3	○		SambaWhistlH	SambaWhistlH	SambaWhistlH	SambaWhistlH	Wind	Punch
C 6	72	C 4	○		SambaWhistlL	SambaWhistlL	SambaWhistlL	SambaWhistlL	Stream	Heartbeat
C# 6	73	C# 4			Guiro Short	Guiro Short	Guiro Short	Guiro Short	Bubble	Footsteps
D 6	74	D 4	○		Guiro Long	Guiro Long	Guiro Long	Guiro Long	Feed	Applause 2
D# 6	75	D# 4			Claves 2	Claves	Claves	Claves		
E 6	76	E 4			Wood Block H	Wood Block H	Wood Block H	Wood Block H		
F 6	77	F 4			Wood Block L	Wood Block L	Wood Block L	Wood Block L		
F# 6	78	F# 4			Scratch H 2	Cuica Mute	Cuica Mute	Cuica Mute		
G 6	79	G 4			Scratch L 3	Cuica Open	Cuica Open	Cuica Open		
G# 6	80	G# 4		2	TriangleMute	TriangleMute	TriangleMute	TriangleMute		
A 6	81	A 4		2	TriangleOpen	TriangleOpen	TriangleOpen	TriangleOpen		
A# 6	82	A# 4			Shaker	Shaker	Shaker	Shaker		
B 6	83	B 4			Jingle Bells	Jingle Bells	Jingle Bells	Jingle Bells		
C 7	84	C 5			Bell Tree	Bell Tree	Bell Tree	Bell Tree	Dog	Machine Gun
-	85	C# 5							Horse	Laser Gun
-	86	D 5							Bird Tweet 2	Explosion
-	87	D# 5							Kitty	Firework
-	88	E 5							Growl	
-	89	F 5							Haunted	
-	90	F# 5							Ghost	
-	91	G 5							Maou	

Style List

Category	Style Name
POP	8Beat Pop 1
	8Beat Pop 2
	8Beat Standard
	8Beat Medium
	8Beat Ballad
	Piano Ballad
	Pop Ballad 1
	Pop Ballad 2
	Organ Ballad
	New Age
16BEAT	16Beat Pop
	16Beat Shuffle 1
	16Beat Shuffle 2
	16Beat Ballad 1
	16Beat Ballad 2
	16Beat Ballad 3
	Fusion
	Fusion Ballad
	Funk 1
	Funk 2
DANCE POP	Dance Pop 1
	Dance Pop 2
	Techno
	Eurobeat
	Synth Boogie
	70s Disco
	Tropical
	Party Pop
	Jungle
	ROCK
16Beat Rock	
8Beat Uptempo	
Rock Shuffle	
Pop Shuffle	
Rhythm & Blues	
Soul	
Gospel Shuffle	
Rock & Roll	
Twist	
BALLAD	Slow Rock 1
	Slow Rock 2
	6/8 Ballad
	Jazz Ballad
	Orchestral Jazz Ballad
	Rock Ballad
	Soul Ballad
	6/8 Gospel
	Blues
	Enka

Category	Style Name	
JAZZ	Swing	
	Big Band Swing	
	Big Band Ballad	
	Jazz Quartet	
	Cool Jazz	
	Dixieland	
	Boogie	
	Bebop	
	Jazz Rock	
	BALLROOM	Foxtrot
Jive		
Big Band Quickstep		
Cha Cha		
Rhumba		
Tango Continental		
Mambo		
Beguine		
LATIN POP		Bossa Nova 1
		Bossa Nova 2
	Bossa Nova 3	
	Salsa	
	Samba	
	Jazz Samba	
	Reggae	
	Pop Reggae	
	TRADITIONAL	March 1
		March 2
6/8 March		
Polka		
Ragtime		
Showtune		
Showtime		
COUNTRY		Bluegrass 1
		Bluegrass 2
		Country Rock
	Country Shuffle	
	8Beat Country	
	Light Pop	
	Folkrock	
	Country Ballad	
	Cowboy Boogie	
	Country 2Step	
WALTZ	Standard Waltz	
	Traditional Waltz	
	Pop Waltz	
	Jazz Waltz	
	Big Band Waltz	
	Viennese Waltz	
	Musette Waltz	
	Country T. Waltz	
	Country Waltz	

● Pianist Style List /

Piano Ballad
Swing1
March
Arpeggio1
Samba
Rock & Roll
80's Pop
6/8 March
Pop Ballad
Petit Waltz
Jazz Ballad
Swing2
Ragtime1
Arpeggio2
Bossa Nova
Honky Tonk
Tight Rock
Ragtime2
Rock Piano
Jazz Waltz
16beatBallad
2beat
Musical
Arpeggio3
Rhumba
BoogieWoogie
Dance Pop
Fanfare
Arpeggio4
Minuet
Rocca Ballad
Old Jazz
Galop
Like Harp
Beguine
16beat Rock
8beat
Cha Cha
Like Swan
Birthday

