Speaker Setting

Fine-tuning so that the System Q value is optimal when setting the speaker type as follows;

Speaker type	Display
OFF	"OFF"
For 5 & 4 in. speaker	"5/4inch"
For 6 & 6x9 in. speaker	"6x9/6inch"
For the OEM speaker	"O.E.M."

1 Enter Standby
Select the "STANDBY" display.
For how to select source item, refer to <Power/Source Select button> of <Basic Operation> (page 4).

2 Enter Speaker Setting mode
Press the [AUD] knob.
"SP SEL" is displayed.

3 Select the Speaker type
Turn the [AUD] knob.

4 Exit Speaker Setting mode
Press the [AUD] knob.

Audio Adjustments

Audio Preset Memory

Registering the value setup by Sound Control. The memory cannot be erased by the Reset button.

1 Setup Sound Control
Refer to the following operations to setup the Sound Control.
- <Audio Control> (page 20)
- <Audio Setup> (page 20)

2 Select Audio Preset item during Menu mode (Other than Standby mode)
Select the "Audio Preset" display.
For how to select Function Control items, refer to <Function Control> (page 6).

3 Enter Audio Preset mode
Press the Control knob for at least 1 second.

4 Select the Audio Preset Memory
Turn the Control knob.
Select the "Memory" display.

5 Determine whether to put the Audio Preset in the memory
Press the Control knob.
"Memory?" is displayed.

6 Put the Audio Preset in the memory
Turn the Control knob to select "YES", and then press the Control knob.
"Memory Completed" is displayed.

7 Exit Audio Preset mode
Press the [FNC] button.

- Register 1 pair of Audio Preset Memory. You cannot register by the source.
- When you press the Reset, all the sources will be the setting value which is registered.
- The following items cannot be registered.
  Volume, Balance, Fader, Loudness, Volume offset, Dual Zone System, Rear Volume

Audio Preset Recall

Recalling the sound setup registered by <Audio Preset Memory> (page 22).

1 Select the source
For how to select source item, refer to <Power/Source Select button> of <Basic Operation> (page 4).

2 Select Audio Preset item during Menu mode (Other than Standby mode)
Select the "Audio Preset" display.
For how to select Function Control items, refer to <Function Control> (page 6).

3 Enter Audio Preset mode
Press the Control knob for at least 1 second.

4 Select the Audio Preset Recall
Turn the Control knob.
Select the "Recall" display.

5 Determine whether to recall the Audio Preset
Press the Control knob.
"Recall?" is displayed.

6 Recall the Audio Preset
Turn the Control knob to select "YES", and then press the Control knob.
"Recall Completed" is displayed.

7 Exit Audio Preset mode
Press the [FNC] button.

- The User memory of "SYSTEM Q" in <Audio Control> (page 20) is changed to the value which was recalled.
- The source tone memory item of <Audio Control> (page 20) is changed to the value which was recalled by the selected source.

Bluetooth Setup

Registering Bluetooth device

To make your Bluetooth device (cell-phone or audio player) usable with this unit, you need to register it (pairing). You can register up to five Bluetooth devices to this unit.

When registering from Bluetooth devices

1 Turn on the control unit.

2 Start registering a unit by operating the Bluetooth device
By operating the Bluetooth device, register the hands-free unit or audio player (pairing). Select "KENWOOD BT CD/R-2P2" from the list of connected units.

3 Enter a PIN code
Input the PIN code registered as mentioned in <Registering PIN Code> (page 24).
Check that registration is complete on the Bluetooth device.

4 By operating the Bluetooth device, start hands-free or audio connection.

When registering from this unit

1 Select Bluetooth device registration item during Menu mode (In Standby mode)
"Device Regist" is displayed.
For how to select Function Control items, refer to <Function Control> (page 6).

2 Enter Bluetooth device registration mode
Press the Control knob for at least 1 second.
Search for the Bluetooth device.
When search is completed, "Finished" is displayed.

3 Select the Bluetooth device
Turn the Control knob or push it towards up or down to select the Bluetooth device.
Press the Control knob to determine the selection.

4 Input the PIN code

Operation type	Operation
Select the numbers.	Turn the Control knob or push it towards up or down.
Move to the next digit.	Push the Control knob towards right.
Delete the last digit.	Push the Control knob towards left.

5 Transmit the PIN code
Press the Control knob for at least 1 second.
If "Pairing Success" is displayed, registration is completed.

6 Return to the device list
Press the Control knob.

7 Exit Bluetooth device registration
Press the [FNC] button.

⊜
- This unit allows up to eight digits to be input for a PIN code. If a PIN code cannot be input from this unit, it can be input from the Bluetooth device.
- If there are 5 or more Bluetooth devices registered, you cannot register a new Bluetooth device.
- If the error message appears even though the PIN code is correct, try <Registering Special Bluetooth device> (page 23).

Registering Special Bluetooth device

Allow registration of a special device that cannot be registered normally (pairing).

1 Select special device registration item during Menu mode (In Standby mode)
"SPCL DVC Select" is displayed.
For how to select Function Control items, refer to <Function Control> (page 6).

2 Enter special device registration mode
Press the Control knob for at least 1 second.
A list is displayed.

3 Select a device name
Turn the Control knob or push it towards up or down to select a device name.
Press the Control knob to determine the selection.
If "Completed" is displayed, registration is completed.

4 Go through the procedure of <Registering Bluetooth device> (page 23) and complete the registration (pairing).

Cancelling special device registration mode
Press the [FNC] button.

⊜
- If the device name is not in the list, select "Other Phone".

Bluetooth Setup

Registering PIN Code

By operating the Bluetooth device, specify the PIN code necessary for registering this unit.

1 Select PIN code edit item during Menu mode (In Standby mode)
"PIN Code Edit" is displayed.
For how to select Function Control items, refer to <Function Control> (page 6).

2 Enter PIN code edit mode
Press the Control knob for at least 1 second.
The current setting of PIN code is displayed.

3 Input the PIN code

Select the numbers.	Turn the Control knob or push it towards up or down.
Move to the next digit.	Push the Control knob towards right.
Delete the last digit.	Push the Control knob towards left.

4 Register a PIN code
Press the Control knob for at least 1 second.
If "Completed" is displayed, registration is completed.

5 Exit the PIN code edit mode
Press the [FNC] button.

- By default, "0000" is specified.
- A PIN code can be specified with up to eight digits.

Downloading the Phone Book

Download the phone book data from the cell-phone to this unit so that you can use the Phone Book of this unit.

To download automatically

If the cell-phone supports a phone book synchronization function, the phone book is downloaded automatically after Bluetooth connection.

- Setting on the cell-phone may be required.
- If no phone book data is found in the unit even after the compete display, your cell-phone may not support automatic download of phone book data. In this case, try downloading manually.

To download from the cell-phone manually

1 By operating the cell-phone, end the hands-free connection.

2 By operating the cell-phone, send the phone book data to this unit
By operating the cell-phone, download the phone book data to this unit.
- During downloading:
  "Downloading" is displayed.
- After completion of downloading:
  "Completed" is displayed.

