KENWOOD

CD TUNER

KDC-PS900

INSTRUCTION MANUAL

KENWOOD CORPORATION

COMPACT
disc
DIGITAL AUDIO

**Take the time to read through this instruction manual.
Familiarity with installation and operation procedures
will help you obtain the best performance from your new
CD 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-PS900   Serial number _____

Contents

Warning

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.

Safety precautions

⚠️WARNING

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

- Press in the faceplate until it is firmly locked to the main unit to prevent it from being detached in an accident.

- When extending the power supply cable, memory backup 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.

⚠️CAUTION

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

- Be sure the unit is connected to a 12V DC power supply with a negative ground connection.

- Do not open the top or bottom cover.

- Do not install the unit in places it is exposed to direct sunlight, high heat or humidity, water may splash over it, or dust exists.

- Do not store the detached faceplate or faceplate storage case in places it is exposed to direct sunlight or high heat.

- Do not splash water on the faceplate.

- The faceplate is a precision piece of equipment that contains sensitive parts. Do not subject it to excessive shock.

- Do not touch the terminals of the faceplate or the unit.

- If you need to replace the fuse, make sure the new fuse is of the same type and rating. Using a fuse of a different type of rating may damage your unit. The fuse rating is normally shown on the fuse and fuse box.

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

4 *English*
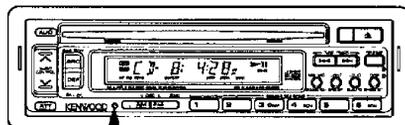
Care and Maintenance

Cleaning the unit

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

⚠CAUTION

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

Cleaning the faceplate terminal

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

Cleaning the CD slot

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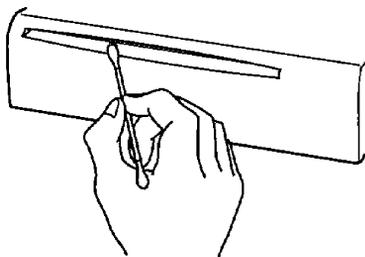

Lens fogging

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

Heat protection

- In warm climates, when vehicles are left standing in direct sunlight with the windows closed, the temperature inside can rise above 60°C. The unit's protection circuits will then display the message "HOLD" and prevent the player from operating. Just open the windows or turn on the air conditioning. As soon as the "HOLD" message disappears, the player will operate normally.
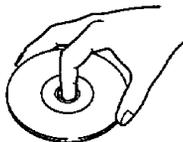
English **5**
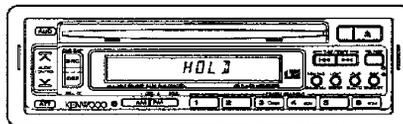
Handling compact discs

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

Holding a disc

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

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

Paper tape

Storing your discs

- Do not store discs where they will be exposed to direct sunlight (such as on the seat and dashboard) or high heat.

- If you do not use your unit for an extended time, remove the discs from the unit and put them in their cases. Do not leave them lying around without cases, piled up, or leaning on a wall and so on.

Cleaning your discs

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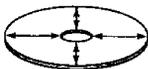
Check your new discs

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

Center hole
Outer edge
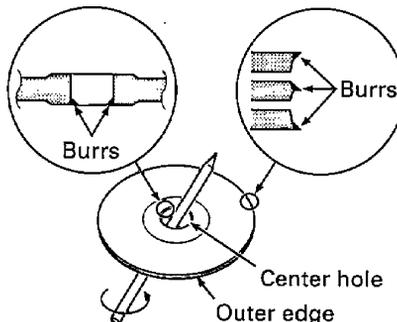
Disc accessories

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

⚠CAUTION

Never use 8 cm (3") compact discs

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

Features

■Tuner section

• **Auto seek tuning (Page 12)**
Automatically searches for stations you can receive.

• **Station preset memory (Page 17)**
Stores the frequencies of your favorite stations in memory. The frequencies stored in memory can be recalled by a single touch of a button.

• **CRSC (Clear Reception System Circuit) (Page 18)**
When this feature is turned on, the tuner switches reception to mono to reduce multi-path noise if it occurs in the broadcast you are listening to.