Parameter Chart

Group	Parameters	Basic Setting	One Touch Setting Parameters	Registration Parameters (Freeze Parameters)	Registration All Setup (*1)	Backup Group	Recall Group	
VOICE	First voice name *2	Grand Piano	○	VOICE SETTING	○	VOICE SETTING	VOICES ETTING	
	Octave Shift of first voice	0	○	VOICE SETTING	○	VOICE SETTING	VOICES ETTING	
DUAL	Voice selected on each group	First voice of a voice group	○	VOICE SETTING	○	VOICE SETTING	VOICES ETTING	
	Dual ON/OFF	OFF	—	—	○	VOICE SETTING	VOICES ETTING	
	Second voice name	Strings Slow 1	○	VOICE SETTING	○	VOICE SETTING	VOICES ETTING	
	Octave Shift of second voice	0	○	VOICE SETTING	○	VOICE SETTING	VOICES ETTING	
	Detune Depth	5	○	VOICE SETTING	○	VOICE SETTING	VOICES ETTING	
SPLIT	Dual Volume Balance	Equal level	○	VOICE SETTING	○	VOICE SETTING	VOICES ETTING	
	Split ON/OFF	OFF	○	VOICE SETTING	○	VOICE SETTING	VOICES ETTING	
	Left range voice name	Acous.Bass 1	○	VOICE SETTING	○	VOICE SETTING	VOICES ETTING	
	Octave Shift of left range voice	0	○	VOICE SETTING	○	VOICE SETTING	VOICES ETTING	
	Split Volume Balance	Equal level	○	VOICE SETTING	○	VOICE SETTING	VOICES ETTING	
ORGAN COMBINATION	Split Point	F#2	—	VOICE SETTING	○	VOICE SETTING	VOICES ETTING	
	Six types of Organ settings.	Initial data	—	—	—	VOICE SETTING	VOICE SETTING	
REVERB	Reverb ON/OFF	Differs depending on the voice	○	REVERB/EFFECT	○	REVERB/EFFECT	REVERB/EFFECT	
	Reverb Type	Differs depending on the style	○	REVERB/EFFECT	○	REVERB/EFFECT	REVERB/EFFECT	
	Reverb Total Depth	50	○	REVERB/EFFECT	○	REVERB/EFFECT	REVERB/EFFECT	
	Reverb Part Depth (BASS, CHORD, RHYTHM, KBD, MIC.)	50	○	REVERB/EFFECT	○	REVERB/EFFECT	REVERB/EFFECT	
EFFECT	Effect ON/OFF	Differs depending on the voice	○	REVERB/EFFECT	○	REVERB/EFFECT	REVERB/EFFECT	
	Effect Type	Differs depending on the voice	○	REVERB/EFFECT	○	REVERB/EFFECT	REVERB/EFFECT	
	Effect Depth (R1,R2, L)	Differs depending on the voice	○	REVERB/EFFECT	○	REVERB/EFFECT	REVERB/EFFECT	
	Effect Depth (MIC.)	0	○	REVERB/EFFECT	○	REVERB/EFFECT	REVERB/EFFECT	
MASTER EQUALIZER	Equalizer Type	FLAT	○	VOICE SETTING	○	VOICE SETTING	VOICES ETTING	
POWER BASS (CVP-98 only)	Power Bass ON/OFF	OFF	—	—	○	VOICE SETTING	VOICES ETTING	
	Power Bass Volume	6	—	—	○	VOICE SETTING	VOICES ETTING	
REGISTRATION	Regist Freeze ON/OFF	OFF	—	—	—	REGISTRATION	REGISTRATION	
	Freeze Parameters ON/OFF (VOICE SETTING, REVERB/EFFECT, TUNE, PEDAL)	OFF	—	—	—	REGISTRATION	REGISTRATION	
	Freeze Parameters ON/OFF (ACMP SETTING)	ON	—	—	—	REGISTRATION	REGISTRATION	
	Memorized Parameters of all 20 Registrations	Initial data	—	—	—	REGISTRATION	REGISTRATION	
MIXER	Registration Name	REGIST A-1 — E-4	—	—	—	REGISTRATION	REGISTRATION	
	Mixer Part Volume (BASS, CHORD, PAD, PHRASE, RHYTHM)	90	○	ACMP SETTING	○	ACMP SETTING	ACMP SETTING	
	Mixer Part Volume (HARMONY)	90	○	ACMP SETTING	○	ACMP SETTING	ACMP SETTING	
STYLE	Mixer Part Volume (KBD)	100	○	VOICE SETTING	○	VOICE SETTING	VOICES ETTING	
	Style Name	8 Beat Pop 1	○	ACMP SETTING	○	ACMP SETTING	ACMP SETTING	