3 By operating the cell-phone, start the hands-free connection.

To clear the downloading completion message
Press any button.

- Up to 1000 phone numbers can be registered for each registered cell-phone.
- Up to 32 digits can be registered for each phone number along with up to 50* characters representing a name.
  (* 50: Number of alphabetic alphabetical characters. Fewer characters can be input depending on the type of characters.)
- To cancel downloading of the phone book data, operate the cell-phone.

Selecting the Bluetooth device You Wish to Connect

When two or more Bluetooth devices have already been registered, you need to select the Bluetooth device you wish to use.

1 Select Bluetooth device selection item during Menu mode

Cell-phone
(In Standby mode)
"Phone Selection" is displayed.

Audio player
"Audio Selection" is displayed.

For how to select Function Control items, refer to <Function Control> (page 6).

2 Enter Bluetooth device selection mode
Press the Control knob for at least 1 second.
'(name)' is displayed.

3 Select the Bluetooth device
Turn the Control knob or push it towards up or down.

4 Set up the Bluetooth device
Push the Control knob towards right or left.
'✱(name)' or '-(name)' is displayed.
"✱": The selected Bluetooth device is busy.
"-": The selected Bluetooth device is on standby.
" " (blank): The Bluetooth device is deselected.

5 Exit the Bluetooth device selection mode
Press the [FNC] button.

⊞
- If a cell-phone is already selected, deselect it, and then select a different one.
- If you cannot select a device using the audio player, connect the device with the audio player.

Deleting a Registered Bluetooth device

You can delete a registered Bluetooth device.

1 Select Bluetooth device deletion item during Menu mode (In Standby mode)
"Device Delete" is displayed.
For how to select Function Control items, refer to <Function Control> (page 6).

2 Enter Bluetooth device deletion mode
Press the Control knob for at least 1 second.
'(name)' is displayed.

3 Select the Bluetooth device
Turn the Control knob or push it towards up or down.

4 Delete the selected Bluetooth device
Press the Control knob.
Turn the Control knob to select "YES", and then press the Control knob.

5 Exit the Bluetooth device deletion mode
Press the [FNC] button.

⊞
- When a registered cell-phone is deleted, its Phone Book, log, SMS, and voice tag are also deleted.

Displaying the Firmware Version

Display the version of the firmware of this unit.

1 Select Bluetooth Firmware update item during Menu mode (In Standby mode)
"BT F/W Update" is displayed.
For how to select Function Control items, refer to <Function Control> (page 6).

2 Enter Bluetooth Firmware update mode
Press the Control knob for at least 1 second.
The firmware version appears.

3 Exit Bluetooth Firmware update mode
Press the [FNC] button.

⊞
- For how to update the firmware, access our website.
  http://www.kenwood.com/bt/information/

Bluetooth Setup

Adding a voice dialing command

Add a voice tag to the phonebook for voice dialing. You can register up to 35 voice tags.

1 Enter voice tag mode
Select "BT" > "VOICE" > "NAME".

For how to select Function Control item, refer to <Function Control> (page 6).

2 Search for the name to register
Select the name to register with reference to 4 in <Calling a number in the PhoneBook> (page 15). If a voice tag has already been registered for a name, "*" is displayed before the name.

3 Select a mode
Push the Control knob towards right or left.

Display	Operation
"N-REG"	Register a voice tag.
"N-CHK"*	Play a voice tag.
"N-DEL"*	Delete a voice tag.
"◀▌"	Return to step 2.

* Displayed only when a name for which a voice tag has been registered is selected.

Select "REG" (Regist)

4 Register a voice tag (first)
Press the Control knob.
"Enter Voice 1" is displayed.
When a beep is heard, utter a voice tag within 2 seconds.

5 Confirm the voice tag (second)
Press the Control knob.
"Enter Voice 2" is displayed.
When a beep is heard, utter the same voice tag as that you uttered in step 4 within 2 seconds. "Completed" is displayed.

6 End registration
Press the Control knob.
Return to step 2. You can register another voice tag continuously.

⊞⟩

- If your voice cannot be recognized, a message is displayed. Pressing the Control knob allows you to retry voice input. (page 40)

Select "CHK" (Play)

4 Press the Control knob.
Play the registered voice and return to step 2.

Select "DEL" (Delete)

4 Delete a voice tag
Press the Control knob.
Turn the Control knob to select "YES", and then press the Control knob.
Return to step 2.

Exit the voice tag mode
Press the [FNC] button.

⊞⟩

- Audio sound is not output during voice tag registration.

Setting a Voice Command for Category

Add a voice tag to the phone number category (type) for voice calling.

1 Enter voice tag mode
Select "BT" > "VOICE" > "TYPE".

For how to select Function Control item, refer to <Function Control> (page 6).

2 Select the category (type) you wish to set
Turn the Control knob or push it towards up or down.
"General"/ "Home"/ "Office"/ "Mobile"/ "Other"

3 Press the Control knob.

4 Select a mode
Push the Control knob towards right or left.

Display	Operation
"T-REG"	Register a voice tag.
"T-CHK"*	Play a voice tag.
"T-DEL"*	Delete a voice tag.
"◀▌"	Return to step 2.

* Displayed only when a category (type) for which a voice tag has been registered is selected.

5 Register the category (type) by performing steps 4 to 6 in <Adding a voice dialing command> (page 26).

Exit the voice tag mode
Press the [FNC] button.

⊞⟩

- Set the voice tag for all the 5 categories. If the voice tag is not registered for all the categories, the Phonebook may not be recalled by voice command.

Downloading the SMS

Download the short message (SMS) arrived at the cell-phone so that it can be read on this unit.

1 Enter SMS download mode
Select "BT" > "SMS" > "SMSDL".
For how to select Function Control item, refer to <Function Control> (page 6).

2 Start downloading
Press the Control knob.
"SMS Downloading" is displayed.
When the downloading finishes, "Completed" is displayed.

3 Exit the SMS download mode
Press the [FNC] button.

⊜

- The cell-phone must be able to transmit the SMS using Bluetooth. Setting on the cell-phone may be required. If the cell-phone does not support SMS function, the SMS download item in Function Control mode is not displayed.
- When the SMS is downloaded from the cell-phone, the unopened messages in the cell-phone are opened.
- The already-read and unread short messages can be respectively downloaded up to 75.

SMS (Short Message Service)

The SMS arrived at the cell-phone is displayed on the receiver.
A newly arrived message is displayed.

⚠

- To prevent car accidents, the driver should not read the SMS while driving.

When a new message arrives
"SMS Received" is displayed.
The display disappears with any operations.

Displaying the SMS

1 Enter SMS Inbox mode
Select "BT" > "SMS" > "INBOX".
For how to select Function Control item, refer to <Function Control> (page 6).
A message list appears.

