

KENWOOD

KDC-C510FM

CD AUTOCHANGER / CONTROLLER / FM MODULATOR SYSTEM

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 compact disc auto changer.

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-C510FM Serial number _____

©PRINTED IN JAPAN B64-1098-00 (K,E)(MC)
98/12 11 10 9 8 7 6 5 4 3 2 1 '97/12

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Warning

⚠ CAUTION

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

KENWOOD CORPORATION
2967-3, ISHIKAWA-CHO,
HACHIOJI-SHI
TOKYO, JAPAN

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

Location : Rear Panel

FCC WARNING

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

NOTE

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

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

NOTE

This Class B digital apparatus meets all requirements of the Canadian interference-Causing Equipment Regulations.

Before use

Safety precautions

Before use

⚠️WARNING

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

- When extending the ignition cable, battery cable, or ground cable, use 0.75mm² (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.
- Do not touch the liquid crystal fluid if the LCD is damaged or broken due to shock. The liquid crystal fluid may be dangerous to your health or even fatal. If the liquid crystal fluid from the LCD contacts your body or clothing, wash it off with soap immediately.

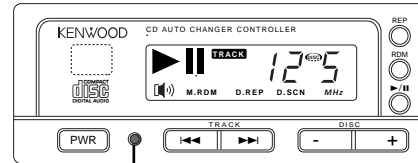
⚠️CAUTION

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.
- When replacing a fuse, only use a new one with the prescribed rating. Using a fuse with the wrong rating may cause your unit to malfunction. on hot places such as above the dashboard.

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

- Some car stereos cause the sound of the tuner to make for a moment when an engine is activated.
- The reception of the tuner may be reduced a little if the KDC-C510FM is used.
- If the sound is lower than the tuner sound, raise up the volume level of the CD with using the receiver.

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.

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.

The marking of products using lasers (Except for some areas)



The label is attached to the chassis/case and says that the component uses laser beams that have been classified as Class 1. It means that the unit is utilizing laser beams that are of a weaker class. There is no danger of hazardous radiation outside the unit.

⚠ CAUTION

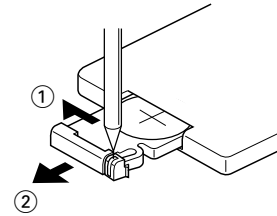
Do not set the remote on hot places such as above the dashboard.

Replacing the Lithium Battery

Use one lithium battery (CR2025). Remove the case following the instructions as illustrated. Insert the battery with the ⊕ and ⊖ poles aligned properly, following the illustration inside the case.

To open

- ① Keep on slide
- ② Pull out.



⚠ WARNING

Store unused lithium batteries out of the reach of children. Contact a doctor immediately if the battery is accidentally swallowed.

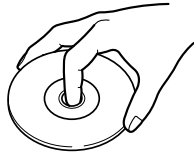
Handling compact discs

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.

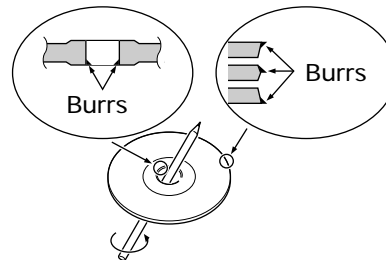
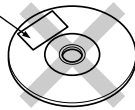
Holding a disc

- 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 side of the disc.

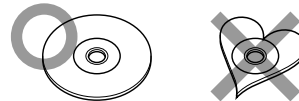
Paper tape



CAUTION

Storing your discs

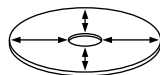
- Do not store discs where they will be exposed to direct sunlight (such as on the seat and dashboard) or high heat.
- If you do not use your unit for an extended time, remove the discs from the unit and put them in their cases. Do not leave them lying around without cases, piled up, or leaning on a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



COMPACT
disc
DIGITAL AUDIO

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, benzene, or other chemicals.

Features

- **Frequency modulation system**
Even if your car audio(car stereo) is not equipped with an AUX input jack, you can use the radio's builtin FM tuner to listen to music played by the CD autochanger using FM broadcast frequencies.
One of the twelve transmission frequencies can be set to avoid interference with an (actual) FM broadcast station.
- **Disc changer control (Page 10)**
This unit has a Disc changer control function.
- **Track / Disc search (Page 11)**
You can search for the track / disc you want by specifying the track / disc number.
- **Direct track/disc search (Page 12)**
This feature allows you to enter the number of the track or disc you wish to hear by pressing the appropriate numeric keys.
- **Track repeat (Page 13)**
When this function is turned on, the track you are listening to is played repeatedly.
- **Disc repeat (Page 14)**
When this function is turned on, the disc you are listening to is played repeatedly.
- **Track scan (Page 15)**
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 16)**
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.