	Style selected on each group	First style of a style group	—	—	○	ACMP SETTING	ACMP SETTING	
	MAIN A/B setting	MAIN A	○	ACMP SETTING	○	ACMP SETTING	—	
	Auto Accompaniment ON/OFF	OFF	○	ACMP SETTING	○	ACMP SETTING	ACMP SETTING	
	Auto Accompaniment type	MULTI FINGER	—	ACMP SETTING	○	ACMP SETTING	ACMP SETTING	
	SMALL ACMP ON/OFF	OFF	○	ACMP SETTING	○	ACMP SETTING	ACMP SETTING	
	Virtual Arranger ON/OFF	ON	○	ACMP SETTING	○	ACMP SETTING	ACMP SETTING	
	Harmony ON/OFF	OFF	○	ACMP SETTING	○	ACMP SETTING	ACMP SETTING	
	Harmony type	Trio	○	ACMP SETTING	○	ACMP SETTING	ACMP SETTING	
METRONOME	Metronome type	NORMAL	—	—	○	ACMP SETTING	ACMP SETTING	
	Metronome volume	50	—	—	○	ACMP SETTING	ACMP SETTING	
SONG	Guide mode	NORMAL	—	—	○	SONG SETTING	SONG SETTING	
	Guide Repeat number	3	—	—	○	SONG SETTING	SONG SETTING	
	Piano Roll display	AUTO	—	—	○	SONG SETTING	SONG SETTING	
	Lyric Display ON/OFF	ON	—	—	○	SONG SETTING	SONG SETTING	
HELP FUNCTION	Help language	ENGLISH	—	—	—	Always set to BACKUP	—	
	Tune	440.0 Hz	—	—	○	TUNE	TUNE	
FUNCTION	Transpose	0	—	VOICE SETTING	○	VOICE SETTING	VOICE SETTING	
	Effect setting	AUTO	—	—	○	REVERB/EFFECT	REVERB/EFFECT	
	Key Touch	NORMAL	—	VOICE SETTING	○	VOICE SETTING	VOICE SETTING	
	Volume when [FIXED] is selected	76	—	VOICE SETTING	○	VOICE SETTING	VOICE SETTING	
	Pan (LEFT, RIGHT1, RIGHT2) settings	CENTER	—	VOICE SETTING	○	VOICE SETTING	VOICE SETTING	
	Left pedal setting	SOFT	—	PEDAL	○	PEDAL	PEDAL	
	Damper range	R	—	PEDAL	○	PEDAL	PEDAL	
	Damper mode	CONT.	—	PEDAL	○	PEDAL	PEDAL	
	Soundboard depth (CVP-98 only)	50	—	—	○	VOICE SETTING	VOICE SETTING	
	Transmission channel of left range voice	3	—	—	○	MIDI SETTING	MIDI SETTING	
	Transmission channel of first voice	1	—	—	○	MIDI SETTING	MIDI SETTING	
	Transmission channel of second voice	2	—	—	○	MIDI SETTING	MIDI SETTING	
	Local Control ON/OFF	ON	—	—	○	MIDI SETTING	MIDI SETTING	
	Sync. setting	INT.	—	—	○	MIDI SETTING	MIDI SETTING	
	Program receive/send ON/OFF	Tx&Rx	—	—	○	MIDI SETTING	MIDI SETTING	
	Control receive/send ON/OFF	Tx&Rx	—	—	○	MIDI SETTING	MIDI SETTING	
	System Exclusive receive/send ON/OFF	Tx&Rx	—	—	○	MIDI SETTING	MIDI SETTING	
	Start/Stop receive/send ON/OFF	Tx&Rx	—	—	○	MIDI SETTING	MIDI SETTING	
	MIDI transpose receive ON/OFF	ON	—	—	○	MIDI SETTING	MIDI SETTING	
	Auto Accompaniment and rhythm send ON/OFF	OFF	—	—	○	MIDI SETTING	MIDI SETTING	
	Harmony send ON/OFF	OFF	—	—	○	MIDI SETTING	MIDI SETTING	
	Remote Keyboard	OFF	—	—	○	MIDI SETTING	MIDI SETTING	
	Micro Tuning ON/OFF	OFF	—	—	○	TUNE	TUNE	
	Micro Tuning parameter settings	0	—	—	○	TUNE	TUNE	
	Scale Tuning setting	PRESET	—	TUNE	○	TUNE	TUNE	
	Preset Scale setting	EQUAL	—	TUNE	○	TUNE	TUNE	
	Basic key of Preset Scale	C	—	TUNE	○	TUNE	TUNE	
	User Scale parameter setting	0	—	TUNE	○	TUNE	TUNE	
	Backup parameter ON/OFF settings	Differs depending on each parameter (*3)	—	—	—	—	Always set to BACKUP	—
	UTILITY	Pop-up Time (VOICE/STYLE)	15	—	—	○	UTILITY	UTILITY
		Pop-up Time (OTHERS)	8	—	—	○	UTILITY	UTILITY
		Alert Voice	STEEL DRUMS	—	—	○	UTILITY	UTILITY
		Alert Volume	50	—	—	○	UTILITY	UTILITY