2 Select a message
Turn the Control knob or push it towards up or down.
- Each pressing of the [AUTO] button switches the number of items displayed between 3 or 1.

3 Display the text
Press the Control knob.
Pressing this button again allows you to select a message again.
- If you push the Control Knob towards right or left when the "◄" or "►" symbol is displayed, the following message is displayed.

4 Exit the SMS Inbox mode
Press the [FNC] button.

⊜

- The unopened message is displayed at the beginning of the list. Other messages are displayed in the order of reception. (Receipt date display: Year-Month-Day-Hour-Minute)
- The SMS that has arrived when the cell-phone is not linked with Bluetooth cannot be displayed. Download the SMS.
- The short message cannot be displayed during downloading the SMS.

Satellite Radio tuner control (Optional)

Basic Operation

Selecting Satellite Radio source

Press the [SRC] button.

Select the "SAT"/ "SIRIUS"/ "XM" display.
For how to select source item, refer to <Power/
Source Select button> of <Basic Operation> (page
4).

⊜

- You need to register to the service provider to receive
  the service by Satellite Radio. Consult the service
  provider if "CALL ... TO SUBSCRIBE" appears.
- The radio may take a little time to start receiving after
  you select the Satellite Radio source.
- If the signal reception fails, "Acquiring Signal"/ "No Signal"
  appears.

Switching Seek Mode

Press the [AUTO] button.

"Channel"	Normal manual seeking control.
"Preset"	Search in order of the channels in the Preset memory.

Select the channel

Push the Control knob towards right or left.

Selecting the Preset Band

Push the Control knob toward up.

Each time you push the knob, the preset band
alternates between the SR1, SR2, SR3 and SR4.

Channel Scan

Press the [AUTO] button for at least 2 seconds.

Pressing this button for 2 seconds or longer allows
you to check individual channel for 10 seconds
each. Pressing this button again for 2 seconds or
longer allows you to exit this mode.

Category and Channel Search

Selecting the channel and category you want to
receive.

1 Enter Category and Channel Search mode
Press the Control knob.

2 Select the Category
Turn the Control knob or push it towards up or
down.

3 Select the Channel
Push the Control knob towards right or left.

Cancelling Category and Channel Search mode

Press the Control knob.

⊜

- You cannot Channel search until the category
  information is acquired.

Function of remote control
Direct Access Tuning

Entering the channel and tuning.

1 Enter Direct Access Tuning mode
Press the [DIRECT] button on the remote
control.

2 Enter the channel
Press the number buttons.

3 Do Channel Search
Press the [I◄◄] or [►►I] button.

Cancelling Direct Access Tuning

**Press the [DIRECT] button on the remote
control.**

⊜

- If you make no button operation for 10 seconds, the
  Direct Access Tuning mode is automatically canceled.
- If you cannot receive any signal in the input Channel due
  to bad conditions on radio wave or other such problems,
  "Acquiring Signal"/ "No Signal" appears.

Preset Memory

Putting the channel in the memory.

1 Select the channel to put in the memory
Push the Control knob towards right or left.

2 Enter Preset Memory mode
Select "P.MEM".
For how to select Function Control item, refer to
<Function Control> (page 6).

3 Select the number to put in the memory
Turn the Control knob or push it towards up or down.

4 Determine the number to put in the memory
Press the Control knob.

5 Allow the determined number to take effect
Press the Control knob.

Cancelling the Preset Memory mode

Press the [FNC] button.

⊞Q

- Only the channel number is stored. Category information is not stored.

Preset Tuning

Recalling the channels in the memory.

1 Enter Preset Tuning Select mode
Turn the Control knob.
A list is displayed.

2 Select a desired station in the memory
Turn the Control knob or push it towards up or down.

3 Recall the station
Press the Control knob.

Cancelling Preset Tuning
Press the [FNC] button.

Basic Operations of remote control
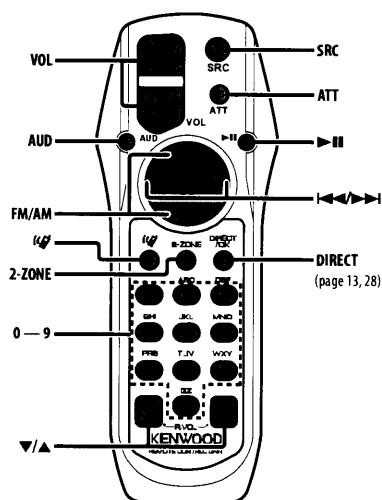
General control

Volume control 🔲 **[VOL]**

Source select 🔲 **[SRC]**

Volume reduce 🔲 **[ATT]**

In Audio control

Audio item select 🔲 **[AUD]**

Adjust the Audio item 🔲 **[VOL]**

⊞

• Refer to <Audio Control> (page 20) for the operation method, such as the procedures for Audio control and others operations.

Dual Zone control

Dual zone system on and off 🔲 **[2-ZONE]**

Rear channel volume control 🔲 **[▲]/ [▼]**

In Tuner/HD Radio source

Band select 🔲 **[FM]/[AM]**

Station select 🔲 **[I◄◄]/[►►I]**

Recall preset stations 🔲 **[1] — [6]**

In CD/USB source

Music select 🔲 **[I◄◄]/[►►I]**

Folder/Disc select 🔲 **[FM]/[AM]**

Pause/Play 🔲 **[►II]**

In Satellite Radio tuner source

Preset band select 🔲 **[FM]**

Channel select 🔲 **[I◄◄]/[►►I]**

Recall preset channels 🔲 **[1] — [6]**

In Bluetooth audio source

Music select 🔲 **[I◄◄]/[►►I]**

Pause/Play 🔲 **[►II]**

Hands-free phone control

Making a call

Enter the dialing method selection mode

🎛️ [(**ℓ**]

Select a dialing method 🎛️ [▶II]

Number dial input

Operation type	Operation
Input a digit.	**[0] – [9] buttons**
Input "+".	**[▶▶I] button**
Input "#".	**[FM] button**
Input "*".	**[AM] button**
Clear the entered phone number.	**[I◀◀] button**

Make a call 🎛️ **[DIRECT]**

Receiving a call

Answer the call 🎛️ [(**ℓ**]

Switch between the private talk mode and the hands-free talk mode 🎛️ [▶II]

Call waiting

Answer Another Incoming Call with the Current Call Suspended 🎛️ [(**ℓ**]

Answer another Incoming Call after Terminating the Current Call 🎛️ **[SRC]**

Continu the Current Call 🎛️ **[1]**

During a call

End the call 🎛️ **[SRC]**

Adjust the voice volume 🎛️ **[VOL]**

⚠️
• Do not set the remote control in hot places such as on the dashboard.

