

# KENWOOD

CD-RECEIVER

# KDC-8003

## INSTRUCTION MANUAL

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-8003 Serial number \_\_\_\_\_

# Contents

---

## Before use

Warning.....	3
Safety precautions.....	4
Handling compact discs.....	6
Features.....	7

## Basic operations

Power/Volume/Attenuator.....	10
Loudness.....	11
Auto seek tuning.....	12
Manual tuning.....	13
Local seek.....	14
Compact disc play.....	15
Basic operations of remote control.....	16

## Tuner features

Station preset memory.....	19
Auto memory entry.....	20
CRSC.....	21
Direct access tuning.....	22
Channel space selections.....	23

## CD player features

Track search.....	24
Direct track search.....	25
Track repeat.....	26
Track scan.....	27
Random play.....	28

## Disc changer control features

Disc play with Disc changer.....	29
Track/Disc search.....	30
Direct track/Disc search.....	31
Track/Disc repeat.....	32
Track scan.....	33
Disc scan.....	34
Random play.....	35
Magazine random play.....	36

## General features

Clock display/setting.....	37
Audio controls.....	38
Selectable illumination/display type.....	40
Theft deterrent faceplate.....	41
Disabled system indicator.....	42
Preout switching.....	43
Low cut filter.....	44

## Installation

Accessories.....	45
Installation procedure.....	46
Connections.....	47
Installation.....	48

Troubleshooting guide.....	50
----------------------------	----

Specifications.....	52
---------------------	----

# 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 I, 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.

Before use

# Safety precautions

Before use

## **▲WARNING**

**Take the following precautions to prevent fire and avoid personal injury :**

- Press in the faceplate until it is firmly locked to the main unit to prevent it from being detached in an accident.
- When extending the ignition cable, battery cable, or ground cable, use 0.75mm<sup>2</sup> (AWG18) or larger automotive grade cable to avoid cable deterioration or damage to the covering.
- Check that no metal objects (coins, tools, etc.) are left inside the unit to avoid short circuits.
- If you smell or see smoke, turn the power off immediately and consult your Kenwood dealer.

## **▲CAUTION**

**Take the following precautions to keep the unit in proper working order.**

- Be sure the unit is connected to a 12V DC power supply with a negative ground connection.
- Do not open the top or bottom cover.
- Do not install the unit in places it is exposed to direct sunlight, high heat or humidity, water may splash over it, or dust exists.
- Do not store the detached faceplate or faceplate storage case in places it is exposed to direct sunlight or high heat.
- Do not splash water on the faceplate.
- The faceplate is a precision piece of equipment that contains sensitive parts. Do not subject it to excessive shock.
- Do not touch the terminals of the faceplate or the unit.
- If you need to replace the fuse, make sure the new fuse is of the same type and rating. Using a fuse of a different type of rating may damage your unit. The fuse rating is normally shown on the fuse and fuse box.
- If you need to replace the fuse, unplug the wiring harness before replacing the fuse to prevent short circuits.

## **IMPORTANT INFORMATION**

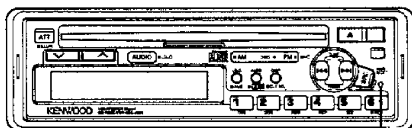
**This unit is NOT designed to be connected directly to a CD changer that was manufactured and sold before 1994. If you plan to use such units, please read the following information carefully.**

- **To control KDC-C200 / KDC-C300 / KDC-C400**  
A CA-DS100 (sold separately as an optional accessory), along with the control box and extension cord supplied with the CD changer, are required.
- **To control KDC-C301 / KDC-C600 / KDC-C800 / KDC-C601 / KDC-C401**  
A CA-DS100 (sold separately as an optional accessory), along with the extension cord supplied with the CD changer, are required.
- **KDC-C100 / KDC-C302 / C205 / C705 and CD changer Manufactured by Other Companies are not compatible with this Kenwood model.**

**FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN DAMAGE TO THIS UNIT AND/OR THE CD CHANGER**

**NOTE**

- If you have difficulty in installing this unit in your vehicle, contact your Kenwood dealer.
- If it doesn't seem to be working properly, first press the Reset button. If the malfunction persists, consult your Kenwood dealer.



Reset button

**Cleaning the unit**

- If the front panel is dirty, wipe it clean with a silicon cloth or soft dry cloth with the power off.

**CAUTION**

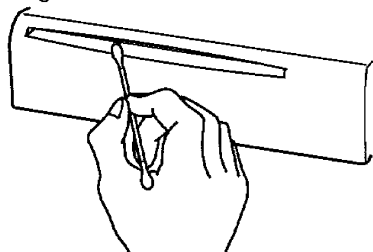
Do not use hard cloths or paint thinner, alcohol, or other volatile solvents. These may damage external surfaces or remove indicator characters.

**Cleaning the faceplate terminal**

- If the faceplate terminal or mount faceplate terminal becomes dirty, wipe it clean with a soft dry cloth.

**Cleaning the CD slot**

- Since dust accumulates in the CD slot, it will sometimes need to be cleaned. Discs loaded in dusty slots may be damaged.

**Lens fogging**

- In cold climates, there may be a period after you turn on your vehicle's heater when the lens that guides the laser beam used in your CD player fogs up. If this happens, you cannot play compact discs. Take out discs and the fogging will disappear. If it does not return to normal after several hours, contact your Kenwood dealer.

**Heat protection**

- In warm climates, when vehicles are left standing in direct sunlight with the windows closed, the temperature inside can rise above 60°C. The unit's protection circuits will then display the message "HoLd" and prevent the player from operating. Just open the windows or turn on the air conditioning. As soon as the "HoLd" message disappears, the player will operate normally.
- The temperature inside the unit rises when you use the unit with the high volume level. If this occurs while you are listening to CD, the unit stops CD play to protect the laser pick-up, and the display shows "H-HoLd". The protection circuits are automatically cancelled in about 15 minutes, and the CD play will be resumed reducing 10 dB of the previously set volume level.

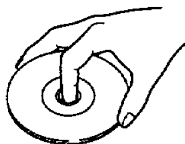
# Handling compact discs

Before use

Stains, scratches, or warping can cause skipping, malfunction, or low sound quality. Take the following precautions to avoid damage to the compact discs.

## Holding a disc

- Avoid touching the recorded side (the side without the titles on) when you hold a compact disc.



- Do not stick paper tape, etc. on either stick of the disc.

Paper tape

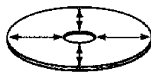


## Storing your discs

- Do not store discs where they will be exposed to direct sunlight (such as on the seat and dashboard) or high heat.
- If you do not use your unit for an extended time, remove the discs from the unit and put them in their cases. Do not leave them lying around without cases, piled up, or leaning on a wall and so on.

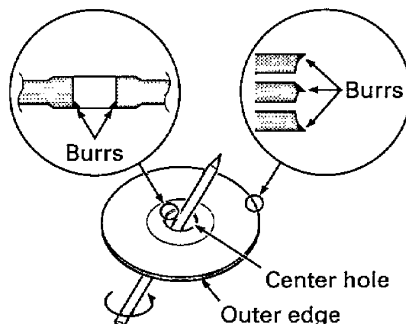
## Cleaning your discs

- If there are stains on a disc, wipe them off with a cleaning cloth or a soft cotton cloth, wiping from the center to the edge. Never use conventional record cleaners, anti static agent, paint thinner, benzine, or other chemicals.



## Check your new discs

- Some new discs have burrs on their outer edges or around the hole in the center. Discs with burrs may not fit properly on the player, causing skipping when they are played. Use a ballpoint pen or similar instrument to remove the burrs.



## Disc accessories

- Stabilizers, protective seals, and other disc accessories on the market, which claim to offer improved sound quality or disc protection, may cause this unit to malfunction. They should not be used on discs played in this unit.

## **CAUTION**

### Never use 8 cm (3") compact discs

- If you attach an adapter to an 8 cm (3") compact disc and load it into this unit, the adapter may be detached from the disc, causing damage to the unit. Do not use 8 cm (3") compact discs.

# Features

---

## ■ Tuner section

- **Auto seek tuning (Page 12)**  
Automatically searches for stations you can receive.
- **Local seek (Page 14)**  
When this feature is turned on, the tuner scans only the stations offering good reception during Auto seek tuning and Auto memory entry.
- **Station preset memory (Page 19)**  
Stores the frequencies of your favorite stations in memory. The frequencies stored in memory can be recalled by a single touch of a button.
- **Auto memory entry (Page 20)**  
Automatically stores the stations in the band you are listening to in memory. You can tune to the stations stored in memory by a single touch of a button in the same way as for the Stations preset memory function. If you use this function when you drive a long way and do not know what stations are available there, you can check the programs broadcast by local stations by recalling them by a single touch of a button.
- **CRSC (Clean Reception System Circuit) (Page 21)**  
When this feature is turned on, the tuner switches reception to mono to reduce multi-path noise if it occurs in the broadcast you are listening to.
- **Direct access tuning (Page 22)**  
This feature allows you to listen to the station of your choice immediately by inputting its frequency.  
(Remote control function)
- **Channel space selection (Page 23)**  
This feature allows you to change the frequency step between 200 kHz in FM/10 kHz in AM and 50 kHz in FM/9 kHz in AM.