*1 These are the [ALL SETUP] parameters in the FUNCTION [REGISTRATION] page (display page 7).

*2 When an Organ Combination voice is selected, the edited settings are also included.

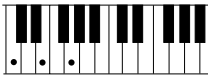
*3 REGISTRATION, UTILITY are set to ON, and others are set to OFF.

Fingering Chart

* All fingerings shown are simple root-position types.

Example for "C" chords

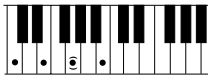
C



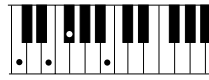
C6



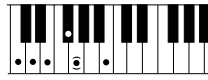
CM7



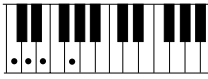
CM7 (b5)



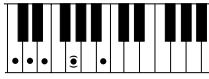
CM7 (#11)



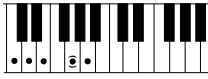
Cadd9



CM7 (9)



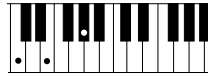
C6 (9)



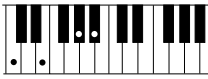
C (b5)



Caug



C7 (#5)



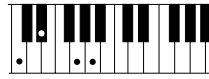
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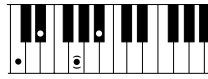
Cm



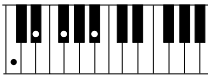
Cm6



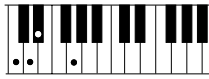
Cm7



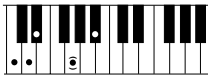
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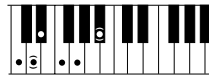
Cmadd9



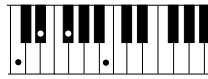
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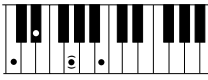
Cm7 (11)



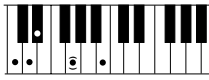
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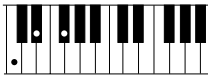
CmM7



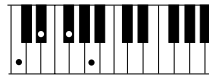
CmM7 (9)



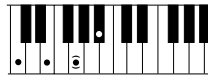
Cm (b5)



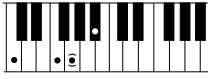
Cdim7



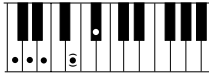
C7



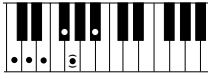
C7sus4



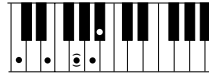
C7 (9)



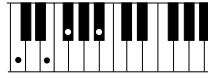
C7 (#11)



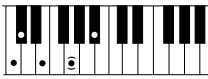
C7 (13)



C7 (b5)



C7 (b9)



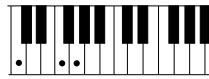
C7 (b13)



C7 (#9)



