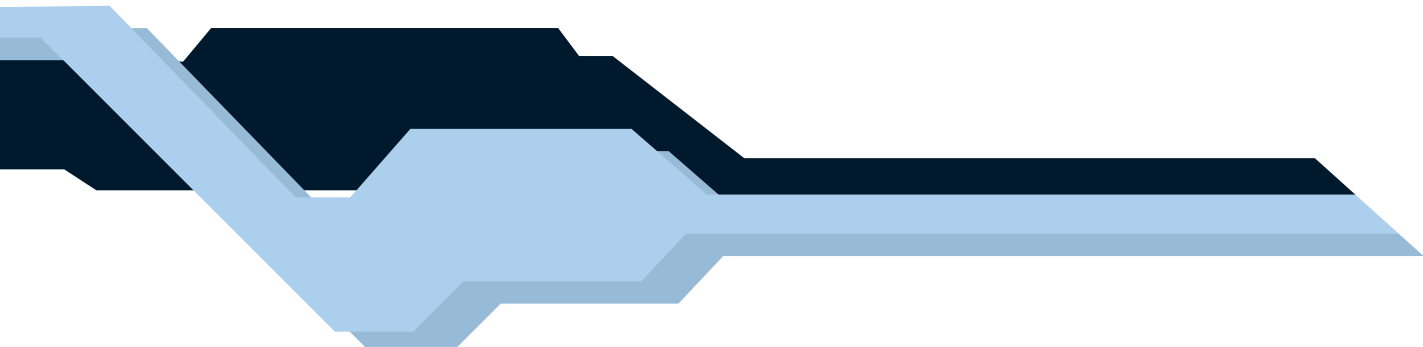# CUBASE AI4

Integrated Music Production System

steinberg

Revision and Quality Control:
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Remote controlling the mixer

About this manual

It is possible to control the Cubase AI mixer via MIDI. A large number of MIDI control devices is supported. This manual describes how to set up Cubase AI for remote control, and lists the supported devices.

▪ There is also a Generic Remote Device option, allowing you to use any MIDI controller to remote control Cubase AI. How to set this up is described in the section "The Generic Remote device" on page 7.

Setting Up

Connecting the remote device

Connect the MIDI Out on the remote unit to a MIDI In on your MIDI interface. Depending on the remote unit model, you may also need to connect a MIDI Out on the interface to a MIDI In on the remote unit (this is necessary if the remote unit features "feedback devices" such as indicators, motorized faders, etc.).

If you will be recording MIDI tracks, you don't want any MIDI data from the remote unit to accidentally be recorded as well. To avoid this, you should also make the following setting:

1. Open the Device Setup dialog from the Devices menu.

2. Select "MIDI Port Setup" in the list to the left.

3. Check the table to the right and locate the MIDI input to which you have connected the MIDI remote unit.

4. Deactivate the check box in the "In 'All MIDI Inputs'" column for that input, so that the State column reads "Inactive".

5. Click OK to close the Device Setup dialog.

Now you have removed the remote unit input from the "All MIDI Inputs" group. This means that you can record MIDI tracks with the "All MIDI Inputs" port selected without risking to record the data from the remote unit at the same time.

Selecting a remote device

1. Pull down the Devices menu and select Device Setup.
A dialog window opens with a list of device categories and devices shown in the left part of the window.

2. If you can't find the remote device you are looking for, click on the plus sign in the top left corner and select the device from the pop-up that appears.
The selected device is added to the Devices list.

▪ Note that it is possible to select more than one remote device of the same type.
If you have more than one remote device of the same type, these will be numbered in the Devices list.