## ■ CD player section

- **Direct track search (Page 25)**  
This feature allows you to enter the number of the track you wish to hear by pressing the appropriate numeric keys.  
(Remote control function)
- **Track repeat (Page 26)**  
When this function is turned on, the track you are listening to is played repeatedly.
- **Track scan (Page 27)**  
When this function is turned on, the first part of each track on the disc you are listening to is played automatically to help you find the one you want.
- **Random play (Page 28)**  
When this function is turned on, the tracks on the disc you are listening to are played in random order.

# Features

---

Before use

## ■ Disc changer (optional) control section

- **Disc changer control (Page 29)**  
This unit has a Disc changer control function.
- **Track / Disc search (Page 30)**  
You can search for the track / disc you want by specifying the track / disc number.
- **Direct track/disc search (Page 31)**  
This feature allows you to enter the number of the track or disc you wish to hear by pressing the appropriate numeric keys.  
(Remote control function)
- **Track repeat (Page 32)**  
When this function is turned on, the track you are listening to is played repeatedly.
- **Disc repeat (Page 32)**  
When this function is turned on, the disc you are listening to is played repeatedly.
- **Track scan (Page 33)**  
When this function is turned on, the first part of each track on the disc you are listening to is played automatically to help you find the one you want.
- **Disc scan (Page 34)**  
When this function is turned on, the first part of each disc in the Disc changer is played automatically to help you find the one you want from the magazine loaded in the Disc changer.
- **Random play (Page 35)**  
When this function is turned on, the tracks on the disc you are listening to are played in random order.
- **Magazine random play (Page 36)**  
When this function is turned on, the tracks on the discs in your Disc changer are played in random order.

## ■ General section

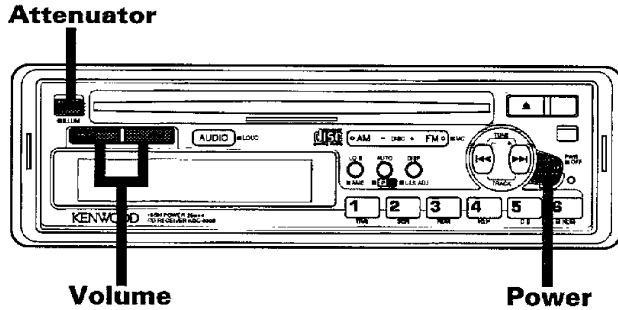
- **Attenuator (Page 10)**  
This function allows you to lower the volume quickly. The fade-in function is provided to restore the original volume gradually.
- **Loudness control (Page 11)**  
When this function is turned on when the volume level is low, sound is made clear by emphasizing bass.
- **Remote control (Page 16)**  
This unit can be operated with the wireless remote control.  
There are also convenient features available only with the remote control.
- **Clock display (Page 37)**  
The time can be displayed.
- **Audio controls (Page 38)**  
Adjust the bass, treble, balance, and fader.
- **Selectable illumination (Page 40)**  
Allows illumination colour to be switched between green and orange.
- **Selectable display type (Page 40)**  
You can select a display type from among negative, positive, and the type that automatically changes between negative and positive display according to the car light switch.
- **Theft deterrent faceplate (Page 41)**  
The faceplate is detachable. When you leave the vehicle, you can take the faceplate with you to help prevent theft.
- **Disabled system indicator (Page 42)**  
When the faceplate is detached from the unit, the LED blinks.



- **Preout switching (Page 43)**  
Front preout can be switched to Non-Fading preout.
- **Low cut filter (Page 44)**  
The frequencies below 100 Hz can be cut off by turning the low cut filter on for speaker output. Use the filter to use Preout as sub-woofer output.
- **Automatic illumination control**  
When the illumination cable is connected, the display panel lights up when the vehicle's lights are on even if the power is off. You can turn the power on easily in darkness.  
If the disabled system is removed, the Disabled System indicator LED lights to remind you to reattach the faceplate.
- **Automatic dimmer control**  
When the dimmer cable is connected, automatically dims the display when the car's light control is turned on.
- **Navigation system support**  
A Navigation system can be connected to this unit and it can be used as a CD-ROM player. The status of the Navigator is shown on the display while it is in use. For details on using the Navigator, see the Instruction Manual supplied with the Navigator.

# Power/Volume/Attenuator

Basic operations



## To turn the power on

Press the Source button.

### **NOTE**

Perform the following operations with the power on.

## To turn the power off

Press the Source button for more than a second.

## To stop all the functions with the power on

Press the Source button to select All off mode.

When "OFF" is displayed, you are in All off mode. You can stop all the function with the power on.

## To increase the volume

Press the Audio up button.



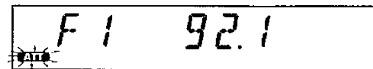
## To decrease the volume

Press the Audio down button.



## To use the Attenuator function

Press the Attenuator button. The Attenuator indicator will appear on the display and Attenuator function will turn on.



ON

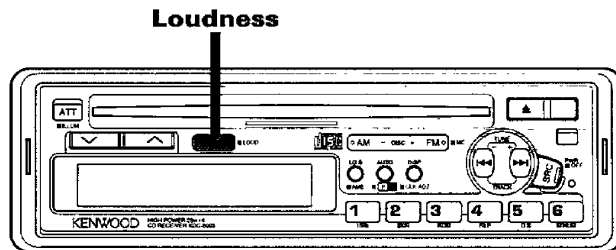
## To cancel the Attenuator function

Press the Attenuator button or set the volume to minimum.

The Attenuator indicator disappears and the Attenuator function is cancelled.

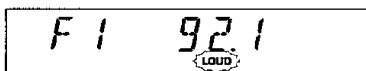
# Loudness

---



## To use loudness control

Press the Loudness button for more than a second. Loudness is turned on and the Loudness indicator appears on the display. This function is factory-set to ON.



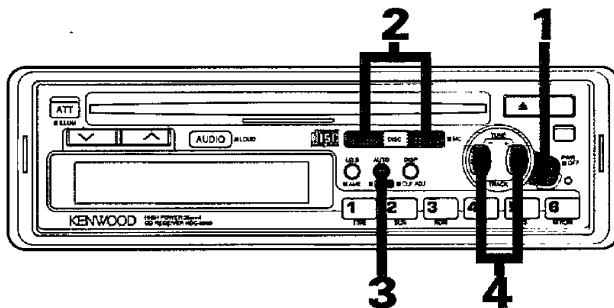
ON

## To cancel loudness control

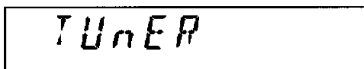
Press the Loudness button for more than a second. Loudness is turned off and the Loudness indicator disappears.

# Auto seek tuning

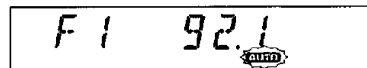
Basic operations



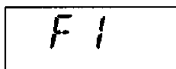
- 1** Listen to the radio  
Press the Source button to select Tuner mode.  
When "TUnER" is displayed, you are in Tuner mode.



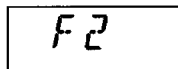
- 3** To select Auto seek tuning mode  
Press the Auto button.  
The Auto indicator will appear on the display and Auto seek tuning will turn on. This function is factory-set to ON.



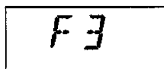
- 2** To select a band  
Press the FM/AM button.  
Each time you press the FM button briefly, the band changes between FM1, FM2, and FM3.  
Press the AM button to choose AM band.



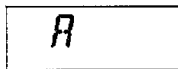
FM1



FM2

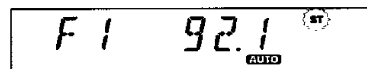


FM3

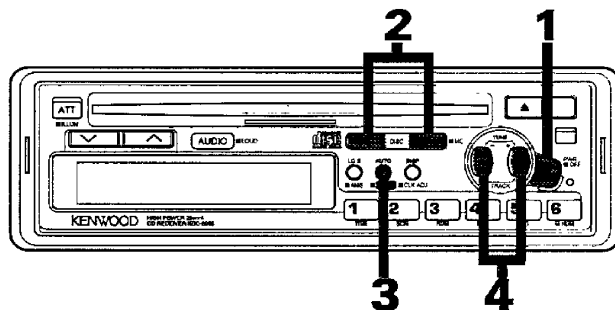


AM

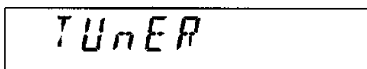
- 4** To tune  
Press the Tuning up/down button.  
When the Tuning up button is pressed, up seeking is performed.  
When the Tuning down button is pressed, down seeking is performed.  
The Stereo indicator appears on the display when stereo broadcasts are received.



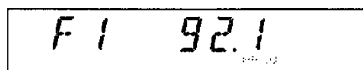
# Manual tuning



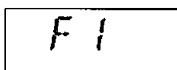
- 1** Listen to the radio  
Press the Source button to select Tuner mode.  
When "TUNER" is displayed, you are in Tuner mode.



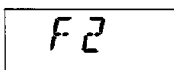
- 3** To select Manual tuning mode  
Press the Auto button.  
The Auto indicator disappears and the Auto seek tuning is cancelled.



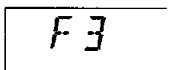
- 2** To select a band  
Press the FM/AM button.  
Each time you press the FM button briefly, the band changes between FM1, FM2, and FM3.  
Press the AM button to choose AM band.



