

KENWOOD

KDC-MP8017

CD-RECEIVER

INSTRUCTION MANUAL

AMPLI-TUNER-LECTEUR DE CD

MODE D'EMPLOI

REPRODUCTOR DE DISCOS COMPACTOS RECEPTOR DE FM/AM

MANUAL DE INSTRUCCIONES

KENWOOD CORPORATION

Take the time to read through this instruction manual.

Familiarity with installation and operation procedures will help you obtain the best performance from your new CD-receiver.

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your KENWOOD dealer for information or service on the product.

Model KDC-MP8017

Serial number _____



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▲ Warning

▲ 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-CHO,
HACHIOJI-SHI
TOKYO, JAPAN

KENWOOD CORP. CERTIFIES THIS EQUIPMENT
CONFORMS TO DHHS REGULATIONS NO.21 CFR
1040. 10, CHAPTER 1, SUBCHAPTER J.

Location : Bottom Panel

FCC 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.

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.

NOTE

This Class B digital apparatus complies with Canadian ICES-003.

Safety precautions

▲WARNING

To prevent injury or fire, take the following precautions:

- Insert the unit all the way in until it is fully locked in place. Otherwise it may fall out of place when jolted.
- When extending the ignition, battery, or ground wires, make sure to use automotive-grade wires or other wires with a 0.75mm² (AWG18) or more to prevent wire deterioration and damage to the wire coating.
- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit.
- If the unit starts to emit smoke or strange smells, turn off the power immediately and consult your Kenwood dealer.
- Make sure not to get your fingers caught between the faceplate and the unit.
- Be careful not to drop the unit or subject it to strong shock.

The unit may break or crack because it contains glass parts.

- Do not touch the liquid crystal fluid if the LCD is damaged or broken due to shock. The liquid crystal fluid may be dangerous to your health or even fatal.
- If the liquid crystal fluid from the LCD contacts your body or clothing, wash it off with soap immediately.

▲CAUTION

To prevent damage to the machine, take the following precautions:

- Make sure to ground the unit to a negative 12V DC power supply.
- Do not open the top or bottom covers of the unit.
- 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 subject the faceplate to excessive shock, as it is a piece of precision equipment.
- When replacing a fuse, only use a new one with the prescribed rating. Using a fuse with the wrong rating may cause your unit to malfunction.
- To prevent a short circuit when replacing a fuse, first disconnect the wiring harness.
- Do not place any object between the faceplate and the unit.
- Do not use your own screws. Use only the screws provided. If you use the wrong screws, you could damage the unit.
- Do not apply excessive force to the moving faceplate. Doing so will cause damage or malfunction.
- Do not apply excessive force to the open faceplate or place objects on it. Doing so will cause damage or breakdown.

IMPORTANT INFORMATION

About the disc changer to be connected:

To connect a disc changer having the "O-N" switch to this unit, set the "O-N" switch to "N".

When you connect a model with no "O-N" switch, the converter cord CA-DS100 available as an option may be required. For details, consult your Kenwood dealer. If a model with no "O-N" switch is connected, some unavailable functions and information that cannot be displayed are generated, such as the DNPS, DNPP, Magazine random play, and CD Text display. Note that none of the KDC-C100, KDC-C302, C205, C705, and non-Kenwood CD changers can be connected.

▲CAUTION

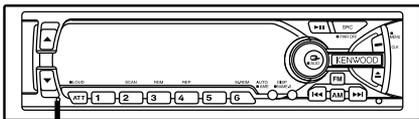
You can damage both your unit and the CD changer if you connect them incorrectly.

Do Not Load 3-in. CDs in the CD slot

If you try to load a 3 in. CD with its adapter into the unit, the adapter might separate from the CD and damage the unit.

NOTE

- If you experience problems during installation, consult your Kenwood dealer.
- Press the reset button if the disc auto changer is first controlled and operates incorrectly. The original operating condition will return.



Reset button

- We recommend the use of the Security Code function (see p. 28) to prevent theft.
- Characters in the LCD may become difficult to read in temperatures below 41 °F (5 °C).

- The illustrations of the display and the panel appearing in this manual are examples used to explain more clearly how the controls are used. Therefore, what appears on the display in the illustrations may differ from what appears on the display on the actual equipment, and some of the illustrations on the display may represent something impossible in actual operation.
- The functions that can be used and the information that can be displayed will differ depending on the external disc players being connected.

Cleaning the Faceplate Terminals

If the terminals on the unit or faceplate get dirty, wipe them with a dry, soft cloth.

Cleaning the Unit

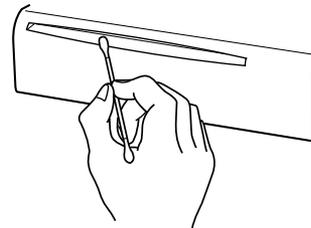
If the faceplate of this unit is stained, wipe it with a dry soft cloth such as a silicon cloth. If the faceplate is stained badly, wipe the stain off with a cloth moistened with neutral cleaner, then wipe neutral detergent off.

▲ CAUTION

Applying spray cleaner directly to the unit may affect its mechanical parts. Wiping the faceplate with a hard cloth or using a volatile liquid such as thinner or alcohol may scratch the surface or erase characters.

Cleaning the CD Slot

As dust tends to accumulate in the CD slot, clean it every once in a while. Your CDs can get scratched if you put them in a dusty CD slot.



Lens Fogging

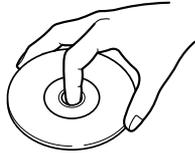
Right after you turn on the car heater in cold weather, dew or condensation may form on the lens in the CD player of the unit. Called lens fogging, CDs may be impossible to play. In such a situation, remove the disc and wait for the condensation to evaporate. If the unit still does not operate normally after a while, consult your Kenwood dealer.

Handling Compact discs

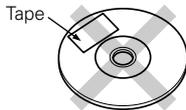
Playing a CD that is dirty, scratched or warped can cause the sound to skip and the unit to operate incorrectly, resulting in worsened sound quality. Take the following precautions to prevent your CDs from getting scratched or damaged.

Handling CDs

- Do not touch the recorded side of the CD (the side opposite the label) when holding it.



- The reflective film on a CD-R or a CD-RW is more fragile than that on an ordinary music CD, and may peel off if scratched. Fingerprints on a CD-R or CD-RW are also more likely to cause skipping when the disc is played. For these reasons, handle the disc very carefully. Detailed handling instructions will appear on the CD-R or CD-RW package: read this information carefully before using the disc.
- Do not stick tape on either side of the CD.

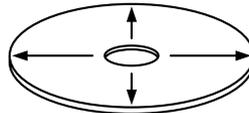


Storing CDs

- Do not store CDs in areas exposed to direct sunlight (such as a car seat or the dashboard) or other hot places. A CD-R or CD-RW is more susceptible than a music CD to damage from high temperatures and humidity, and in some cases, may become unusable if left in the car for long periods of time.
- Remove CDs from the unit when not listening to them for a while, and put them back in their cases. Do not pile up CDs that are removed from their cases or prop them against something.

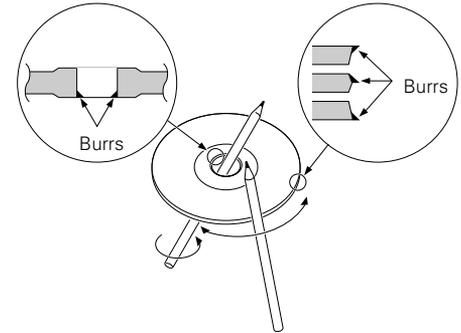
Cleaning CDs

If a CD has gotten dirty, wipe it off gently using a commercially available cleaning cloth or a soft cotton cloth, starting from the center of the disc and moving outward. Do not clean CDs with conventional record cleaners, anti-static formulas, or chemicals such as paint thinner or benzene.



Checking New CDs for Burrs

When playing a new CD for the first time, check that there are not any burrs stuck to the perimeter of the disc or in the central hole. CDs with burrs stuck on them may not load properly or may skip while playing. Remove burrs using a ballpoint pen or a similar utensil.

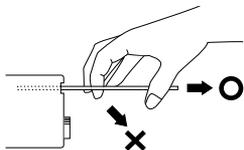


Do Not Load CD Accessories

Do not use commercially available CD accessories that can be loaded into the CD slot, such as stabilizers, protective sheets, or CD cleaning discs, since they can cause the unit to malfunction.

Removing the CD

Only remove the CD from the machine in a horizontal direction, holding it flat. You may damage the surface of the CD if you try pulling it down as it ejects.



Do Not Use Special Shape CDs

- Be sure to use round shape CDs only for this unit and do not use any special shape CDs. Use of special shape CDs may cause the unit to malfunction.



- Be sure to use CDs with disc mark



only for this unit.

- CD-Rs and CD-RWs which have not undergone finalization processing cannot be played. (For more information on finalization processing, refer to the manual for your CD-R/CD-RW writing software or CD-R/CD-RW recorder.) Additionally, depending on the recording status, it may prove impossible to play certain CDs recorded on CD-R or CD-RW.

Do Not Use CDs with Sticker on the Labeled Side

Do not use the CD with the label sticker stuck on it.

Using such a CD may cause the CD to be deformed and the sticker to peel off, resulting in malfunction of the unit.

Notes on playing MP3 files

This unit can play MP3 files.

Note, however, that the MP3 file recording media and formats acceptable are limited.

When writing MP3 files, pay attention to the following restrictions.