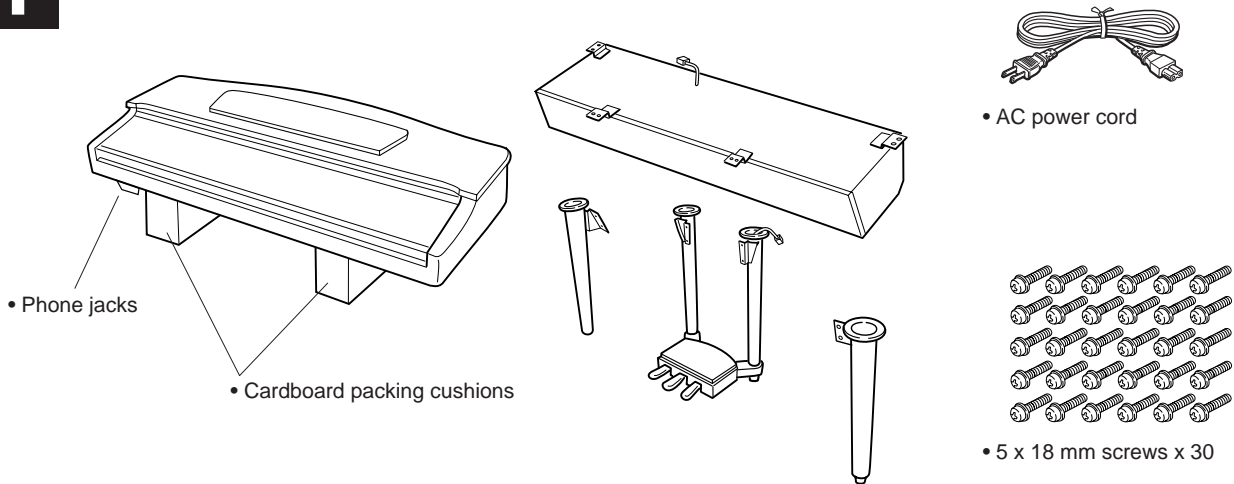
Csus4



Specifications

		CVP-98	CVP-96
KEYBOARD		88 keys (A-1 — C7)	
TO NE GENERATOR		AWM (Advanced Wave Memory)	
MAXIMUM SIMULTANEOUS POLYPHONY		128	64
VOICES		Clavinova voices: 133 ; XG voices: 480 ; Drum Kits: 12 sets Voice Groups: Piano, Electric Piano, Vibraphone, Guitar, Clavinova Tone/Synth, Organ, Strings/Choir, Brass, Sax/Flute, Bass, Drums, XG Organ Combination, Dual/Split	
EFFECTS		Effect (25 types), Reverb (16 types)	
TO NE CONTROLS		Master Equalizer, Power Bass (CVP-98 only)	
ACCOMPANIMENT STYLES		Accompaniment Styles: 100; Pianist Styles: 40 Style Groups: Pop, 16 Beat, Dance Pop, Rock, Ballad, Jazz, Ballroom, Latin Pop, Traditional, Country, Waltz Disk/Custom Pianist Controls: Start/Stop, Syncro, Tap, Intro, Main A, Main B, Auto-fill, Ending, Fade in/out buttons Metronome, Tempo +/- buttons	
AUTO ACCOMPANIMENT		Single Finger, Multi Finger, Fingered, Full Keyboard Harmony, Pianist, One Touch Setting, Virtual Arranger, Synchro Stop, Small ACMP, Chord Assist, Individual Part Volume Control (Mixer)	
REGISTRATION		Bank A - E x 4 memory locations (20), Freeze	
SONG PLAY MODE		Song Playback, Repeat, Volume control of individual Parts (Mixer) Controls: Song, Play/Stop, Rewind, Fast forward, Pause Guide Control: Easy Play, Next Note, Sound Repeat Lyric Disply	
SONG RECORD MODE		Quick Recording, Track Recording, Chord Sequence, Song Name, Track Edit, Initial Edit	
LCD/CONTROLS		320 x 240 dot liquid crystal display, Contrast dial, Beat lamp, Function button, Mixer button, Page ◀ ▶ buttons, Display hold button, LCD buttons, data dial, +/- buttons, Exit button	
VOLUME CONTROLS		Master volume, ACMP/Song volume	
DEMO/HELP		27 Demo Songs; 5 help languages (English, Japanese, German, French, Spanish)	
DISK DRIVE		3.5-inch micro floppy disk drive	
PEDAL CONTROLS	RIGHT	Damper	
	CENTER	Sostenuto	
	LEFT	Soft, Start/Stop, Harmony On/Off, Registration+, Main A, Main B, Ending/Rit, Break, Fade In/Out	
JACKS AND TERMINALS		Headphone jacks x 2, AUX OUT jacks (L/L+R, R), AUX IN jacks (L/L+R, R), EXP.PEDAL jack, MIC. jack, TO HOST terminal, MIDI terminals (IN, OUT, THRU)	
INPUT/OUTPUT SPECIFICATIONS		AUX OUT: Output Impedance: 600 Ω AUX IN: Input Impedance: 10 kΩ; Input Sensitivity: -10 dBm	
MAIN AMPLIFIERS		240 W (60 W x 4)	120 W (60 W x 2)
SPEAKERS		16 cm x 2, 14 cm x 2, 2.5 cm x 2, 5 cm x 2	16 cm x 2, 5 cm x 4
DIMENSIONS (W x D x H)	Music stand down	1415 mm x 603 mm x 890 mm (55-3/4" x 23-3/4" x 35")	1415 mm x 603 mm x 890 mm (55-3/4" x 23-3/4" x 35")
	Music stand up	1415 mm x 603 mm x 1055 mm (55-3/4" x 23-3/4" x 41-1/2")	1415 mm x 603 mm x 1050 mm (55-3/4" x 23-3/4" x 41-3/8")
WEIGHT		69.5 kg (153 lbs., 4 oz.)	66.0 kg (145 lbs., 8 oz.)

- Specifications and descriptions in this owner's manual are for information purposes only. Yamaha Corp. reserves the right to change or modify products or specifications at any time without prior notice. Since specifications, equipment or options may not be the same in every locale, please check with your Yamaha dealer.

1

CVP-98/96: Assembly

NOTE

- Be careful not to confuse parts, and be sure to install all parts in the correct direction. Please assemble in accordance with the sequence given below.
- Assembly should be carried out by at least two persons.
- Be sure to use the correct screw size, as indicated above. Use of incorrect screws can cause damage.
- Be sure to tighten up all screws upon completing assembly of each unit.
- To disassemble, reverse the assembly sequence given below.