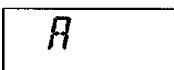
FM1



FM2

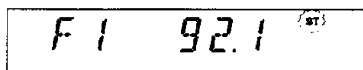


FM3

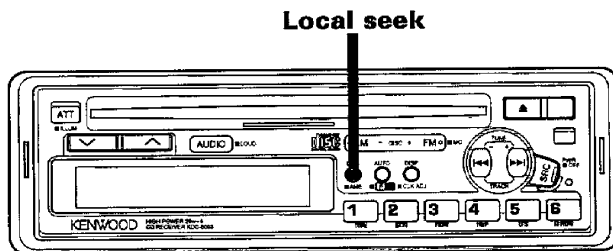


AM

- 4** To tune  
Press the Tuning up/down button.  
When you press the button once, the received frequency changes by one step. The frequency will continue to change as long as you hold the button down.  
The Stereo indicator appears on the display when stereo broadcasts are received.

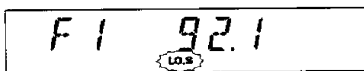


# Local seek



## To use Local seek

Briefly press the Local seek button. The Local seek indicator will appear on the display, and local seek will turn on.

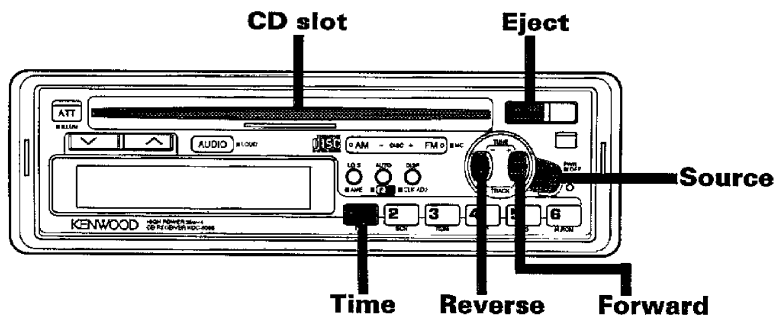


ON

## To cancel Local seek

Briefly press the Local seek button. The Local seek indicator disappears, and local seek turns off.

# Compact disc play



## To play compact discs

Insert a CD with the title side up. If there is already a CD in the unit, press the Source button to select CD mode.

When you enter CD mode, "Cd" will be displayed, and CD playing will start.



### **CAUTION**

Do not attempt to insert a disc in a slot where there is already another disc inside.

This unit is designed for playing 12 cm (5") compact discs. Attempting to play 8 cm (3") disc may damage the unit and should be avoided.

## To stop and eject

Press the Eject button. CD play stops and the disc is ejected.

## To fast forward

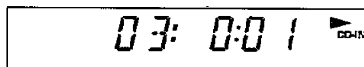
Hold down the Forward button. When you release the button, CD play restarts.

## To reverse

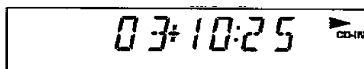
Hold down the Reverse button. When you release the button, CD play restarts.

## To switch play time display type

Press the Time button. Each time you press the button, the track time and the total CD play time are displayed alternately.



Track time

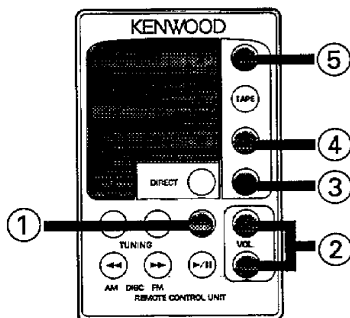


Total CD play time

# Basic operations of remote control

## All modes

Basic operations



### ① Attenuator button

Lowers volume immediately.  
To restore previous level, press this button again or set the volume to minimum.

### ② Volume button

The  $\wedge$  button increases the volume.  
The  $\vee$  button decreases the volume.

### ③ Disc changer button

Selects Disc changer mode.

### ④ CD button

Selects CD mode.

### ⑤ Tuner button

Each press of this button switches between the tuner mode and the All off mode.

## Replacing the battery

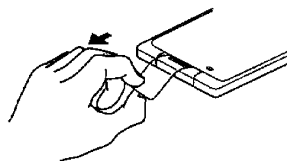
- Use one lithium battery (CR2025).
- Insert the battery according to the illustration inside the battery case, taking care not to reverse the + and - polarity.
- This battery life is about 6 months, depending on operating conditions. When it expires, replace it.

## **▲WARNING**

- Store the lithium battery outside the reach of children. In case a person swallows a lithium battery, immediately call the doctor.

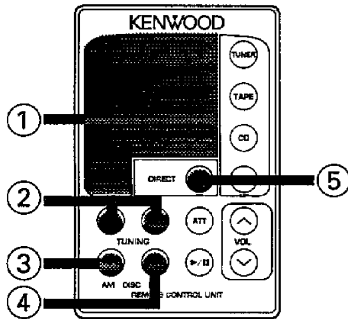
## **NOTE**

- Before using the remote controller for the first time, pull out the film from the battery case.



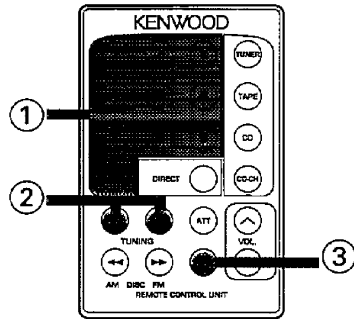


## Tuner mode



- ① **Numeric keys**  
Numeric keys 1 to 6 are used to recall preset stations.  
Enter the frequency of the station during Direct access tuning.
- ② **Tuning button**  
The ◀◀ button decreases the frequency.  
The ▶▶ button increases the frequency.
- ③ **AM button**  
Press the AM button to choose AM mode.
- ④ **FM button**  
Each time you briefly press the FM button, the band changes between FM1, FM2, and FM3.
- ⑤ **Direct button**  
Press the Direct button to select Direct access tuning mode.

## CD mode

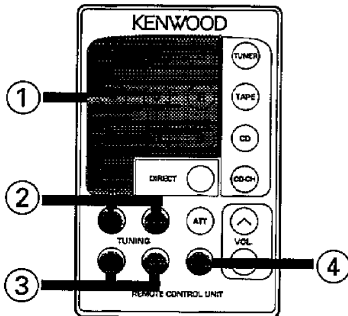


- ① **Numeric keys**  
Use numeric keys to specify the track number during direct track search.
- ② **Track search button**  
Press the ◀◀ button to find a previous track.  
Press the ▶▶ button to find a subsequent track.
- ③ **▶/|| button**  
Plays/pauses CD play.

# Basic operations of remote control

## Disc changer mode

Basic operations



### ① Numeric keys

Use numeric keys to specify the track or disc number during direct track or disc search.

### ② Track search button

Press the ◀◀ button to find a previous track.

Press the ▶▶ button to find a subsequent track.

### ③ Disc search button

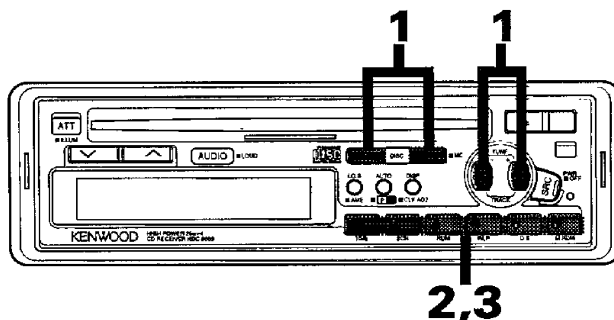
Press the ◀◀ button to find a previous disc.

Press the ▶▶ button to find a subsequent disc.

### ④ ▶/|| button

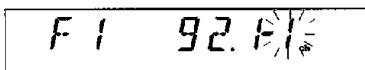
Plays/pauses disc play.

# Station preset memory



**1** Select the band and station (frequency) you want to preset.

**2** To preset  
Press the Preset station button (1 to 6) you want to use for more than two seconds.  
When the station identity is stored in memory, the button number indicator blinks once.

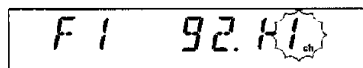


You can preset each button for one station each from the FM1, FM2, FM3, and AM bands.

## **NOTE**

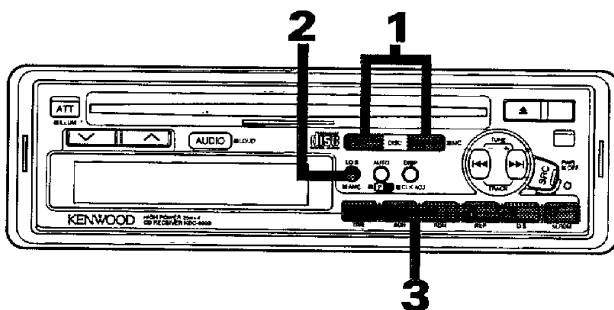
To change preset frequencies  
Tune in a station you want to preset and press the Preset station button you want to change for more than two seconds.

**3** To recall a preset station  
Briefly press the Preset station button (1 to 6) you want.  
The number of the button that you pressed will be displayed, and the preset station will be recalled.



# Auto memory entry

Tuner features



**1**

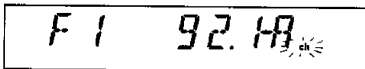
Select the band for Auto memory entry.

**2**

## Auto memory entry

Press the Auto memory button for more than two seconds.

Auto memory entry starts and preset station button numbers are displayed in order.

