

# KENWOOD

FM/AM CD TUNER

# KDC-95R KDC-85R

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## 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 FM/AM CD tuner.**

### **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-95R/85R Serial number \_\_\_\_\_

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# WARNING

## CAUTION

The use of optical instruments with this product will increase eye hazard.

## INFORMATION

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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 the receiving antenna
- Relocate this equipment with respect to the receiver
- Move this equipment away from the receiver
- Plug this equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:

"How to Identify and Resolve Radio-TV Interference Problems".

This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

- As the laser beam used in this compact disc player is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

## 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:

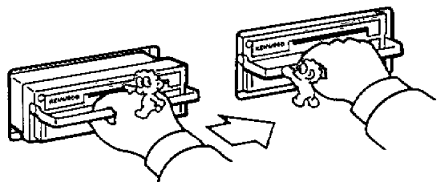
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# **WARNING**

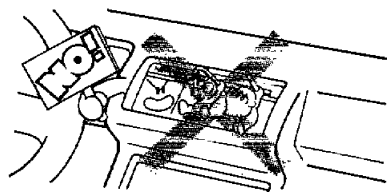
TO PREVENT ELECTRIC SHOCK, FIRE AND OTHER INJURY.

PLEASE NOTE THE FOLLOWINGS:

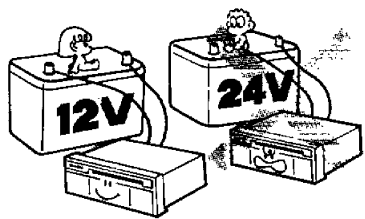
- Secure the locks on the detachable case.



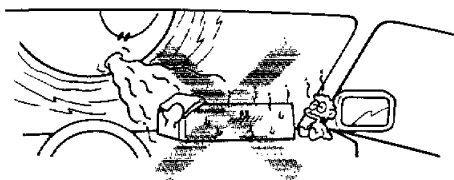
- Do not drop pieces of metal, needles, coins and other electrically conductive materials into the unit.



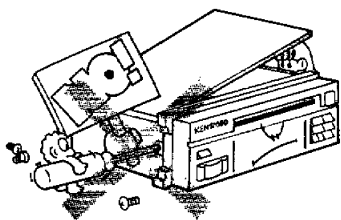
- The unit is designed to be connected 12 V DC and negative grounding.



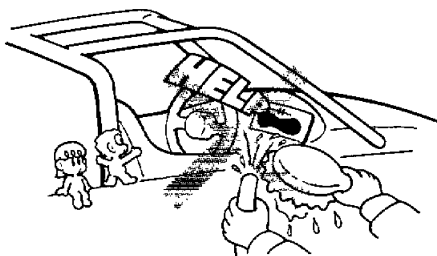
- Do not place the unit, where it will be exposed to direct sunlight or close to heating device.



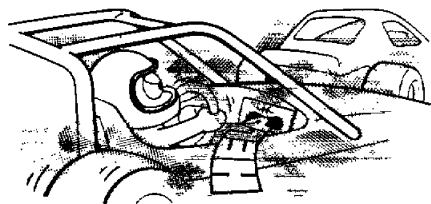
- Do not open enclosure, such as front panel, top or bottom cover.



- Do not dash water on the unit.

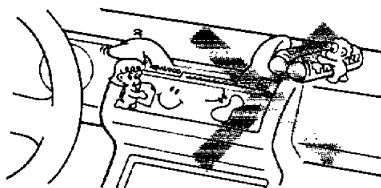


- Do not place the unit in areas of excessive dust, high humidity or on unstable surfaces.

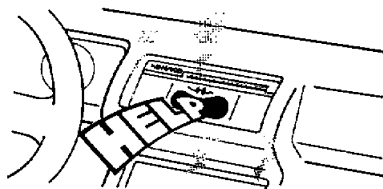


## CLEANING

1. Turn the power off, before cleaning the unit.
2. Do not use any type of abrasive pad, thinner, benzine and any such kind of objects.
3. Wipe the front panel and other exterior surfaces of the unit with a soft dry cloth or a soft cloth lightly moistened with a neutral detergent.



- If an abnormal smell or smoke is detected, immediately turn the power off.



- If you have difficulty in installing the set in your car, please contact your KENWOOD dealer.

# BEFORE USE

## Note on Operation

- The CD Player is designed to be connected to 12 V DC and negative grounding.
- Avoid mounting the CD Player where it is likely to be exposed to direct sunlight, hot air or water. Also, avoid mounting it where there is excessive vibration. Take care not to allow any metal objects or water to enter the interior of the CD Player.
- When you use the CD Player for the first time, or if you have replaced the battery, push the RESET button with the tip of a pencil or similar pointed object.
- If a disc is inserted violently, sometimes a protection circuit will function and stop the operation. Should the protection circuit function, turn the power switch OFF once and then turn it ON again.

## About Condensation

- When a disc or disc magazine is brought from a low-humidity place to a car where there is high humidity due to rain, etc., water vapor may condense on the disc. Or, when the main unit of the changer is installed under the dashboard, condensation may occur on the surface of the optical lens immediately after turning on the heater. If the CD player is operated in this condition, the laser pickup may not correctly read out the signal, or dropouts may occur occasionally. Thus, correct operation may not be obtained. In such cases, dehumidify the disc, or remove the disc magazine from the changer and leave it for about one hour, at which time correct operation will resume.  
If the CD player does not operate correctly after a long time interval, consult your dealer or nearest KENWOOD Service Station.

## About temperature

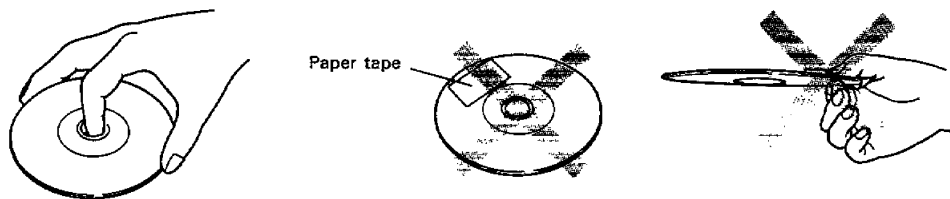
- When a car is exposed to sunlight with all the windows closed, the temperature inside will rise considerably. When it rises above 60 degrees C, a circuit that protects the interior will function, displaying "HoLd" and the compact disc may sometimes cease to operate. In such a case, the compact disc cannot be played back. At that time, operate the air-conditioner or open the window and drive for a while to decrease the room temperature. When the room temperature is lowered, the "HoLd" indicator automatically goes off and play starts automatically. If the compact disc cannot still be played back correctly, press the reset button.

## Handling of compact disc

- Stains, dust or scratches on the disc or warping of the disc will cause malfunction such as skipping. Handle the disc in the following manner so that you may enjoy the beautiful sound of the CD Player for a long time.

### <Handling the disc>

Hold the disc without touching the music storage area (glistening rainbow colors). Do not apply a paper tape to the label on the disc, nor to the music storing area.

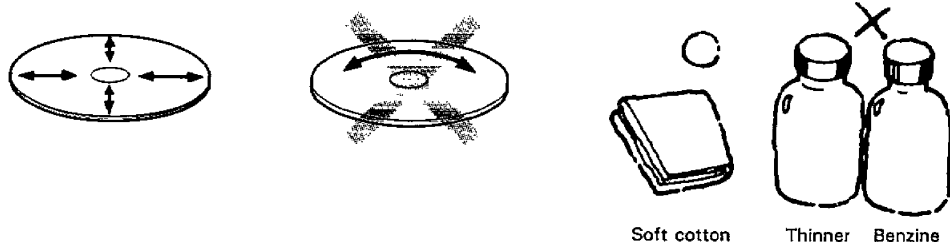


### <Storage of compact disc>

- Do not put the disc where it is exposed to direct sunlight, heat or humidity.
- Especially in summer, never leave the disc exposed to direct sunlight or placed on the seat or dashboard with the windows closed because the temperature will rise considerably and the disc will warp.
- When the player is not in use for an extended period of time; remove the disc magazine from the changer, and store it in a place which is not subject to high temperature or high humidity.  
Be sure to store the discs in their cases or in the magazine. Do not leave them outside of the case or magazine, or piled up, or leaning on a slant. This may cause scratches, dirt or warping.

### <Cleaning of compact disc>

If there are fingerprints or stains on the disc, remove them by lightly wiping it with soft cotton cloth from the center toward the outside edge. Never use thinner or benzine. Also, avoid using conventional record cleaner.



# POWER, VOLUME AND LOUDNESS

## POWER ON/OFF

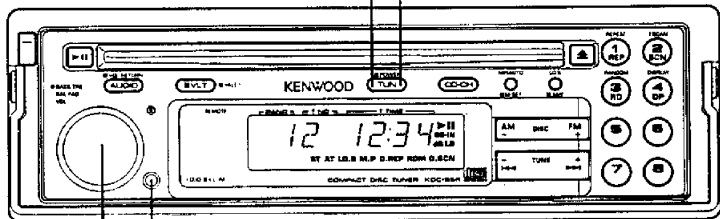
Press the Power switch.  
(The power goes ON.)