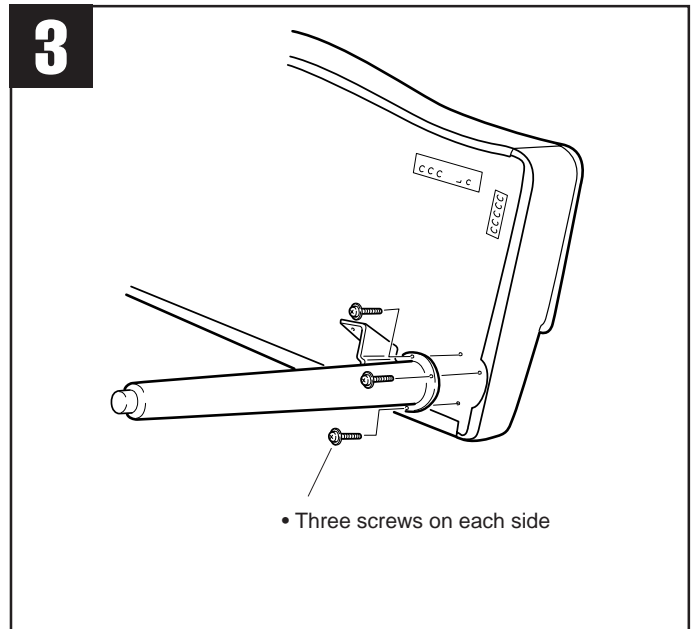
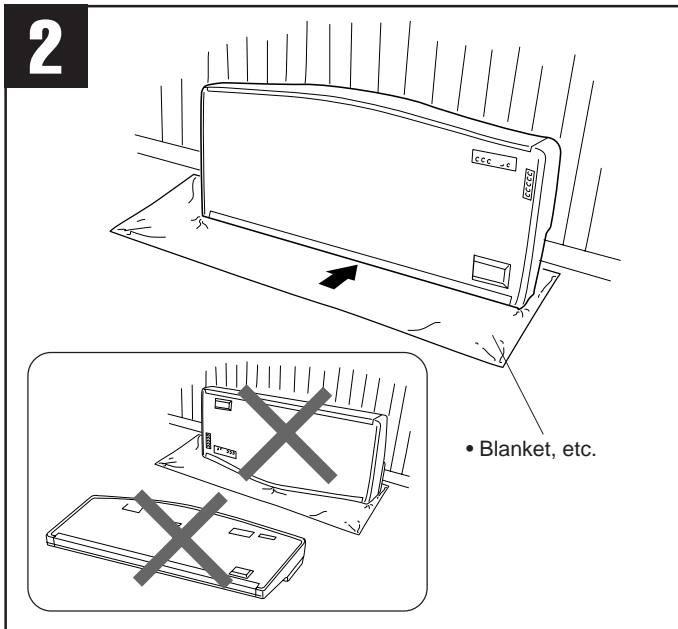
1 Open the box and remove all the parts.

Take out the two cardboard packing cushions and place them on the floor. Then take out main unit and place it on top of the packing cushions. Position the cushions so as to protect the phone jacks on the base of the unit.

Remove all parts from the box. Confirm that all parts shown in the illustration above are provided.

CAUTION

- When you lift the pedal box assembly, make sure that you lift by both legs.



2 Carefully lean the main unit against a wall.

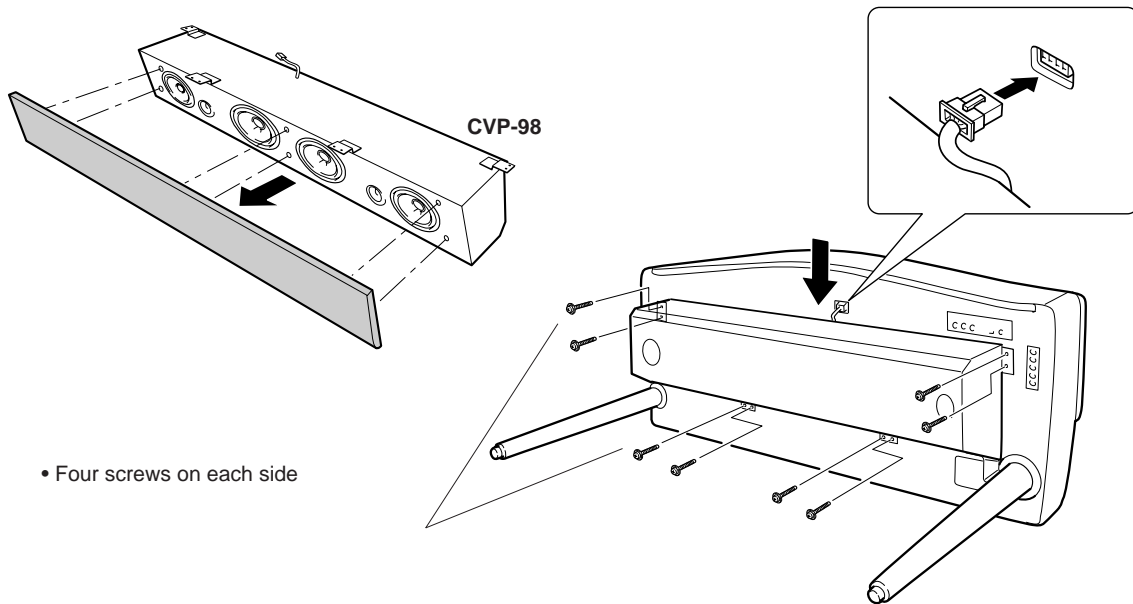
To make it easier to install the legs, place a soft blanket or similar material on the floor near a wall, close the Clavinova keyboard cover, place the front panel of the Clavinova (the side with the keyboard) on the blanket and gently lean the unit against the wall — **MAKING SURE THAT IT CAN NOT FALL** — as shown in the illustration.



- Do not lay the main unit upside-down on the floor.