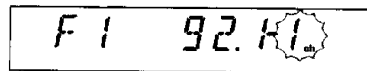


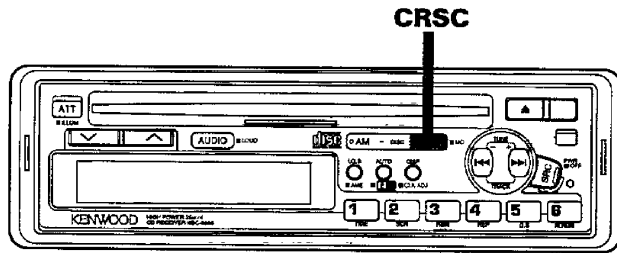
When stations are preset in all Preset stations buttons, Auto memory entry ends. The last preset station is received.

**3**

To recall stations stored in memory by Auto memory entry  
Briefly press a Preset station button (1 to 6).

The number of the pressed button is displayed, and the station is recalled.





## To turn CRSC on

Press the MC button for more than a second.

The mc indicator disappears on the display and the CRSC function will turn on. This function is factory-set to ON.

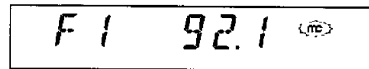
### **NOTE**

If FM sound is unstable:  
With CRSC function on, strong electrical field (from power lines, for instance) may make the sound level fluctuate. If this happens, try turning CRSC off.

## To cancel the CRSC

Press the MC button for more than a second.

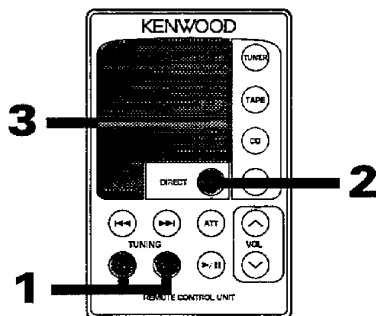
The mc indicator will appear on the display and the CRSC function is cancelled.



OFF

# Direct access tuning

Tuner features

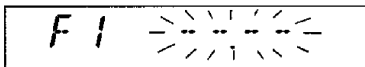


**1**

Select the band you want.

**2**

Press the Direct button.  
The frequency display blinks for 10 seconds.



**3**

Enter the frequency you want while the frequency display is blinking.

*For example:*

- To tune to 92.1 MHz FM;  
Press 9, 2, and 1.
- To tune to 530 kHz AM;  
Press 5, 3, and 0.

## **NOTE**

The tuner receives the frequency you entered.

You cannot enter frequencies your tuner cannot receive in each band.

Frequencies that can be input.

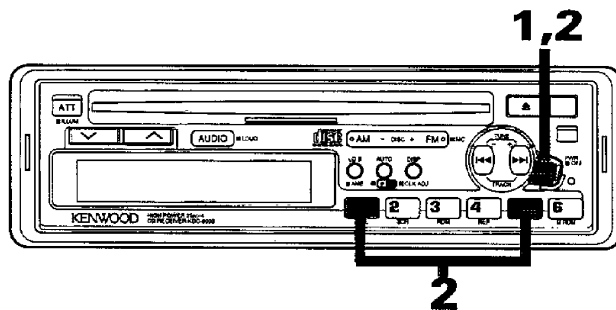
Frequencies for FM broadcasting can be input in 0.1MHz units. They cannot be specified in 0.01MHz units.

## **To cancel**

To cancel in the middle, press the Direct button.

The Direct access tuning function is cancelled and the frequency display stops blinking.

# Channel space selection



**1**

Turn the power off.

**2**

Hold down preset station buttons "1" and "5" and turn the power on. The frequency step is 50 kHz in FM and 9 kHz in AM.

## **NOTE**

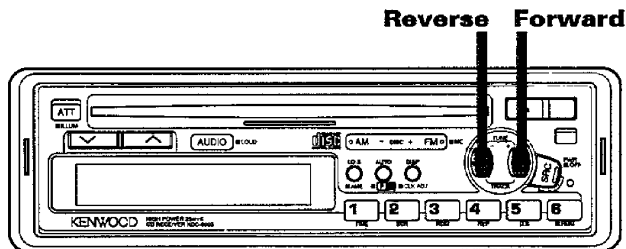
- When the frequency step is changed, all the contents of memory become the initial values.
- This operation is not needed when the unit is used in the United States or Canada. If it is used in any other country, the operation must be carried out so as to set the frequency to 50 kHz on FM and 9 kHz on AM.

## To return to the original frequency step

Perform steps 1 and 2 again. The frequency step returns to its original value.

Tuner features

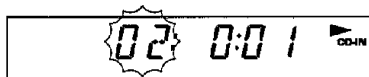
# Track search



CD player features

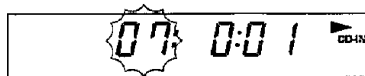
## Reverse track search

Briefly press the Reverse button. When you press this button once, the player returns to the start of the track you are listening to. Each time you press the button, the track number on the display decreases. The player plays the track with the track number shown on the display.



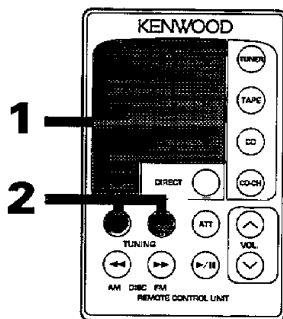
## Forward track search

Briefly press the Forward button. Each time you press this button, the track number on the display increases. The player plays the track with the track number shown on the display.



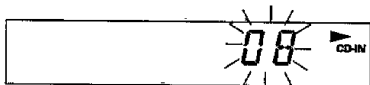


# Direct track search



**1**

Enter the number of track you want to listen to.  
The input number blinks for 10 seconds and stays lit.



**2**

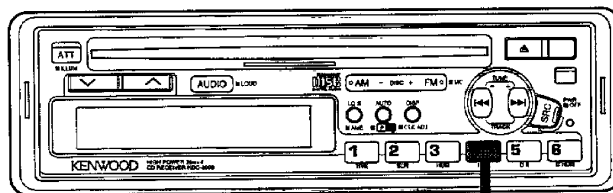
Press the ◀◀ or ▶▶ button while the number is blinking.  
The player starts playing the track specified in step 1.

## To cancel

To cancel search in the middle, press the ▶/|| button.  
The Direct track search is cancelled and the normal display returns.

CD player features

# Track repeat

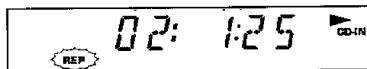


**Repeat**

CD player features

## To repeat track

Press the Repeat button.  
The Repeat indicator will appear on the display and the Track repeat function will turn on.  
The same track is played repeatedly.



ON

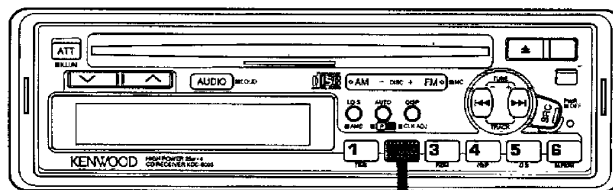
### **NOTE**

When disc play stops, Track repeat is cancelled.

## To cancel

Press the Repeat button.  
The Repeat indicator disappears and the Track repeat function is cancelled.

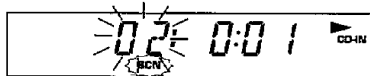
# Track scan



1,2

1

Press the Track scan button. The Track scan indicator will appear on the display and the player will play the first 10 seconds of each track in succession. The track number blinks on the display.



2

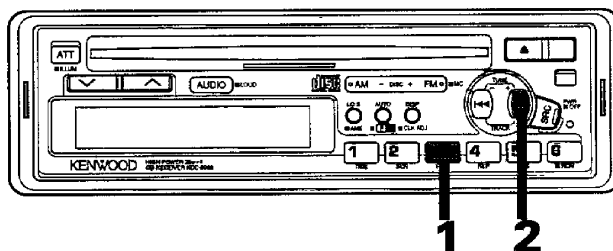
To select a track Press the Track scan button. The Track scan indicator disappears and the Track scan is cancelled. Normal playback starts.

### NOTE

- When disc play stops, Track scan is cancelled.
- When all tracks on the disc you are listening to are scanned, Track scan is cancelled.

CD player features

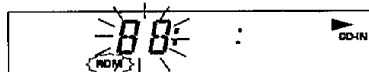
# Random play



## CD player features

**1**

Press the Random button. The Random indicator will appear on the display and the player will randomly select another track from the disc you are playing. The track numbers on the display will change continuously during track selection. When a track is selected, playback will begin automatically.



ON

**2**

To select another track  
Press the ►| button.  
The player will randomly choose another track.

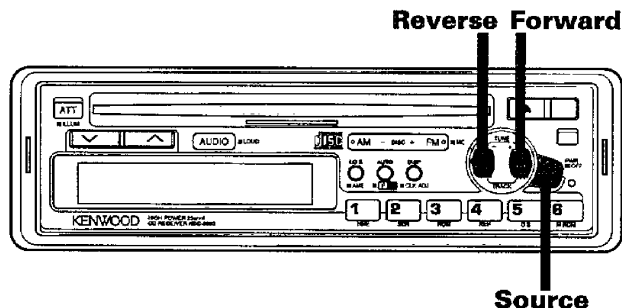
## To cancel

Press the Random button. The Random indicator disappears and Random play is cancelled. Normal disc play starts.