Press the Power switch for more than 1 second.  
(The power goes OFF.)

## ALL MODE STAND BY

Tap the Power switch during tuner mode.  
(The power remains in the ON condition and wait for operation of each mode state.)

OFF



## VOLUME

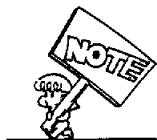
Turning this knob clockwise, increases the volume, and turning counterclockwise, decreases.

## LOUDNESS SWITCH

When listening at low volume levels, press this switch will activate the loudness circuit which will compensate for the human ear's decreased response.

ON 12:34

ON



- Turning the power ON automatically turns this unit to a tuner mode.
- Tap the Power (Tuner) switch to change the play mode from disc play to tuner.
- Explain how to operate hereafter with the power ON.



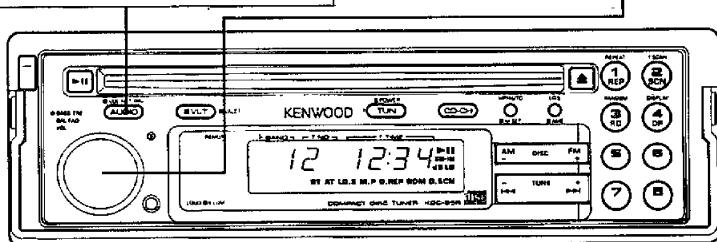
# AUDIO CONTROL

1

Pressing the Audio switch will enable the audio control. Unless it is pressed, Volume and it becomes possible to adjust in the order of Bass, Treble, Balance and Fader and back to Volume if pressed every time.

2

Adjustment will be made by the Audio controller respectively. For operations and display, refer to the following table.



| Display   | Turn counterclockwise               | Turn clockwise                      |
|---|-------------------------------------|-------------------------------------|
| Adjust the Volume<br>                                 | Volume decreases.                   | Volume increases.                   |
| Adjust the Bass response<br>                          | Bass decreases.                     | Bass increases.                     |
| Adjust the Treble response<br>                        | Treble decreases.                   | Treble increases.                   |
| Adjust the Balance of the right and left channels<br> | The left sound will be emphasized.  | The right sound will be emphasized. |
| Adjust the Balance of the front and rear speakers<br> | The front sound will be emphasized. | The rear sound will be emphasized.  |

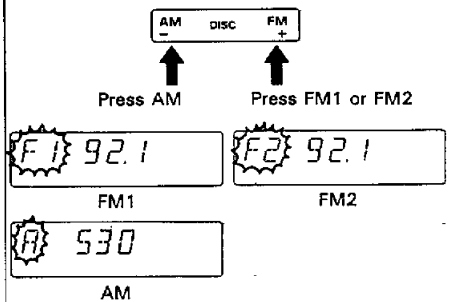


- The player will return to volume control function when more than 5 seconds elapses after pressing the Audio switch or the Audio controller, or by pressing the Audio switch for more than 1 second.

# SEEK TUNING

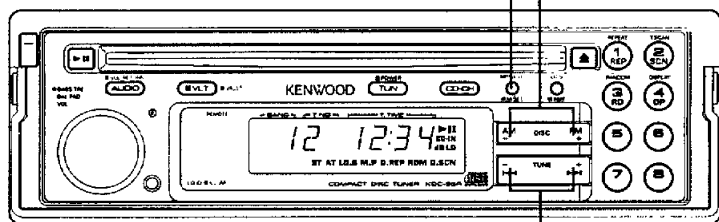
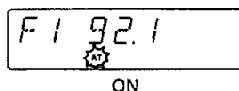
1

Select the desired Band.



2

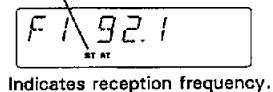
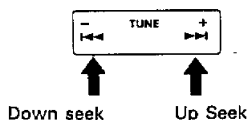
Turn the Auto switch ON.



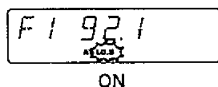
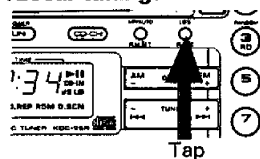
3

Press Seek switch.  
(Seek starts and receives  
a broadcast station.)

Lit when stereo  
broadcast is received.



## <Local tuning>

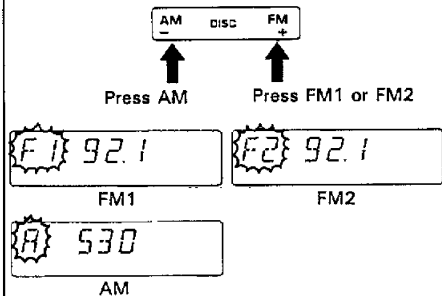


- If the Local switch is turned ON during SEEK TUNING and AUTO MEMORY, it will stop at stations only with satisfactory reception conditions.

# MANUAL TUNING

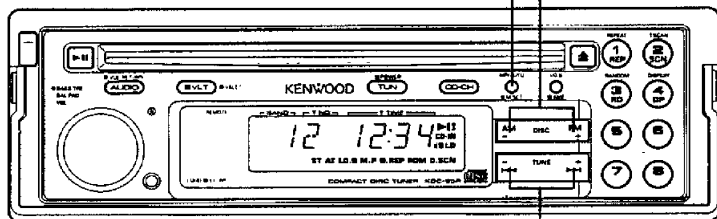
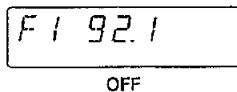
1

Select the desired Band.



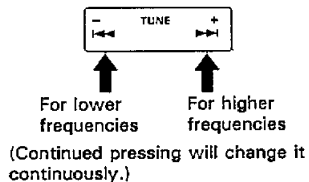
2

Turn the Auto switch OFF.



3

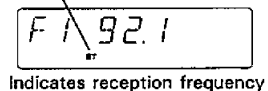
Press to select the desired frequency.



4

Indicates the frequency being received.

Lit when stereo broadcast is received.



# PRESET STATION TUNING

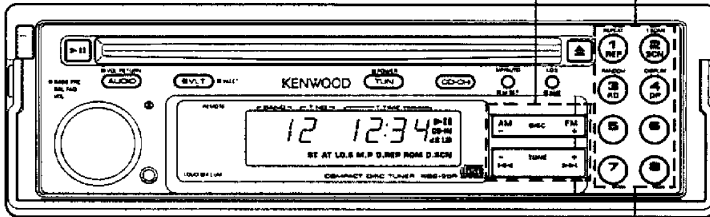
1

Selects the band and station you wish to preset.

2

Press the Preset station switch you wish to be kept preset for more than 2 seconds.  
(When it is preset, the number of switch pressed will be indicated.)

F1 92.1 5



3

By repeating operation of 1 - 2 above, one station can be memorized in one switch each at FM1, FM2 and AM.

4

If tapped, the preset station can be called out.  
(The number of switch pressed will be indicated.)

F1 92.1 5

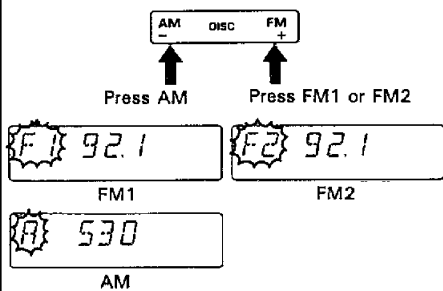


- If preset is to be made anew on the switch already preset, what was preset before will be replaced with what is to be preset.

# AUTO MEMORY

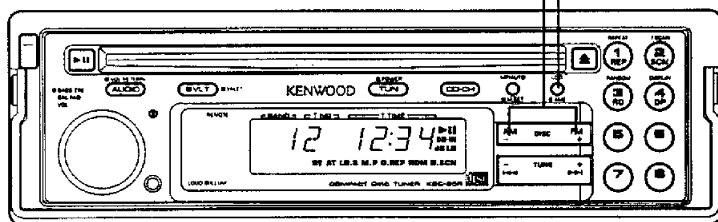
1

Select the desired band.



2

Press the Auto memory switch for more than 2 seconds.



3

The selected band is automatically scanned and 8 stations are memorized. When 8 stations are memorized, the AUTO MEMORY function is automatically released.

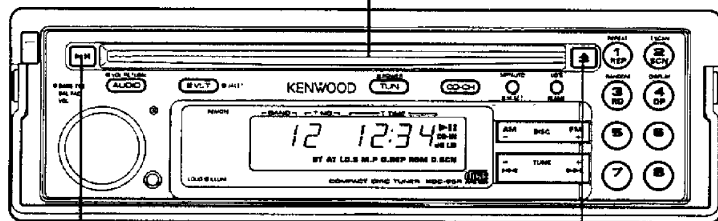
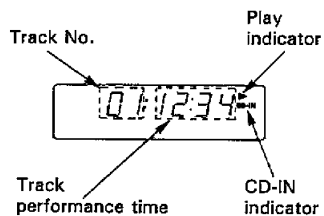
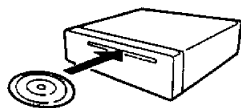
4

The station last stored in memory is received.