3. Now select your MIDI control device model from the Devices list.
Depending on the selected device, either a list of programmable function commands or a blank panel is shown in the right half of the dialog window.
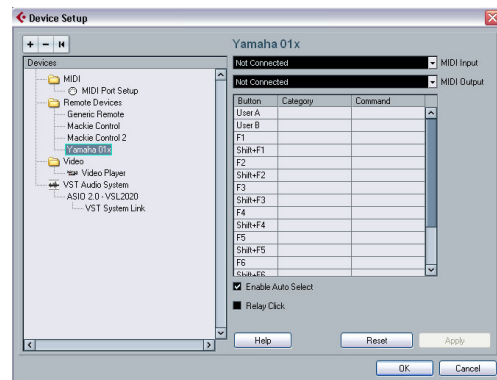
A Yamaha 01x selected as remote control device.

4. Select the correct MIDI input from the pop-up menu.
If necessary, select the correct MIDI output from the pop-up menu.

5. Click OK to close the dialog.
You can now use the MIDI control device to move faders and knobs, activate Mute and Solo, etc. The exact parameter configuration depends on which external MIDI control device you are using.

⚠ Sometimes communication between Cubase AI and a remote device is interrupted or the handshaking protocol fails to create a connection. To re-establish communication with any device in the Devices list, select it and click the Reset button in the Device Setup dialog. Also, the "Send Reset Message to all Devices" button at the top of the dialog will reset every device in the Devices list.

Operations

Writing automation using remote controls

Automating the mixer using a remote control device is done in the same way as when you operate on-screen controls in Write mode. However, when it comes to replacing existing automation data, there is one important difference:

• If you activate Write mode and move a control on the remote control device, all data for the corresponding parameter is replaced from the position where you moved the control, up until the position where playback is stopped! In other words, as soon as you move a control in Write mode, it remains "active" until you stop playback. The reason for this is explained below.

As a consequence, an additional precaution must be taken:

• Make sure you move only the controller you want to replace!

In order to replace existing automation data for a control, the computer needs to know how long the user actually "grabbed" or used the control. When doing this "on screen", the program simply <u>detects</u> when the mouse button is pressed and released. When you are using an external remote control device, however, there is no mouse button involved, and Cubase AI cannot tell whether you "grab and hold" a fader, or simply move it and release it. Instead, you have to indicate that you have "released" the control by stopping playback.

⚠ This is only relevant when you are using a remote control device and Write mode is activated in the mixer.

Assigning remote key commands

For some of the supported remote devices, you can assign any Cubase AI function (to which a key command can be assigned) to generic buttons, wheels or other controls. As of this writing, these devices are:

• Tascam US-428
• Yamaha 01x
• Yamaha DM 2000v2
• Yamaha DM 1000v2
• Steinberg Houston

Proceed as follows:

1. Open the Device Setup dialog and select one of the remote devices that support this feature.
On the right side of the window you will find a three column table. This is where you assign commands.

2. Use the "Button" column to locate a remote device control or button to which you wish to assign a Cubase AI function.

3. Click in the "Category" column for the control, and select one of the Cubase AI function categories from the pop-up menu that appears.

4. Click in the "Command" column, and select the desired Cubase AI function from the pop-up menu that appears.
The available items on the pop-up menu depend on the selected category.

5. Click "Apply" when you are done.

The selected function is now assigned to the button or control on the remote device.

A note about remote controlling MIDI tracks

While most remote control devices will be able to control both MIDI and audio channels in Cubase AI, the parameter setup may be different. For example, audio-specific controls (such as EQ) will be disregarded when controlling MIDI channels.

The Generic Remote device

If you have a generic MIDI controller, you can use this for remote control of Cubase AI by setting up the Generic Remote device:

1. Open the Device Setup dialog on the Devices menu.
If the Generic Remote device isn't on the Devices list, you need to add it.