Acceptable media

The MP3 file recording media acceptable to this unit are CD-ROM, CD-R, and CD-RW.

Acceptable medium formats

The medium formats acceptable to this unit are ISO 9660 Level 1 and Level 2 excluding the extended formats. When reading an MP3 file written in a format other than ISO 9660 Level 1 or Level 2, the unit may fail to play the file normally or display the file or folder name correctly.

The major specifications of ISO 9660 Level 1 and Level 2 are as follows:

- Maximum number of directory levels: 8
- Maximum number of files and folders per directory level: 253 (files and folders in total)
- Characters available to file and folder names: A - Z, 0 - 9, _ (underscore)
- Maximum number of characters in file names :
 Level 1: 12 (including a separator "." and a 3-character extension)
 Level 2: 31 (including a separator "." and a 3-character extension)

Settings for your MP3 encoder and CD writer

When you use your MP3 encoder to compress audio data to an MP3 file, set the transfer bit rate of the encoder to fixed 128 kbps.

When you use your CD writer to record MP3 files up to the maximum disc capacity, disable additional writing. For recording on an empty disk up to the maximum capacity at once, check Disc at Once.

Entering ID3 tag

Displayable ID3 tag is ID3 version 1 and

1.1; the character code is ASCII (see A List of Codes).

Entering file and folder names

When entering file and folder names, use the alphanumeric characters described above only. If you use any other character for entry, the file and folder names are not displayed correctly. They may neither be displayed correctly depending on the CD writer used.

The unit recognizes and plays only those MP3 files which have the MP3 filename extension (.MP3). MP3 files should therefore be saved with the MP3 extension.

Writing files into a medium

When a medium containing MP3 data is loaded, the unit checks all the files on the medium. If the medium contains a lot of folders or non-MP3 files, therefore, it takes a long time until the unit starts playing MP3 files.

In addition, it may take time for the unit to move to the next MP3 file or a file search or folder search may not be performed smoothly.

You should not write non-MP3 files or unneeded folders along with MP3 files on the medium.

▲CAUTION

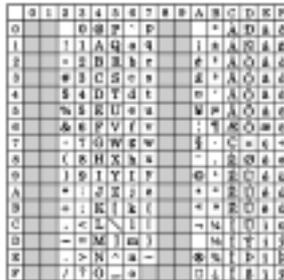
When playing MP3 files on a medium which also contains non-MP3 files or folders, observe the following precautions. Loading such a medium may produce loud noise to break the speakers.

- Do not attempt to play a medium containing a non-MP3 file with the MP3 extension.
 The unit mistakes non-MP3 files for MP3 files as long as they have the MP3 extension.
- Do not attempt to play a medium containing non MP3 file.

MP3 file playing order

When selected for play, folder search, file search, or for folder select, files and folders are accessed in the order in which they were written by the CD writer.

Because of this, the order in which they are to be recorded does not match the order in which they are played. You may be able to set the order in which MP3 files are to be played by writing them onto a medium such as a CD-R with their file names beginning with play sequence numbers such as "01" to "99", depending on your CD writer.

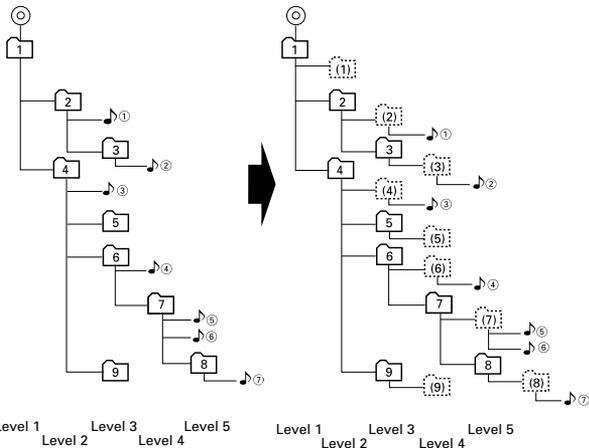


For example, a medium with the following folder/file hierarchy is subject to folder search, file search, or folder select as shown below.

Folder File Virtual folder Root

Example of a medium's folder/file hierarchy
(For a file search or folder search)

Medium's virtual folder/file hierarchy
for a folder select



When a file search is executed with file 4 being played ...

Current file number	Operation of the button	
	◀◀ Button	▶▶ Button
4	Beginning of file 4 → 3 → 2 → 1 → 7 ...	5 → 6 → 7 → 1 ...

When a folder search is executed with file 4 being played ...

When a folder search is executed with file 4 currently being played, the unit selects folders as shown below, starting with folder 6 .

Current folder number	Operation of the button	
	FM Button	AM Button
6	7 → 8 → 9 → 1 ...	5 → 4 → 3 → 2 → 1 → 9 ...

When folder select is selected with file 3 being played to move from folder to folder ...

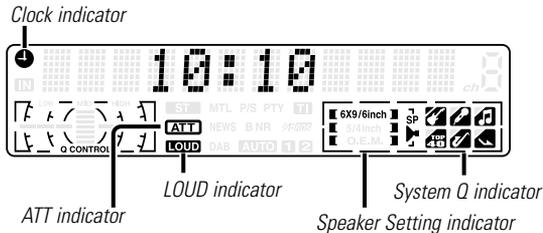
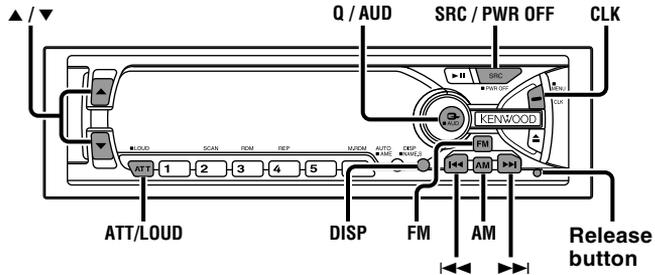
During folder select, a virtual folder is created one hierarchical level below each folder. The hierarchy is displayed as if the MP3 file recorded in each folder were placed in that virtual folder. When the unit enters the folder select mode with file 3 being played, it selects folders as shown below, starting with folder 4 (virtual folder 4).

Current folder number	Operation of the button			
	◀◀ Button	▶▶ Button	AM Button	FM Button
4	9 → 6 → 5 → 4 ...	5 → 6 → 9 ...	4 → 1	—

NOTE

- Each virtual folder is displayed with the original folder name bounded by parentheses " () ". For example, the virtual folder below the folder named " 4 " is displayed with a name of " (4) ". The file name of each virtual folder is displayed with up to 29 characters (in the ISO 9660 Level 2 format) or 10 characters (in the ISO 9660 Level 1 format), excluding the binding parentheses.
- The FM button is disabled in a folder because it has no subordinate hierarchical level below. Immediately after entering the folder select mode as in the above example, therefore, the FM button cannot be used as there is no hierarchical level below folder 4 . Once you have moved to folder 1 using the folder select function, for example, you can use the FM button to select folder 1 → 1 one level below.

General features



Power

Turning on the power:

Press the SRC (source) button.

NOTE

Turn the power on before carrying out the following procedures.

Turning off the power:

Press the PWR OFF button for at least one second.

NOTE

The status of the Security Code function (page 28) is displayed whenever the power is switched on.

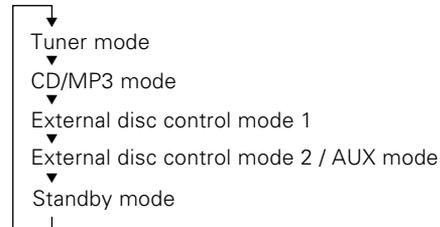
"CODE ON" : Security Code has been registered

"CODE OFF" : Security Code has not been registered

Switching Modes

Switching Modes:

Each time you press the SRC (source) button, the mode switches as follows:



Selecting standby mode:

Press the SRC button repeatedly and switch to "ALL OFF". When "ALL OFF" is displayed, the standby mode is activated. The standby mode turns all functions off while leaving the power to the unit on. Use this mode when you want to have the display illuminated but don't want to listen to anything.

NOTE

- The mode switches to the next mode from any mode which cannot be used.
- The external disc control mode will differ depending on the unit that is connected.
- To enable the selection of External disc control mode 2/AUX mode, you should connect optional switching adapter KCA-S210A (which allows you to select both External disc control mode 2 and AUX mode) or CD changer (KDC-CPS87, KDC-CX87, KDC-CPS85, KDC-CX85, KDC-CPS82 or KDC-CX82) or switching adapter CA-C1AX (which allows you to select AUX mode only).

During the AUX mode, "AUX" (or AUX-name display) will show in the display. When the CA-C1AX is being used, the AUX Mode will replace the External Disc Control Mode.

NOTE**Selecting AUX-name display**

Pressing the DISP button for at least two seconds during the AUX mode, AUX-name display is blinked for AUX-name selection mode.

Pressing **◀◀** or **▶▶** button during this mode allows you to select "AUX", "TV", "VCP", "GAME" or "PORTABLE" in the AUX mode.

The AUX-name selection mode can be exited by pressing the DISP button or doing nothing for 10 seconds.

Volume**Increasing Volume:**

Press the **▲** button to turn up the volume.

Decreasing Volume:

Press the **▼** button to turn down the volume.

Attenuator

This function allows you to turn down the volume quickly.

Turning Attenuator On/Off:

Press the ATT button to switch the attenuator on and off.

When the attenuator is on, the ATT indicator blinks.

When the attenuator is off, the volume returns to the original level.

NOTE

Turning the volume up, or turning it all the way down deactivates the attenuator function.