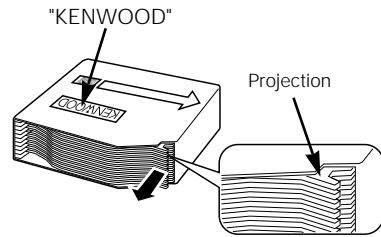
- **Disc random play (Page 17)**
When this function is turned on, the tracks on the disc you are listening to are played in random order.
- **Magazine random play (Page 18)**
When this function is turned on, the tracks on the discs in your Disc changer are played in random order.
- **Modulation level control (Page 20)**
The modulation level can be changed in the range between 1 to 4 according to the recording level of the disc you are listening to.
- **Dynamic control (Page 20)**
The unit has a prevention of distortion function to reduce sound distortion.

Before use

Loading compact discs

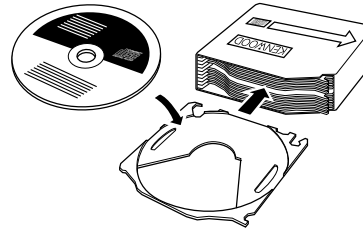
Before use

1



Make sure the disc magazine is the right way up with the Kenwood logo on the top. Pull the tray out by the projection.

2

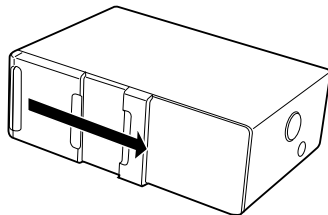


Place the disc on the tray with the label facing upwards. Insert the tray into the disc magazine until it locks. The discs are numbered from the bottom from 1 to 10.

▲ CAUTION

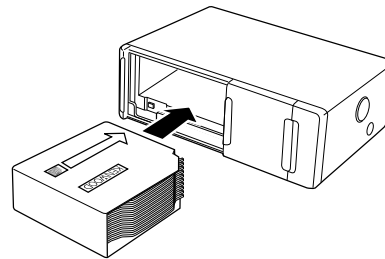
- Take care to insert the tray into the correct grooves in the disc magazine.
- 8-cm discs cannot be used. If an 8-cm disc adapter is used, the disc cannot be ejected.
- Keep all the trays in the magazine even when empty.

3



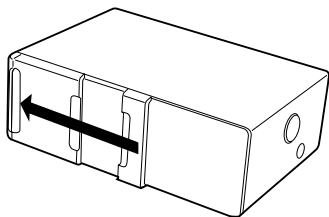
Open the CD changer door.

4



Insert the magazine into the CD changer until it clicks.

5

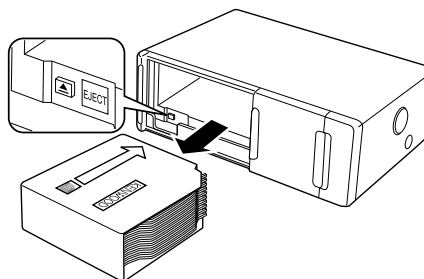


Close the CD changer door.

NOTE

Use the CD changer with its door closed to prevent the entry of dust into the changer.

6 Magazine ejection



Open the CD changer door, and press the "EJECT" button.

NOTE

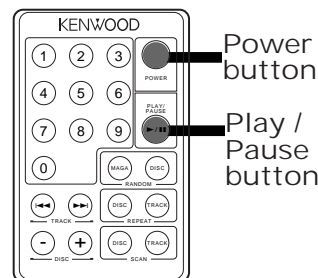
Be sure to open the door completely before pressing the EJECT button. If the door is not completely open, the magazine may hit the door and cause damage or malfunction.

Before use

CD play with CD auto-changer


Set the car radio FM station to 88.3 MHz. See Page 20 for more information on changing the transmission frequency.

Disc changer control features



To play compact discs

Press the Power button.

The power goes ON and the CD play start. When the unit receives any signal from the remote controller, the  mark lights up.

To listen to the radio

Press the Power button.

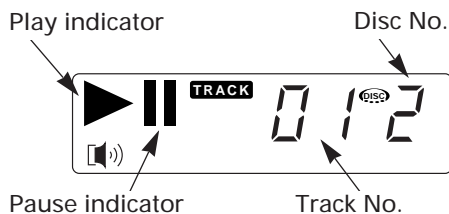
The RF modulator is turned OFF and the radio can be heard.

Pause

Press the Play/Pause button.

Disc play is temporarily paused.