• **Direct access tuning (Page 19)**
This feature allows you to listen to the station of your choice immediately by inputting its frequency.
(Remote control function)

• **Channel space selection (Page 20)**
This feature allows you to change the frequency step between 200 kHz in FM/10 kHz in AM and 50 kHz in FM/9 kHz in AM.

■CD player section

• **Track search (Page 21)**
You can search for the track you want by specifying the track number.

• **Direct track search (Page 22)**
This feature allows you to enter the number of the track you wish to hear by pressing the appropriate numeric keys.
(Remote control function)

• **Track repeat (Page 23)**
When this function is turned on, the track you are listening to is played repeatedly.

• **Track scan (Page 24)**
When this function is turned on, the first part of each track on the disc you are listening to is played automatically to help you find the one you want.

• **Random play (Page 25)**
When this function is turned on, the tracks on the disc you are listening to are played in random order.

• **Disc name preset (Page 26)**
With this feature, up to 10 discs can be named. When a disc whose name is preset is played, its name is displayed automatically.

Before use

English 7

Features

∎General section

- **Remote control (Page 15)**
  This unit can be operated with the wireless remote control.
  There are also convenient features available only with the remote control.

- **Attenuator (Page 10)**
  This function allows you to lower the volume quickly. The fade-in function is provided to restore the original volume gradually.

- **Attenuator gain selection (Page 10)**
  You can switch the gain of the attenuation function between -20 and -60 dB. If a large-output amplifier is used, sound may not be attenuated completely if the gain is -20 dB. In this case, set it to -60 dB.

- **Loudness control (Page 11)**
  When this function is turned on when the volume level is low, sound is made clear by emphasizing bass.

- **Audio controls (Page 28)**
  Adjust the bass, treble, balance, fader and Non-fading preout.

- **Defeat tone (Page 30)**
  When this function is turned on, the tone adjustment function is bypassed, and the Bass and Treble can be made flat.

- **Non-fading preout (Page 31)**
  This unit has Non-fading preout which is independent and is not adjusted by the fader. Non-fading preout can be turned off if it is not necessary. For details of the Non-fading preout level adjustment, see the Audio control section.

- **Selectable illumination (Page 32)**
  Allows illumination colour to be switched between green and orange.

- **Illumination control (Page 32)**
  The illumination light can be turned on and off.

- **Clock display (Page 33)**
  The time can be displayed.

- **Theft deterrent faceplate (Page 34)**
  The faceplate is detachable. When you leave the vehicle, you can take the faceplate with you to help prevent theft.

- **Disabled system indicator (Page 35)**
  When the faceplate is detached from the unit, the LED blinks.

- **Touch sensor tone (Page 36)**
  When a button is pressed, the touch sensor tone beeps to confirm the operation. The touch sensor tone can be disabled if it is not necessary.

- **Output voltage selection (Page 37)**
  You can switch the output voltage of the preout terminal between High and Low.

- **Automatic illumination control**
  When the illumination cable is connected, the display panel lights up when the vehicle's lights are on even if the power is off. You can turn the power on easily in darkness.

- **Automatic dimmer control**
  When the dimmer cable is connected, automatically dims the display when the car's light control is turned on.

Power/Volume

Volume Power
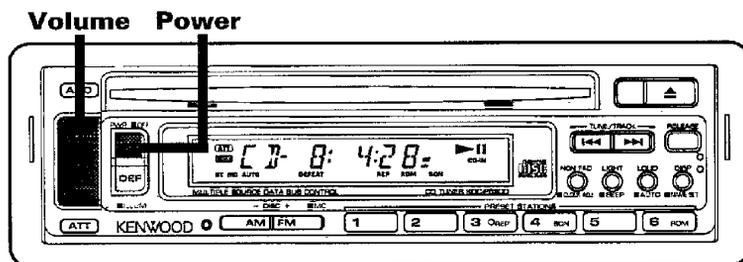
To turn the power on
Press the Source button.

NOTE

Perform the following operations with the power on.

To turn the power off
Press the Source button for more than a second.

To turn the all standby
Press the Source button to select All standby mode.
When "ALL OFF" is displayed, you are in All standby mode. You can stop each function with the power on.

ALL OFF

To increase the volume
Press the Audio up button.

VOL : -38-

To decrease the volume
Press the Audio down button.