### **NOTE**

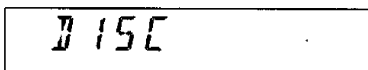
When the disc play stops, the Random play function is cancelled.

# Disc play with Disc changer

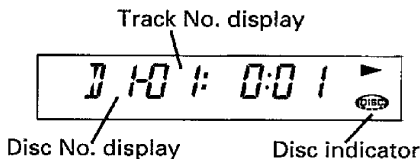


## To play discs

Press the Source button to select Disc changer mode. If you see DISC display, you are in Disc changer mode.



The Disc indicator will appear on the display and disc play will begin.



When the player reaches the end of the last track on the disc you are playing, it will shift automatically to the first track on the next disc. When the player plays the last disc, it will return to the first disc.

When you change the discs in the auto changer, "LoAd" is displayed. Disc No. 10 is displayed as "0".

## To fast forward

Hold down the Forward button.

## To reverse

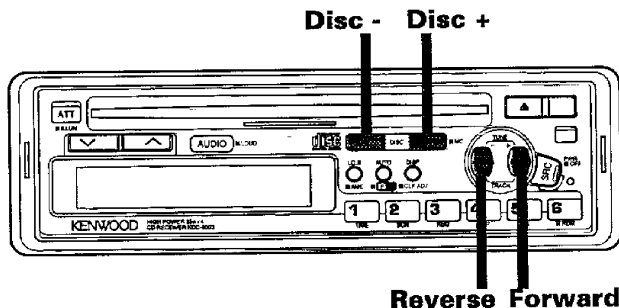
Hold down the Reverse button.

### **NOTE**

- If the MD track number surpasses "100", the last two digits of the track number are displayed.
- This unit cannot display MD disc titles.

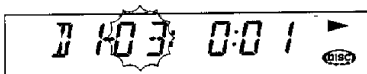
Disc changer control features

# Track/Disc search



## Reverse track search

Briefly press the Reverse button. When you press this button once, the player returns to the start of the track you are listening to. Each time you press the button, the track number on the display decreases. The player plays the track with the track number shown on the display.

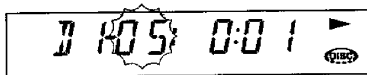


### NOTE

If you try reverse track search while playing track 1, the player will resume play at the start of track 1; it does not search for the last track.

## Forward track search

Briefly press the Forward button. Each time you press this button, the track number on the display increases. The player plays the track with the track number shown on the display.

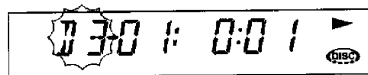


### NOTE

If you try forward track search while playing the last track on a disc, the Forward track search function does not work.

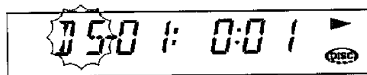
## Reverse disc search

Press the Disc - button. Each time you press this button, the disc number on the display decreases. The player plays the disc with the disc number shown on the display.

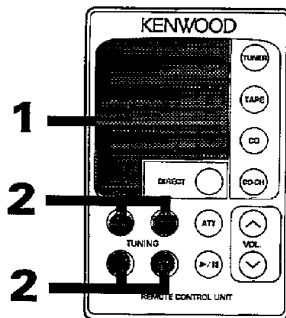


## Forward disc search

Press the Disc + button. Each time you press this button, the disc number on the display increases. The player plays the disc with the disc number shown on the display.

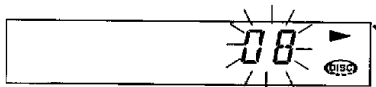


# Direct track/disc search



**1**

Enter the number of track or disc you want to listen to. The input number blinks for 10 seconds and stays lit.



## **NOTE**

To search for disc 10 directly, enter "0".

**2**

### Direct track search

Press the ◀◀ or ▶▶ button while the number is blinking. The player starts playing the track specified in step 1.

### Direct disc search

Press the ◀◀ or ▶▶ button while the number is blinking. The player starts playing the disc specified in step 1.

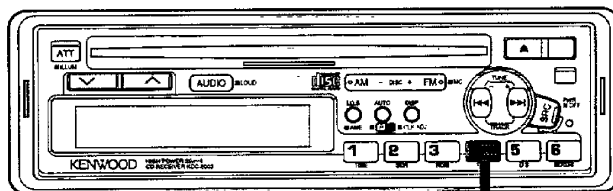
## To cancel

To cancel search in the middle, press the ▶/|| button.

The Direct track/disc search is cancelled and the normal display returns.

Disc changer control features

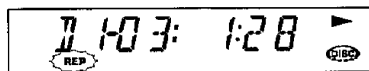
# Track/Disc repeat



Repeat

## To start Track repeat

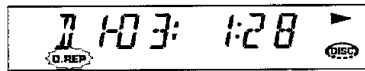
Press the Repeat button once.  
When Disc repeat is on, press the button twice.  
The Repeat indicator will appear on the display and the Track repeat function will turn on.  
The same track is played repeatedly.



ON

## To start Disc repeat

Press the Repeat button twice.  
When Track repeat is on, press the button once.  
The Disc repeat indicator will appear on the display and the Disc repeat function will turn on.  
The same disc is played repeatedly.



ON

## To cancel Track repeat

Press the Repeat button twice.  
The Repeat indicator disappears and the Track repeat function is cancelled.

### **NOTE**

When disc play stops, Track repeat is cancelled.

## To cancel Disc repeat

Press the Repeat button once.  
The Disc repeat indicator disappears and the Disc repeat function is cancelled.

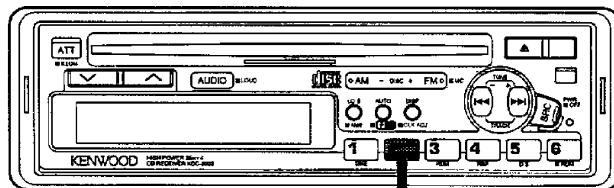
### **NOTE**

When disc play stops, Disc repeat is cancelled.

Disc changer control features



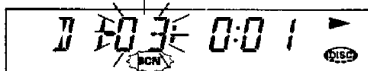
# Track scan



1,2

1

Press the Track scan button. The Track scan indicator will appear on the display and the player will play the first 10 seconds of each track in succession. The track number blinks on the display.



2

To select a track

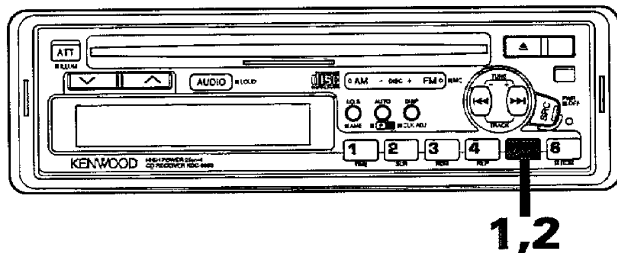
Press the Track scan button. The Track scan indicator disappears and the Track scan is cancelled. Normal playback starts.

### NOTE

- When disc play stops, Track scan is cancelled.
- When all tracks on the disc you are listening to are scanned, Track scan is cancelled.

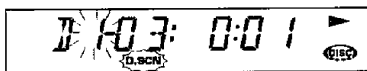
Disc changer control features

# Disc scan



**1**

Press the Disc scan button.  
The Disc scan indicator will appear on the display and the player will play the first 10 seconds from each disc in succession.



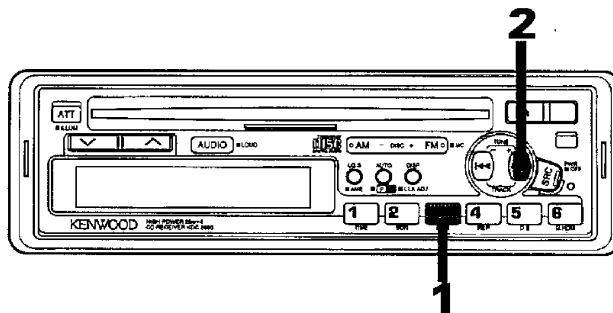
**2**

To select a disc  
Press the Disc scan button.  
The Disc scan indicator disappears and the Disc scan is cancelled.  
Normal playback starts.

### **NOTE**

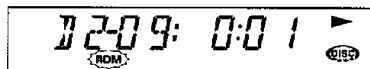
- When disc play stops, Disc scan is cancelled.
- When all discs in the magazine you are listening to are scanned, Disc scan is cancelled.

# Random play



**1**

Press the Random button.  
The Random indicator will appear on the display and the player will randomly select another track from the disc you are playing. The track numbers on the display will change continuously during track selection. When a track is selected, playback will begin automatically.



ON

## **NOTE**

When all the tracks on a disc have been played, the player will randomly select the next disc.

**2**

**To select another track**

Press the ►► button.  
The player will randomly choose another track.

**To cancel**

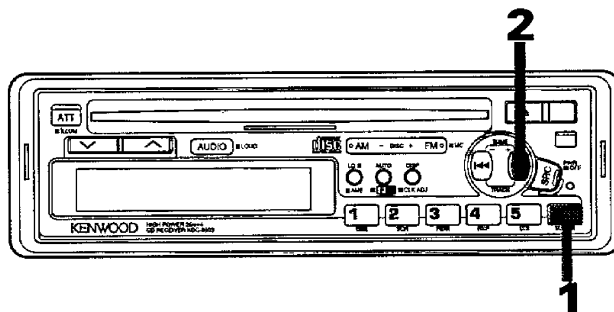
Press the Random button.  
The Random indicator disappears and Random play is cancelled. Normal disc play starts.