2. Click the "+" sign in the top left corner and select the "Generic Remote" device from the pop-up menu.

• When the Generic Remote device is added in the Device Setup dialog, you can open the corresponding window by selecting "Generic Remote" from the Devices menu.
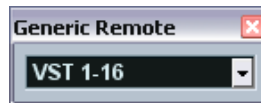
The Generic Remote window

3. Select the Generic Remote device in the Devices list to the left.
The settings for the Generic Remote device are displayed, allowing you to specify which control on your device should control which parameter in Cubase AI.
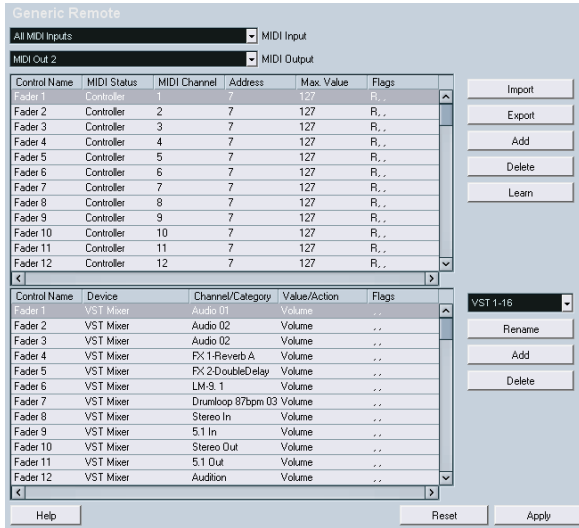
4. Use the MIDI Input and Output pop-up menus to select the MIDI port(s) to which your remote device is connected.

5. Use the pop-up menu to the right to select a bank.
Banks are combinations of a certain number of channels, and are used because most MIDI devices can control only a limited number of channels at a time (often 8 or 16). For example, if your MIDI control device has 16 volume faders, and you are using 32 mixer channels in Cubase AI, you would need two banks of 16 channels each. When the first bank is selected you control channel 1 to 16; when the second Bank is selected you control channel 17 to 32. Since you can control Transport functions as well, you may need several banks.

6. Set up the table at the top according to the controls on your MIDI control device.
The columns have the following functionality:

Column	Description
Control Name	Double clicking this field allows you to enter a descriptive name for the control (typically a name written on the console). This name is automatically reflected in the Control Name column in the lower table.
MIDI Status	Clicking in this column pulls down a pop-up menu, allowing you to specify the type of MIDI message sent by the control. The options are Controller, Program Change, Note On, Note Off, Aftertouch and Polyphonic Pressure.

Column	Description
MIDI Channel	Clicking in this column opens a pop-up menu, allowing you to select the MIDI channel on which the controller is transmitted.
Address	The Continuous Controller number or the pitch of a note.
Max. Value	The maximum value the control will transmit. This value is used by the program to "scale" the value range of the MIDI controller to the value range of the program parameter.
Flags	Clicking in this column pulls down a pop-up menu, allowing you to activate or deactivate three flags: Receive – activate this if the MIDI message should be processed on reception. Transmit – activate this if a MIDI message should be transmitted when the corresponding value in the program changes. Relative – activate this if the control is an "endless" dial, which reports the number of turns instead of an absolute value.

▪ If you find that the table at the top holds too many or too few controls, you can add or remove controls with the Add and Delete buttons to the right of the table.

▪ If you are uncertain of which MIDI message a certain controller sends, you can use the Learn function:
Select the control in the upper table (by clicking in the Control Name column), move the corresponding control on your MIDI device and click the Learn button to the right of the table. The MIDI Status, MIDI Channel and Address values are automatically set to those of the moved control.

7. Use the table at the bottom to specify which Cubase AI parameters you want to control.
Each row in the table is associated to the controller in the corresponding row in the first table (as indicated by the Control Name column). The other columns have the following functionality:

Column	Description
Device	Clicking in this column pulls down a pop-up menu, used for determining which device in Cubase AI should be controlled. The special option "Command" allows you to perform certain command actions by remote control. One example of this is the selection of remote banks.
Channel/Category	This is where you select the channel to be controlled or, if the "Command" Device option is selected, the Command category.