VOL : -42-

Attenuator/Attenuator gain selection

1,2

Attenuator

2
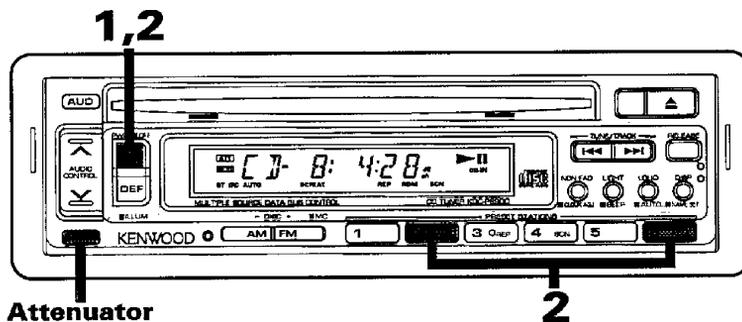
To use the Attenuator function

Briefly press the Attenuator button. The Attenuator indicator blinks on the display and Attenuator function will turn on.
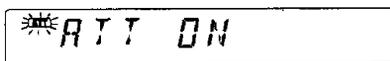
```
※ATT ON
```
ON

To cancel the Attenuator function

Briefly press the Attenuator button or set the volume to minimum. The Attenuator indicator disappears and the Attenuator function is cancelled.
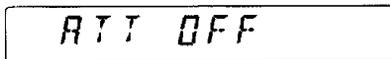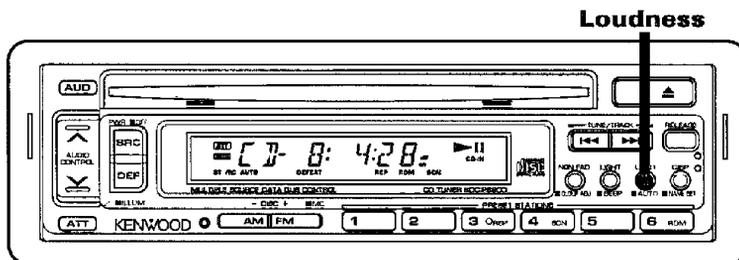
```
ATT OFF
```
OFF

Attenuator gain selection

1

Turn the power off.

2

Hold down preset station buttons "2" and "6" and turn the power on. The gain of the Attenuator function becomes -60 dB.

Restoring the original Attenuator gain

Perform steps 1 and 2 again. The gain of the Attenuator function returns to -20 dB.

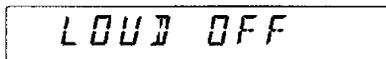**10** *English*

Loudness

Loudness

To use loudness control

Briefly press the Loudness button.
Loudness is turned on and the
Loudness indicator appears on the
display.

> ⊞ _L O U D   O N_

ON

|NOTE|

Loudness does not affect the Non-
fading preout.
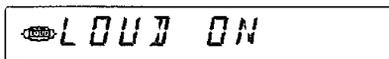
To cancel loudness control

Briefly press the Loudness button.
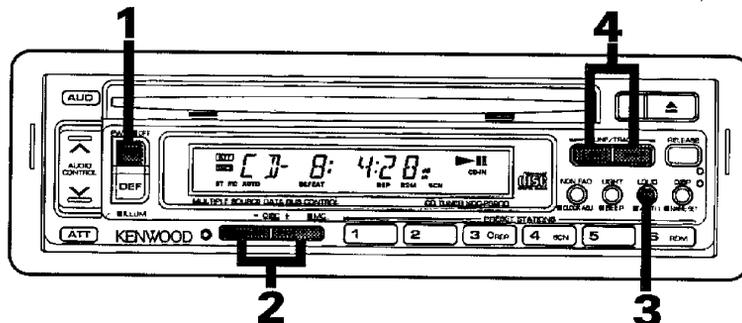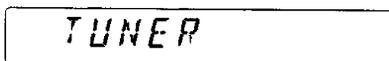Loudness is turned off and the
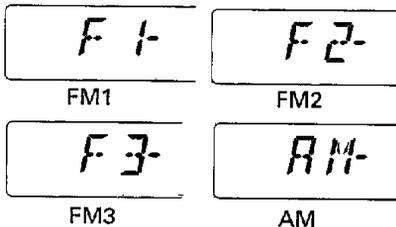Loudness indicator disappears.