If you press the switch once more, the disc is replayed from the paused part.



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. The play display blinks during disc replacement. Disc No. 10 is displayed as "0".

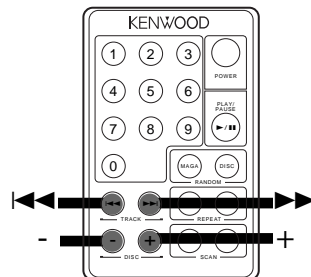
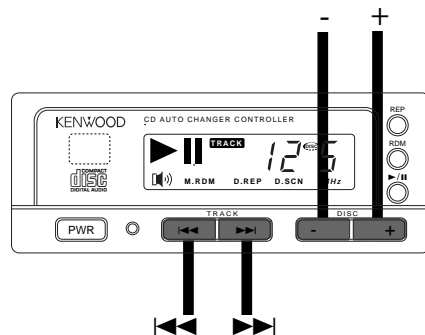
NOTE

- Be sure to turn down the volume whenever you listen to the radio or a cassette tape after stopping the disc play.
- During the disc play is being conducted, you are not able to receive ordinary Radio broadcasting because antenna output is switched into compact disc player's side.

Power off

Press the Power button.
The power goes OFF.

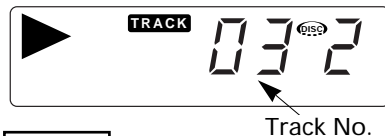
Track/Disc search



Disc changer control features

Reverse track search

Briefly press the **◀◀** 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.
When the **◀◀** button on the display unit is held down, the player fast-rewinds while playing the track.



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 **▶▶** 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.
When the **▶▶** button on the display unit is held down, the player fast-forwards while playing the track.

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 **-** 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.

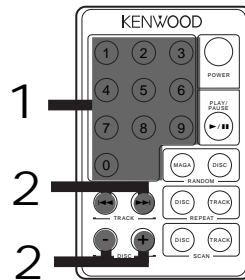


Forward disc search

Press the **+** 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

Disc changer control features



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".
- If a track number that does not exist on the disc you are listening to is displayed, carry out the operation in step 2, and the direct track search is made to the last track.

2

Direct track search

Press the ◀◀ or ▶▶ button while the number is blinking.

The player starts playing the track specified in step 1.

If three or more numbers are entered, the last two entered digits (shown on the display) are valid.

Direct disc search

Press the - or + button while the number is blinking.

The player starts playing the disc specified in step 1.

When two digits are displayed, the direct disc search is made to the disc number corresponding to the number on the right side.

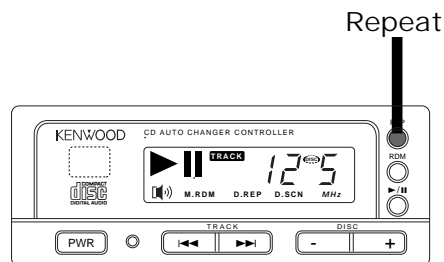
To cancel

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

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

Also, if you do nothing for 10 seconds, the search will automatically cancel.

Track repeat



Disc changer control 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

To cancel

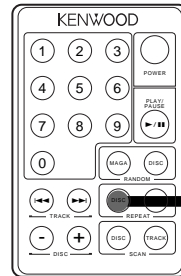
Press the Repeat button.
The Repeat indicator disappears and the Track repeat function is cancelled.

NOTE

When disc play stops, Track repeat is cancelled.

Disc repeat

Disc changer control features



DISC repeat

To repeat disc

Press the Disc repeat button.
The Disc repeat indicator will appear
on the display and the Disc repeat
function will turn on.
The same disc is played repeatedly.



ON

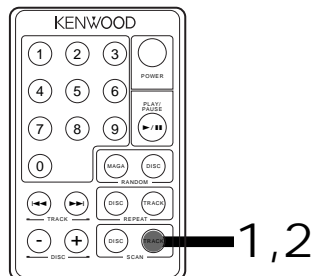
To cancel

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

NOTE

When disc play stops, Disc repeat is
cancelled.

Track scan



Disc changer control features

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.



2

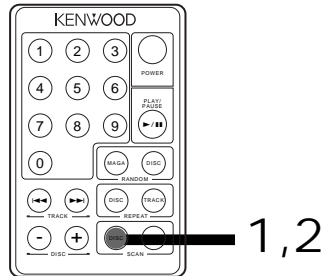
To select a track
Press the Track scan button.
The Track scan indicator disappears and the Track scan is cancelled.
Normal playback starts.

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 scan

Disc changer control features



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.