Loading and Replacing battery
Use two "AA"/ "R6"-size batteries.
Slide the cover while pressing downwards to remove it as illustrated.
Insert the batteries with the + and – poles aligned properly, following the illustration inside the case.
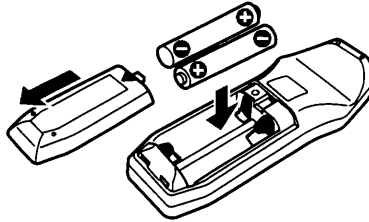
Appendix

About Audio file
- **Playable Audio file**
  AAC-LC (.m4a), MP3 (.mp3), WMA (.wma)
- **Playable disc media**
  CD-R/RW/ROM
- **Playable disc file format**
  ISO 9660 Level 1/2, Joliet, Romeo, Long file name.
- **Playable USB device**
  USB mass storage class
- **Playable USB device file system**
  FAT16, FAT32

Although the audio files are complied with the standards listed above, the play maybe impossible depending on the types or conditions of media or device.

- **Playing order of the Audio file**
  In the example of folder/file tree shown below, the files are played in the order from ① to ⑩.
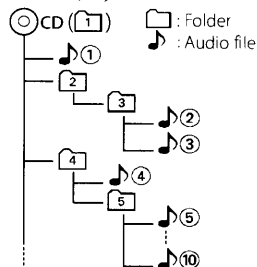
An online manual about audio files is put on the site, **www.kenwood.com/audiofile/**. On this online manual, detailed information and notes which are not written in this manual are provided. Make sure to read through the online manual as well.

- In this manual, the word "USB device" is used for flash memories and digital audio players which have USB terminals.
- The word "iPod" appearing in this manual indicates the iPod connected with the iPod connection cable (optional accessory). The iPod connected with the iPod connection cable can be controlled from this unit. iPods that can be connected with the iPod connection cable are the iPod nano, Fifth Generation iPod, iPod classic, and iPod touch. Other iPods cannot be connected.
  It may be different from the playlist in iPod.

About USB device
- If you start playback after connecting the iPod, the music that has been played by the iPod is played first.
  In this case, "RESUMING" is displayed without displaying a folder name, etc. Changing the browse item will display a correct title, etc.
- When the iPod is connected to this unit, "KENWOOD" or "✓" is displayed on the iPod to indicate that you cannot operate the iPod.
- When the USB device is connected to this unit, it can be charged up provided that this unit is powered.
- Install the USB device in the place where it will not prevent you from driving your vehicle properly.
- You cannot connect a USB device via a USB hub and Multi Card Reader.
- Take backups of the audio files used with this unit. The files can be erased depending on the operating conditions of the USB device.
  We shall have no compensation for any damage arising out of erasure of the stored data.
- No USB device comes with this unit. You need to purchase a commercially available USB device.
- When connecting the USB device, usage of the CA-U1EX (option) is recommended.
  Normal playback is not guaranteed when a cable other than the USB compatible cable is used. Connecting a cable whose total length is longer than 5 m can result in abnormal playback.

About KENWOOD "Music Editor" of PC application
- "Music Editor" is recorded in the CD-ROM attached to this unit.
- Refer to the user's manual recorded in the installation CD-ROM and Help of "Music Editor" for the operation method of "Music Editor".
- The unit can play USB device created by "Music Editor".
- Information about "Music Editor" upgrade is put on the site, www.kenwood.com.

About Satellite Radio tuner (Optional)
This unit supports Satellite Radio tuners which are released by SIRIUS and XM.
Refer to the instruction manual of Satellite radio tuner.

About HD Radio (Optional)
When you connect an HD Radio, Tuner features of the unit are disabled and changed to HD Radio tuner features.
With the HD Radio tuner, you can use the similar

functions of Tuner features. Refer to Tuner features for how to use the functions.

About the Cell-Phone

This unit conforms to the following Bluetooth specifications:

Version	Bluetooth Standard Ver. 1.2
Profile	HFP (Hands Free Profile)
	OPP (Object Push Profile)
	PBAP (Phonebook Access Profile)
	SYNC (Synchronization Profile)

For the cell-phones verified for compatibility, access the following URL:

http://www.kenwood.com/bt/information/

⊜

- The units supporting the Bluetooth function have been certified for conformity with the Bluetooth Standard following the procedure prescribed by Bluetooth SIG. However, it may be impossible for such units to communicate with your cell-phone depending on its type.
- HFP is a profile used to make a hands-free call.
- OPP is a profile used to transfer data such as a phone book between units.

About the Bluetooth Audio player

This unit conforms to the following Bluetooth specifications:

Version	Bluetooth Standard Ver. 1.2
Profile	A2DP (Advanced Audio Distribution Profile)
	AVRCP (Audio/Video Remote Control Profile)

⊜

- A2DP is a profile designed to transfer the music from an audio player.
- AVRCP is a profile designed to control playback and selection of music by an audio player.

Menu Glossary

- **SRC Select**

  Setting up the Source Select mode.
  1 : Displays source icons for your choice.
  2 : Allows you to select sources one after another.
- **BT DVC Status (Displaying the Bluetooth device Status)**

  You can display the connection status, signal strength, and battery level.

  📱 : Bluetooth cell-phone connection status.

  🎧 : Bluetooth Audio connection status.

  🔋 : Battery level of cell-phone.
  Full 🔋 ➡ 🔋 ➡ 🔋 ➡ 🔋 Nearly dead

  📶 : Signal strength of cell-phone.
  Maximum 📶➡📶 ➡📶 ➡📶 Minimum

⊜

- Icons are not displayed if information cannot be obtained from the cell-phone.
- Since the number of steps of the control unit is different from that of the cell-phone, the statuses displayed on the control unit may discord from those displayed on the cell-phone.
- **Auto Answer (Setting the Time Interval for Automatic Answer)**

  This function automatically answers (responds to) a call after lapse of the preset time interval for automatic answer.

  "OFF" : Does not answer the phone call automatically.

  "0" : Automatically answers the phone call at once.

  "1s" - "99s" : Automatically answers the phone call after lapse of 1 - 99 seconds.

⊜

- If the time set in the cell-phone is shorter than that set in the unit, the former will be used.
- This function does not work for call waiting.
- **SP Select (Setting up the Voice Output Speakers)**

  You can specify the voice output speakers.

  "Front" : Outputs voice from the front-left and front-right speakers.

  "F-R" : Outputs voice from the front-right speaker.

  "F-L" : Outputs voice from the front-left speaker.

⊜

- Select the speaker which is further from the microphone in order to prevent howling or echoes.
- **Call Beep (Setting the Beep of the Incoming Call)**

  You can output a beep from the speaker when a call comes in.

  "ON" : Beep is heard.

  "OFF" : Beep is canceled.
- **Display**

  If this unit is not operated at least 5 seconds with "OFF" selected, the display turns off. During a setup mode, the display will not turn off even if 5 seconds lapse.