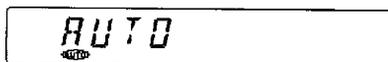> _L O U D   O F F_

OFF

Auto seek tuning

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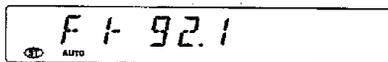When "TUNER" is displayed, you are in Tuner mode.

> ### TUNER

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

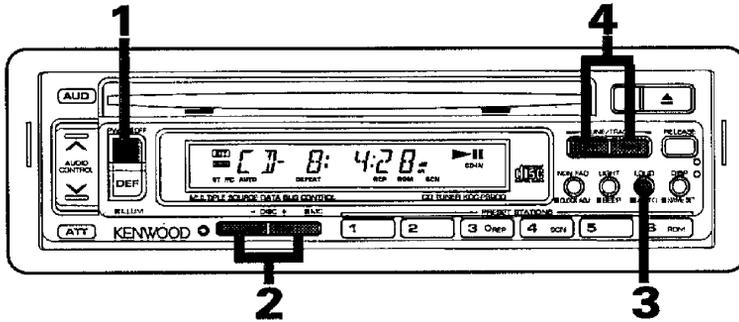| F 1-	F 2-
FM1	FM2

F 3-	A M-
FM3	AM

3 To select Auto seek tuning mode
Press the Auto button for more than a second.
The Auto indicator will appear on the display and Auto seek tuning will turn on. This function is factory-set to ON.
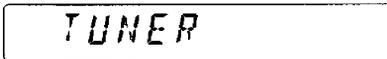
> ### AUTO

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

> ### F 1- 92.1

Basic operations

Manual tuning

1 Listen to the radio

Press the Source button to select Tuner mode.
When "TUNER" is displayed, you are in Tuner mode.

    TUNER

2 To select a band

Press the FM/AM button.
Each time you press the FM button briefly, the band changes between FM1, FM2, and FM3.
Press the AM button to choose AM band.

    F 1-

FM1

    F 2-

FM2

    F 3-

FM3

    AM-

AM

3 To select Manual tuning mode

Press the Auto button for more than a second.
The Auto indicator disappears and the Auto seek tuning is cancelled.
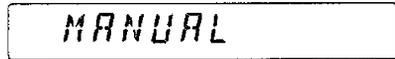
    MANUAL
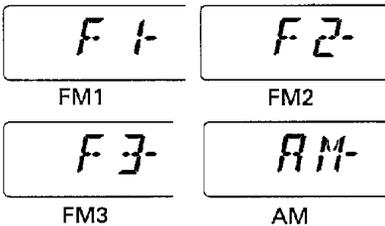
4 To tune

Press the Tuning up/down button.
When you press the button once, the received frequency changes by one step. The frequency will continue to change as long as you hold the button down.
The Stereo indicator appears on the display when FM stereo broadcasts are received.
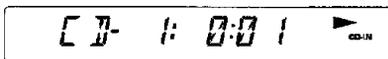
    F 1- 92.1

English 13

Compact disc play

Source   CD slot   Eject

Reverse Forward
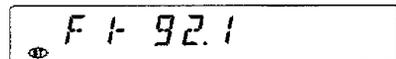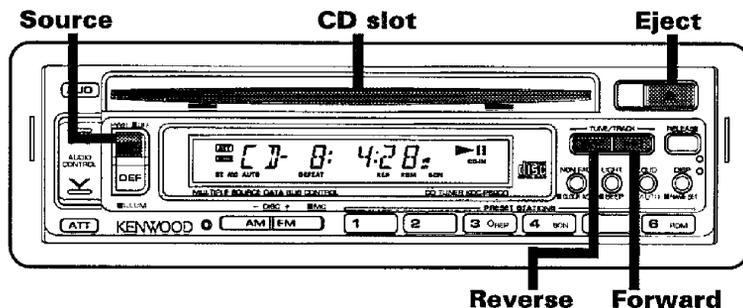
To play compact discs

Insert a CD with the title side up.
If there is already a CD in the unit,
press the Source button to select
CD mode.
When you enter CD mode, "CD" will
be displayed, and CD playing will
start.