3 Attach the front legs.

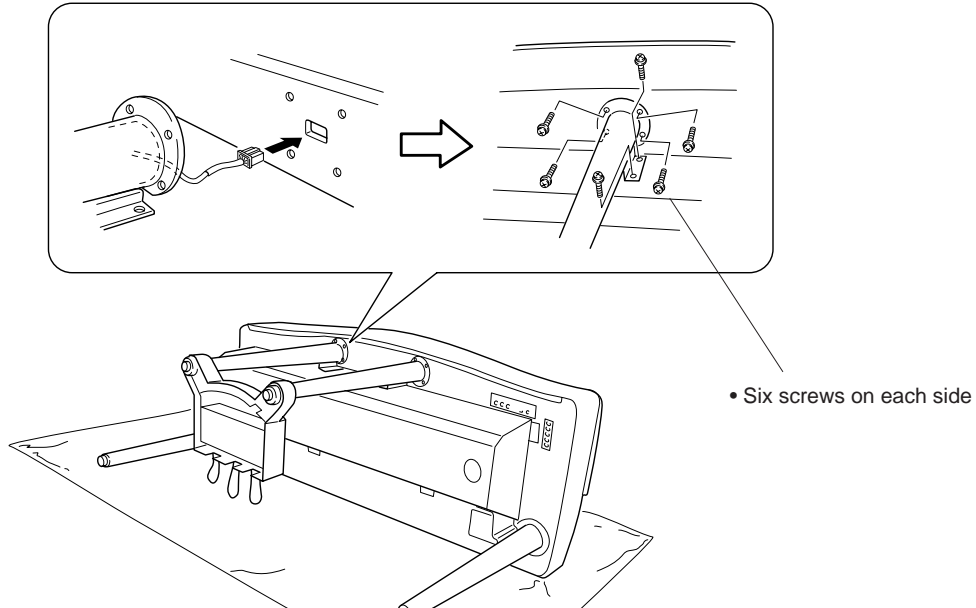
Securely attach the two front legs using three screws for each leg (use a Philips “+” screwdriver) as shown in the illustration. Make sure that the screws are firmly tightened.

4

4 Attach the speaker box.

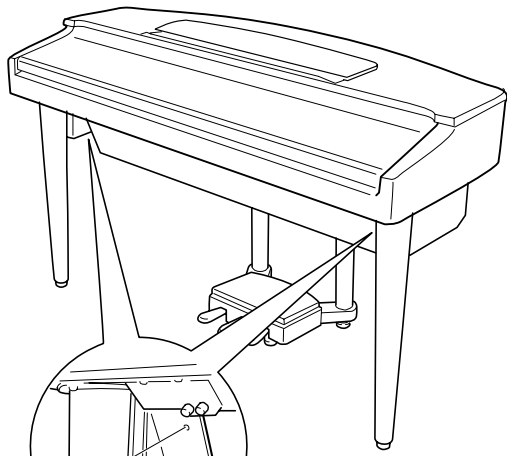
Remove the speaker box cover (attached to the speaker box in 6 places with plastic plugs) from the speaker box. Gently rest the speaker box onto the corresponding brackets on the front legs. (Be careful not to touch the speakers when handling the speaker box. Damage may result.)

Make sure the speaker cord is extending out from the rear of the speaker box. Secure the speaker box to the main keyboard unit using four screws on each side. Insert the speaker cord connector into the corresponding socket on the main keyboard unit, making sure that the protruding clip on the connector is facing up.

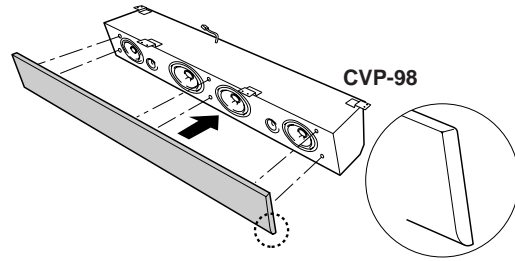
5

5 Attach the pedal box assembly.

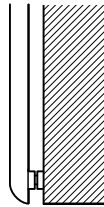
Before attaching the rear leg and pedal box assembly, insert the pedal cord plug extending from the rear leg into the corresponding socket in the main unit. Make sure that the protruding clip on the connector is facing up. Put the excess cord into the leg and loosely secure the rear leg and pedal assembly using 6 screws for each leg (four screws per leg and two screws on each leg bracket). Once the rear leg and pedal assembly has been loosely attached, go back and tighten all 12 of the screws on the rear leg and pedal assembly.