Loudness

This function amplifies low and high tones when the volume is turned down.

The LOUD indicator lights up when the loudness function is on.

Turning Loudness On/Off:

Press the LOUD button for at least one second to switch the loudness on and off.

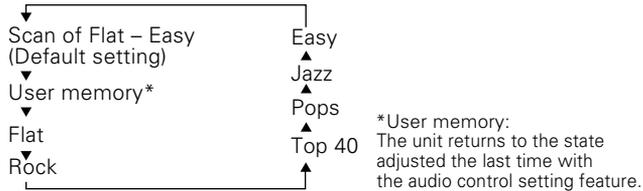
General features

System Q

You can recall the best audio setting preset for different types of the music.

Switching the Preset Sound Setting:

Each time you press the Q button, the preset sound setting switches as follows:



As you proceed, each indicator would go on.

NOTE

The System Q function changes the values of the following sound quality parameters: Bass center frequency, bass level, bass quality factor, bass extend, middle center frequency, middle level, middle quality factor, treble center frequency, and treble level. Their setting values are different depending on the setting of the speaker setting mode.

Audio Control Setting

Adjust various parameters of sound quality.

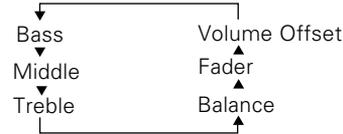
1 Press the AUD button for at least one second to enter the control mode.

2 Selecting mode

Press either the FM or AM button.

Each time the button is pressed, the adjustment mode will change as follows:

Pressing the FM button advances the display, and pressing the AM button reverses it.



NOTE Source tone memory

Each source (CD, FM, AM and disc changer) has its own memory in which to store the bass, middle, and treble tone settings. The settings made for a particular source are recalled automatically whenever you use that source (for example, FM mode uses the tone settings made for FM, AM for AM, etc.).

3 Adjust each mode

Press the ◀▶ button.

Look at the table to adjust the mode being displayed.

Adjustment mode (Display)	Operation of Audio control button	
	◀▶ button	▶▶ button
Bass ("Bass")	Bass decreased.	Bass increased.
Middle("Middle")	Middle decreased.	Middle increased.
Treble("Treble")	Treble decreased.	Treble increased.
Balance("Balance")	Left channel emphasized.	Right channel emphasized.
Fader ("Fader")	Rear channel increased.	Front channel increased.
Volume Offset ("V Offset")	The sound level of each source decreased.	The sound level of each source increased.

4 Press the AUD button to end the control mode.

NOTE

Determining the parameters in the audio control setting would clear all the adjustments made in the System Q and they are replaced with the values in the audio control setting.

Speaker Setting

This function allows you to adjust the setting that is recalled with the System Q, according to types of speakers.

- 1 Press the SRC button repeatedly to select the standby mode. "ALL OFF" is displayed when the standby mode is selected.
- 2 Press the Q button to enter the speaker setting mode.
- 3 Press either the **◀◀** or **▶▶** button to select the type of speaker. The setting switches as follows.
Off ("SP OFF") / For 6/6x9 in. speaker ("SP 6*9/6inch") /
For 5/4 in. speaker ("SP 5/4inch") /
For the OEM speaker ("SP O.E.M.")
- 4 Press the Q button to end the speaker setting mode.

NOTE

Speaker setting function allows for tuning of bass, middle and treble

Clock display

Changing the Clock Display:

Each time you press the CLK button, the display switches between the clock and each mode display.

NOTE

The clock indicator lights while the clock is displayed.

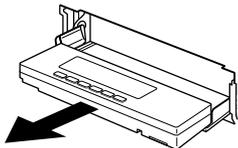
General features

Theft Deterrent Faceplate

The faceplate can be reversed to hide the control panel or detached from the unit, helping to deter theft.

Removing the Faceplate:

- When the control panel is visible:
Press the release button.
 - When the control panel has been hidden:
Press the upper side of the faceplate.
- Holding the center part of the faceplate, pull it out.



- Push back the bottom of the faceplate bracket until it locks.

CAUTION

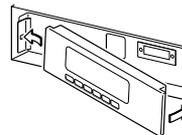
- Do not apply excessive force to the faceplate bracket without attaching the faceplate. Doing so will cause the faceplate bracket to be deformed.
- Do not touch the connector on the faceplate bracket after removing the faceplate. Touching the connector may cause damage to the unit.

NOTE

- The faceplate is a precision piece of equipment and can be damaged by shocks or jolts. For that reason, keep the faceplate in its special storage case while detached.
- Do not expose the faceplate or its storage case to direct sunlight or excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.

Reattaching the Faceplate:

- Hold the faceplate so that the control panel faces the front toward you and set the left side of the faceplate in the faceplate bracket.



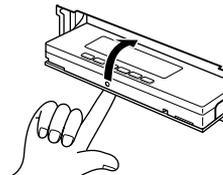
CAUTION

Do not set the right side of the faceplate in the faceplate bracket first, when reattaching the faceplate. Doing so may cause the connector on the faceplate bracket to malfunction.

- Press the right side of the faceplate until it locks.

Hiding the control panel:

- Press the release button and slide open the faceplate.
- Push upward the back of the control panel and reverse the panel.

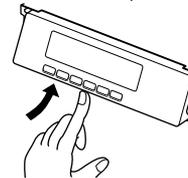


NOTE

The panel cannot be reversed when the faceplate is not attached.

Opening the control panel:

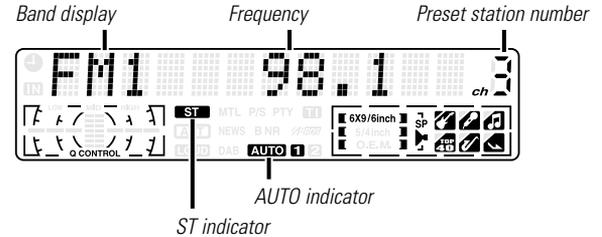
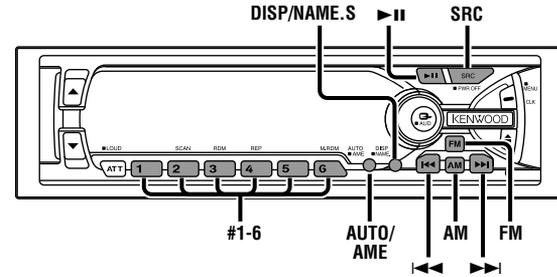
- Press the upper side of the faceplate.
The faceplate will open.
- Push the bottom of the control panel and close the faceplate.



Tuner features

NOTE

While the control panel is sliding, only available buttons are ▲, ATT, ▲, ▼ and SRC.



Tuner features

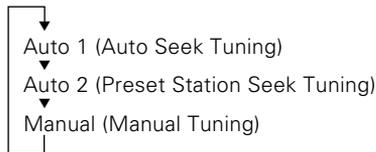
Tuning

You can choose from three tuning modes: auto seek, preset station seek, and manual. The AUTO 1 indicator lights up when auto seek tuning is selected, and the AUTO 2 indicator lights when preset station seek tuning is selected.

Selecting Tuning Mode:

Press the AUTO button.

Each time you press the AUTO button, the mode switches as follows.



Tuning:

- 1 Press the SRC (source) button repeatedly to select the tuner mode. "TUNER" is displayed when the tuner mode has been selected.
- 2 Press either the FM or AM button to select the band.
Each time you press the FM button, the band switches between the FM1, FM2 and FM3 (which are used for groups of preset stations).
Press the AM button to select the AM band.
- 3
 - Auto Seek Tuning
Press the ►► button to seek higher frequencies.
Press the ◀◀ button to seek lower frequencies.
 - Preset station seek tuning
Press the ►► button to move to the next preset station (i.e., the one with the next highest number), and the ◀◀ button to move to the last preset station (i.e., the one with the next lowest number).
 - Manual Tuning
Press the ►► button to increase the frequency by one step.
Press the ◀◀ button to decrease the frequency by one step.

NOTE

The ST indicator lights up when stereo broadcasts are being

received.

Station Preset Memory

Store the frequency of a station. You can then recall that station with a single touch of a button.

- 1 Select the band/station that you want to have stored.
- 2 Press the button (#1-6) that you want to use for the station, for at least two seconds.
The button number blinks once in the display to indicate that the data has been stored.

Recalling a Preset Station:

Press the preset station button (#1-6) for the desired station. The number of the recalled station is displayed.

NOTE

You can store six stations in each of the FM1, FM2, FM3, and AM bands.

Auto Memory Entry

You can automatically store all the receivable frequencies in the band currently being listened to, and then recall them with the touch of a button later. This function is especially useful when you are travelling and do not know what stations are available. Up to six frequencies can be stored this way.

- 1 Select the band for auto memory entry.
- 2 Press the AME button for at least two seconds to start auto memory entry.
The numbers of the preset station buttons are shown in order. When all the stations in a certain band are stored in the preset memory, the auto memory entry stops. The tuner then plays the last station received.

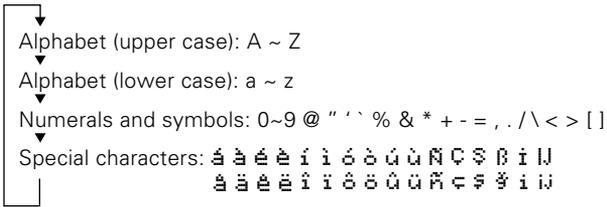
Recalling a Preset Station:

Press the preset station button (#1-6) for the desired station. The number of the recalled station is displayed.