┌─────────────────────────────┐
│ *CD*   │
└─────────────────────────────┘

┌─────────────────────────────┐
│ *CD- 1: 0:01*   ► ═   │
└─────────────────────────────┘

⚠CAUTION

• Do not attempt to insert a disc in a
  slot where there is already another
  disc inside.
  This unit is designed for playing 12
  cm (5") compact discs. Attempting
  to play 8 cm (3") disc may damage
  the unit and should be avoided.
• If you eject a CD shortly after it has
  been loaded and try to push it in
  again, the CD may not be reloaded.
  In this case, take the CD right out
  and reinsert it.

To stop and eject

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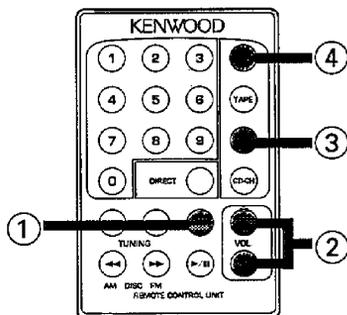CD play stops and the disc is ejected.

To fast forward

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

To reverse

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

Basic operations of remote control

All modes

①Attenuator button
Lowers volume immediately.
To restore previous level, press this
button again or set the volume to
minimum.

②Volume button
The ∧ button increases the volume.
The ∨ button decreases the volume.

③CD button
Selects CD mode.

④Tuner button
Each press of this button switches
between the tuner mode and the
standby mode.

Replacing the battery
• Use one lithium battery (CR2025).
• Insert the battery according to the
  illustration inside the battery case,
  taking care not to reverse the + and -
  polarity.
• If no operation occurs even when a
  button is pressed, the battery may be
  exhausted. Replace with a new battery.

⚠WARNING

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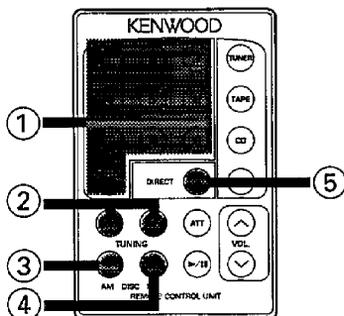 swallows a lithium battery, immediately
  call the doctor.

NOTE

• Before using the remote controller for
  the first time, pull out the film from the
 battery case.
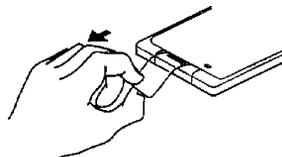
# Basic operations of remote control

Tuner mode

CD mode

①Numeric keys
Numeric keys 1 to 6 are used to recall preset stations.
Enter the frequency of the station during Direct access tuning (Page19).

②Tuning button
The ◀◀ button decreases the frequency.
The ▶▶ button increases the frequency.

③AM button
Press the AM button to choose AM mode.

④FM button
Each time you briefly press the FM button, the band changes between FM1, FM2, and FM3.

⑤Direct button
Press the Direct button to select Direct access tuning mode.
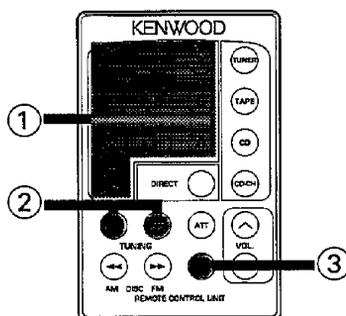
①Numeric keys
Use numeric keys to specify the track number during direct track search (Page 22).

②Track search button
Press the ◀◀ button to find a previous track.
Press the ▶▶ button to find a subsequent track.

③▶ /❙❙ button
Plays/pauses CD play.

16 *English*
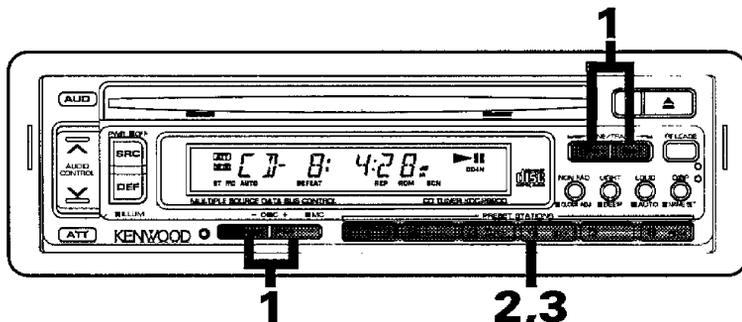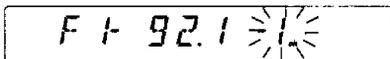
Station preset memory

1

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

2 To preset

Press the Preset station button (1 to 6) you want to use for more than two seconds.