6

• Two screws on each side



CVP-98



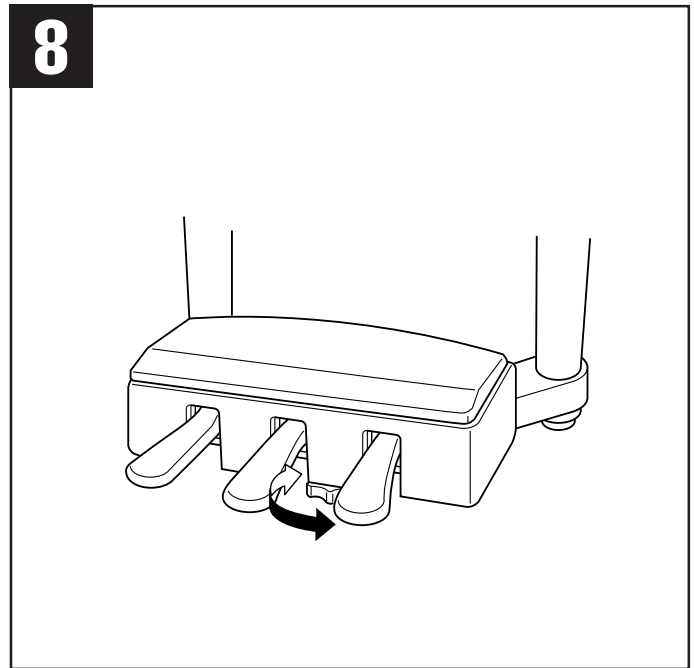
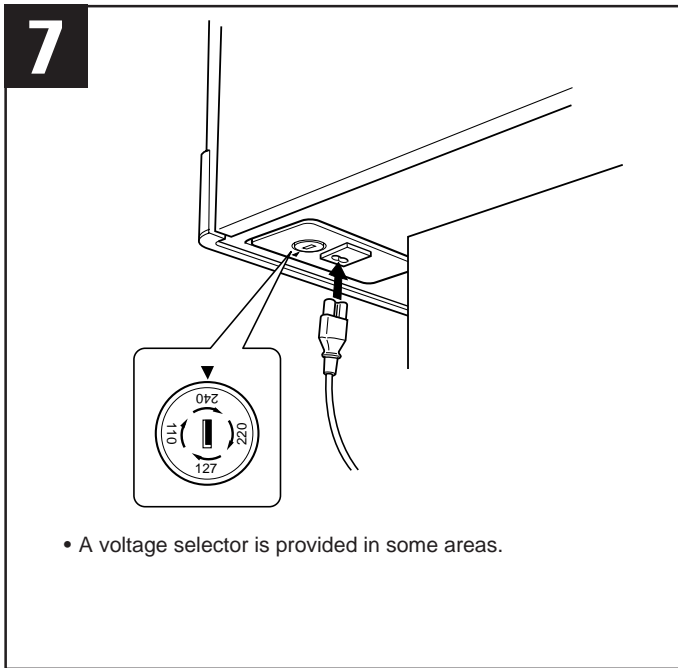
• Make sure the plugs are fully inserted and there is no space left around the plugs and holes.

6 Secure the speaker box.

Stand the main unit on its legs and securely attach the speaker box to the bracket on the front legs using two screws for each bracket. If it is impossible to align the bracket holes with the speaker box holes, slightly loosen the three screws on each of the front legs, align the holes, and secure the speaker box. After the speaker box is firmly attached, retighten the screws on the front legs firmly. Put the speaker box cover back in place with the rounded edge of the cover at the bottom, insert the plugs on the cover into their corresponding holes on the speaker box.

CAUTION

- When attaching the cover, make sure you push where the plugs are. The speaker cover is made of a soft material so pushing in a place where there are no plugs may cause damage to the speaker.

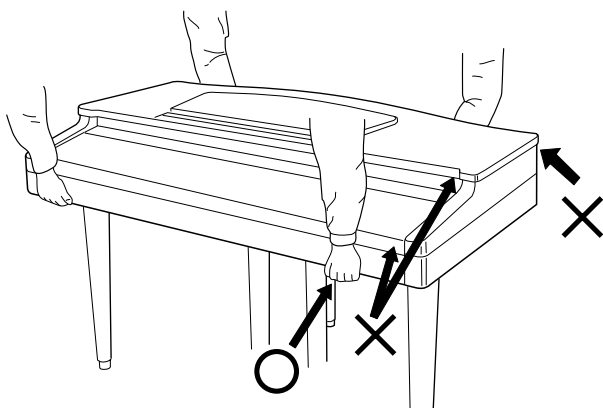


7 Voltage Selector

Before connecting the AC power cord, check the setting of the voltage selector which is provided in some areas. To set the selector for 110V, 127V, 220V or 240V main voltages, use a “minus” screwdriver to rotate the selector dial so that the correct voltage for your region appears next to the pointer on the panel. The voltage selector is set at 240V when the unit is initially shipped. After the proper voltage has been selected connect the AC power cord.

8 Set the adjuster.

For stability, an adjuster is provided on the bottom of the pedal box. Rotate the adjuster until it comes in firm contact with the floor surface. The adjuster ensures stable pedal operation and facilitates pedal effect control. If the adjuster is not in firm contact with the floor surface, distorted sound may result.



CAUTION

- When moving the instrument after assembly, always hold the lower surface of the main unit, NEVER the top portion or keyboard cover. Improper handling can result in damage to the instrument or personal injury.

■ **After completing the assembly, please check the following.**

- Are there any parts left over?
 - ➔ Review the assembly procedure and correct any errors.
- Is the Clavinova clear of doors and other movable fixtures?
 - ➔ Move the Clavinova to an appropriate location.
- Does the Clavinova make a rattling noise when you shake it?
 - ➔ Tighten all screws.
- Does the pedal box rattle or give way when you step on the pedals?
 - ➔ Turn the adjuster so that it is set firmly against the floor.
- Are the pedal and power cords inserted securely into the sockets?
 - ➔ Check the connection.
- If the main unit creaks or is otherwise unsteady when you play on the keyboard, refer to the assembly diagrams and retighten all screws.