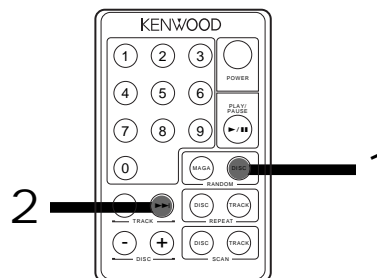
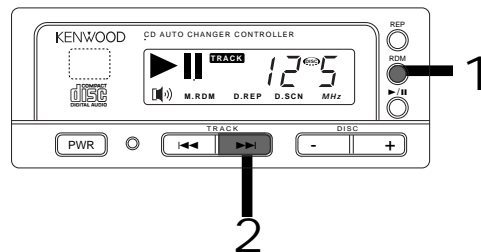
2

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.

Disc random play



Disc changer control features

1

Press the Disc 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

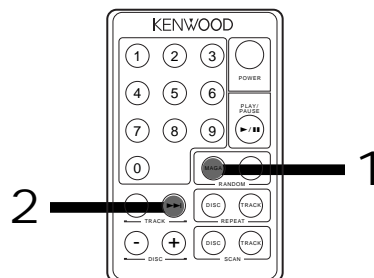
Press the Disc random button.
The Random indicator disappears and Random play is cancelled. Normal disc play starts.

NOTE

When the disc play stops, the Disc random play function is cancelled.

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.



2

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

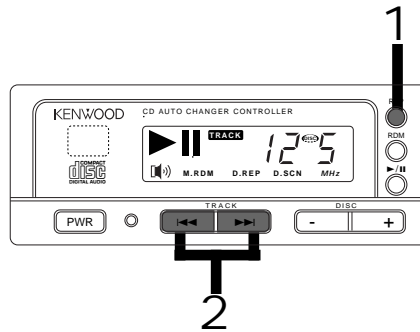
To cancel

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.

Changing the transmission frequency



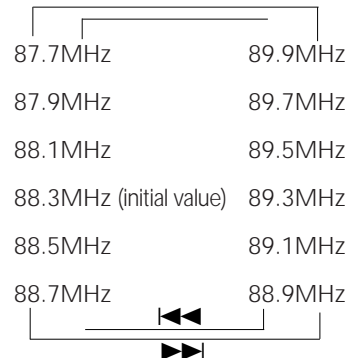
- 1 To set the frequency change mode
Hold down the REP button on the display unit for more than three seconds.
The FREQ indicator will light up and the currently set frequency will be displayed.



NOTE

- The initial value is 88.3MHz.
- If this function is on, the functions other than power on / off, reset, and modulation level / dynamic control, cannot be operated.
- This function is not available when the random play, repeat play, or scan play function is on. Before using this function, cancel the other functions. This function cannot be used while loading a disc (while the play indicator is blinking).

- 2 To change the frequency
Press the ◀◀ or ▶▶ button on the display unit.
The transmission frequency will change as follows:



NOTE

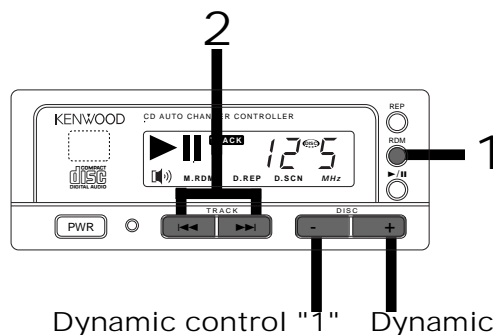
Some car radios cannot receive a 87.7 MHz frequency.

To cancel

Hold down the REP button on the display unit for more than three seconds.
The FREQ indicator will go off and the frequency change will take effect.
The frequency change mode is automatically cancelled if you do nothing for 15 seconds.

Modulation level / Dynamic control

Installation



- 1 To set the control mode
Hold down the RDM button on the display unit for more than three seconds.
The LEVEL indicator will light up and the currently set modulation level will be displayed.

Modulation level



Number for prevention of distortion setting

NOTE

- If this function is on, the functions other than power on / off, reset, and changing the transmission frequency, cannot be operated.
- This function is not available when the random play, repeat play, or scan play function is on. Before using this function, cancel the other functions. This function cannot be used while loading a disc (while the play indicator is blinking).

- 2 To change the modulation level
Press the ◀◀ or ▶▶ button on the display unit.

Each time the button is pressed, the modulation level changes in the range from 1 to 4. As the number increases, the modulation level increases. The initial setting is 2.

NOTE

Dynamic control

The unit comes with the prevention of distortion function to reduce sound distortion.