# COMPACT DISC PLAY

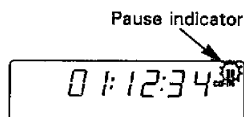
## COMPACT DISC PLAY

Insert a 12 cm CD or an 8 cm CD with the label sides up.  
(The disc will be drawn in, starting the CD-IN and Play indicator to light ON.)



## PAUSE

Press the Play/Pause switch.  
(Disc play is temporarily paused and Pause indicator lights up.)  
If you press the switch once more, the disc is replayed from the paused part.



## EJECT

Press the Eject switch.  
(The disc will come out.)



- Automatic loading and play can be made if the Play/Pause switch is pressed in the eject condition. Furthermore, if more than 15 seconds elapse in the ejection condition, it will automatically load and stop.
- When a disc is already inserted, do not insert another disc into the inserting slot.

## AHEAD/BACKWARD

(at high speed)

| Operation | Press |
|-----------|-------|
| Ahead     | +     |
| Backward  | -     |

The Ahead/Backward play is released as soon as the finger is removed from the switch.

## TIME DISPLAY

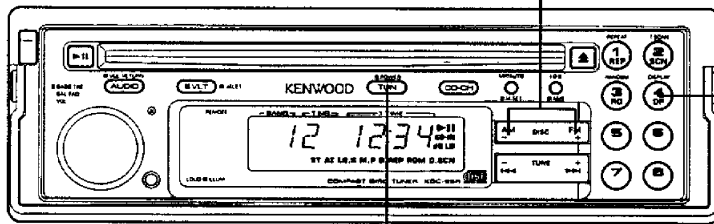
Press the Display switch.  
(Every time you press it, it switches over between the track performance time and the disc performance time.  
When the disc performance time is displayed, "+" will appear.)

02:01:23<sup>TR</sup>

Track performance time display

02:12:34<sup>TR</sup>

Disc performance time display



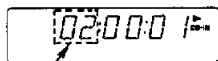
## LISTENING TO TUNER

Tap the Tuner switch.  
(The unit enters Tuner mode.)

# TRACK SEARCH

## BACKWARD TRACK SEARCH

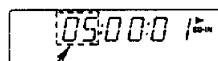
Press the ◀◀ switch successively until the Track No. display shows the desired track No.



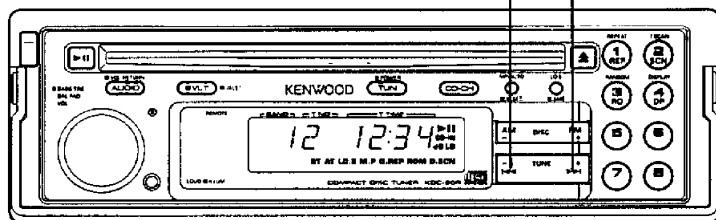
Track No. display

## FORWARD TRACK SEARCH

Press the ▶▶ switch successively until the Track No. display shows the desired track No.



Track No. display



- If you specify a track number that is not in the disc, it will make a direct search to the final track.

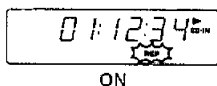


# REPEAT PLAY & RANDOM PLAY

## REPEAT PLAY

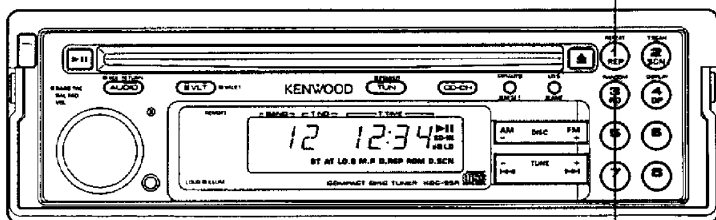
1

Press the Track repeat switch.  
(Repeat indicator lights up.)



2

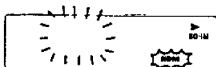
The track being played is played repeatedly.  
(To release, press the Track repeat switch again.)



## RANDOM PLAY

1

Press the Random switch.  
(Random indicator lights up,  
changes the track No. display one  
after another and selects the  
track.)



2

The tracks in the CD is played in a  
random order.  
(To release, press the Random  
switch again.)

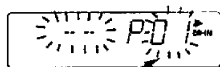


- Pressing the ►► switch during RANDOM PLAY changes the track to the next random selection.

# MEMORY PLAY

1

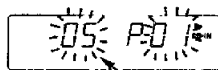
Press and hold the CD memory switch for more than 1 second. (The Memory Play Program No. which can be memorized next is displayed blinking.)



Memory play program No.

2

Enter the track No. with numeric keys. (The Track No. display shows the entered track No.)



Track No. display

**NOTE:**

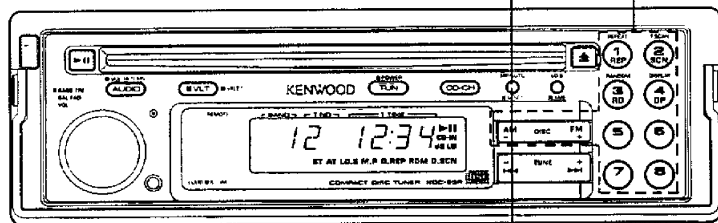
Enter " - " for No. ⑨.

Enter " + " for No. ⑩.

Example:

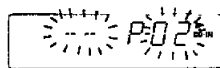
Track No. 9 ... ⑨

Track No. 10 ... ① → ⑩



3

Tap the CD memory switch. (The content of that memory play No. is memorized and the memorization for the next memory No. gets ready.)



4

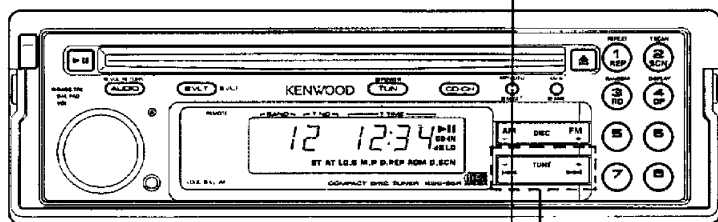
Repeat steps 1 to 3 for memorizing up to 20 selections.



- To change the memory contents, tap the ◀◀ or ▶▶ switch until the memory No. of the content to be changed is displayed, then perform operations in steps 2 to 4 for that No. To clear the memory content, enter "⑩ → ⑩".
- In case "E-(Number)" appears on the display window, please see page 46.

# 5

To release the Memory mode, enter no numeric key for 10 seconds or press and hold the CD memory switch for more than 1 second.



# 6 MEMORY PLAY

Press the Memory play switch. (Memory play indicator lights and the Memory play starts from the last displayed memory No.)



# 7

Tapping the ►► switch plays the next memory No., and tapping the ◄◄ switch displays the previous memory No. and its content. (To release, press the Memory play switch again.)



- The memorized contents are retained even when the power is turned off or compact disc is ejected.

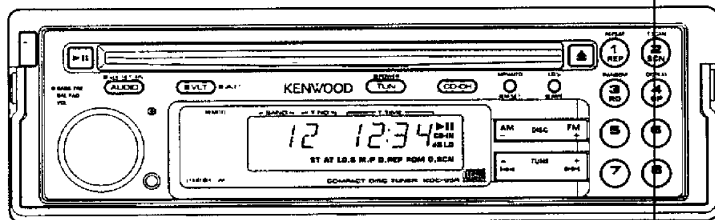
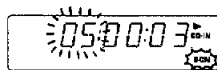
# TRACK SCAN

1

Press the Track scan switch.  
(This initiates TRACK SCAN.)

2

The first 10 seconds of all tracks in the CDs are played in sequence, starting the Scan indicator to light ON.  
(The Track No. display blinks.)



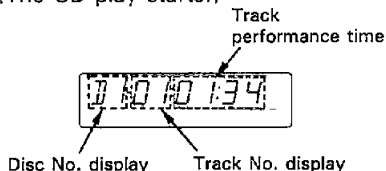
3

When the beginning of a desired track starts to be played, press the Track scan switch.  
(TRACK SCAN play is released and normal CD play starts.)

# COMPACT DISC PLAY (CD-Changer is used)

## COMPACT DISC PLAY

Press the CD-CH switch.  
(The CD play starts.)

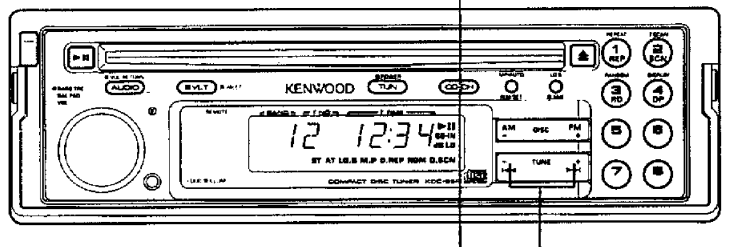


## AHEAD/BACKWARD

(at high speed)

| Operation | Press       |
|-----------|-------------|
| Ahead     | ▶▶ and hold |
| Backward  | ◀◀ and hold |

The Ahead/Backward play is released as soon as the finger is removed from the switch.