## **NOTE**

When the disc play stops, the Random play function is cancelled.

Disc changer control features

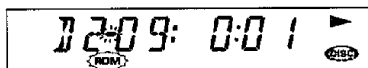
# Magazine random play



Disc changer control features

**1**

Press the **Magazine random** button. The Magazine random play indicator will appear on the display and the track select will start. The track/disc numbers on the display will change continuously during track selection. When a track is selected, playback will begin automatically.



ON

## **NOTE**

The Magazine random play is not available if you use the KDC-C200/C300/C400/C301/C401.

**2**

To select another track  
Press the **▶▶** button.  
The player will randomly choose another track.

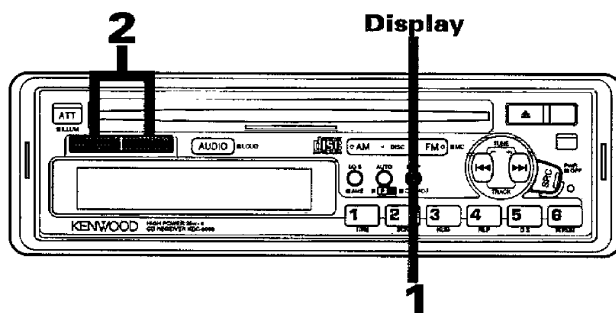
## To cancel

Press the **Magazine random** button. The Magazine random indicator disappears and Magazine random play is cancelled. Normal disc play starts.

## **NOTE**

- When disc play stops, the Magazine random play function is cancelled.
- The Magazine random selection time changes according to the number of discs in the magazine.

# Clock display/setting



## To recall clock display

Press the Display button.  
The display changes as listed in the table.

Mode	Displays
Tuner	Frequency ↔ Clock
CD	Track number/Track time ↔ Clock
Disc changer	Disc/Track number/Track time ↔ Clock
All off	"OFF" ↔ Clock

## To set the clock

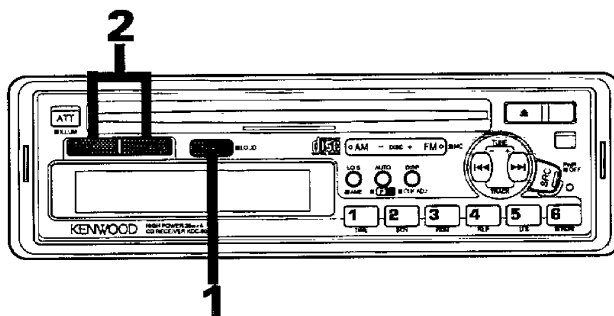
**1**

If the time is not displayed, press the Display button.  
The time is displayed.

**2**

Hold down the Display button, and press the  $\nabla/\wedge$  button.  
Press the  $\nabla$  button to adjust the hour and the  $\wedge$  button to adjust the minutes.

# Audio controls



- 1** To select the control mode  
Press the Audio button.  
Each time you press this button, the adjustment mode changes as follows: Bass -> Treble -> Balance -> Fader. If you do not perform the next operation within five seconds, the Volume adjustment mode (normal mode) will return.

## **NOTE**

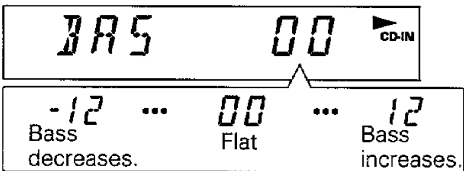
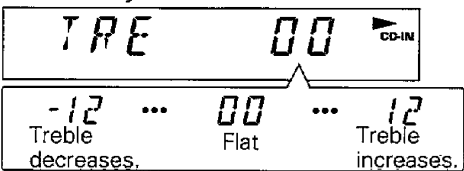
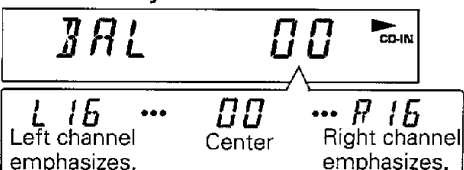
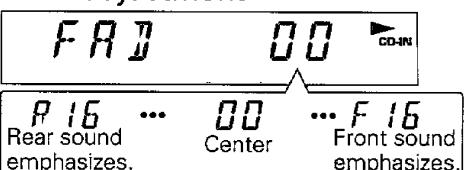
### Source tone memory

This unit allows the Tone (Bass and Treble) control to be set independently for each source mode (CD, FM, AM, and Disc-changer). The tone set in CD mode is recalled automatically when you select CD, and the tone set in FM mode is recalled automatically when you select FM.

- 2** To adjust each mode  
Press the Audio control button.  
Adjust each mode according to the table.

## To cancel

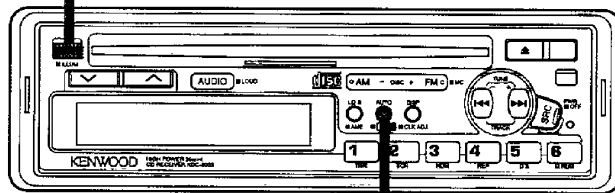
Do nothing for more than five seconds.  
The Volume adjustment mode will return.

Display	Operation of Audio control button	
	Audio down button	Audio up button
<p><b>Bass adjustment</b></p> 	Bass decreases.	Bass increases.
<p><b>Treble adjustment</b></p> 	Treble decreases.	Treble increases.
<p><b>Balance adjustment</b></p> 	Left channel emphasizes.	Right channel emphasizes.
<p><b>Fader adjustment</b></p> 	Rear sound emphasizes.	Front sound emphasizes.

General features

# Selectable illumination/display type

**Illumination**



**Display type**

## To change illumination color

Press the Illumination button for more than two seconds .  
Each time you press this button, the illumination will change from green to orange or vice versa.

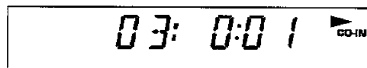
## To change the display type

Press the P/N button for more than one second.  
Each time you press this button, the display type changes among negative, positive, and car light switch interlock type. If the car light switch interlock type is selected, the display automatically becomes the negative type when the car light turns on and becomes the positive type when the light turns off.

General features



Negative type



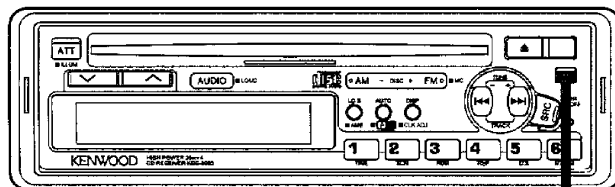
Positive type

### **NOTE**

To use the car light switch interlock type, the illumination cable must be connected to the car light control switch.



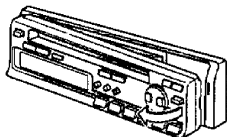
# Theft deterrent faceplate



Release

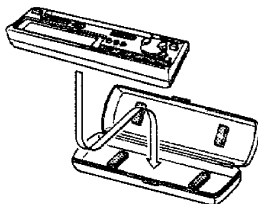
## To remove the faceplate

Press the Release button.  
The faceplate is unlocked and can be detached.



### **CAUTION**

- Place the faceplate in the storage case (option) to prevent shocks. Since it is a precision piece of equipment, if it is subject to shock, it may fail.

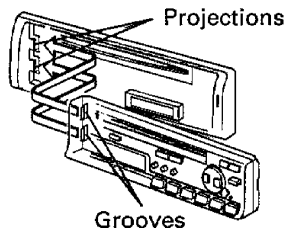


- Do not expose the faceplate or its storage case to direct sunlight or high heat, otherwise it may be deformed or fail.

## To install the faceplate

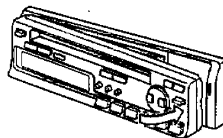
1

Align the projections on the faceplate with the grooves on the faceplate.



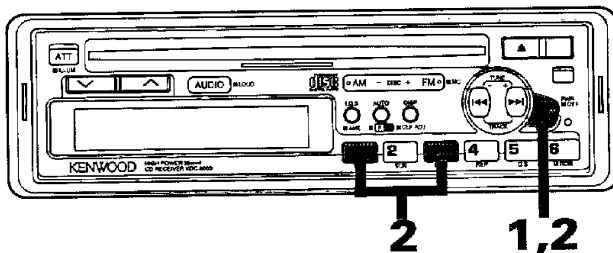
2

Press the faceplate until it clicks.  
The faceplate is locked in place and the unit becomes operable.



General features

# Disabled system indicator



**1**

Turn the power off.

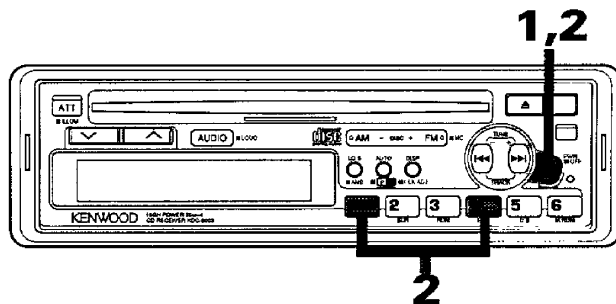
**2**

Hold down preset station buttons "1" and "3" and turn the power on. The Disabled system indicator function turns off, and the LED does not blink when the faceplate is detached.