Appendix

- **ILM Dimmer (illumination dimmer)**
  Reduces the key Illumination brightness.
  AUTO: Dims the illumination in conjunction with the Light switch of the vehicle.
  MNAL1: Dims the illumination constantly.
  MNAL2: Turns off the upper and lower illuminations, and dims the left and right illuminations.
  OFF: Does not dim the illumination.
- **AMP**
  Selecting "OFF" turns off the built-in amplifier.
  Turning off the built-in amplifier improves the quality of the sound from Preout.
- **Zone2 (Dual Zone)**
  Set the destination (front speaker "Front" or rear speaker "Rear") of the sub source (AUX IN) when the Dual Zone function is turned on.
- **Supreme**
  Technology to extrapolate and supplement with proprietary algorithm, the high-frequency range that is cut off when encoding at low bit rate (less than 128Kbps, Sampling frequency is 44.1kHz).
  Supplementing is optimized by compression format (AAC, MP3 or WMA) and processed according to bit rate.
  The effect is negligible with music that is encoded at high bit rate, variable bit rate or has minimal high frequency range.
- **Receive Mode (Receive mode Setting)**
  Sets the receive mode of the HD Radio.
  Auto: Automatically tunes to analog broadcast when there is no digital broadcast.
  Digital: Digital broadcasts only.
  Analog: Analog broadcasts only.
- **CD Read**
  Sets the method for reading CD.
  When unable to play special format CD, set this function to "2" to force playing. Note that some music CD may be unplayable even when set to "2". In addition, audio files cannot be played when set to "2". Normally, keep this set to "1".
  1 : Automatically distinguishes between audio file disc and music CD when playing disc.
  2 : Forces playing as music CD.

⚠CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

> Kenwood Corporation
> 2967-3, ISHIKAWA-MACHI,
> HACHIOJI-SHI
> TOKYO, JAPAN
>
> KENWOOD CORP. CERTIFIES THIS EQUIPMENT CONFORMS TO DHHS REGULATIONS N0.21 CFR 1040. 10, CHAPTER 1, SUBCHAPTER J.

Location : Bottom Panel

FCC and IC WARNING

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

FCC and IC NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment may cause harmful interference to radio communications, if it is not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Accessories/ Installation Procedure

Accessories

① 1

④ 4

② 2

⑤ 4

③ 1
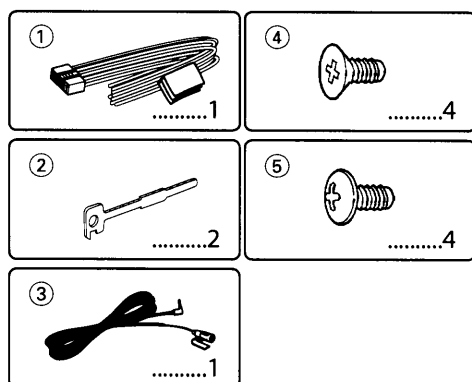
Installation Procedure

1. To prevent a short circuit, remove the key from the ignition and disconnect the ⊖ battery.
2. Make the proper input and output wire connections for each unit.
3. Connect the speaker wires of the wiring harness.
4. Connect the wiring harness wires in the following order: ground, battery, ignition.
5. Connect the wiring harness connector to the unit.
6. Install the unit in your car.
7. Reconnect the ⊖ battery.
8. Press the reset button.

⚠WARNING

If you connect the ignition wire (red) and the battery wire (yellow) to the car chassis (ground), you may cause a short circuit, that in turn may start a fire. Always connect those wires to the power source running through the fuse box.

⚠

- Mounting and wiring this product requires skills and experience. For safety's sake, leave the mounting and wiring work to professionals.
- Make sure to ground the unit to a negative 12V DC power supply.
- Do not install the unit in a spot exposed to direct sunlight or excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.
- Do not use your own screws. Use only the screws provided. If you use the wrong screws, you could damage the unit.
- If the power is not turned ON ("Protect" is displayed), the speaker wire may have a short-circuit or touched the chassis of the vehicle and the protection function may have been activated. Therefore, the speaker wire should be checked.
- If your car's ignition does not have an ACC position, connect the ignition wires to a power source that can be turned on and off with the ignition key. If you connect the ignition wire to a power source with a constant voltage supply, as with battery wires, the battery may die.

- If the console has a lid, make sure to install the unit so that the faceplate will not hit the lid when closing and opening.
- If the fuse blows, first make sure the wires aren't touching to cause a short circuit, then replace the old fuse with one with the same rating.
- Insulate unconnected wires with vinyl tape or other similar material. To prevent a short circuit, do not remove the caps on the ends of the unconnected wires or the terminals.
- Connect the speaker wires correctly to the terminals to which they correspond. The unit may be damaged or fail to work if you share the ⊖ wires or ground them to any metal part in the car.
- When only two speakers are being connected to the system, connect the connectors either to both the front output terminals or to both the rear output terminals (do not mix front and rear). For example, if you connect the ⊕ connector of the left speaker to a front output terminal, do not connect the ⊖ connector to a rear output terminal.
- After the unit is installed, check whether the brake lamps, blinkers, wipers, etc. on the car are working properly.
- Mount the unit so that the mounting angle is 30° or less.
- Reception may drop if there are metal objects near the Bluetooth antenna.
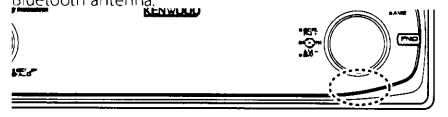
Bluetooth antenna unit