Column	Description
Value/Action	Clicking in this column pulls down a pop-up menu, allowing you to select the parameter of the channel to be controlled (typically, if the "VST Mixer" Device option is selected you can choose between volume, pan, send levels, EQ, etc.). If the "Command" Device option is selected, this is where you specify the "Action" of the category.
Flags	Clicking in this column pulls down a pop-up menu, allowing you to activate or deactivate three flags: Push Button – When activated, the parameter is only changed if the received MIDI message shows a value unequal to 0. Toggle – When activated, the parameter value is switched between minimum and maximum value each time a MIDI message is received. The combination of Push Button and Toggle is useful for remote controls which do not latch the state of a button. One example is controlling mute status with a device on which pressing the Mute button turns it on, and releasing the Mute button turns it off. If Push Button and Toggle are activated, the Mute status will change between on and off whenever the button is pressed on the console. Not Automated – When activated, the parameter will not be automated.

8. If necessary, select another bank and make settings for it.

Note that you only need to make settings in the bottom table for this bank – the table at the top is already set up according to the MIDI remote device.

▪ If necessary, you can add banks by clicking the Add button below the Bank pop-up.

Clicking the Rename button allows you to assign a new name to the currently selected bank, and you can remove an unneeded bank by selecting it and clicking the Delete button.

9. When you are finished, close the Device Setup window.

Now, you can control the specified Cubase AI parameters from the MIDI remote device. To select another bank, use the pop-up menu in the Remote Status window (or use a control on the MIDI remote device, if you have assigned one for this).

Importing and exporting remote setups

The Export button in the top right corner of the Generic Remote Setup window allows you to export the current setup, including the Control configuration (the table at the top) and all banks. The setup is saved as a file (with the Windows file extension ".xml"). Clicking the Import button allows you to import saved remote setup files.

▪ The last imported or exported remote setup will automatically be loaded when the program starts or the Generic Remote control is added in the Device Setup dialog.

The supported remote control devices

In the following sections, the remote control devices supported by Cubase AI are listed along with a brief description of the corresponding feature set.

Steinberg Houston

Houston is a MIDI/USB remote control device designed especially for use with VST audio applications such as Cubase AI. With clearly laid out controls (including touch sensitive motorized faders, rotary knobs, transport controls and a jog/shuttle wheel) Houston allows you to control virtually every mixer parameter in Cubase AI, without having to use the computer keyboard or mouse.

▪ For details about parameters and hands-on mixing techniques, please see the Houston documentation.

Mackie Control

Mackie Control is an automated touch-sensitive control surface. It is a nine-fader (eight channels and master) MIDI controller that provides in-depth mixing, editing, automation and navigational control for any supported digital audio workstation.

A special Lexan overlay that shows all Steinberg-specific key assignments for the Mackie Control device is available to customize the controller.

Mackie HUI

Specifications

Mackie HUI can control any number of channels in groups of 8.

▪ Use the left and right Bank buttons to select channels 1–8, 9 –16 etc.

▪ Use the left and right Channel buttons to shift the fader assignment in steps of one channel.

▪ The Fader button in the Auto Enable section is used to disable/enable the motors.

▪ The Mute, Pan, Send, Plug In and Send Mute buttons in the Auto Enable section are currently not supported.

▪ Use the Rec/Rdy buttons to arm a track for recording.

- Use the Select buttons to select a single track for detailed settings.

- With the Mute and Solo buttons you can mute or solo a track.

- Use the Default button to un-solo all tracks.

- Use the Assign button to un-mute all tracks.

- To the right of the time display, you find an LED labeled "Rude Solo Light". This LED lights up as soon as any channel is soloed.

- Use the Insert buttons to bypass all inserts of one track.

Pan button in the Select Assign section:

- Fader Set: panning left/right or panning front/rear. Press button repeatedly to cycle through the assignments (the eight V-Pots control the pan parameters).
- V-Sel button in the Select Assign section: monitor track.