## To turn the Disabled system indicator on

Perform steps 1 and 2 again. The LED blinks when the faceplate is detached.

# Preout switching

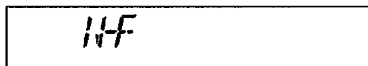


**1**

Turn the power off.

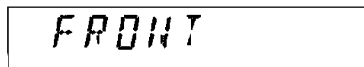
**2**

Hold down preset station buttons "1" and "4" and turn the power on. "N-F" is displayed, and Front preout is switched to Non-Fading preout. The front preout cannot be adjusted with the fader.

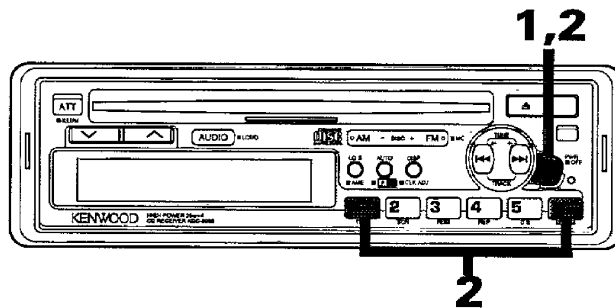


## To return to the Front preout

Perform steps 1 and 2 again. "FRONT" is displayed, and Non-Fading preout returns to Front preout. The front preout can be adjusted with the fader.



# Low cut filter



**1**

Turn the power off.

**2**

Hold down preset station buttons "1" and "6" and turn the power on. "LO-CUT" is displayed, and the Low cut filter is turned on for speaker output to cut off frequencies below 100 Hz.

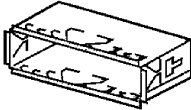
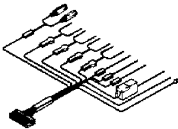
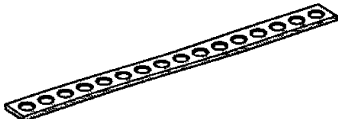

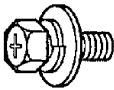


LO-CUT

## To cancel the Low cut filter

Perform steps 1 and 2 again. "NORMAL" is displayed, and the Low cut filter is turned off and sound below 100Hz is output.

NORMAL

# Accessories

Part name	External view	Number of items
Mounting sleeve		1
Wiring harness		1
Metal mounting strap		1
Removal tool		2
Screw with washer (M4 × 8)		1
Machine screw (M5 × 6)		4
Machine screw (M4 × 16)		1

Installation

# Installation procedure

---

## Installation

1. Remove the ignition key and disconnect the negative (-) terminal of the battery to prevent short circuits.
2. Connect the input and output cables of the units.
3. Connect the speaker cables of the wiring harness.
4. Connect the ground cable, battery cable, and ignition cable of the wiring harness in the order listed.
5. Connect the wiring harness connectors to the unit.
6. Install the unit in the car.
7. Connect the negative (-) terminal of the battery.
8. Press the Reset button.

## **▲CAUTION**

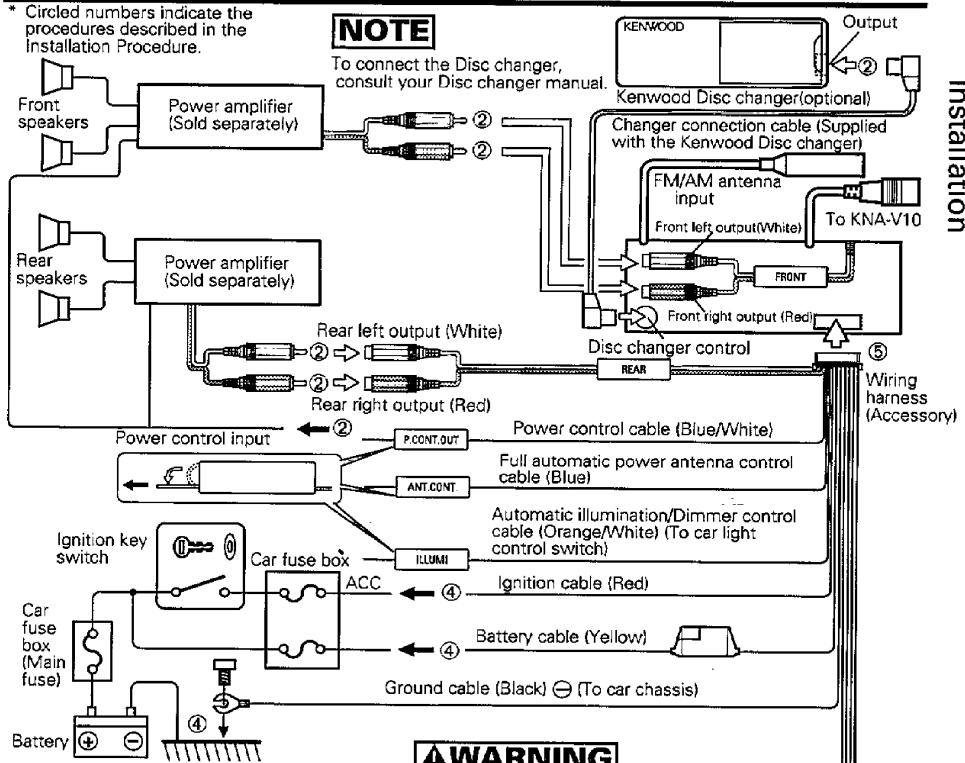
- If the fuse blows, check cables for shorts, then replace the fuse with one of the same rating.
- Check that no unconnected cables or connectors are touching the car body. Do not remove caps from unconnected cables or connectors to prevent short circuits.
- Connect the speaker cables to appropriate speaker connectors separately. Sharing the negative cable of the speaker or grounding speaker cables to the metal body of the car can cause this unit to fail.
- After installation, check that the brake lamps, wipers, and wipers work properly.
- Some CD auto-changers require a conversion cord for connection. See the "Safety precautions" for details.
- Insulate unconnected ends of cords with vinyl tape or similar.
- The Navigation system that can be connected to the unit is KNA-V10. See the Installation Manual supplied with the KNA-V10 for details on connecting and installing the KNA-V10.

# Connections

\* Circled numbers indicate the procedures described in the Installation Procedure.

## NOTE

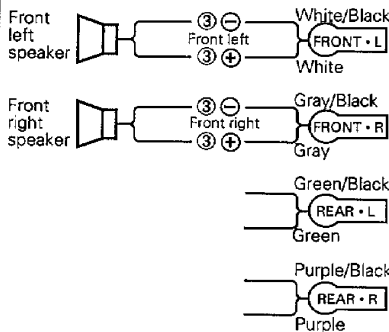
To connect the Disc changer, consult your Disc changer manual.



Installation

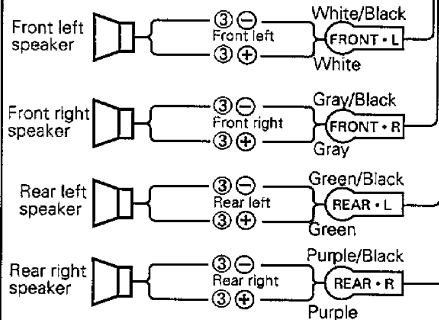
## CAUTION

When two speakers are connected to the system, be sure to connect both of them to the front output or rear output. In other words, do not connect the positive connector of the left speaker to the front output and the negative connector to the rear output.



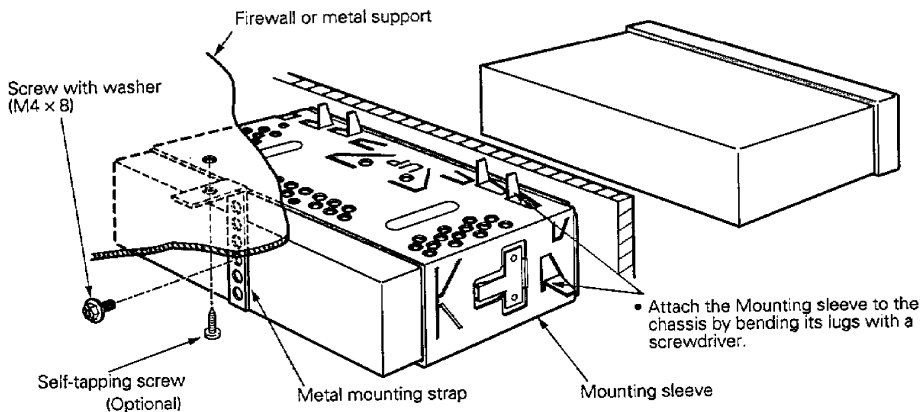
## WARNING

To prevent fire when the ignition cable (Red) or battery cable (Yellow) is short-circuited by coming into contact with the vehicle chassis (ground), only connect the power supply after making the fuse box connections.



# Installation

Installation



## CAUTION

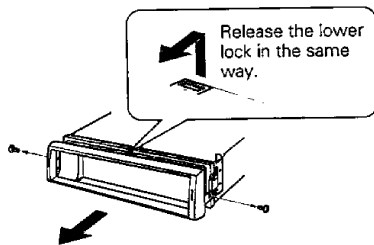
Install the Mounting sleeve with the letters "UP" facing upward. If it is installed with the letters facing downward, the unit cannot be removed with the Removal tool.