If the sound is distorted severely, press the + button on the display unit and then set the function to "2" (ON). If the prevention of distortion function is set to "2" (ON), the sound extension is reduced.

The initial setting is "1" (OFF).

CAUTION

If a disc with a high recording level is used, the sound may distort even if the prevention of distortion function is set to "2" (ON). In this case, reduce the modulation level.

To cancel

Hold down the RDM button on the display unit for more than three seconds.

The LEVEL indicator will go off and the modulation level change will take effect. The control mode is automatically cancelled if you do nothing for 15 seconds.

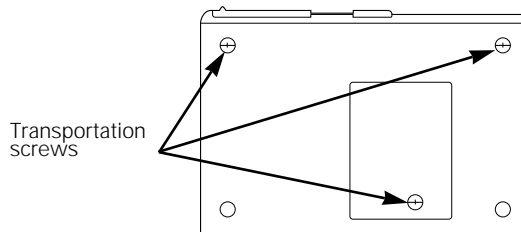
Installation procedure

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 ground cable, battery cable, and ignition cable of the wiring harness in the order listed.
4. Install the unit in the car.
5. Connect the negative (-) terminal of the battery.
6. 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.
- After installation, check that the brake lamps, wipers, and wipers work properly.
- Insulate unconnected ends of cords with vinyl tape or similar.
- Use only the supplied screws for installation. Use of any other screws may damage the unit.

Removing the transportation screws



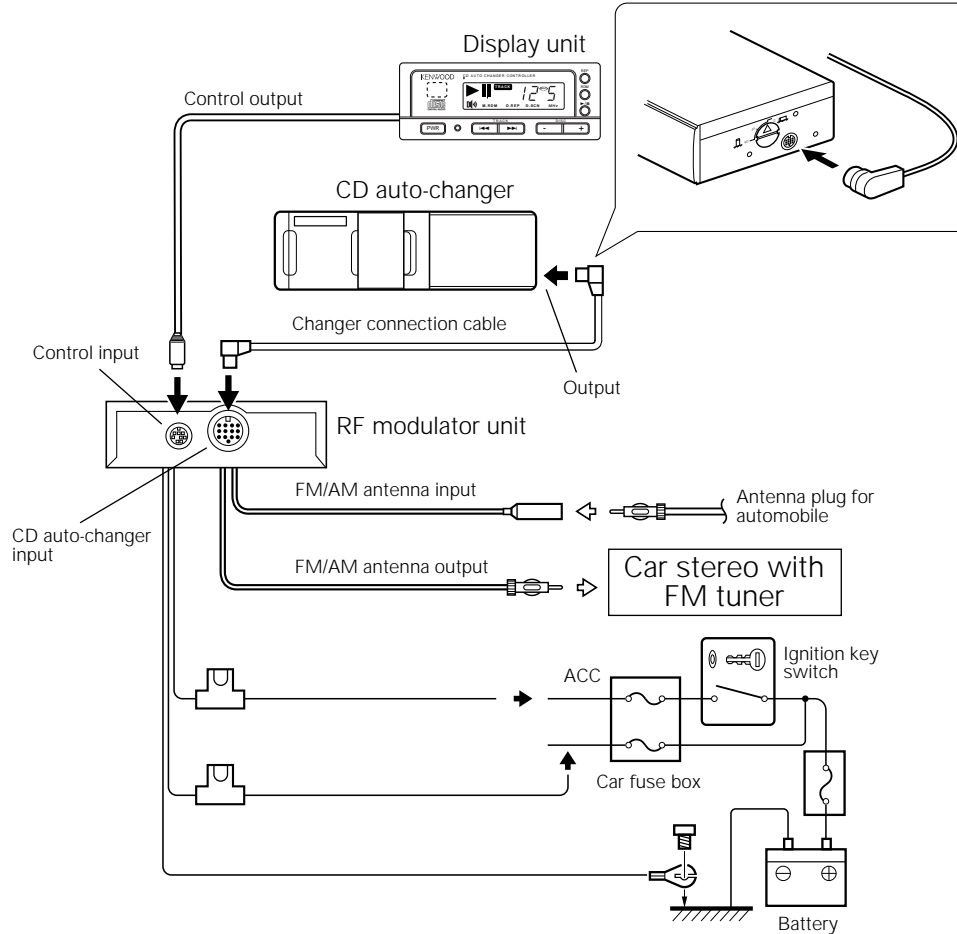
Remove all 3 transportation screws (minus) for protecting the internal mechanism before you start to install the unit.

NOTE

After removing the transport screw, retain it carefully and attach it again before transporting the unit again.