Send A to Send E buttons in the Select Assign section:

- Fader Set: Send 1 level to Send 8 level (Send A to Send D assigns Send 1 to Send 4, Send E assigns Send 5 to Send 8: press button repeatedly to cycle through the assignments).
- V-Sel button in the Select Assign section: send on/off switch (depending on selected Send).
- V-Sel button with Shift in the Select Assign section selected: pre/post fader switch (depending on selected Send).

- The SELECT ASSIGN four character display in the Select Assign section displays Send or Pan assignment for V-Pots and V-Sel buttons.

- The four character displays above the Select buttons display the assigned track names.

- The Bypass button in the Select Assign section is always selected to indicate the bypass function of the Insert buttons.

- The Mute, Rec/Rdy All, Input and Output buttons in the Select Assign section are currently not supported.

- Use the Auto buttons to control the status of the Read and Write buttons in the Mixer of Cubase AI, depending on the Read/Write status in the Auto Mode section.

- Use the Off button in the Auto Mode section to control the Read All or Write All button in the mixer of Cubase AI, depending on the Read/Write status in the Auto Mode section.

- The Touch, Latch and Trim buttons in the Auto Mode section are currently not supported.

- Use the Transport button in the Window section to open or close the Transport panel.

- Use the Edit button in the Window section to bring the current Project window to the front.

- Use the Status button in the Window section to open or close the VST Performance window.

- Use the Mix button in the Window section to open or close the Mixer window.

- Use the Mem-Loc button in the Window section to open the Marker window.

- The Alt button in the Window section is used for user-assigned functions.

- The Undo button in the Keyboard Shortcuts section undoes the last performed operation in Cubase AI.
Hold down the Shift button and press Undo to redo the last undone operation.

- Press the Save button in the Keyboard Shortcuts section to save the current project.
Hold down the Shift button and press the Save button to save a backup copy of the current project.

- The Edit Mode, Edit Tool, Option/All, Ctrl/Clutch and Alt/Fine buttons in the Keyboard Shortcuts section are currently not supported.

- The Cut, Copy, Paste and Delete buttons in the Edit section control the equivalent Cubase AI functions.

- The Capture and Separate buttons in the Edit section are currently not supported.

- The buttons in the Status/Group section are currently not supported.

- Use the In and Out buttons above the transport controls to set the project cursor to the positions of the left or right locators.
Hold down the Shift button and press the In or Out button to move the left or right locator to the current project cursor position.

- Use the RTZ and END buttons to set the project cursor to the beginning or the end of the project.

- Press the Quick Punch button to switch automatic punch in on or off.
Hold down the Shift button and press the Quick Punch button to switch automatic punch out on or off.

- Press the Loop button to switch Cycle mode on or off.

- Press the On Line button to switch Synchronisation on or off.

- The Audition, Pre and Post buttons are used for user assignable functions (see function keys F1 to F7).

- The Mackie HUI Play, Stop, Record, Rewind and Fast Forward transport controls control the equivalent functions in Cubase AI.

- The jog wheel is used for moving the project cursor position in Cubase AI.

- The Scrub and Shuttle buttons are currently not supported.

- Pressing the cursor keys located to the left of the jog wheel is the same as pressing the arrow keys on your computer keyboard.
When the Mode button is selected, pressing the cursor keys will control zooming in the Project window.

- Use the Scroll control in the DSP Edit/Assign section to scroll through the pages of one parameter group.

- Use the Compare button in the DSP Edit/Assign section for page up.
Hold down the Shift button in the Keyboard Shortcuts section and press the Compare button to jump to the last page.

- Use the Bypass button in the DSP Edit/Assign section for page down.
Hold down the Shift button in the Keyboard Shortcuts section and press the Bypass button to jump to the first page.

- Use the Insert/Param button in the DSP Edit/Assign section to switch the display of names of the available parameters in the lower row on or off.