About CD players/disc changers connected to this unit

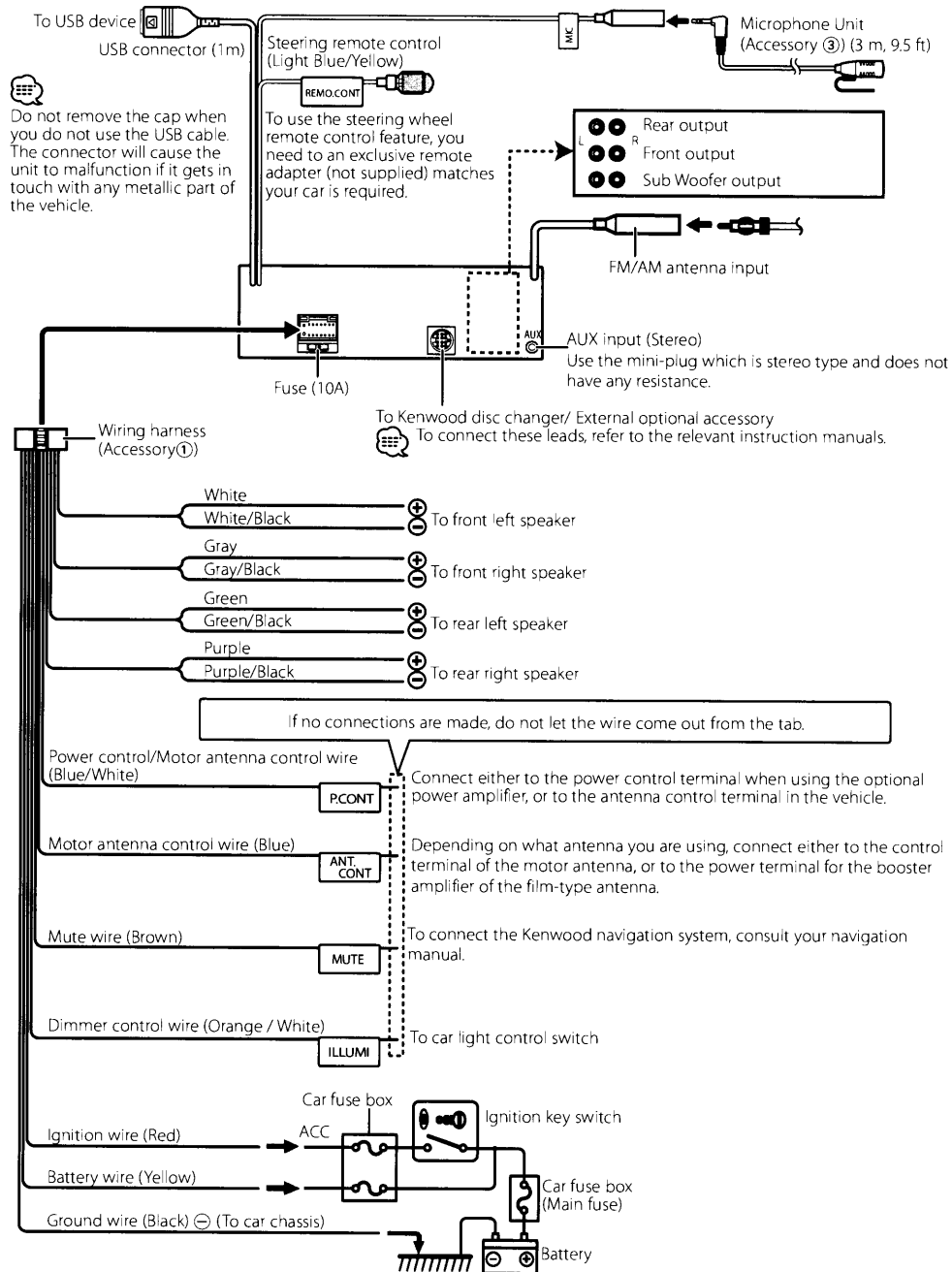If the CD player/ disc changer has the "O-N" switch, set it to the "N" position.
The functions you can use and the information that can be displayed may differ depending on the models being connected.

For Good Reception
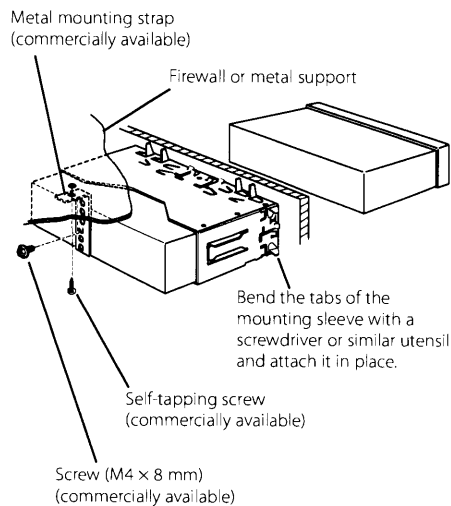
To assure good reception, note the following:
- Communicate with the cell-phone within the line-of-sight distance of 10 m (30 ft). The communication range becomes shorter depending on the surrounding environment. The communication range also becomes shorter when there is an obstacle between this unit and the cell-phone. The above maximum communication range (10 m) is not always assured.
- A broadcast station or walkie-talkie located nearby can interfere with communication due to too strong signal.

Connecting Wires to Terminals

To USB device

USB connector (1m)
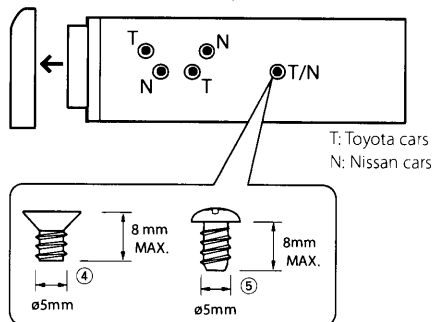
Do not remove the cap when you do not use the USB cable. The connector will cause the unit to malfunction if it gets in touch with any metallic part of the vehicle.

Steering remote control (Light Blue/Yellow)

REMO.CONT

To use the steering wheel remote control feature, you need to an exclusive remote adapter (not supplied) matches your car is required.

Microphone Unit (Accessory ③) (3 m, 9.5 ft)

Rear output
Front output
Sub Woofer output

FM/AM antenna input

AUX input (Stereo)
Use the mini-plug which is stereo type and does not have any resistance.

Fuse (10A)

To Kenwood disc changer/ External optional accessory
To connect these leads, refer to the relevant instruction manuals.

Wiring harness (Accessory①)

White
White/Black ——— To front left speaker

Gray
Gray/Black ——— To front right speaker

Green
Green/Black ——— To rear left speaker

Purple
Purple/Black ——— To rear right speaker

If no connections are made, do not let the wire come out from the tab.

Power control/Motor antenna control wire (Blue/White)

P.CONT

Connect either to the power control terminal when using the optional power amplifier, or to the antenna control terminal in the vehicle.

Motor antenna control wire (Blue)

ANT. CONT

Depending on what antenna you are using, connect either to the control terminal of the motor antenna, or to the power terminal for the booster amplifier of the film-type antenna.

Mute wire (Brown)

MUTE

To connect the Kenwood navigation system, consult your navigation manual.

Dimmer control wire (Orange / White)

ILLUMI

To car light control switch

Car fuse box

Ignition key switch

Ignition wire (Red)   ACC

Battery wire (Yellow)

Car fuse box (Main fuse)

Ground wire (Black) ⊖ (To car chassis)

Battery

Installation/Removing the Unit

non-Japanese cars

Metal mounting strap
(commercially available)

Firewall or metal support

Bend the tabs of the
mounting sleeve with a
screwdriver or similar utensil
and attach it in place.

Self-tapping screw
(commercially available)

Screw (M4 × 8 mm)
(commercially available)

- Make sure that the unit is installed securely in place. If the unit is unstable, it may malfunction (for example, the sound may skip).

Japanese cars

1 Refer to the section <Removing the hard rubber frame> and then remove the hard rubber frame.
2 Align the holes in the unit (two locations on each side) with the vehicle mounting bracket and secure the unit with the accessory screws.

T: Toyota cars
N: Nissan cars

8 mm
MAX.
④
ø5mm

8mm
MAX.
⑤
ø5mm

Accessory④...for Nissan car
Accessory⑤...for Toyota car

Removing the hard rubber frame

1 Engage the catch pins on the removal tool and remove the two locks on the upper level.
Upper the frame and pull it forward as shown in the figure.