## NOTE

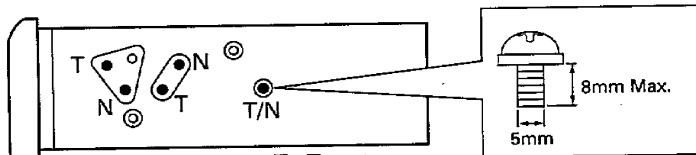
Install the unit securely. If the unit is unstable, it may malfunction, causing sound skipping.

## To install in the Japanese car

1. Remove the escutcheon.



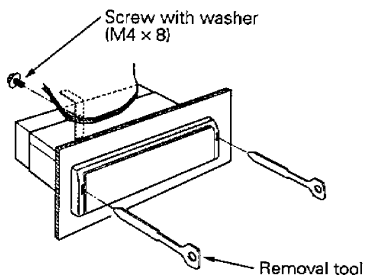
2. Fit the Machine screws (M5 x 6) (accessories) into the appropriate (two) holes in the car bracket.



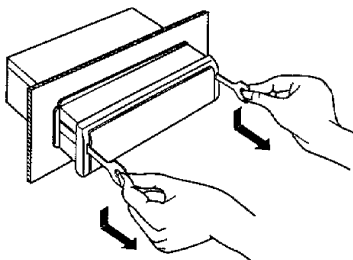


## To remove the unit.

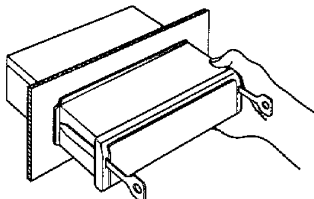
1. Remove the Screws with washer (M4 x 8) holding on the back panel.
2. Insert the removal tools deep into the slots of the unit.



3. Push the tools down and pull them toward you until the set is drawn out halfway.

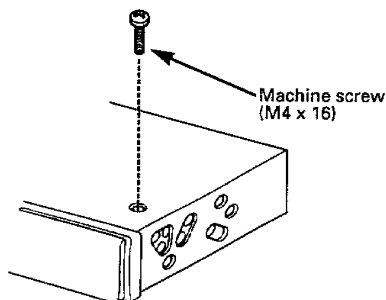


4. Take the set out by hand, being careful not to drop it.



## How to use the faceplate fastening screw.

When you want to fasten the faceplate to the main unit so that they cannot be separated, attach the provided machine screw (M4 x 16 mm) into the screw hole shown in the illustration below.



### CAUTION

- Be sure to attach the machine screw (M4 x 16 mm) to the specified screw hole. If it is attached to other screw hole, it will contact the mechanical parts inside the unit and cause damage to them.
- Never insert the machine screw (M4 x 16 mm) into other screw hole than specified.

# Troubleshooting guide

Often, what appears to be a malfunction is due to user error. Before calling for service please consult the following table.

Symptom	Cause	Remedy
The power is not turned on.	The wiring harness fuse blows.	Check cables for shorts, then replace the fuse with one of with the same rating (shown on the case).
No sound or sound is low.	The volume level is minimum.	Raise the volume level.
	The fader or balance is set to one side.	Adjust the fader and balance.
	The input/output cable or wiring harness is connected incorrectly.	Connect the input/output cable or wiring harness correctly. See "Connections" (Page 47).
The unit does not work properly when a button is pressed.	The microcomputer malfunctions.	Press the Reset button on the front panel.
Sound quality is poor. (Sound distortion)	The volume level is too high.	Use the appropriate volume level.
	A speaker cable is pressed by a screw in the car.	Check the speaker cabling.
	A speaker cable is shared.	Connect the speaker output connectors to the separate speaker connectors.
Poor radio reception.	The car antenna is not extended.	Extend the antenna.
	The antenna control cable is not connected.	Connect the cable correctly. See "Connections" (Page 47).
When the ignition key switch is set to OFF, the memory contents disappear.	The battery cable is not connected correctly.	Connect the cable correctly. See "Connections" (Page 47).
A Disc cannot be inserted.	Another disc has already been inserted.	Eject the previous disc before inserting another.
A disc is ejected immediately after being inserted.	The disc is upside down.	Insert the disc with the title side up.
	The disc is very dirty.	Check and, if possible, clean the disc See "Cleaning your discs" (Page 6).
As disc plays, you hear skipping.	The disc is dirty or damaged.	Check and, if possible, clean the disc See "Cleaning your discs" (Page 6).
Sound quality is poor.	The recording of the disc is poor.	Try playing another disc. If the sound is good, the fault was with the original disc.
	The disc is dirty or damaged.	Check and, if possible, clean the disc See "Cleaning your discs" (Page 6).
The specified track is not played.	The player is set to RANDOM PLAY.	Turn off RANDOM PLAY.

## Disc changer section

Symptom	Cause	Remedy
Disc changer mode cannot be selected.	Disc changer input is not connected to the unit.	Connect the Disc changer input to the unit.
Disc play does not start.	Power button is not turned ON.	Turn the power button ON, press the SOURCE button, and select the Disc changer mode.
The specified disc is not played; a different disc is played instead.	The specified disc is very dirty.	Check and, if possible, clean the disc.
	The disc is loaded upside down.	Eject the disc magazine and insert the disc correctly.
	Two discs are inserted in a slot.	Eject the disc magazine and insert the discs correctly.
	The number of the slot into which the disc is inserted is different from the number of the specified disc.	Eject the disc magazine and check the number of the specified disc.
Sound skips due to vibration.	The disc is severely damaged.	Use another disc.
	Something is touching the Disc changer.	Keep it away from the Disc changer.
Sound quality is poor.	The disc is dirty or damaged.	If sound skips at the same part, the disc is faulty. Check and, if possible, clean the disc.
	The recording of the disc is poor.	Try playing another disc. If the sound is good, the fault was with the original disc.
No sound is heard even though the information concerning the Disc changer is displayed.	The disc is dirty or damaged.	Check and, if possible, clean the disc.
	Volume is set to minimum level.	Raise the volume level.
	The microcomputer does not function correctly.	Press the Reset button on this unit.
The specified track is not played.	The system is not connected properly.	Connect the system properly. See "Connections" (Page 47).
	The player is set to RANDOM PLAY/MAGAZINE RANDOM PLAY.	Turn off RANDOM PLAY/MAGAZINE RANDOM PLAY.

### In some cases, you may see one of the following error messages on your unit's display

- E-01:** No disc magazine in changer. Disc magazine is not inserted properly.  
⇒ Insert the disc magazine properly.
- E-02:** No disc in disc magazine  
⇒ Load a disc in the disc magazine.
- E-04:** Disc is too dirty. The disc is upside down. The disc is damaged.  
⇒ Clean the disc and insert it correctly.
- E-10:** No data is recorded on the MD.  
⇒ The player plays the next disc automatically.
- E-11:** No track is recorded on the MD.  
⇒ The player plays the next disc automatically.
- E-99:** Mechanism malfunction.  
⇒ Press the Reset button. If the "E-99" message does not disappear, contact local service centre.
- Hold:** When the temperature exceeds 60°C, a protection circuit will stop all operations. This message will then be displayed.  
⇒ Let the place where the changer is located cool down. As soon as it has cooled, the changer starts playing.

# Specifications

Specifications subject to change without notice.

Specifications

## Disc section

Laser Diode .....	GaAlAs ( $\lambda=780$ 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 .....	10 Hz ~ 20 kHz ( $\pm 1$ dB)
Total Harmonic Distortion .....	0.01 % (1 kHz)
Signal to Noise Ratio .....	93 dB
Dynamic Range .....	96 dB
Channel Separation .....	85 dB

## FM tuner section

Frequency Range (200 kHz space) .....	87.9 MHz – 107.9 MHz
(50 kHz space) .....	87.5 MHz – 108.0 MHz
Usable Sensitivity .....	0.8 $\mu$ V/75 $\Omega$ (9.3dBf)
Quieting Sensitivity (S/N = 50 dB) .....	1.6 $\mu$ V/75 $\Omega$ (15.2dBf)
Frequency Response ( $\pm 3.0$ dB) .....	30 Hz – 15 kHz
Signal to Noise Ratio (IEC-A) .....	73 dB
Selectivity .....	100 dB
Capture Ratio .....	1.5 dB
Image Response Ratio .....	73 dB
IF Response Ratio .....	120 dB
Stereo Separation (1 kHz) .....	40 dB

## AM tuner section

Frequency Range (10 kHz space) .....	530 kHz – 1700 kHz
(9 kHz space) .....	531 kHz – 1611 kHz
Usable Sensitivity .....	28dB (30 $\mu$ V)

## Audio section

Maximum Power Output .....	25 W $\times$ 4
Power Output (10% THD, 1 KHz, 4 $\Omega$ ) .....	20 W $\times$ 4
(1% THD, 30 Hz – 20 KHz, 4 $\Omega$ ) .....	15 W $\times$ 4
Tone Action .....	Bass: 100 Hz ( $\pm 10$ dB)
	Treble: 10 kHz ( $\pm 10$ dB)
Preout Level .....	1500 mV (Max.) / 10 k $\Omega$

## General

Operating Voltage .....	14.4 V (11 – 16 V allowable)
Current consumption .....	6.9 A at Rated power
Installation size (W $\times$ H $\times$ D) .....	182 $\times$ 53 $\times$ 162 mm
	7-3/16 $\times$ 2-1/16 $\times$ 6-1/16 in.
Weight .....	1.8 kg