Connections

Installation



⚠ 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.

⚠ CAUTION

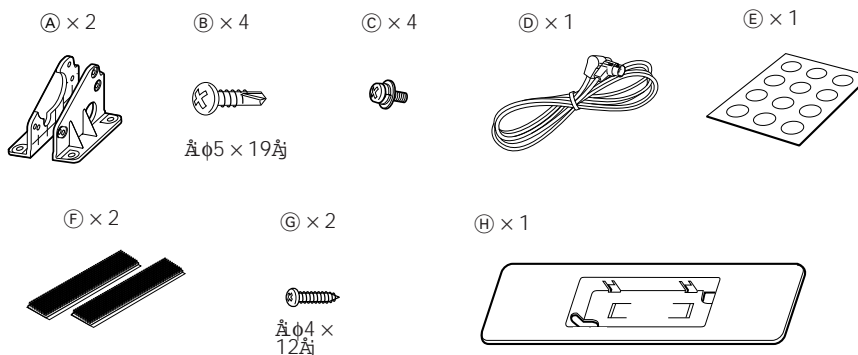
Be sure to press the reset button after installation.

NOTE

Do not install an antenna of radio equipment or distribute the antenna cable near the changer output cable, for this could cause malfunction with this unit.

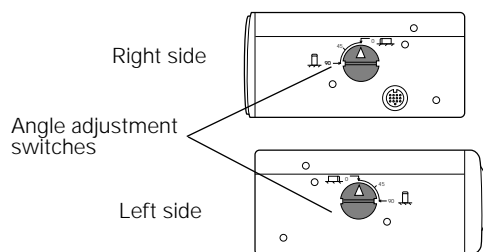
Installation

Accessories



Installation

Angle adjustment switches

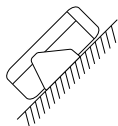


The angle adjustment switches on the both sides of the unit are to be set according to the angle of installation of the CD auto changer. Set both of the two switches to the same position. If the switches are not set properly, sound skip or other malfunction may occur.

Set the angle adjustment switches with a coin or other flat object.

Change the switch step by step by detaching and reusing the object at the end of each step.

Installation angle	0°~5°	40°~50°	85°~90°
Angle adjustment switch position			



- It is not possible to install at an angle of 40°~50° if only (A) is used.

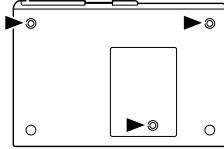
Installation

Horizontal installation

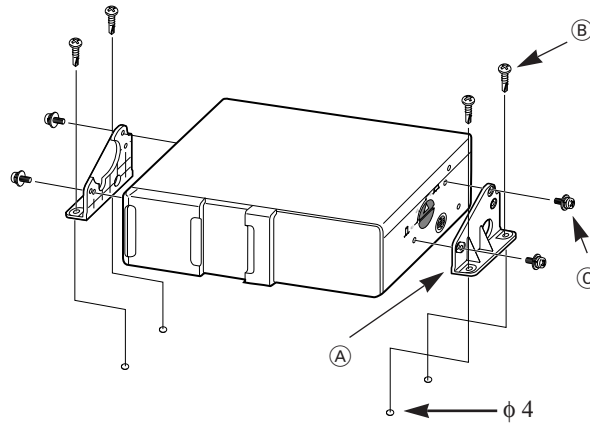
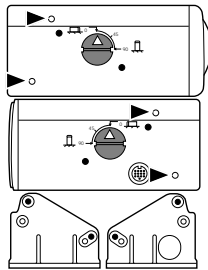
Installation

Cover the holes indicated by (3) with the dustproof seals (E). (Bottom and sides)
Use the holes marked (A1) to install the unit.

Bottom view



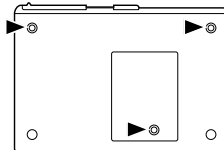
Side view



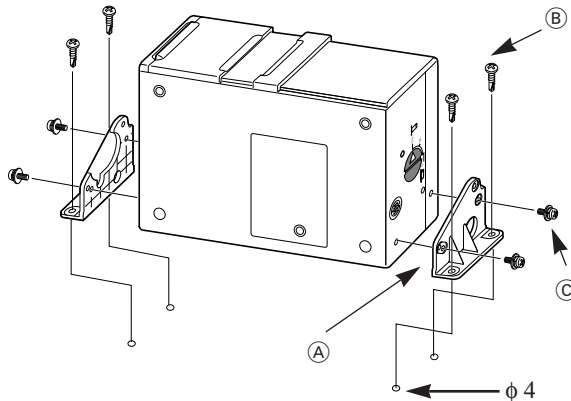
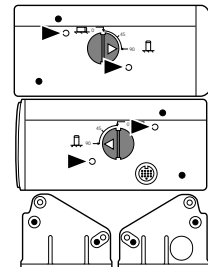
Vertical installation

Cover the holes indicated by (3) with the dustproof seals (E). (Bottom and sides)
Use the holes marked (A1) to install the unit.