When the station is entered in memory, the number of the button to which you've assigned it will be displayed.

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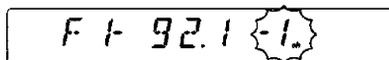
|NOTE|

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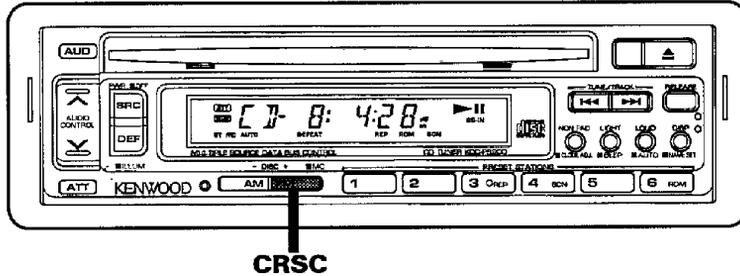
3 To recall a preset station

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

CRSC

CRSC

Tuner features

To turn CRSC on

Press the MC button for more than a second.

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

$$\boxed{CRSC \ \ ON}$$

ON

|NOTE|

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

To cancel the CRSC
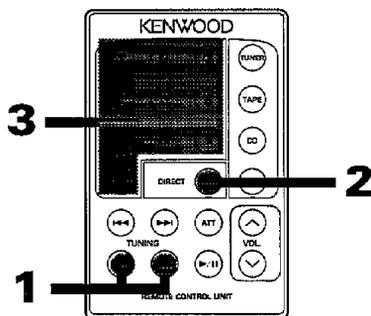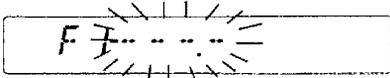
Press the MC button for more than a second.

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

$$\boxed{CRSC \ \ OFF}$$

OFF

Direct access tuning

1

Select the band you want.

2

Press the Direct button.

```
DIRECT
```

The frequency display blinks for 10 seconds.

3

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

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

NOTE

The tuner receives the frequency you entered.
You cannot enter frequencies your tuner cannot receive in each band.
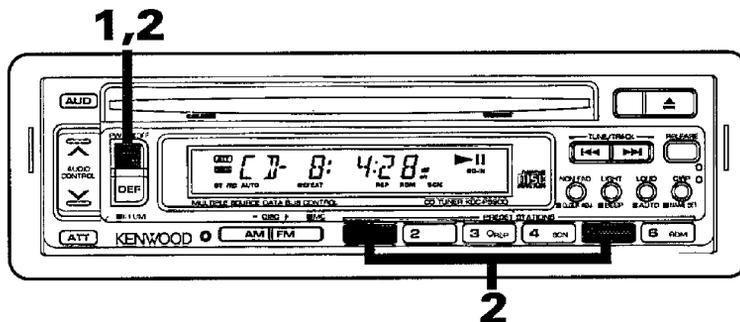
Frequencies that can be input
Frequencies for FM broadcasting can be input in 0.1MHz units. They cannot be specified in 0.01MHz units.

To cancel

To cancel in the middle, press the Direct button.
The Direct access tuning function is cancelled and the frequency display stops blinking.

Channel space selection

1,2

2

1
Turn the power off.

2
Hold down preset station buttons "1" and "5" and turn the power on. The frequency step is 50 kHz in FM and 9 kHz in AM.
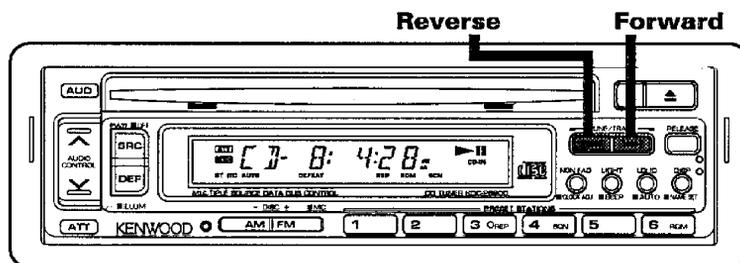
[NOTE]

- When the frequency step is changed, all the contents of memory become the initial values.
- This function is not available in the United States and Canada.