## TO STOP CD PLAY

Press the CD-CH switch.  
(The CD play stops.)



### At the end of the disc

- When disc reaches the end of the last selection of the next disc starts automatically. At the end of the last disc, the unit will go back to the beginning of the first disc, and the play will restart.
- The Disc No. display of No. 10 Disc is "0".

# TRACK/DISC SEARCH (CD-Changer is used)

## BACKWARD DISC SEARCH

Tap the Disc - switch successively until the Disc No. display shows the desired disc No.

060 10 134

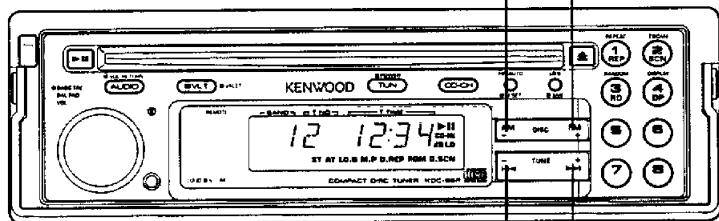
Disc No. display

## FORWARD DISC SEARCH

Tap the Disc + switch successively until the Disc No. display shows the desired disc No.

020 10 134

Disc No. display



## BACKWARD TRACK SEARCH

Tap the ◀◀ switch successively until the Track No. display shows the desired track No.

180 10 134

Track No. display

## FORWARD TRACK SEARCH

Tap the ▶▶ switch successively until the Track No. display shows the desired track No.

180 30 134

Track No. display

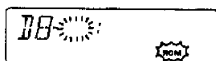


- If BACKWARD TRACK SEARCH is initiated while track No. 1 is being played, the play position always returns to the beginning of track No. 1 and other tracks cannot be searched.
- If FORWARD TRACK SEARCH is initiated while the last track of a disc is being played, no operation takes place.

# RANDOM PLAY (CD-Changer is used)

1

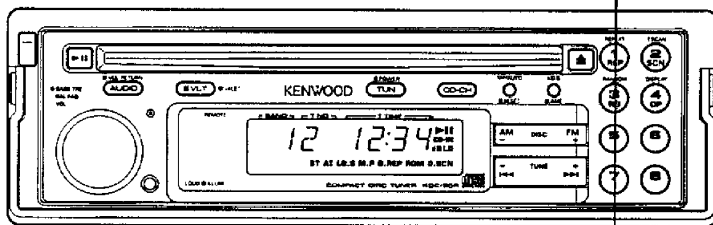
Press the Random switch.  
(Random indicator lights up, and  
the displayed track No. vary one  
after another.)



During Random Search

2

The tracks in the CD is played in a  
random order. When all of the  
tracks in that CD have been  
played, the next CD is played in a  
random order.



## TO RELEASE

Press the Random switch again.



- When the Disc magazine is eject, RANDOM PLAY should be initiated again.

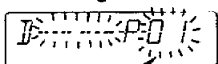


- Pressing the ►► switch during RANDOM PLAY changes the track to the next random selection.

# MEMORY PLAY (CD-Changer is used)

1

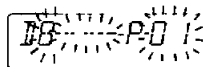
Press and hold the CD memory switch for more than 1 second. (The Memory Play program No. which can be memorized next is displayed blinking.)



Memory play program No.

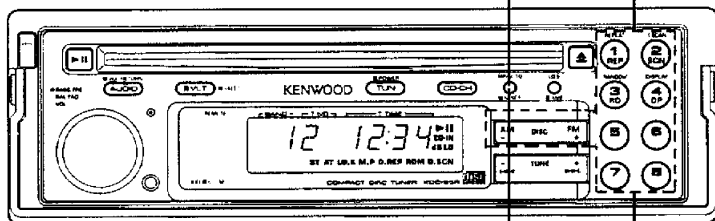
2

Enter the disc No. with a numeric key. (The Disc No. display shows the entered disc No.)



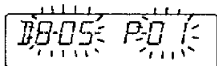
**NOTE:**

Enter “-” for disc No. 9.  
Enter “+” for disc No. 10.



3

Enter the track No. with numeric keys. (The Track No. display shows the entered track No.)



**NOTE:**

Enter “-” for No. 9

Enter “+” for No. 10

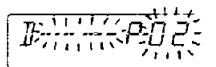
Example:

Track No. 9 ... ⑨ → ⑨

Track No. 10 ... ① → ⑩

4

Tap the CD memory switch. (The content of that memory play No. is memorized and the memorization for the next memory No. gets ready.)



- To change the memory contents, tap the ◀◀ or ▶▶ switch until the memory No. of the content to be changed is displayed, then perform operations in steps 2 to 4 for that No. To clear the memory content, enter “⑩ → ⑩ → ⑩”.
- In case “E-(Number)” appears on the display window, please see page 46.

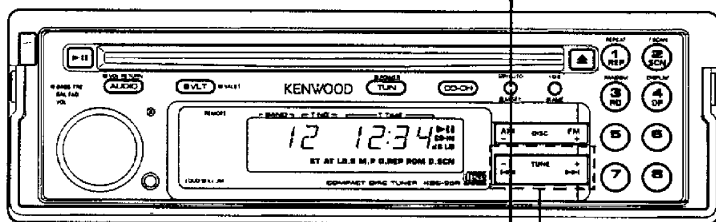


**5**

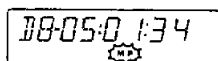
Repeat steps 1 to 4 for memorizing up to 20 selections.

**6**

To release the Memory mode, enter no numeric key for 10 seconds or press and hold the CD memory switch for more than 1 second.

**7 MEMORY PLAY**

Press the Memory play switch. (Memory play indicator lights and the Memory play starts from the last displayed memory No.)



ON

**8**

Tapping the ►► switch plays the next memory No., and tapping the ◀◀ switch displays the previous memory No. and its content. (To release, press the Memory play switch again.)

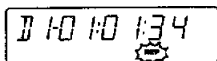


- When the Disc magazine is eject, MEMORY PLAY should be initiated again.

# TRACK/DISC REPEAT (CD-Changer is used)

**1**

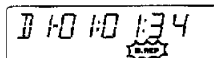
Press the Repeat switch.  
(Repeat indicator lights and the track being played is played repeatedly.)



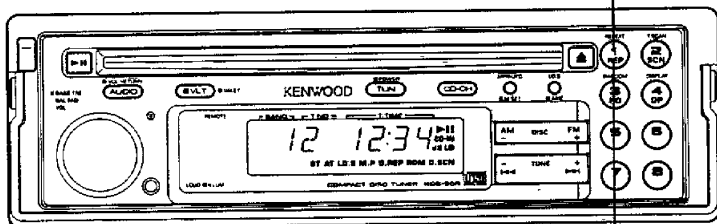
Track repeat ON

**2**

Press the Repeat switch again.  
(Disc Repeat indicator lights and the Disc being played is played repeatedly.)



Disc repeat ON



**3 TO RELEASE**

Press the Track repeat switch again.



- When the Disc magazine is eject, TRACK/DISC REPEAT should be initiated again.



- Ahead/Backward CD Play (at high speed) cannot be initiated during TRACK/DISC REPEAT.

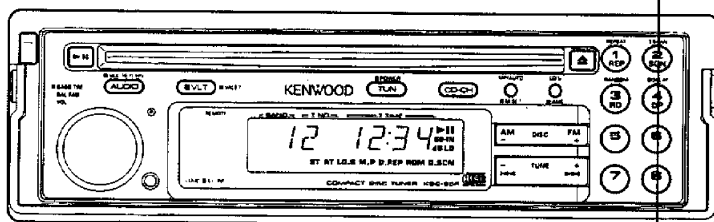
# TRACK SCAN (CD-Changer is used)

1

Tap the Track scan switch.  
(This initiates TRACK SCAN.)

2

The first 10 seconds of all tracks in the CDs are played in sequence, starting the Scan indicator to light ON.  
(The Track No. display blinks.)



3

When the beginning of a desired track starts to be played, press the Track scan switch.  
(TRACK SCAN is released and normal CD play starts.)

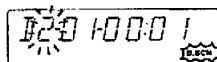
# DISC SCAN (CD-Changer is used)

1

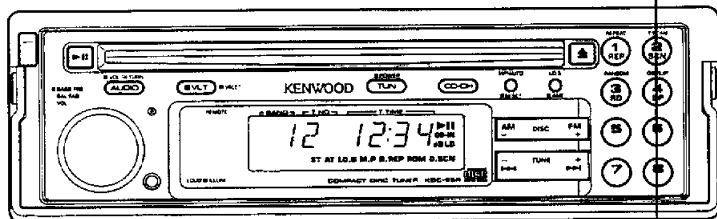
Press the Track scan switch for more than 1 second.  
(This initiates DISC SCAN.)

2

The first 10 seconds of each track of the disc will be played one after another.  
(While the disc is being scanned, the Disc No. indicator blinks.)