Station Name Preset (SNPS)

You can assign names to radio stations with the Station Preset Memory. Up to 32 FM stations and 16 AM stations can be assigned names.

- 1 Adjust the frequency to the station whose name you want to enter.
- 2 Press the NAME.S button for at least two seconds. "NAME SET" is displayed once the station name preset mode is entered. The cursor will blink in the position where letters are entered.
- 3 Press either the ◀◀ or ▶▶ button to move the cursor to the desired position. The ◀◀ button moves the cursor to the left, and the ▶▶ button to the right.
- 4 Each time the ▶| button is pressed, the characters to be entered change as listed below. Press the FM or AM button to display the desired character. Characters that can be displayed are as follows.



- 5 Continue steps 3 and 4 until all the characters are chosen for the name.

NOTE

You can enter up to eight characters for each name.

6 Assigning Names

Press the NAME.S button.

The name of the station is stored in memory, and the Station Name Preset mode ends.

Also, if you make no input for 10 seconds, the name will be stored up to the point that you have entered, and the mode ends.

NOTE

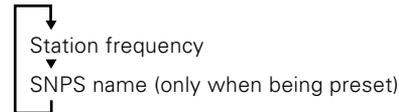
- You can assign names to up to 32 FM stations and 16 AM stations.
- All the station names will be erased if you press the Reset button.
- If you want to change the name of a station, first display the name of the station (following steps 1 and 2 above), then change the letter(s) that you want by following steps 3 and 4.

Switching Display for Tuner

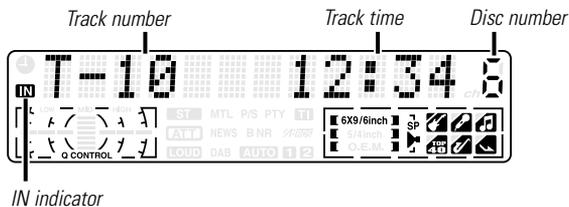
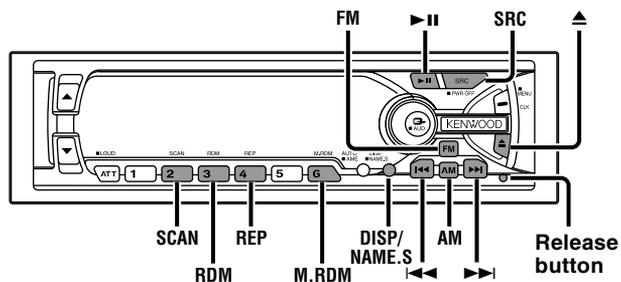
You can change the display used when listening to the radio.

Changing the Display:

Each time you press the DISP button, the display changes as follows:



CD/External disc control features



Playing CDs

Playing CDs:

Press the release button to slide open the faceplate, showing the CD insertion slot.

Holding the CD with the labeled side facing up, insert it in the slot. The CD will start playing. Push back the bottom of the faceplate with your hand until it locks.

The IN indicator will light when a CD has been inserted.

▲CAUTION

When inserting a CD, make sure the CD has been completely drawn in before pushing back the faceplate. Failing to do so might scratch the CD.

Playing CDs Already Inserted:

Press the SRC (source) button repeatedly to select the CD mode.

"CD" is displayed when the CD mode has been selected.

The CD will start playing.

Pausing and Restarting CD Play:

Press the ►|| button to make the disc pause.

Press the same button again to start play again.

Eject:

Press the release button and slide open the faceplate.

Press the ▲ button.

The CD stops playing and ejects from the slot.

Push back the bottom of the faceplate with your hand until it locks.

▲CAUTION

- Do not attempt to insert a CD into the slot if another one is already there.
- The unit can only play 5 in. CDs. If you insert a 3 in. CD, it will get stuck inside and can cause the unit to malfunction.
- When the faceplate has been slid open, it might interfere with the shift lever or something else. If this happens, pay attention to safety and move the shift lever or take an appropriate action, then operate the unit.
- Do not use the unit with the faceplate in the open condition. Doing so will cause breakdown.

NOTE

- When you load a CD and eject it right away, the next time you try to insert the CD may not load. In such a situation, take the CD out for a moment and then reinsert it.
- While the control panel is sliding, only available buttons are ▲, ATT, ▲, ▼ and SRC.

Playing Other Disc mode

This function permits the connection of optional players and the playing of discs other than the loaded CD (in the current unit).

Playing Discs:

Press the SRC button repeatedly to select the external disc control mode.

The disc will start playing.

NOTE

The external disc control mode will differ, depending on the unit that is connected.

Mode Display Examples

- "CD2" ...when a CD player is connected
- "DISC" ...when a disc changer is connected
- "DISC-1" , "DISC-2" ...when two disc changers are connected

Pausing and Restarting Disc Play:

Press the ►|| button to make the disc pause.

Press the same button again to start play again.

NOTE

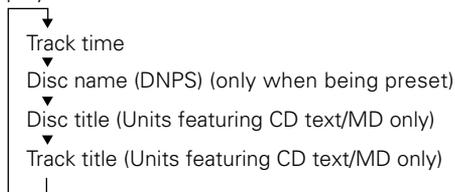
- When one disc has finished playing its last track, the next disc in the changer will start playing. When the last disc in the changer has finished, the player will return to the first disc and start playing it.
- Disc #10 is displayed as "0".

Switching Display for Discs

Switch the display that appears while discs are playing.

Switching Display for Discs:

Each time you press the DISP button, the display during disc play switches as follows:

**NOTE**

- You can give names to discs through the presetting disc name function (page 22). Note that depending on the unit, display may not be possible.
- If you try to display the name of a disc that does not have one, "NO NAME" is displayed instead.
- When there is an attempt to display the title of a disc for which the disc title/track title has not been recorded, "NO TEXT" is displayed for CD and "NO TITLE/NO NAME" is displayed for MD.
- If you attempt to display disc title/track title when connecting the CD changer not supported for CD text feature, caution messages such as "NO TEXT" or "Reading" may be displayed.
- Depending on the type of characters of the CD Text, some characters may not be displayable.

CD/External disc control features

Fast Forwarding and Reversing Disc Play

Fast Forwarding Disc Play:

Hold down on the ►► button.

Release your finger to play the disc at that point.

Reversing Disc Play:

Hold down on the ◀◀ button.

Release your finger to play the disc at the point.

NOTE

You cannot use reverse play between tracks depending on the model being connected. Instead, the reverse play function is canceled when it reaches the beginning of a track, at which point normal play will automatically resume.

Track Search

Search forward or backward through the tracks on the disc until you reach the one that you want to listen to.

Making a Reverse Track Search:

Press the ◀◀ button to display the desired track number.

Press once to search back to the beginning of the current track, twice to search back to the beginning of the previous track, and so forth.

Play starts at the beginning of the displayed track number.

NOTE (For disc changers)

Pressing the ◀◀ button while listening to track 1 will only search back to the beginning of that track. The reverse search is not "recycled" to the last track on the disc.

Making a Forward Track Search:

Press the ►► button to display the desired track number.

Press once to fast forward to the next track, twice to fast forward to the track after that, and so forth.

Play starts at the beginning of the displayed track number.

NOTE (For disc changers)

You cannot make a forward track search when listening to the last track on a disc.

Disc Search

(Function of disc changers)

Search forward or backward through the discs in a disc changer.

Making a Reverse Disc Search:

Press the AM button to display the desired disc number.

Each time the button is pressed, the displayed disc number decreases by one.

Play starts at the beginning of the displayed disc.

Making a Forward Disc Search:

Press the FM button to display the desired disc number.

Each time the button is pressed, the displayed disc number increases by one.

Play starts at the beginning of the displayed disc.

NOTE

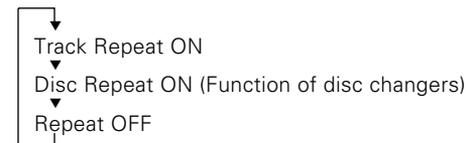
"Load" is displayed when discs are being exchanged on the disc changer.

Track / Disc Repeat

Repeat playing the track or the disc currently being listened to.

Turning Repeat Play On/Off:

Press the REP button to switch repeat track/disc play on and off as follows:



"Repeat ON"/"T-Repeat ON" is displayed and the track number blinks in the display when track repeat is on.

"D-Repeat ON" is displayed and the disc number blinks in the display when disc repeat is on.

NOTE

Repeat play is canceled when you eject the disc.

NOTE

Random play is canceled when you eject the disc.

Track Scan

Successively play the beginning of each track on a disc until you find the track that you want to listen to.

Starting the Track Scan:

Press the SCAN button. "Scan ON" is displayed and the first 10 seconds of each track will be played, in order.

The track number currently being heard blinks in the display.

Stopping to Listen to the Track Being Scanned:

Press the ►|| or SCAN button again to stop the scan and keep on listening to a track normally.

NOTE

- The track scan function is canceled when you eject the disc.
- The track scan function only scans each track on a disc once.

Random Play

Play all the tracks on the current disc in random order.

- 1 Press the RDM button to switch random play on and off. "Random ON" is displayed when random play is turned on. The track number will change over and over in the display as the next track is being selected. When the track has been selected, play will begin. The selected track number blinks in the display as it is being played.

NOTE (For disc changers)

When all the tracks on a certain disc have been played using random play, the next disc on the changer will start playing using the same function.

- 2 To change the track being heard, press the ►►| button. Another track will be selected and played.

Magazine Random Play *(Function of disc changers)*

Play the tracks on all the discs in the disc changer in random order.