F1 button: Selected Channel: EQ

- Page 1 – Gain, Frequency, Q and Enable for the lo band
- Page 2 – Gain, Frequency, Q and Enable for the lo mid band
- Page 3 – Gain, Frequency, Q and Enable for the hi mid band
- Page 4 – Gain, Frequency, Q and Enable for the hi band
- Buttons above dials: bypass EQs

F2 button: Selected Channel: Sends

- Pages 1 to 8 – Level, Enable, Pre/Post and Bus for Sends 1 to 8
- Buttons above dials: bypass sends

F3 button: Selected Channel: Routing

- Page 1 – Output Bus, Monitor, Input Bus, Input Gain
- Page 2 – Input Phase
- Buttons above dials: monitor

F4 button: Selected Channel: Inserts

F5 button: Global mode Send Effects

F6 button: Global mode Master Effects

F7 button: Global mode Instruments

- Use the Locate/Numerics buttons to set the project cursor position.

- Immediately after you enter a numeric character, the Mackie HUI time display will no longer show the project cursor position, but the new value.
- You don't have to enter decimal points, colons, or semicolons for a new value.
- Use the CLR button to delete the last character. Holding down Shift (in the Keyboard Shortcuts section) and pressing the CLR button will delete the new value.
- Press the Enter button to set the project cursor to the position according to the new value.
- Use the "+" and "-" buttons to shift the project cursor position forward or backward by the amount of time set with the new value.

- The three LEDs left of the time display indicate whether Bars+Beats (BEATS), a frame based timecode (TIME CODE) or Samples (all LEDs off) is selected.

Remote controlling the mixer

Tascam US-428

Specifications

The US-428 can remote control up to 64 mixer channels.

▪ When the Tascam US-428 device is added in the Device Setup dialog, you can open the Remote Status window by selecting "Tascam US-428" from the Devices menu.

This indicates which bank (group of eight channels in Cubase AI) is currently being controlled by the remote device. To select another bank, use the pop-up menu in the window or use the Bank Left/Right buttons on the remote device.

▪ The US-428 transport keys will have the equivalent functionality in Cubase AI.

▪ To set markers, hold down "Set" while pressing a locator key.

▪ If you hold down the function key [Null] and then move a fader, the Select and Rec indicators above the fader will indicate whether the fader position is below or above the current fader level in Cubase AI.

If the upper indicator is lit, the fader position on the panel is above the fader level in Cubase AI and vice versa. When both indicators are dark, fader positions are matched for that channel.

⚠ The US-428 supports "MIDI Feedback", allowing for mute/solo, channel selection, EQ band, Aux 1 to 4 and transport status to be indicated on the panel. For this (and the fader position indication described above) to work, you need to select the "US-428 Control" port as input and output.

Cubase AI mixer

The following US-428 controls will remote control the following mixer parameter for each channel strip:

▪ Fader: volume

▪ Mute/Solo: mute and solo (selected via the Solo switch)

▪ Select: selects channel for editing

▪ Pan-Dial: pan

▪ EQ-Gain

Controls the EQ gain for each band selected with the Low, LoMid, HiMid and High buttons. These correspond to the four EQ bands in Cubase AI, starting from the leftmost band.

▪ EQ-Freq

Controls the EQ frequency for each band selected with the Low, LoMid, HiMid and High buttons. These correspond to the four EQ bands in Cubase AI, starting from the leftmost band.

▪ EQ-"Q"

Controls the EQ "Q" for each band selected with the Low, LoMid, HiMid and High buttons. These correspond to the four EQ bands in Cubase AI, starting from the leftmost band.

▪ Aux 1 to Aux 4 and shuttle wheel:

The effect send levels for sends 1 to 4.

▪ The shuttle wheel will act as position shuttle if no Aux send button is selected.

Press the activated button to deselect it.

▪ Holding down the "Asgn" button and pressing the Low, LoMid, HiMid and High EQ buttons switches the corresponding EQ band "On" button status.