ON



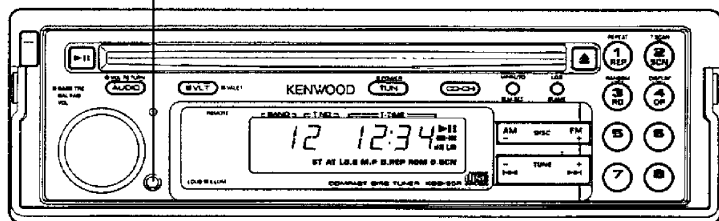
3

Press Track scan switch for the disc required.  
(DISC SCAN will be canceled and operation will return to the normal Disc play mode.)

# SELECTABLE ILLUMINATION

- Illuminations can be changed to fit the type of car or to suit your own taste.

Every time the Illumination switch is pressed for more than 1 second, it will switch over between the colors of green and orange.



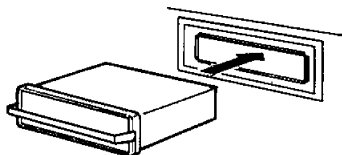
- Keeping connected the Automatic illumination/Dimmer control supply lead of the Detachable case ①, the illumination become dark synchronized with the car's light. Even during the power is OFF, turning ON the car's light control the illumination lights up.

# INSERTION/REMOVAL OF UNIT

## ■ Insert the unit

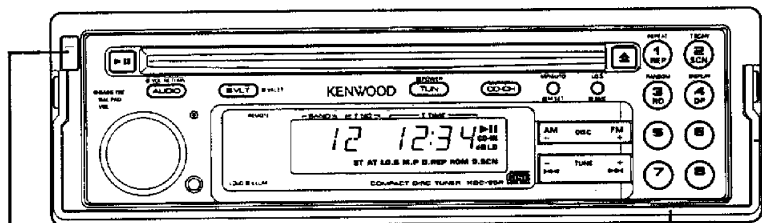
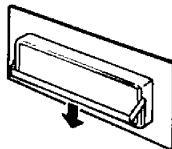
1

Insert the unit into the detachable case.



2

Lower the handle down to the bottom.



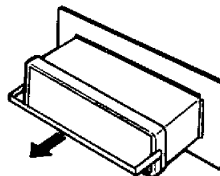
## ■ Remove the unit

1

Press the T.P.C. button.  
Lift the handle.  
(The handle lock is released and power is OFF.)

2

Hold the handle and pull it out.



- This unit is precisely designed. While transporting the unit, do not apply shock. Doing so may damage the unit.

# CHANNEL SPACE SELECTION

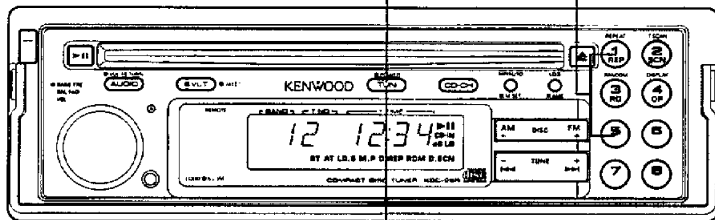
- The KDC-95R/85R has a channel space select function. Two spacing frequencies are available for both FM and AM, 200 kHz or 50 kHz for FM, and 10 kHz or 9 kHz for AM.

**1**

Turn the power OFF.

**2**

Keep on pressing the Preset station switch of "1" and "5"



**3**

Turn ON the power while engaged in the operation of 2.  
(Channel space will turn to 50 kHz for FM and 9 kHz for AM.)

**4**

To bring it back the home position, carry out operations of 1-3 again.  
(Channel space returns to 200 kHz for FM and 10 kHz for AM.)



- When the channel space is changed, the memorized contents are erased.
- The channel space selection is not used in United States or Canada.

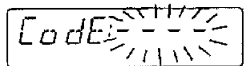
# CODE PROTECTION

- A code number can be registered to prevent misuse. It can be set so that the equipment will not operate until the code number registered at the time of Power OFF is re-entered at the time of Power ON.

## ■ Registration of code number

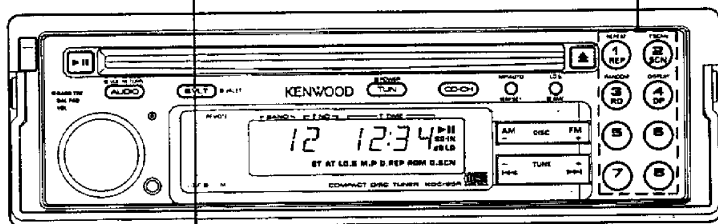
1

Press the Valet switch for more than 1 second.  
(- indicator blinks.)



2

A code number up to four digits can be entered with the Preset station switch.  
(The number entered will be shown as a blinking display.)



3

Tap the Valet switch.  
(Power is turned OFF.)

### TO RELEASE

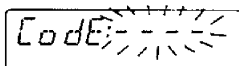
For cancellation of the code number, press the Valet switch for more than 1 second.  
(The player will return to the state it was in before code number registration.)



## ■ Turning the power ON

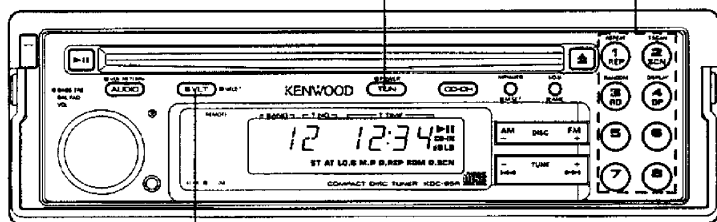
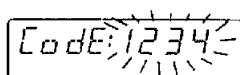
1

Press the Power switch.  
(- indicator blinks.)



2

Re-enter the code number using  
the Preset station switch.  
(The number entered blinks.)



3

Press the Valet switch.  
(Power is turned ON.)



- If each operation is not performed within 10 seconds of pressing the Power switch, the power will be automatically turned OFF.

# HOW TO OPERATE CA-R2B (KDC-95R ONLY)

■ When this unit is controlled with CA-R2B, the way (function) to operate

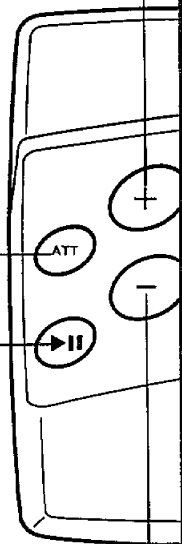
Increases the audio volume.

Attenuates the volume quickly.  
(Pressing again resumes the  
previous volume.)

**CD**

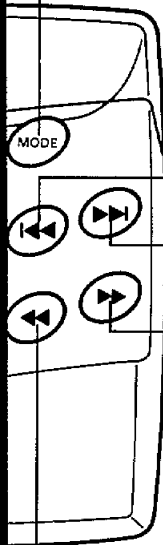
The unit enters pause mode. When  
the switch is pressed during fast  
forward or rewind, the unit enters  
tape play mode.

Decreases the audio volume.



**CA-R2B is as follows:**

Switches the mode to CD, Tuner, CD-changer.



**CD**

Searches the beginning of the previous track.

**TUNER**

Decreases the receiving frequency.

**CD CHANGER**

Searches and plays the previous track.

**CD**

Searches the beginning of the next track.

**TUNER**

Increases the receiving frequency.

**CD CHANGER**

Searches and plays the next track.

**CD**

Rewinds the disc.

**TUNER**

Switches to AM band.

**CD CHANGER**

Plays the previous disc.

**CD**

Fast-forwards the disc.

**TUNER**

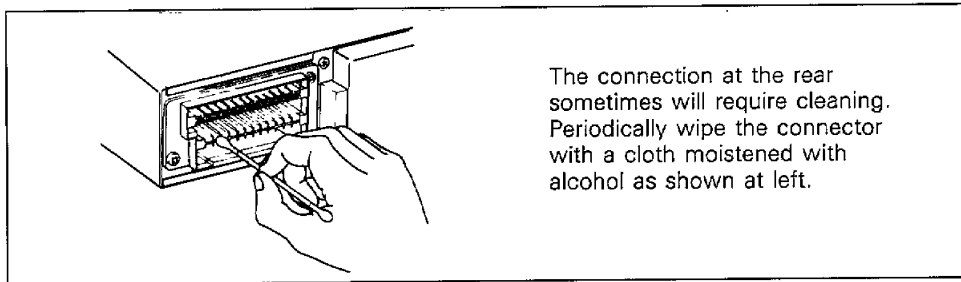
Switches to FM 1/2 bands.

**CD CHANGER**

Plays the next disc.