Bottom view



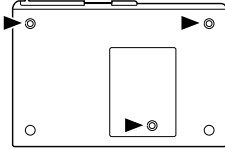
Side view



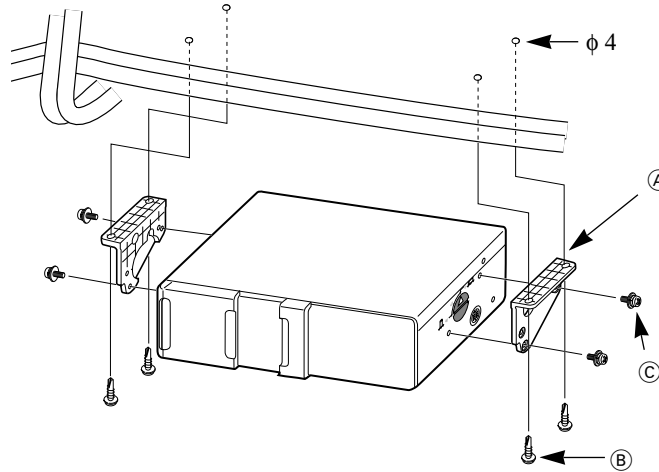
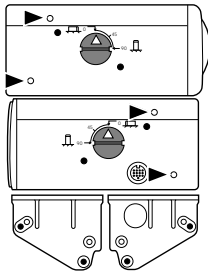
In case of hanging in the trunk

Cover the holes indicated by (3) with the dustproof seals (E). (Bottom and sides)
Use the holes marked (A1) to install the unit.

Bottom view



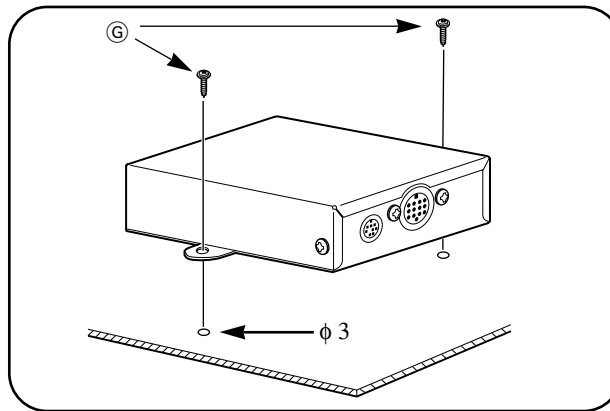
Side view



▲CAUTION

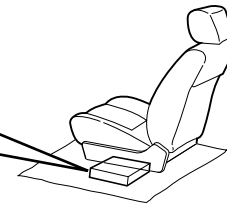
Do not tighten the screw (C) too securely at the time of installation, but tighten it securely after having fixed the bracket (A).

Installation of RF modulator unit



▲CAUTION

Take sufficient care so that the cables are not caught under the seat. If they are caught, they may break.



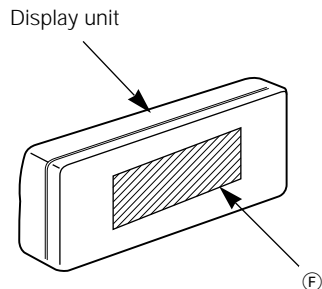
Install the RF modulator unit beneath the front seat using Metal fixture and Bind head screw as shown in the above figure.

Installation

Installation of Display unit

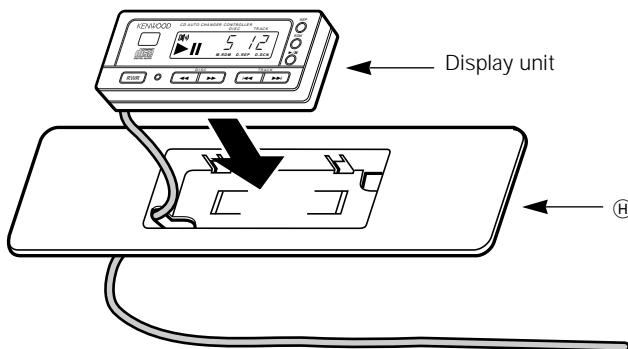
Installation

Ⓐ Installation without using the trim mount plateⓂ



Attach one velcro to the slanted-line of the the display units as shown above, and attach the other velcro to the parts where you wish to attach the display units. Then, put velcros together and install the display units.