- 1 Press the M.RDM button to switch magazine random play on and off. "M.Random ON" is displayed when magazine random play is turned on. The disc and track numbers will change over and over in the display as the next track is being selected. When the disc/track has been selected, play will begin. The selected disc/track number blinks in the display as it is being played.
- 2 To change the track being heard, press the ►►| button. Another disc/track will be selected and played.

NOTE

- Magazine random play is canceled when you eject the disc.
- The time needed for random selection depends on the number of discs loaded in the disc magazine.

CD/External disc control features

Text / Title Scroll

This function permits the text to be scrolled and the entire text to be displayed. The scrolling method differs depending on the setting of scrolling in the menu.

To scroll automatically:

Press the DISP button to display the disc title or the track title. The display of the text will be scrolled repeatedly.

To scroll manually:

- 1 Press the DISP button to display the disc title or the track title.
- 2 Pressing the DISP button for at least one second results in one scrolling display of the titles.

NOTE

- Please see the menu settings (page 31) about switching between manual scrolling and automatic scrolling.
- Only units with a CD text feature permit title display.
- You cannot use the text scroll function during magazine random play.

Presetting Disc Names (DNPS)

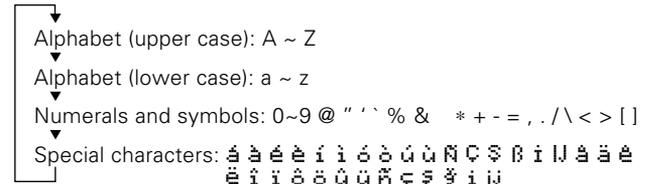
Store the names of discs to be displayed when played.

- 1 Play the disc whose name you want to preset.

NOTE

- This function is not available for disc changers that do not feature the Disc Name Preset function.
 - The Disc Name Preset function cannot be used during the Magazine random play as well as while a disc title or track title is displayed.
- 2 Press the NAME.S button for at least two seconds. "NAME SET" is displayed and the disc name preset mode is entered. The cursor blinks in the position where character input can be made.

- 3 Press either the ◀◀ or ▶▶ button to move the cursor to the desired position. The ◀◀ button moves the cursor to the left, and the ▶▶ button to the right.
- 4 Each time the ▶|| button is pressed, the characters to be entered change as listed below. Press the FM or AM button to display the desired character. Characters that can be displayed are as follows.



- 5 Continue steps 3 and 4 until all the characters are chosen for the name.

NOTE

You can enter up to 12 characters for each name.

- 6 Press the NAME.S button.

The disc name is stored and the disc name preset mode is canceled.

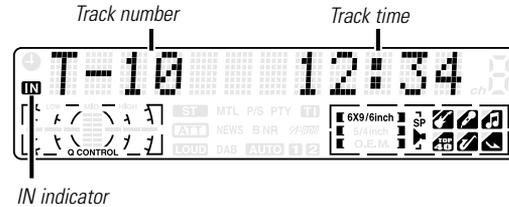
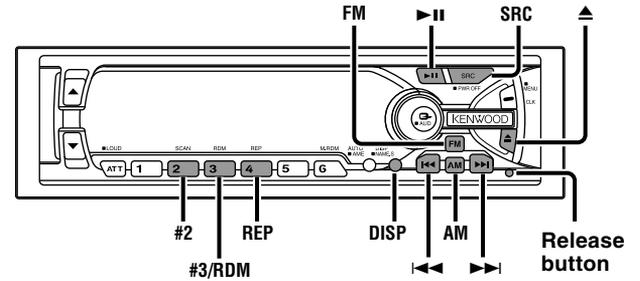
If you make no entry in a 10-second period, the name will be stored with the characters input so far.

NOTE

- The number of discs whose names can be stored will differ depending on the disc changer that is connected. Please see your disc changer manual for details. Up to 30 CDs can be registered with this unit.
- Discs are identified by their total length and number of tracks. If another disc happens to have the same specifications as one that you have already stored a name for, the name will be displayed for it, too.
- If you want to change the name of a disc, repeat steps 1 and 2 to display the name, and then repeat steps 3 and 4 to input the changes.

MP3 player features

- Pressing the reset button erases the disc names stored in this unit, but does not erase the names stored in a disc changer.
- MP3 recorded media allows you to register a single media name only. Registration for each CD as it is available with the CD cannot be achieved.



MP3 player features

Playing MP3 Files

Play:

Press the Release button to slide open the faceplate, showing the CD (insertion) slot.

Holding the media with the labeled side facing up, insert it in the slot. The media will start playing. Push back the bottom of the faceplate with your hand until it locks.

The IN indicator will light when a media has been inserted.

▲CAUTION

When inserting a media, make sure the media has been completely drawn in before pushing back the faceplate. Failing to do so might scratch the media.

Playing Media Already Inserted:

Press the SRC button repeatedly to select the CD mode.

"CD" is displayed when the CD mode has been selected.

The media will start playing.

Pausing and Restarting Media Play:

Press the ►|| button to make the media pause.

Press the same button again to start play again.

NOTE

MP3-related operations (such as a file search and folder search) cannot be performed during a pause. Cancel the pause before you can perform such operations.

Eject:

Press the release button and slide open the faceplate.

Press the ▲ button.

The media stops playing and ejects from the slot.

Push back the bottom of the faceplate with your hand until it locks.

▲CAUTION

- Do not attempt to insert a media into the slot if another one is already there.
- When the faceplate has been slid open, it might interfere with the shift lever or something else. If this happens, pay attention to safety and move the shift lever or take an appropriate action, then operate the unit.
- Do not use the unit with the faceplate in the slid condition.

Doing so will cause breakdown.

NOTE

- When you load a media and eject it right away, the next time you try to insert the media may not load. In such a situation, take the media out for a moment and then reinsert it.
- The MP3 media that this unit can play are CD-ROM, CD-R, and CD-RW.

The medium formats must be ISO 9660 Level 1 or Level 2. The methods and precautions to be followed for writing MP3 files are covered in "Notes on playing MP3 files" (page 8). Check that section before creating your MP3 media.

- It takes time for the unit to check each medium to see if it contains any MP3 file before it starts playing the medium.
- While the control panel is sliding, only available buttons are ▲, ATT, ▲, ▼ and SRC.

File Search

Search forward or backward through the files on the media until you reach the one that you want to listen to.

Making a Backward File Search:

Press the I◀◀ button to display the desired file number.

Press once to search back to the beginning of the current file, twice to search back to the beginning of the previous file, and so forth.

Play starts at the beginning of the displayed file number.

Making a Forward File Search:

Press the ►►I button to display the desired file number.

Press once to fast forward to the next file, twice to fast forward to the file after that, and so forth.

Play starts at the beginning of the displayed file number.

NOTE

It may take time for the file search depending on the number of files and the state of the folder hierarchy.

Folder Search

Search forward or backward through the folders on the media.

Making a Backward Folder Search:

Press the AM button.

Pressing the button moves back to the previous folder. The unit plays the medium starts at the beginning of the selected folder.

If the selected folder contains no MP3 file, the unit automatically plays the file nearest to that folder in the MP3 file playing order.

Making a Forward Folder Search:

Press the FM button.

Pressing the button moves to the next folder. The unit plays the medium starts at the beginning of the selected folder.

If the selected folder contains no MP3 file, the unit automatically plays the file nearest to that folder in the MP3 file playing order.

NOTE

It may take time for the folder search depending on the number of files and the state of the folder hierarchy.

- Time code may be different between the states before and after the fast forwarding and reversing operations.
- The time code for the first few seconds on pressing the button may be unchanged.
- The time code variation may be large if a file is encoded in variable bit rate (VBR).

Fast Forwarding and Reversing MP3 Play

Fast Forwarding MP3 Play:

Hold down on the ►► button.

Release your finger to play the MP3 at that point.

Reversing MP3 Play:

Hold down on the ◀◀ button.

Release your finger to play the MP3 at the point.

NOTE

- If you reach the beginning of the file with the fast reverse, the player enters the pause state. If you release the button, the music begins to play.
- During the fast forwarding and reversing process, audible tone and time code display are disabled.

MP3 player features

Folder Select

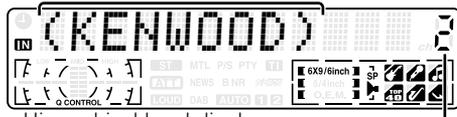
You can use this function to select the folder containing the sound file you want be played.

1 Enter the Folder Select Mode

Pressing the #2 button enters the folder select mode.
The display reads as shown below.

<Folder name display>

Displays the current folder name.



<Hierarchical level display>

Displays the hierarchical level of the current folder.

NOTE

The unit cannot enter the folder select mode if the loaded medium contains no folder recorded.

2 Selecting the desired folder

- You can move from folder to folder at the same hierarchical level:
Press the ►► button to move to the next folder at the same hierarchical level.
Press the ◀◀ button to move to the previous folder at the same hierarchical level.
- You can select the hierarchical level of the folder:
Press the FM button to move down one level in the folder hierarchy.
Press the AM button to move up one level in the folder hierarchy.
- You can return to the first hierarchical level (Root Jump):
Press the #3 button to return to the folder at the top hierarchical level on the medium currently being played.

NOTE

The methods for moving to other folders in the folder select mode are different from those in the folder search mode.

See "Notes on playing MP3 files" (page 8) for details.

3 When you have found a desired folder

Press either the #2 or ►► button.

This ends the folder select mode and starts playing the first MP3 file in the selected folder.