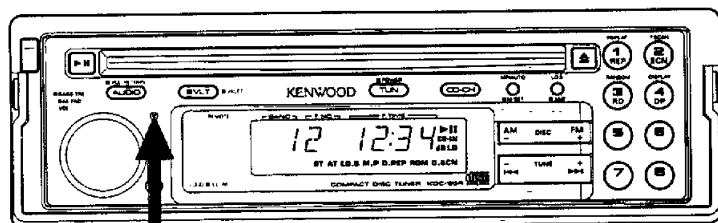
# CARE AND MAINTENANCE

## CAUTION:



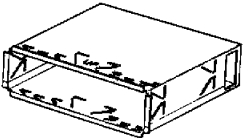
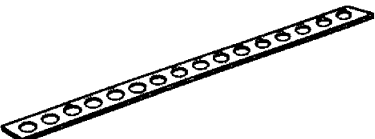





- **If your set malfunctions**

If your set malfunctions or operates abnormally, first press the Reset button. If the malfunction persists, leave the set as it is and please call your KENWOOD dealer.



Reset button

# ACCESSORIES

| No. | Part name                       | External View  | Number of units |
|-----|---------------------------------|--|-----------------|
| ①   | Detachable case                 |   | 1               |
| ②   | Metal mounting strap            |   | 1               |
| ③   | Hex. Bolt (M5 × 20)             |   | 1               |
| ④   | Hex. nut (M5)                   |   | 2               |
| ⑤   | Stepped screw (M3 × 15.8 – 8.8) |   | 2               |
| ⑥   | Stepped screw (M3 × 9.8 – 5.8)  |   | 2               |
| ⑦   | Velcro (KDC-95R only)           |  | 2               |

# INSTALLATION

## ■ INSTALLATION

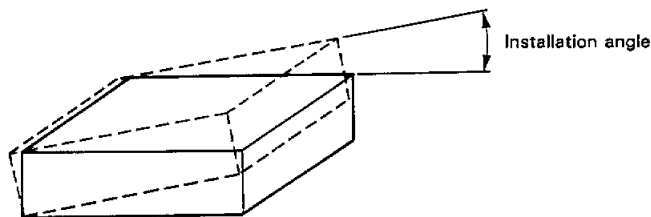
1. Before installation and wiring, remove the  $\ominus$  terminal of the battery to prevent short-circuiting.
2. Connect the input and output cords of the system.
3. Connect the ground to the metal chassis of the car.
4. Connect the memory back-up lead (yellow).
5. Connect the power supply lead (red).
6. Install the set and after confirming the installation and wirings are correct, connect the  $\ominus$  terminal of the battery.
7. After installation, surely press the Reset button.



- If a fuse is blown, first check that the associated wires are not short-circuited then replace the fuse with a new one having the same capacity.
- Secure unconnected wires properly so that they do not contact the vehicle chassis.
- Do not remove the caps attached to the unused terminals.

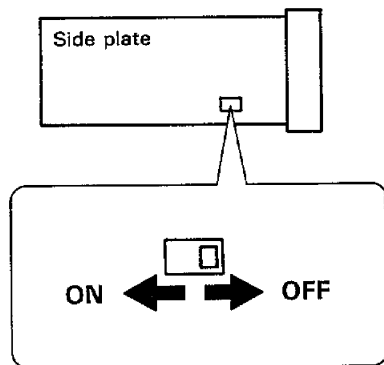
## ■ INSTALLATION ANGLE

This unit should be installed with an angle of less than  $30^\circ$  from the horizontal surface.



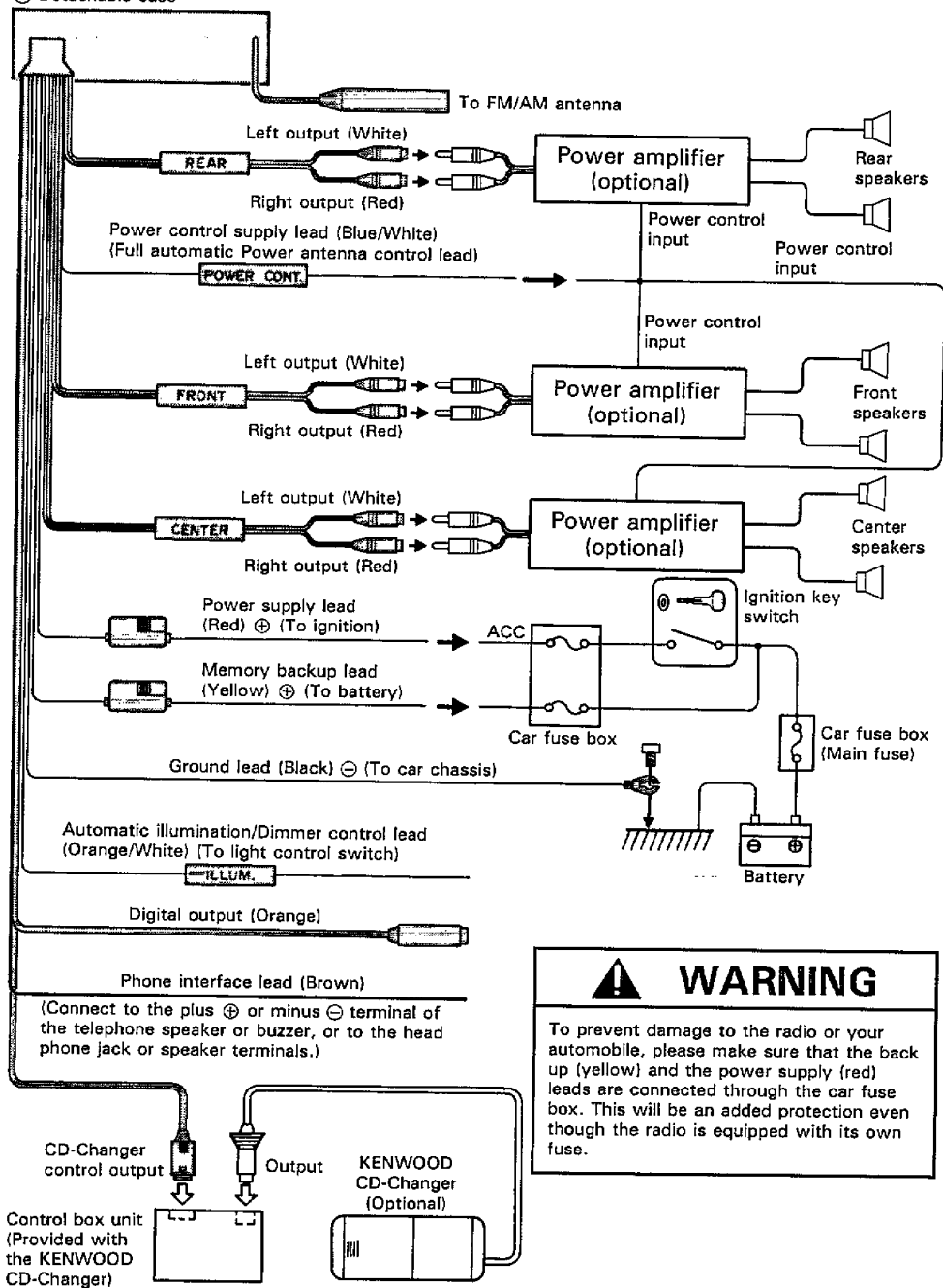
## ■ DIGITAL SELECTOR SWITCH (KDC-95R ONLY)

Set the digital selector switch, located at the left of the unit, to ON to obtain the digital output.