Lock   Catch

Accessory②
Removal tool
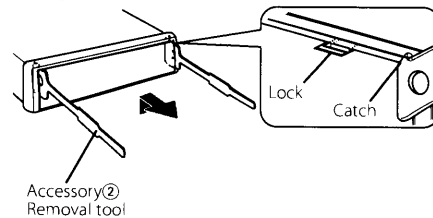
2 When the upper level is removed, remove the lower two locations.

- The frame can be removed from the bottom side in the same manner.

Removing the Unit

1 Refer to the section <Removing the hard rubber frame> and then remove the hard rubber frame.
2 Remove the screw (M4 × 8) on the back panel.
3 Insert the two removal tools deeply into the slots on each side, as shown.
4 Lower the removal tool toward the bottom, and pull out the unit halfway while pressing towards the inside.

Screw (M4 × 8 mm)
(commercially available)
Accessory②
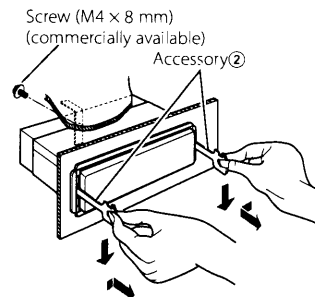
⚠
- Be careful to avoid injury from the catch pins on the removal tool.

5 Pull the unit all the way out with your hands, being careful not to drop it.

Installation/Removing the Unit

Installation the Microphone Unit

1 Check the installation position of the microphone (accessory ③).

2 Remove oil and other dirt from the installation surface.

3 Install the microphone.

4 Wire the microphone cable up to the hands-free box with it secured at several positions using tape or the like.

Accessory③

Fix a cable with a commercial item of tape.

Peel the release coated paper of double-face adhesive tape to fix on the place shown above.

Adjust the direction of the microphone to the driver.
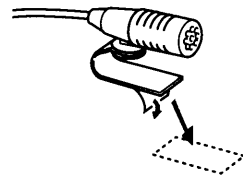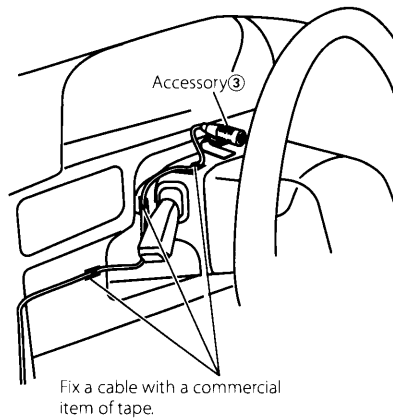
• Install the microphone as far as possible from the cell-phone.

Troubleshooting Guide

Some functions of this unit may be disabled by some settings made on this unit.

⚠ • **Cannot set up the subwoofer.**
• **Cannot set up the High Pass Filter.**
• **Cannot set up the Fader.**
• **No Audio control effect on AUX.**
▶ • <Subwoofer output> of <Basic Operation> (page 4) is not set to On.
• The Dual zone function is enabled. ☞ <Audio Setup> (page 20)

⚠ • **Cannot set up the subwoofer phase.**
▶ The Low Pass Filter is set to Through. ☞ <Audio Setup> (page 20)

⚠ • **Cannot set up the audio control.**
• **Cannot set up the audio setup.**
▶ You cannot set up during hands-free calling.

⚠ • **Cannot select the output destination of the subsource in the Dual zone.**
• **Cannot adjust the volume of the rear speakers.**
▶ The Dual zone function is disabled. ☞ <Audio Setup> (page 20)

⚠ • **Cannot register a security code.**
• **Cannot set up Display Illumination Control.**
▶ <Demonstration mode Setting> (page 19) is not turned off.

What might seem to be a malfunction in your unit may just be the result of slight misoperation or miswiring. Before calling service, first check the following table for possible problems.

General

？ **The Touch Sensor Tone does not sound.**
✔ The preout jack is being used.
☞ The Touch Sensor Tone cannot be output from the preout jack.

？ **The illumination flashes when the knob or button is operated.**
✔ This is the key illumination effect.
☞ You set this effect in "MENU" > "ILM Effect" of <Function Control> (page 6).

？ **The key illumination effect brought about in conjunction with the sound volume is small.**
✔ The key illumination effect may be insufficient depending on the sound volume and sound quality.

Tuner source

？ **Radio reception is poor.**
✔ The car antenna is not extended.
☞ Pull the antenna out all the way.

Disc source

？ **The specified disc does not play, but another one plays instead.**
✔ The specified CD is quite dirty.
☞ Clean the CD, referring to the CD cleaning of the section on <Handling CDs> (page 3).
✔ The disc is loaded in a different slot from that specified.
☞ Eject the disc magazine and check the number for the specified disc.
✔ The disc is severely scratched.
☞ Try another disc instead.

Audio file source

？ **The sound skips when an Audio file is being played.**
✔ The media is scratched or dirty.
☞ Clean the media, referring to the CD cleaning of the section on <Handling CDs> (page 3).
✔ The recording condition is bad.
☞ Record the media again or use another media.

？ **Noise is heard when carrying out Folder Search.**
✔ Noise may be produced if folders without audio files exist continuously in the playing media.
☞ Do not make folders without audio files.

Hands-free

？ **The hands-free talk volume is low.**
✔ The hands-free talk volume is set at a low level.
☞ The hands-free talk volume can be adjusted independently. Adjust it during hands-free talk.

？ **No sound is heard from the rear speakers.**
✔ You are talking in the hand-free talk mode.
☞ No sound is heard from the rear speakers in the hands-free talk mode.

？ **No beep is heard at reception of an incoming call.**
✔ No beep is heard depending on the type of your cell-phone.
☞ The "MENU" > "Call Beep" of <Function Control> (page 6) is set ON.

？ **Voice is not recognized.**
✔ The vehicle window is open.
☞ If the surrounding noise is large, voice cannot be recognized properly. Close the vehicle windows to reduce noise.
✔ Small voice.
☞ If voice is too small, it cannot be recognized properly. Speak into the microphone a little more loudly and naturally.
✔ The person uttering the voice tag is not the one who registered the it.
☞ Only the voice of the person who registered the voice tag can be recognized.

Troubleshooting Guide

Bluetooth audio source

? **The Bluetooth audio player cannot be registered (pairing).**

✔ The PIN code is fixed.

☞ When a PIN code is specified in the Instruction Manual for Bluetooth Audio Player, register it with reference to <Registering PIN Code> (page 24) to register the Bluetooth audio player. If no PIN code is specified in the Instruction Manual, try "0000".

? **The sound from the Bluetooth audio player is discontinuous.**

✔ The distance between this unit and audio player is too far.

☞ Move the audio player nearer to this unit.

✔ Another Bluetooth device is affecting the Bluetooth communication.

☞ Turn off another Bluetooth device.

☞ Move another Bluetooth device away from this unit.

✔ Another Bluetooth device or profile is used for communication.

☞ The downloading of the Phone book or the SMS disconnects the sound.