NOTE

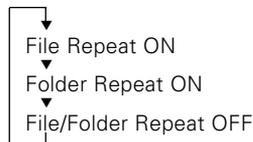
- If the folder selected after leaving the folder select mode contains no MP3 file, the unit plays the MP3 file nearest to that folder in the MP3 file playing order.
- If the folder select mode is interrupted by another session such as traffic information, you will be brought back to the first folder in the media.
- During the folder select mode, no audible sound is produced.

File / Folder Repeat

Repeat playing the file or the folder currently being listened to.

Turning Repeat Play On/Off:

Press the REP button to switch repeat file/folder play on and off as follows:



"F REP ON" is displayed when file repeat is on.

"FOL REP ON" is displayed when folder repeat is on.

NOTE

Repeat play is canceled when you eject the media.

Random Play

Play all the files on the current folder in random order.

- 1 Press the RDM button to switch random play on and off. "Random ON" is displayed when random play is turned on. When the file has been selected, play will begin.
- 2 To change the file being heard, press the ►| button. Another file will be selected and played.

NOTE

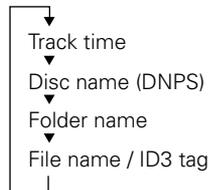
Random play is canceled when you eject the media.

Switching Display for MP3

Switch the display that appears while MP3 files are playing.

Switching Display for MP3:

Each time you press the DISP button, the display during files play switches as follows.



NOTE

- You can give names to media through the presetting disc name function (page 22).
- If you try to display the name of a media that does not have one, "NO NAME" is displayed instead.
- Folder names and file names are not displayed correctly if the loaded medium does not conform to ISO 9660 Level 1/2 or if they contain any character unacceptable to your CD writer.

- The track time display may not match the actual track time depending on the MP3 file recording states.
- For display items for File name/ID3 tag, see "Switching the MP3 title information display" for menu settings (page 31).

Name Scroll for MP3

This function permits the folder/file name and ID3 tag(Song title, Artist, Album) to be scrolled and the entire name to be displayed. The scrolling method differs depending on the setting of scrolling in the menu.

To scroll automatically:

Press the DISP button to display the folder name or the file name.

The display of the name will be scrolled repeatedly.

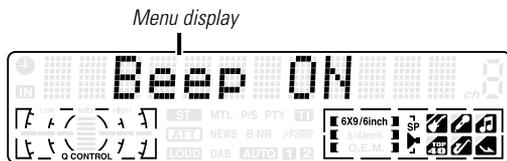
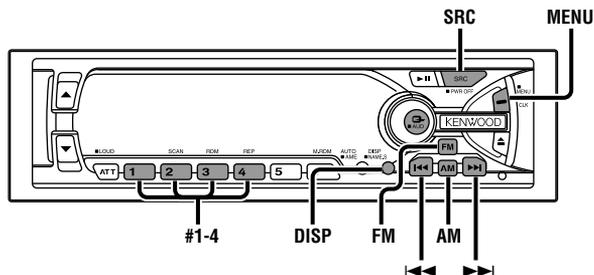
To scroll manually:

- 1 Press the DISP button to display the folder name or the file name.
- 2 Pressing the DISP button for at least one second results in one scrolling display of the names.

NOTE

Please see the menu settings (page 31) about switching between manual scrolling and automatic scrolling.

Menu settings



Menu System

You can set the defaults for additional functions in the menu mode. Make a setting for each function, referring to the following operations.

1 Enter the menu mode

Press the MENU button for at least one second.

"MENU" is displayed when the menu mode is entered.

The function that you can adjust is indicated with the current settings displayed.

2 Selecting function to set

Press the FM button to search through the functions until you see the one you want to adjust in the display.

Press the AM button to search through the functions backward.

Function items change in the order of features that follow in the menu system.

Example: If you want to switch the setting of the touch sensor tone function from on to off, first search through the functions until you see "Beep ON" in the display.

3 Changing setting for currently displayed function

Press either the ◀◀ or ▶▶ button.

The setting will change for each function.

Example: The setting of the touch sensor tone will switch from on to off, and "Beep OFF" is displayed.

4 Ending the menu mode

Press the MENU button.

NOTE

Make sure to end the menu mode when finished.

Security Code

When the battery is removed from the unit's power switch, you cannot turn on the unit again unless the preset security code is input. This function helps prevent theft.

NOTE

You must follow steps 1 to 8 to be able to use the Security Code function. Turning off the power during the procedure will deactivate the security code setting.

Once the security code function has been activated, "Security" disappears from the MENU system. Note that it will no longer be possible to cancel this function afterwards.

1 Press the SRC button repeatedly to select the standby mode. "ALL OFF" is displayed when the standby mode is selected.

2 Select the four digits to use in your security code.

NOTE

The four-digit security code is very important, as you will need it to turn the unit on again when the code security function is on. Choose the number carefully and do not forget it (write it down and keep it separately in a safe place).

3 Press the MENU button for at least one second. "MENU" is displayed first and then "Security" is displayed.

4 Press either the ◀◀ or ▶▶ button for at least one second. "ENTER" will appear in the display for one second, indicating the code setting mode has been entered. When "CODE" appears in the display, you can start inputting the code.

5 Press the preset button and enter the security code that you have selected in step 2.
Example: Use "3510" as the security code.

Step	Button to press	# Times pressed	Display
1	#1	4	"3"
2	#2	6	"5"
3	#3	2	"1"
4	#4	1	"0"

6 Press the DISP button for at least three seconds. The security code will be set. "RE-ENTER" will appear in the display for one second, asking you to enter the code once again for confirmation. When "CODE" appears in the display, you can start inputting the code.

7 Press the Preset button and input the security code again.

8 Press the DISP button again for at least three seconds. "APPROVED" will appear in the display, with the security code function turning on. From this point on, if the unit is disconnected from the battery, the security code must be entered the first time that the unit's power is turned on. "ENTER" and "CODE" will appear in the display, asking you to input the code.

NOTE

If you input an incorrect security code, the code setting mode will be canceled automatically. Follow the steps from 4 to 8 above again.

If you press the RESET button or remove the battery:

The first time you turn the unit on again, "CODE" will appear in the display, asking you to input the security code.

Repeat steps 7 and 8 above, and input the security code. You can start operating the unit again when "APPROVED" appears in the display.

If you enter the incorrect code, the power will turn off. Enter the correct code to turn the unit on.

Touch Sensor Tone

This function produces a beep sound that accompanies button operation. It can be switched on or off.

Display and setting:

"Beep ON" : Beep setting is on. (Default setting)

"Beep OFF" : Beep setting is off.

NOTE

The beep sound is not output from the preout jacks.

Menu settings

Manual Time Adjustment

Adjust the time manually.

Display and setting:

- 1 Select the display "Clock Adjust" during the selecting function in the menu system.
- 2 Press either the ◀◀ or ▶▶ button for at least one second to enter the Manual time adjustment mode.
The time display will blink.
- 3 • Adjusting the hours
Press the FM button to advance the hours, or press the AM button to make the hours go back.
• Adjusting the minutes
Press the ▶▶ button to advance the minutes, or press the ◀◀ button to make the minutes go back.
- 4 Press the MENU button to end the Manual Time Adjustment mode.
Exiting the Manual Time Adjustment mode would start the clock counting.

Selectable Illumination

You can switch the color of the button illumination between green and red.

Display and setting:

- "Button Green" : The color of the illumination is green.
"Button Red" : The color of the illumination is red.

Switching Graphic Display

This function allows you to turn off the lower part of the display if there is too much information in the display.

Display and setting:

- "Graphic ON" : The display will turn on by using the whole part of the display. (Default setting)
"Graphic OFF" : The display will turn on by using only the upper part of the display and the IN indicator.

Contrast Adjustment

This adjustment permits easy viewing of the display.

Display and setting:

- "Contrast 0" – "Contrast 10"

NOTE

The initial setting value is "5".

Dimmer

You can dim the display.

NOTE

The dimmer function is not available for units if the dimmer wire is not connected.

Display and setting:

- "Dimmer ON" : The dimmer setting is on. (Default setting)
"Dimmer OFF" : The dimmer setting is off.

Clean Reception System Circuit (CRSC)

<In FM reception of Tuner mode>

Temporarily have reception switched from stereo to mono to reduce multi-path noise when listening to the FM station.

Display and setting:

"CRSC ON" : The CRSC is on. (Default setting)

"CRSC OFF" : The CRSC is off.

NOTE

Strong electrical fields (such as from power lines) may cause unstable sound quality when CRSC is turned on. In such a situation, turn it off.

Reading the MP3 ID3 tag <in MP3 mode>

ID3 tag information in the MP3 file is configured for use.

Display and setting:

"ID3 Read ON" : ID3 tag is read.

"ID3 Read OFF" : ID3 tag is not read. (Default setting)

NOTE

- If you switch this setting during the play of MP3, the track is replayed from the beginning.
- If you turn the ID3 tag read ON, beginning of the play is delayed for reading process of each tag for the tune.

Switching the MP3 title information display

You can switch what you want to display for an ongoing tune.

Display and setting:

"ID3 DISP A" : Filename

"ID3 DISP B" : ID3 tag song title and its artist name (Default setting)

"ID3 DISP C" : ID3 tag album name and its artist name

NOTE

If you don't turn the MP3 ID Read ON, the setup items will not be displayed.

Text Scroll

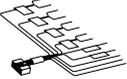
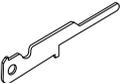
This function permits the CD text, MD title and ID3 tag (Song title, Artist, Album) to be scrolled and the entire text to be displayed. Switching between manual scrolling and automatic scrolling is permitted.