# CONNECTIONS (KDC-95R)

① Detachable case

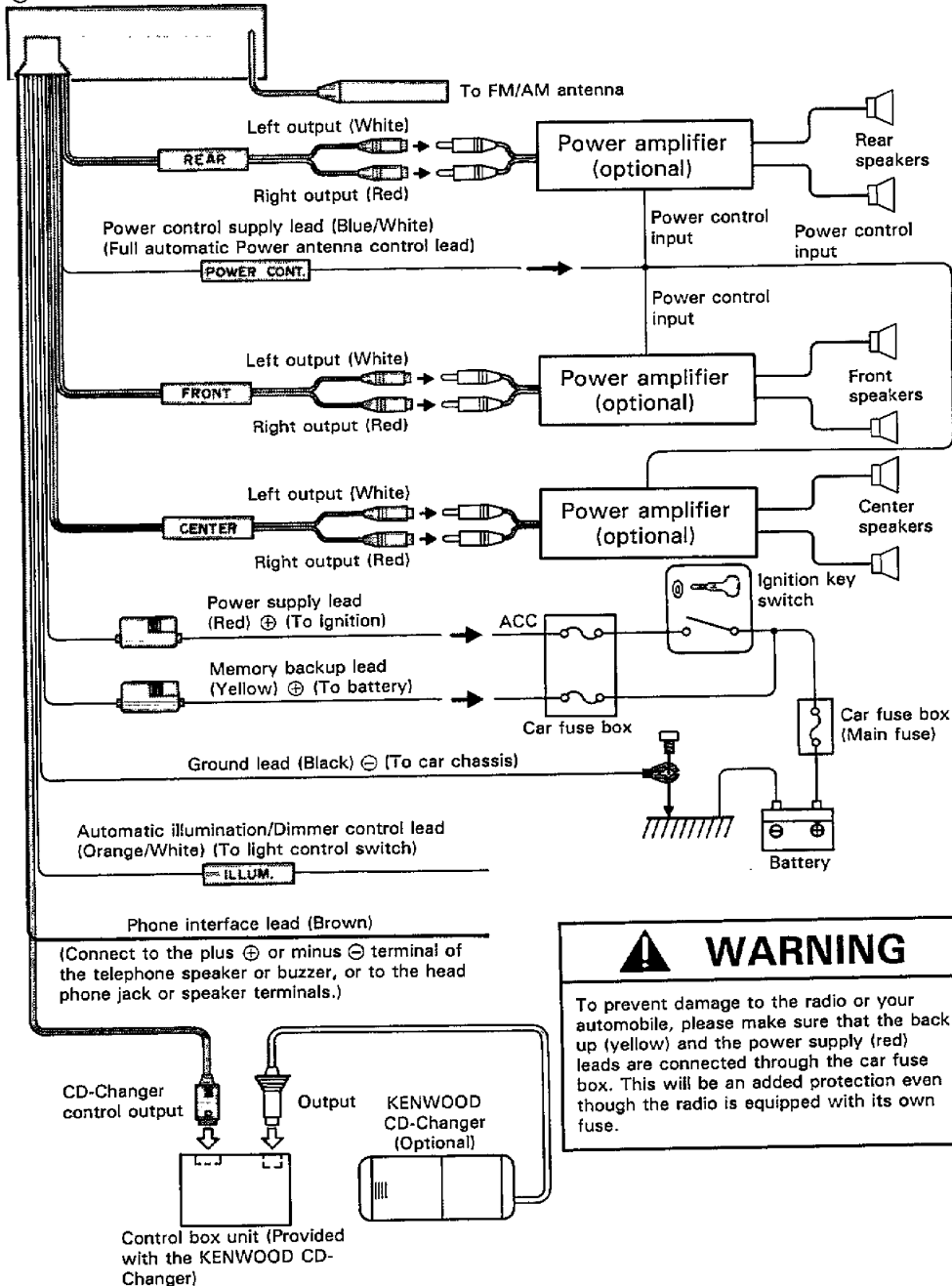


## WARNING

To prevent damage to the radio or your automobile, please make sure that the back up (yellow) and the power supply (red) leads are connected through the car fuse box. This will be an added protection even though the radio is equipped with its own fuse.

# CONNECTIONS (KDC-85R)

① Detachable case



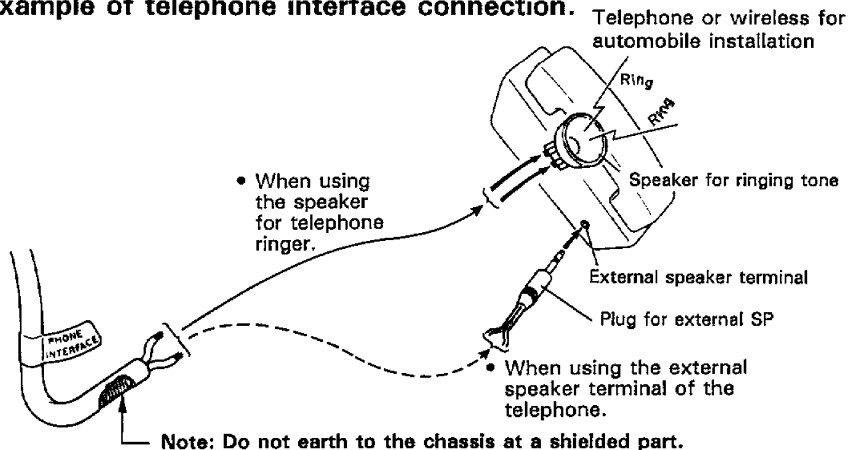
**⚠ WARNING**

To prevent damage to the radio or your automobile, please make sure that the back up (yellow) and the power supply (red) leads are connected through the car fuse box. This will be an added protection even though the radio is equipped with its own fuse.



# CONNECTIONS

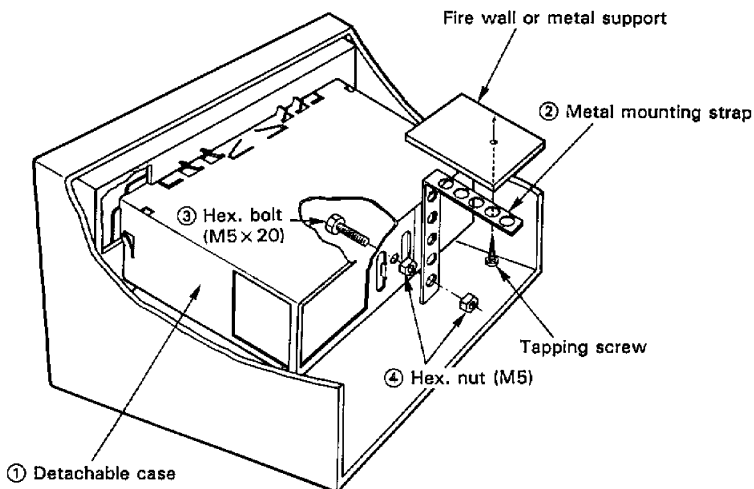
## ■ Example of telephone interface connection.



\* When extending a cable, be sure to use a shielded cable.

## INSTALLATION

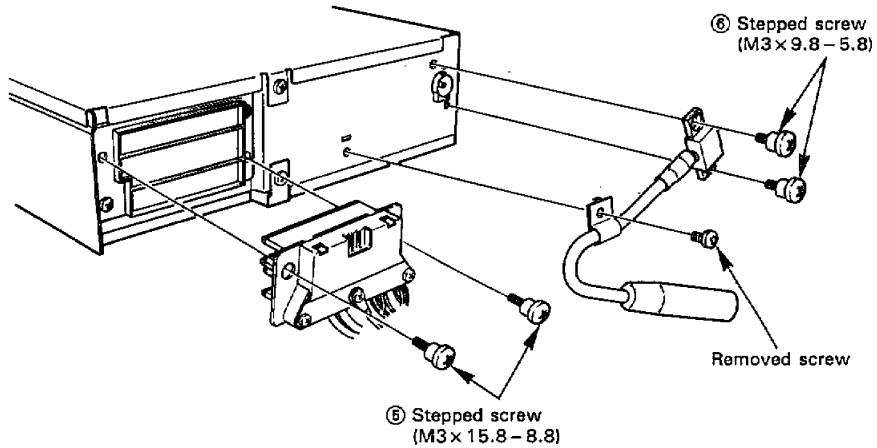
■ Insert the Detachable case ① into the console and clamp with the claws. If the detachable case cannot be inserted, cut off the console with a file.



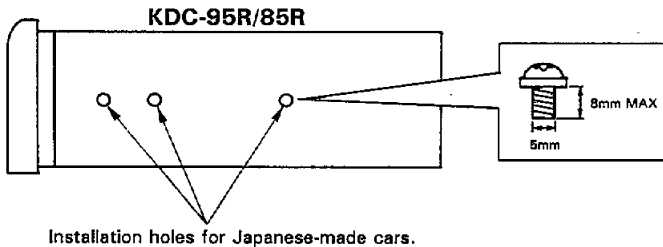
• Securely install the Detachable case ①. If the case is not installed correctly, the sound may be skipped.

# INSTALLATION

- To install the unit without Detachable case ①, disconnect the wireharness from the detachable case and connect the wireharness to the unit directly.

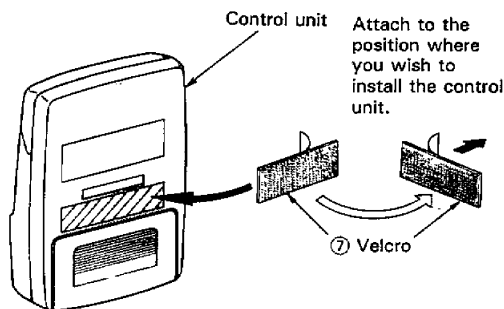


- Tighten up the TP screw (M5) into the following three holes when installation is made for Japanese-made cars.



# INSTALLATION OF CA-R2B (Remote control unit)

## ■ Installing the control unit

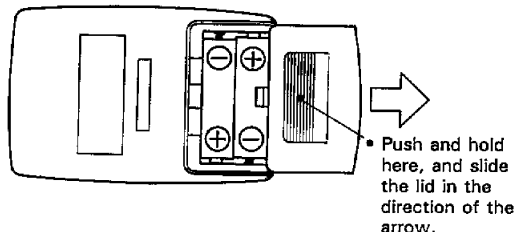


Attach one of the velcro ⑦ strips on the hashed portion on the control unit (position which does not cover the battery box lid) as shown in the illustration. Attach the another velcro on the receivable place while the control unit is being used. Install the control unit by matching the velcro ⑦ strips. (The control unit can be attached/detached during use.)

### CAUTION

- Be sure not to place the unit on such place as where it is exposed to direct sunlight and temperature eventually rises. It results in the deformation of the case, breakage of batteries, leakage of battery liquid and so on.
- Depending on the place where the unit is installed, the signal of the control unit may not be received. Therefore, be make sure that installing place for the unit is where reception can be made before making installation.