Ⓐ Installation using the trim mount plateⓂ



Pass the cable from the Display unit through the hole on the trim mount plate and push fit the Display unit into the trim mount plate until it locks.

⚠ 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.
- Depending on the installing location, the display unit may not be able to receive the signals from the controller unit. Install them after confirming that the signals can be received.
- Install the unit in such a way that it does not disturb driving.

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 22).
The unit does not work properly when a button is pressed.	The microcomputer malfunctions.	Press the Reset button of the display unit.
Sound quality is poor. (Sound distortion)	The volume level is too high.	Use the appropriate volume level.
CD play does not start.	CD auto-changer input is not connected to the unit.	Connect the CD auto-changer input to the unit.
	Power button is not turned ON.	Turn the power button ON.
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. See "Cleaning your discs" (Page 6).
	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.
	The disc is severely damaged.	Use another disc.
Sound skips due to vibration.	Something is touching the CD auto-changer.	Keep it away from the CD auto-changer.
	The disc is dirty or damaged.	If sound skips at the same part, the disc is faulty. Check and, if possible, clean the disc. See "Cleaning your discs" (Page 6).
	The unit is mounted at a slant.	Mount the unit so that is level.
	Changer unit is mounted in an unstable place.	Mount the unit in a stable place.
	The angle adjustment switches are set improperly.	Set the angle adjustment switches to the correct positions.
Nothing appears on the display.	The control output of the display unit is not connected properly.	Connect the control output properly.
Sound distortion.	A disc with a high recording level is used.	Change the modulation level / dynamic control setting. (Page 20)

Troubleshooting guide

Symptom	Cause	Remedy
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)
No sound is heard even though the information concerning the CD auto-changer is displayed.	Volume is set to minimum level.	Raise the volume level.
	The microcomputer does not function correctly.	Press the Reset button of the display unit.
	The system is not connected properly.	Connect the system properly. See "Connections" (Page 22)
The specified track is not played.	The player is set to RANDOM PLAY/MAGAZINE RANDOM PLAY.	Turn off RANDOM PLAY/MAGAZINE RANDOM PLAY.

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

- 01 E:** No disc magazine has been loaded in the changer. The disc magazine is not completely loaded.
⇒ Load the disc magazine properly.
- 02 E:** No disc has been loaded in the disc magazine.
⇒ Load a disc into the disc magazine.
- 04 E:** No disc has been loaded in the disc magazine.
⇒ Load a disc into the disc magazine
The CD is quite dirty. The CD is upside-down. The CD is scratched a lot.
⇒ Clean the CD and load it correctly.
- 77 E:** The unit is malfunctioning for some reason.
⇒ Press the reset button on the unit. If the "E- 77" code does not disappear, consult your nearest service center.
- 99 E:** Something is wrong with the disc magazine. Or the unit is malfunctioning for some reason. Check the disc magazine. And then, press the reset button on the unit.
If the "E- 99" code does not disappear, consult your nearest service center.
- 0d E:** The protective circuit in the unit activates when the temperature inside the automatic disc changer exceeds 60°C (140°F), stopping all operation.
⇒ Cool down the unit by opening the windows or turning on the air conditioner. As the temperature falls below 60°C (140°F), the disc will start playing again.

Specifications

Specifications subject to change without notice.

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
Modulating Frequency (200KHz STEP)	87.7, 87.9, 88.1, 88.3, 88.5, 88.7, 88.9, 89.1, 89.3, 89.5, 89.7, 89.9 MHz

Specifications

General

Operating Voltage	14.4 V (11 ~ 16 V)
Current consumption	1.4 A
Operating Temperature	-10 ~ 50 °C
Size (W × H × D)	
CD changer	250 × 80 × 173 mm (9-13/16 × 3-1/8 × 6-13/16 in.)
Controller	54 × 85 × 5 mm (2-1/8 × 3-3/8 × 3/16 in.)
Display unit	105 × 40 × 18 mm (4-1/8 × 1-9/16 × 11/16 in.)
RF modulator unit	150 × 30 × 80 mm (5-7/8 × 1-3/16 × 3-1/8 in.)
Trim mount plate	188 × 58 × 2 mm (7-3/8 × 2-5/16 × 1/16 in.)
Weight	
CD changer	2.0 kg (4.4 lbs)
Controller	0.028 kg (0.06 lbs)
Display unit	0.125 kg (0.28 lbs)
RF modulator unit	0.456 kg (1.0 lbs)