Display and setting:

"Scroll Auto" : Automatic scrolling (Default setting)

"Scroll MANU" : Manual scrolling

Accessories

	External view	Number of items
①	1
②	1
③	2
④	4
⑤	4
⑥	1
⑦	1
⑧	1

▲CAUTION

The use of any accessories except for those provided might result in damage to the unit. Make sure only to use the accessories shipped with the unit, as shown above.

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.

▲CAUTION

- 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.
- Do not let unconnected wires or terminals touch metal on the car or anything else conducting electricity. 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.
- After the unit is installed, check whether the brake lamps, blinkers, wipers, etc. on the car are working properly.
- Insulate unconnected wires with vinyl tape or other similar material.
- Some disc changers need conversion cords for connection. See the section on "Safety Precautions" for details.
- Mount the unit so that the mounting angle is 30° or less.

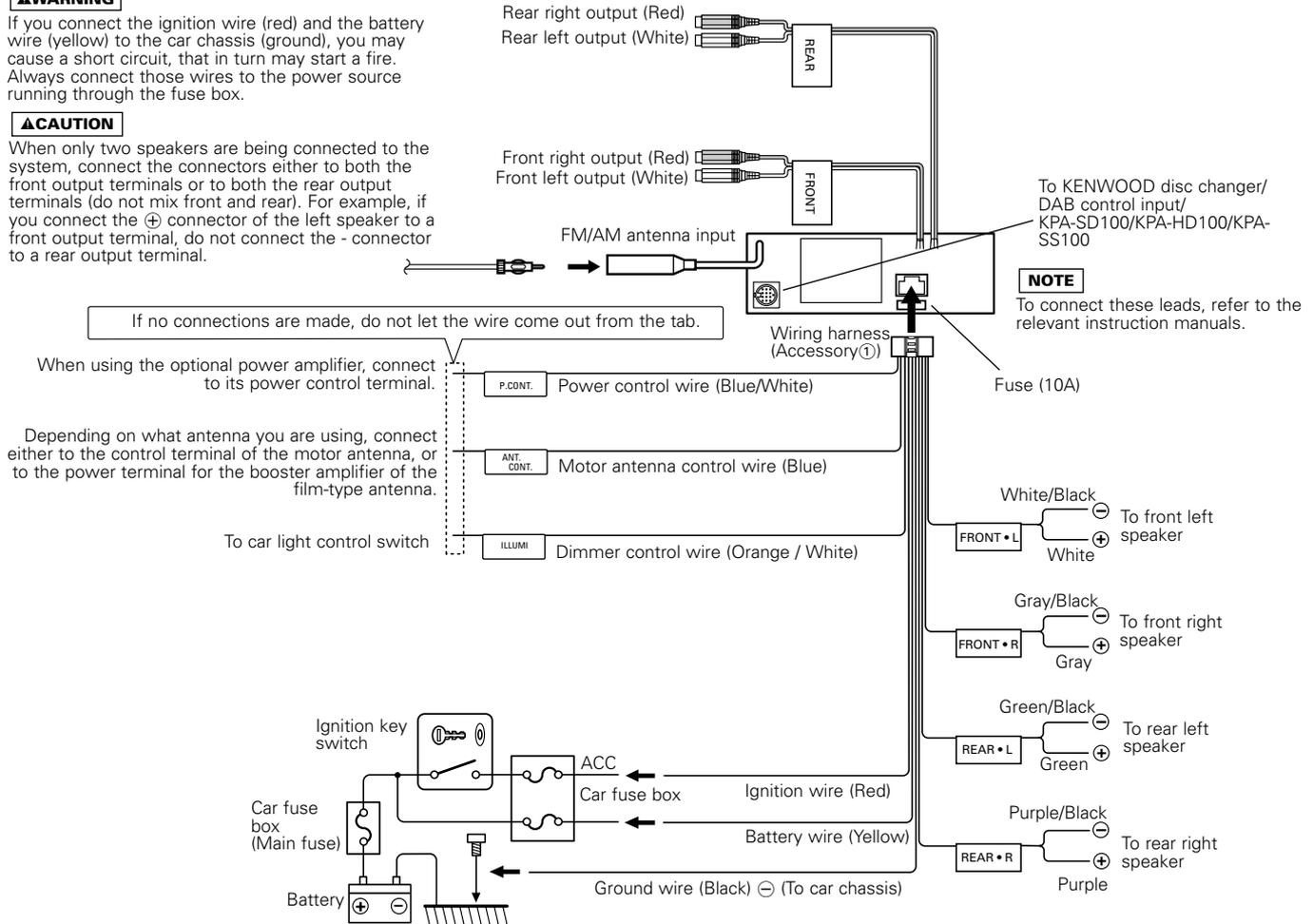
Connecting Wires to Terminals

▲WARNING

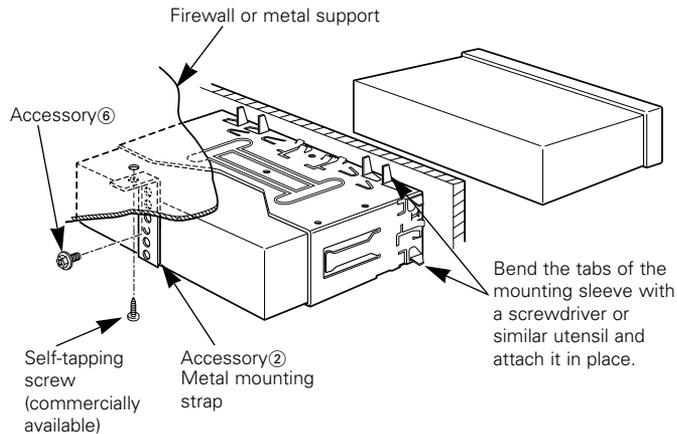
If you connect the ignition wire (red) and the battery wire (yellow) to the car chassis (ground), you may cause a short circuit, that in turn may start a fire. Always connect those wires to the power source running through the fuse box.

▲CAUTION

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.



■ Installation

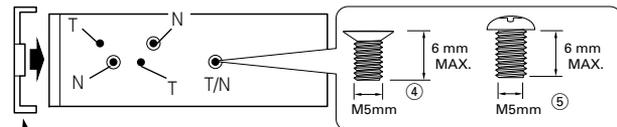


NOTE

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

■ Installing in Japanese-Made Cars

- 1 Refer to the section "Removing the hard rubber frame (P. 35)" and then remove the hard rubber frame.
- 2 Mount the J-Car trim plate with the thick part at the bottom.
- 3 Align the holes in the unit (two locations on each side) with the vehicle mounting bracket and secure the unit with the accessory screws.



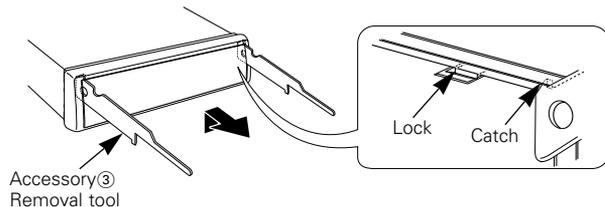
Accessory⑧
J-Car Trim Plate
(place thick part on bottom)

CAUTION

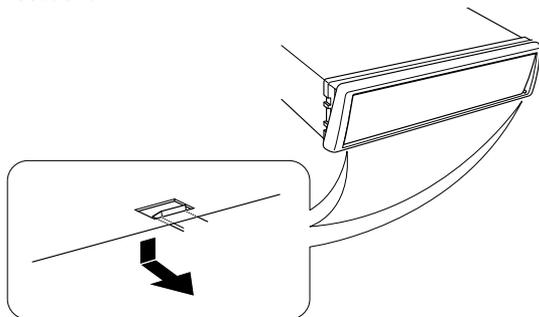
- During installation, do not use any screws except for those provided. The use of different screws might result in damage to the main unit.
- Damage may occur if a screwdriver or similar tool is used with excessive force during the installations.

■ Removing the hard rubber frame

- 1 Refer to the section “Theft deterrent faceplate (P. 14)” and then remove the faceplate.
- 2 Engage the catch pins on the removal tool and remove the two locks on the upper level. Push upward the frame and pull it forward as shown in the figure.



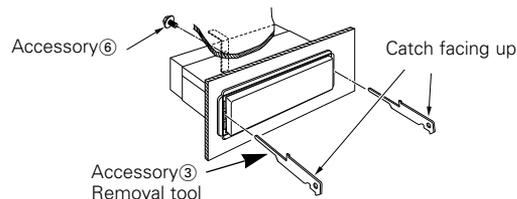
- 3 When the upper level is removed, remove the lower two locations.



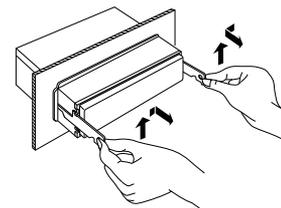
The frame can be removed from the bottom side in the same manner.

■ Removing the Unit

- 1 Refer to the section “Removing the hard rubber frame” and then remove the hard rubber frame.
- 2 Remove the Hex-head screw with integral washer (M4×8) on the back panel.
- 3 Insert the two removal tools deeply into the slots on each side, as shown.



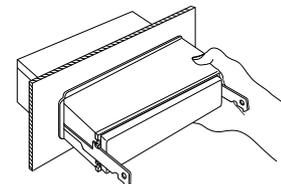
- 4 Push upward the removal tool toward the top, and pull out the unit halfway whilst pressing towards the inside.