The messages shown below display your systems condition.

TOC Error:	• No disc has been loaded in the disc magazine. • The CD is quite dirty. The CD is upside-down. The CD is scratched a lot.
Error 05:	The disc is unreadable.
Error 77:	The unit is malfunctioning for some reason. ➪ Press the reset button on the unit. If the "Error 77" code does not disappear, consult your nearest service center.
Mecha Error:	Something is wrong with the disc magazine. Or the unit is malfunctioning for some reason. ➪ Check the disc magazine. And then press the reset button on the unit. If the "Mecha Error" code does not disappear, consult your nearest service center.
IN (Blink):	The CD player section is not operating properly. ➪ Reinsert the CD. If the CD cannot be ejected or the display continues to flash even when the CD has been properly reinserted, please switch off the power and consult your nearest service center.
Protect:	The speaker wire has a short-circuit or touches the chassis of the vehicle, and then the protection function is activated. ➪ Wire or insulate the speaker cable properly and press the reset button. If the "Protect" code does not disappear, consult your nearest service center.
Unsupported File:	An Audio file is played with a format that this unit can't support.
Copy Protection:	A copy-protected file is played.
Read Error:	The file system of the connected USB device is broken. ➪ Copy the files and folders for the USB device again. If the error message is still displayed, initialize the USB device or use other USB devices.
No Device:	The USB device is selected as a source although no USB device is connected. ➪ Change the source to any source other than USB. Connect an USB device, and change the source to USB again.
N/A Device:	An unsupported USB device is connected.
No Music Data/ Error 15:	• The connected USB device contains no playable audio file. • Media was played that does not have data recorded that the unit can play.

USB ERROR (Blink):
            Some trouble may have occurred to the connected USB device.
            ⇨ Remove the USB device, then cycle the power switch to ON. If the same display is repeated, use another USB device.

iPod Error: Connection to the iPod has failed.
            ⇨ Check that the connected iPod is an iPod that is supported. See <About Audio file> (page 32) for information on supported iPods.
            ⇨ Remove the USB device and then reconnect it.
            ⇨ Confirm that the software for the iPod is the latest version.

USB REMOVE: The Remove mode has been selected for the USB device/iPod. You can remove the USB device/iPod safely.

No Number: • The calling party does not notify a caller ID.
            • There is no phone number data.

No Data: • There is no outgoing call list.
            • There is no incoming call list.
            • There is no missed call list.

No Entry: The cell-phone has not been registered (pairing).

HF Disconnect:
            The unit cannot communicate with the cell-phone.

Audio Disconnect:
            The unit cannot communicate with the audio player.

HF Error 07:   The memory cannot be accessed.
            ⇨ Turn off the power and on again. If this message still appears, press the reset button on the control unit.

HF Error 68:   The unit cannot communicate with the cell-phone.
            ⇨ Turn off the power and on again. If this message still appears, press the reset button on the control unit.

Unknown: The Bluetooth device cannot be detected.

Device Full: 5 Bluetooth device have already been registered. No more Bluetooth device cannot be registered.

PIN Code NG: The PIN code is wrong.

Connect NG: The unit cannot be connected to the device.

Pairing Failed: Pairing error.

Err No Matching:
            The voice tag is wrong. Voice cannot be recognized because of an unregistered voice tag, etc.

Too Soft: Voice is too small and cannot be recognized.

Too Loud: Voice is too large to be recognized.

Too Long: The word or utterance is too long to be recognized.

No Phonebook:
            Data is not contained in the phone book.

No Message: No short message in In Box.

No Voice Data: The voice tag is not registered in the phonebook.

Memory Full: The number of voice tags reaches the maximum number to be registered in the phonebook.

Specifications

FM tuner section

Frequency range (200 kHz space)
: 87.9 MHz – 107.9 MHz
Usable sensitivity (S/N = 30dB)
: 9.3dBf (0.8 μV//75 Ω)
Quieting Sensitivity (S/N = 50dB)
: 15.2dBf (1.6 μV//75 Ω)
Frequency response (±3 dB)
: 30 Hz – 15 kHz
Signal to Noise ratio (MONO)
: 70 dB
Selectivity (±400 kHz)
: ≥ 80 dB
Stereo separation (1 kHz)
: 40 dB

AM tuner section

Frequency range (10 kHz space)
: 530 kHz – 1700 kHz
Usable sensitivity (S/N = 20dB)
: 28 dBμ (25 μV)

Bluetooth section

Technology
: Bluetooth 1.2 Certified
Frequency
: 2.402 – 2.480 GHz
Output Power
: +4dBm (MAX), 0dBm (AVE) Power Class 2
Maximum Communication range
: Line of sight approx.10m (32.8 ft)
Profiles
: HFP (Hands Free Profile)
: HSP (Headset Profile)
: OPP (Object Push Profile)
: PBAP (Phonebook Access Profile)
: SYNC (Synchronization Profile)
: SPP (Serial Port Profile)
: A2DP (Advanced Audio Distribution Profile)
: AVRCP (Audio/Video Remote Control Profile)

CD player section

Laser diode
: GaAlAs
Digital filter (D/A)
: 8 Times Over Sampling
D/A Converter
: 24 Bit
Spindle speed
: 500 – 200 rpm (CLV)
Wow & Flutter
: Below Measurable Limit
Frequency response (±1 dB)
: 10 Hz – 20 kHz
Total harmonic distortion (1 kHz)
: 0.01 %
Signal to Noise ratio (1 kHz)
: 105 dB
Dynamic range
: 93 dB
MP3 decode
: Compliant with MPEG-1/2 Audio Layer-3
WMA decode
: Compliant with Windows Media Audio
AAC decode
: AAC-LC ".m4a" files

USB Interface

USB Standard
: USB1.1/ 2.0 (Full speed)
Maximum Supply current
: 500 mA
File System
: FAT16/ 32
MP3 decode
: Compliant with MPEG-1/2 Audio Layer-3
WMA decode
: Compliant with Windows Media Audio
AAC decode
: AAC-LC ".m4a" files

Audio section

Maximum output power
: 50 W x 4
Full Bandwidth Power (at less than 1% THD)
: 22 W x 4
Speaker Impedance
: 4 – 8 Ω
Tone action
Bass : 100 Hz ±8 dB
Middle : 1 kHz ±8 dB
Treble : 10 kHz ±8 dB
Preout level / Load (CD)
: 2500 mV/10 kΩ
Preout impedance
: ≤ 600 Ω

Auxiliary input

Frequency response (±1 dB)
: 20 Hz – 20 kHz
Input Maximum Voltage
: 1200 mV
Input Impedance
: 100 kΩ

General

Operating voltage (10.5 – 16V allowable)
: 14.4 V
Maximum Current consumption
: 10 A
Installation Size (W x H x D)
: 182 x 53 x 155 mm
7-3/16 x 2-1/16 x 6-1/8 inch
Weight
: 3.1 lbs (1.40 kg)