## ■ Loading/replacing batteries



- Insert batteries following the illustration inside the battery box, taking care not to reverse the ⊕ and ⊖ polarity.
- The control unit uses two "AAA"-size (UM-4) batteries. The battery life is approximately one year. When the life has expired, please replace both of them with new batteries.

### Notes Regarding to the Use of Batteries

If a battery is used improperly, liquid leakage or brokerage of the battery may be brought about. Obey the following actions:

- Put the battery into the battery compartment while keeping its pole correctly.
- If the battery-liquid leakage takes place, wipe the battery liquid left in the compartment well with soft and dry cloth then replace the battery with new one.
- Do not short-circuit the metal built in the battery compartment while a battery is being placed there.
- Do not use different kind of battery and second-hand battery together.
- Do not throw the battery into flame.

# TROUBLESHOOTING GUIDE

What often appears to be a malfunction is often due to user error in operation or connection. When trouble occurs with your unit, please check the following before calling for service.

| Symptom   | Cause  | Remedy   |
|---|--|--|
| Compact disc cannot be inserted.  | A compact disc has already been inserted and you are trying to insert another disc.  | Eject the previously inserted disc and insert another one.   |
| A disc is ejected immediately after being inserted.   | <ol style="list-style-type: none"><li>1. The compact disc is inserted upside down.</li><li>2. The compact disc is very dirty.</li></ol>                    | <ol style="list-style-type: none"><li>1. Insert the disc with the labeled side facing up.</li><li>2. Clean the disc (refer to "Cleaning of compact disc").</li></ol>   |
| Even when the required track is specified, the specified track is not played or the player does not function. | The player is set to RANDOM PLAY.  | Release RANDOM PLAY.   |
| Sound is skipped by vibrations.   | The compact disc is dirty or damaged.  | If the sound skips even while the car is stationary, clean the compact disc (refer to "Cleaning of compact disc").   |
| The sound quality is poor due to noise during playback.   | <ol style="list-style-type: none"><li>1. The compact disc is damaged or dirty.</li><li>2. The sound recorded in the compact disc itself is poor.</li></ol> | <ol style="list-style-type: none"><li>1. Clean the compact disc (refer to "Cleaning of compact disc").</li><li>2. Try playing another compact disc. If its sound quality is good, the poor sound was due to the disc itself.</li></ol> |

# TROUBLESHOOTING GUIDE

| Symptom   | Cause  | Remedy  |
|---|--|---|
| No sound one channel  | The balance/fader control is extremely rotated to one side.  | Adjust the balance/fader control.   |
| Poor reception  | The antenna is not extended.   | Extend the antenna.   |
| Operation switches do not function.   | Correct operation is not obtained due to a sudden change in the power voltage, etc.                        | Press the Reset button of the front panel.  |
| Phone interface does not function.  | Phone interface lead is not connected correctly.   | Connect it correctly according to the connecting method.  |
| Phone interface functions although it is not used.<br>(Displays "CALL" indication). | Conductor is contacting chassis and so on as phone interface lead is clipped or the cap at the tip is off. | Wire in such a way that the conductor of phone interface lead does not contact chassis and so on. |

## ■ When the KENWOOD CD-changer is connected:

| Symptom   | Cause   | Remedy   |
|---|---|--|
| CD play does not start.   | Power switch is not turned ON.  | Turn the power switch ON, then press the CD switch.  |
| The specified disc is not played and the next disc is played.   | <ol style="list-style-type: none"> <li>1. The specified disc is too dirty.</li> <li>2. The disc is placed upside down.</li> <li>3. Two discs are set in the same position.</li> <li>4. The specified disc is placed in a position with a different number.</li> <li>5. The disc is damaged or scratched seriously.</li> </ol> | <ol style="list-style-type: none"> <li>1. Clean the disc.</li> <li>2. Eject the magazine and re-insert the disc correctly.</li> <li>3. Eject the magazine and set each disc correctly.</li> <li>4. Eject the magazine to check the disc number and the position number, then specify again.</li> <li>5. Play other discs.</li> </ol> |
| No sound is output while the changer indicator is shown.  | <ol style="list-style-type: none"> <li>1. Volume is set to the minimum level.</li> <li>2. The incorporated microcomputer is not operating correctly.</li> <li>3. System connections are made imperfectly (power cord, connection of pre-out jacks, or speaker connections, etc.).</li> </ol>                                  | <ol style="list-style-type: none"> <li>1. Increase the volume level.</li> <li>2. Press the Reset button of this unit.</li> <li>3. Check the connections according to the instruction manual. If anything is wrong, reconnect it correctly.</li> </ol>  |
| During memory play, a track or disc which has been memorized is not played.                                   | The memorized disc No. and/or track No. does not exist.   | Perform memorying again correctly.   |
| Even when the required track is specified, the specified track is not played or the player does not function. | The player is set to random play or memory play.  | Release random play or memory play.  |

# TROUBLESHOOTING GUIDE

## ■ When the KENWOOD CD-changer is connected

Other than the previous, this unit displays various error indications to show the following messages.

- E-00:** The CD-changer control output is not connected.
- E-01:** No disc magazine in the changer, or the magazine is not set completely.
- E-02:** No discs in the disc magazine.
- E-03:** The specified track is not present on the disc.  
(Example: This appears when the 15th track is specified for a disc on which only 10 tracks are contained.)
- E-04:** Disc is too dirty.  
Condensation has occurred on the disc, or water drops are on the disc.  
Disc is set upside down.
- E-05:** Memory play switch is pressed with no memory.
- E-99:** Operation incorrect due to something being defective.  
Press the Reset button on the unit.  
If the "E-99" indication does not disappear with this operation, consult your nearest KENWOOD Service Agent.
- HoLd:**
- When the temperature exceeds 60°C, the protection circuit is engaged to stop any operation. At this time, this indication will appear.
  - Open a window or turn the air-conditioner ON to lower the temperature. After a while, this indication will go out.
  - This indication also appears for several seconds when making connections, or when the Reset button is pressed.
- E-0E:** This is displayed when the condition of "HoLd" is released.
- LoAd:** This indication appears while a disc is being changed inside the changer.
- CAUTION: Memory play, Random play, Track/Disc repeat or Track/Disc scan cannot be initiated while the load indication is displayed.

\* When no indicator appears in this unit and only illumination appears, the cable connector may nearly be disconnected.

# SPECIFICATIONS

Specifications subject to change without notice.

## Disc Section

|   |                                       |
|---|---------------------------------------|
| Laser Diode .....                               | GaAlAs ( $\lambda = 780 \text{ nm}$ ) |
| Digital Filter .....                            | 8 Times Over Sampling                 |
| D/A Converter .....                             | 1 bit (With D.P.A.C)                  |
| Spindle Speed .....                             | 500~200 rpm (CLV)                     |
| Wow & Flutter .....                             | Below Mesurable Limit                 |
| Frequency Response ( $\pm 1 \text{ dB}$ ) ..... | 5 Hz~20 kHz                           |
| Total Harmonic Distortion (1 kHz) .....         | 0.005%                                |
| Signal to Noise Ratio .....                     | 96 dB                                 |
| Dynamic Range .....                             | 96 dB                                 |
| Channel Separation .....                        | 85 dB                                 |

## FM Tuner Section

|   |   |
|---|---|
| Frequency Range .....                           | 87.9 MHz~107.9 MHz                      |
| Channel Space .....                             | 200 kHz                                 |
| Usable Sensitivity .....                        | 12.0 dBf (1.1 $\mu\text{V}/75 \Omega$ ) |
| 50 dB Quieting Sensitivity .....                | 15.2 dBf (1.6 $\mu\text{V}/75 \Omega$ ) |
| Frequency Response ( $\pm 1 \text{ dB}$ ) ..... | 30 Hz~15 kHz                            |
| Signal to Noise Ratio .....                     | 73 dB                                   |
| Selectivity .....                               | 70 dB                                   |
| Capture Ratio .....                             | 1.5 dB                                  |
| Stereo Separation (1 kHz) .....                 | 40 dB                                   |

## AM Tuner Section

|                          |                   |
|--------------------------|-------------------|
| Frequency Range .....    | 530 kHz~1,700 kHz |
| Usable Sensitivity ..... | 27 dB $\mu$       |
| Channel Space .....      | 10 kHz            |

## Audio Section

|                    |  |
|--------------------|--|
| Tone Action .....  | Bass: 100 Hz $\pm 8 \text{ dB}$<br>Treble: 10 kHz $\pm 8 \text{ dB}$ |
| Preout Level ..... | 1.0 V  |

## General

|                                     |   |
|-------------------------------------|---|
| Operating Voltage .....             | 14.4 V (11~16 V)                                      |
| Current Consumption .....           | 1.2 A   |
| Operating Temperature .....         | -10~50 $^{\circ}\text{C}$                             |
| Installation Size (W x H x D) ..... | 180 x 50 x 170 mm<br>(7-1/16 x 1-15/16 x 6-11/16 in.) |
| Weight .....                        | 2.1 kg (4.6 lb)                                       |

KENWOOD