▲ CAUTION

Be careful to avoid injury from the catch pins on the removal tool.

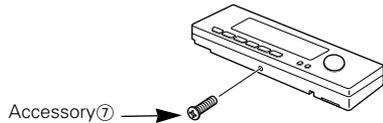
- 5 Pull the unit all the way out with your hands, being careful not to drop it.



■ Locking the faceplate to the unit

If you want to lock the faceplate to the unit so that it does not fall off, follow the directions below.

- 1 Refer to the function "Theft Deterrent Faceplate" (page 14) and remove the faceplate.
- 2 Insert the provided screw into the hole at the center of the bottom side of the faceplate which you have removed from the unit.



- 3 Push back the bottom of the faceplate bracket unit it locks.
- 4 Refer to the section "Theft Deterrent Faceplate (page 14)" and then reattaching the faceplate.

▲CAUTION

Never insert the tapite screws ($\varnothing 2 \times 4$ mm) in any other screw holes than the one specified. If you insert it in another hole, it will contract and may cause damage to the mechanical parts inside the unit.

Troubleshooting Guide

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.

PROBLEM	POSSIBLE CAUSE	SOLUTION
The power does not turn on.	The fuse has blown.	After checking for short circuits in the wires, replace the fuse with one with the same rating.
No sound can be heard, or the volume is low.	Attenuator is turned on.	Turn off Attenuator.
	The fader or balance settings are set all the way to one side.	Reset the fader or balance settings.
	The input/output wires or wiring harness are connected incorrectly.	Reconnect the input/output wires or the wiring harness correctly. See the section on "Connecting Wires to Terminals".
	The values of Volume offset are low.	Increase the values of Volume offset. (see p. 12)
Nothing happens when the buttons are pressed.	The computer chip in the unit is not functioning normally.	Press the reset button on the unit (see p. 5).
The sound quality is poor or distorted.	One of the speaker wires is being pinched by a screw in the car.	Check the speaker wiring.
	The speakers are not wired correctly.	Reconnect the speaker wires so that each output terminal is connected to a different speaker.
Radio reception is poor.	The car antenna is not extended.	Pull the antenna out all the way.
	The antenna control wire is not connected.	Connect the wire correctly, referring to the section on "Connecting Wires to Terminals".
The memory is erased when the ignition is turned off.	The battery wire has not been connected to the proper terminal.	Connect the wire correctly, referring to the section on "Connecting Wires to Terminals".
	The ignition and battery wire are incorrectly connected.	Connect the wire correctly, referring to the section on "Connecting Wires to Terminals".
A CD ejects as soon as it is loaded.	The CD is upside-down.	Load the CD with the labeled side up.
	The CD is quite dirty.	Clean the CD, referring to the section on "Cleaning CDs" (see p. 6).
The sound skips on a CD.	The CD is scratched or dirty.	Clean the CD, referring to the section on "Cleaning CDs" (see p. 6).
A track will not play.	Random play has been selected.	Turn off random play.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Can't remove disc.	The cause is that more than 10 minutes has elapsed since the vehicle ACC switch was turned OFF.	The disc can only be removed within 10 minutes of the ACC switch being turned OFF. If more than 10 minutes has elapsed, turn the ACC switch ON again and press the Eject button.
Free switching of the sound quality.	The system Q function is set on Scan mode.	Refer to the "System Q" page and switch it to a function other than Scan mode. (see p. 12).
Audio control setting cannot be achieved.	The system Q function is set on Scan mode.	Refer to the "System Q" page and switch it to a function other than Scan mode.(see p. 12).
Cannot play an MP3 file.	Not conforming to ISO 9660 Level 1/2.	Use a medium conforming to ISO 9660 Level 1/2.
	The MP3 file has no or invalid filename extension.	Add the ".MP3" extension to the MP3 file name.
	The media is scratched or dirty.	Clean the media, referring to the section on "Cleaning CDs" (see p.6).
Noise or no sound generated when an MP3 file is played.	The file has the MP3 filename extension while it is not an MP3 file.	Do not use the ".MP3" extension in non-MP3 files.
Takes time before the unit starts playing MP3 files.	The medium contains many folders, files, and hierarchical levels.	The unit checks all files on the loaded medium first. If the medium has many files recorded, it may take a long time for the unit before it starts playing MP3 files.
Fails to play MP3 files in the intended order.	The MP3 files were not written by the CD writer in the order in which you wanted them to be played.	Depending on the CD writer, you may be able to set the order in which MP3 files are to be played by writing them onto a medium with their file names beginning with play sequence numbers such as "01" to "99".
The sound skips when an MP3 file is being played.	The media is scratched or dirty.	Clean the media, referring to the section on "Cleaning CDs" (see p.6).

CD/MP3/External disc control mode

PROBLEM	POSSIBLE CAUSE	SOLUTION
The disc control mode cannot be selected.	No wire has been connected to the disc changer input terminal on the unit.	Connect the wire to the disc changer input terminal on the unit.
The specified disc does not play, but another one plays instead.	The specified CD is quite dirty.	Clean the CD.
	The CD is upside-down.	Load the CD with the labeled side up.
	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.
The sound skips.	Something is touching the disc changer.	Remove whatever is touching it.
	The CD is scratched or dirty.	If skipping happens at the same place when the car is stopped, something with the CD is wrong. Clean the CD.
The display shows that the changer is being played, but no sound can be heard.	The computer chip in the unit is not functioning normally.	Press the reset button on the unit (see p. 5).
The specified track will not play.	Random play or magazine random play has been selected.	Turn off random play or magazine random play.
Track repeat, disc repeat, track scan, random play, and magazine random play start by themselves.	The setting is not cancelled.	The settings for these functions remain on until the setting is turned off or the disc is ejected, even if the power is turned off or the source changed.
Cannot play CD-R or CD-RW	Finalization processing is not being conducted for CD-R/CD-RW.	Conduct finalization processing with CD recorder.
	A non-compatible CD changer is being used to play the CD-R/CD-RW.	Use a CD changer compatible with CD-R/CD-RW to play.

If the following situations, consult your nearest service center:

- Even though the disc changer is connected, the Disc Changer Mode is not on, with "AUX" showing in the display during the Changer Mode.
- Even though no device (KCA-S210A, CA-C1AX, KDC-CPS87, KDC-CX87, KDC-CPS85, KDC-CX85, KDC-CPS82 or KDC-CX82) is connected, the AUX Mode is entered when switching modes.

The following messages are displayed when certain problems are occurring in your system. Take the recommended actions.

Eject	No disc magazine has been loaded in the changer. The disc magazine is not completely loaded. ⇒ Load the disc magazine properly. No CD in the unit. ⇒ Insert the CD.
No Disc	No disc has been loaded in the disc magazine. ⇒ Load a disc into the disc magazine.
TOC Error	No disc has been loaded in the disc magazine. ⇒ Load a disc into the disc magazine. The CD is quite dirty. The CD is upside-down. The CD is scratched a lot. ⇒ Clean the CD and load it correctly.
Blank DISC	Nothing has been recorded on the MD.
No Tr DISC	No tracks are recorded on the MD, although it has a title.
NO PANEL	The faceplate of the slave unit being connected to this unit has been removed. ⇒ Replace it.
E-77	The unit is malfunctioning for some reason. ⇒ Press the reset button on the unit. If the "E- 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.
Hold Error	The protective circuit in the unit activates when the temperature inside the automatic disc changer exceeds 60°C (140°F), stopping all operation. ⇒ Cool down the unit by opening the windows or turning on the air conditioner. As the temperature falls below 60°C (140°F), the disc will start playing again.
IN	If this indicator blinks, the CD player is malfunctioning. ⇒ Eject the CD and try inserting it again. If the CD cannot be ejected, press the eject button and hold it in until the CD is ejected.

Specifications

Specifications subject to change without notice.

FM tuner section

Frequency range (200 kHz space)	87.9 MHz – 107.9 MHz
Usable sensitivity (S/N = 30dB)	9.3dBf (0.8 μ V/75 Ω)
Quieting Sensitivity (S/N = 50dB)	15.2dBf (1.6 μ V/75 Ω)
Frequency response (\pm 3 dB)	30 Hz – 15 kHz
Signal to Noise ratio (MONO)	70 dB
Selectivity (\pm 400 kHz)	\geq 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 dB μ (25 μ V)

CD player section

Laser diode	GaAlAs (λ =780 nm)
Digital filter (D/A)	8 Times Over Sampling
D/A Converter	1 Bit
Spindle speed	500 – 200 rpm (CLV)
Wow & Flutter	Below Measurable Limit
Frequency response (\pm 1 dB)	10 Hz – 20 kHz
Total harmonic distortion (1 kHz)	0.01 %
Signal to Noise ratio (1 kHz)	93 dB
Dynamic range	93 dB
Channel separation	85 dB

Audio section

Maximum output power	47 W \times 4
Full Bandwidth Power (at less than 1% THD)	22 W \times 4
Tone action	
Bass :	100 Hz \pm 10 dB
Middle :	1 kHz \pm 10 dB
Treble :	10 kHz \pm 10 dB
Preout level / Load (during disc play)	1800 mV/10 k Ω
Preout impedance	\leq 600 Ω

General

Operating voltage (11 – 16V allowable)	14.4 V
Current consumption	10 A
Installation Size (W \times H \times D)	182 \times 53 \times 162 mm 7-3/16 \times 2-1/16 \times 6-5/16 in.
Weight	4.0 lbs (1.7 kg)