▪ Holding down the "Asgn" button and pressing the Aux1 to Aux4 buttons switches the corresponding Effect Send 1–4 "On" button status.

Yamaha 01V

Specifications

The Yamaha 01V can remote control the Cubase AI mixer. Before you can initiate remote control operation, the 01V must be set up in the following way:

▪ MIDI Parameter Change and Receive must be enabled.

▪ MIDI Control Change and Receive must be disabled.

▪ Device ID / MIDI Channel Receive must be set to "1".

▪ Local Control should be set to "Off".

As soon as Local Control is set to "Off", remote control of the mixer is enabled.

The 01V remote operation of the Cubase AI mixer is very straightforward, with (almost) every parameter having the equivalent parameter controller in the 01V mixer. The current status of all controllable parameters is fed back to the 01V and indicated on the panel, using the motorized faders, indicators, etc. (for this to work, you need a twoway MIDI connection between the 01V and Cubase AI).

To facilitate 32 channel remote control, two separate control "Layouts" are used, each controlling 16 mixer channels. The "Memory" button on the 01V is used to switch between VST layout 1 and 2. Page 1 displays VST Layout 1, and page 2 VST Layout 2.

The following parameters are remote controllable for channels 1–32 in the mixer:

⚠ The value ranges for the parameters in the 01V may not match the ranges for the corresponding parameters in all cases.

▪ Fader level, mute and pan.
01V controls for these parameters control the equivalent Cubase AI parameters.

▪ Effect sends 1–6.
01V Aux 1–4 control effect send 1–4, 01V effect 1 and 2 control effect send 5 and 6.

▪ EQ Frequency, Gain and Q (4 bands).
01V controls for these parameters control the equivalent Cubase AI parameters.

▪ Stereo Master Volume.
The 01V control for this parameter controls the equivalent Cubase AI parameter.

▪ Send effects master volume 1–4 are controlled by 01V Aux Master 1–4. Send effects master 5 and 6 are controlled by 01V effect master 1 and 2.

With Layout 1 the 01V controls the following channels:

▪ Channel 1–12, 13/14 and 15/16 will control channels 1–14.

▪ 01V Return 1 and 2 will control channels 15 and 16.

With Layout 2 the 01V controls the following channels:

▪ Channel 1–12, 13/14 and 15/16 will control channels 17–30.

▪ 01V Return 1 and 2 will control channels 31 and 32.

Yamaha DM2000/DM 2000v2

The Yamaha DM2000 is a digital mixing console that provides full automation of virtually all console parameters. It is designed to integrate effectively with digital audio workstations such as Cubase AI.

▪ For detailed information about features, parameters, etc., please see the documentation which comes with the Yamaha DM2000.

Yamaha DM1000

The Yamaha DM1000 is a digital mixing console that provides full automation of virtually all console parameters. It is designed to integrate effectively with digital audio workstations such as Cubase AI.

▪ For detailed information about features, parameters, etc., please see the documentation which comes with the Yamaha DM1000.

Yamaha 01v96v2

The Yamaha 01v96v2 is a digital mixing console that provides full automation of virtually all console parameters. It is designed to integrate effectively with digital audio workstations such as Cubase AI.

▪ For detailed information about features, parameters, etc., please see the documentation which comes with the Yamaha 01v96v2.

Yamaha 02r96v2

The Yamaha 02r96v2 is a digital mixing console that provides full automation of virtually all console parameters. It is designed to integrate effectively with digital audio workstations such as Cubase AI.

▪ For detailed information about features, parameters, etc., please see the documentation which comes with the Yamaha 02r96v2.

Yamaha 01x

The Yamaha 01x is a digital mixing console that provides full automation of virtually all console parameters. It is designed to integrate effectively with digital audio workstations such as Cubase AI.

▪ For detailed information about features, parameters, etc., please see the documentation which comes with the Yamaha 01x.

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