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

Track search

Reverse   Forward

Reverse track search

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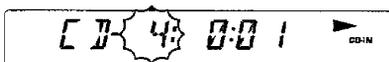
Forward track search

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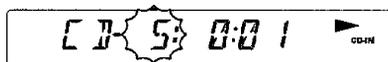
CD player features
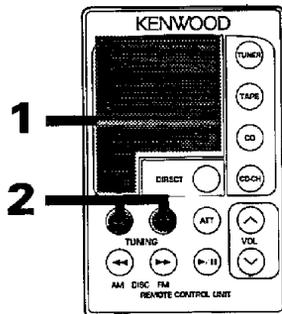
Direct track search

1

Enter the number of track you want to listen to.

The input number blinks for 10 seconds and stays lit.
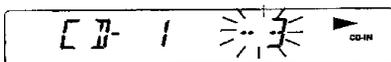
2 Direct track search

Press the ◄◄ or ►►I button while the number is blinking.

The player starts playing the track specified in step 1.

To cancel

To cancel search in the middle, press the ► /II button.

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

CD player features
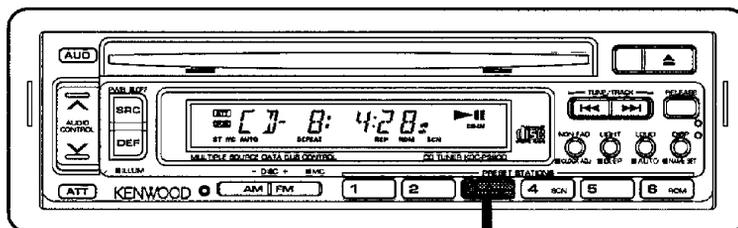
Track repeat

Repeat

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.
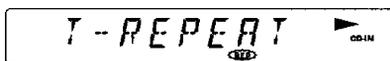
ON

To cancel

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

CD player features

Track scan

1,2
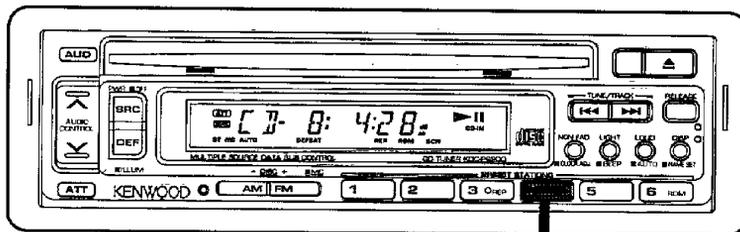
1 Press the Track scan button.
The Track scan indicator will appear on the display and the player will play the first 10 seconds of each track in succession.

```
T-5CAN
```

```
CD-3 0:01
```
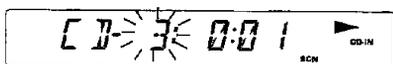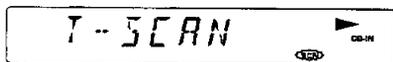
2 **To select a track**
Press the Track scan button.
The Track scan indicator disappears and the Track scan is cancelled. Normal playback starts.

NOTE

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

Random play
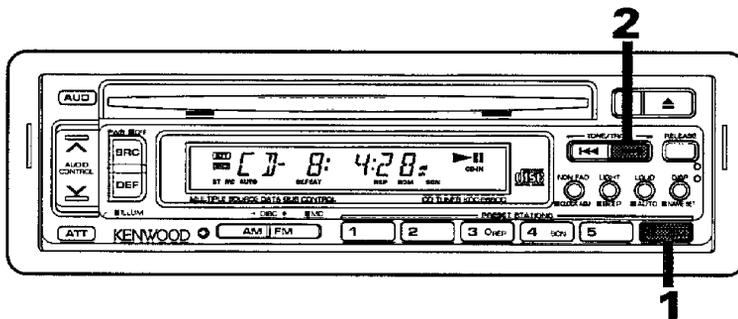
1

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

```
RANDOM    ►
          ON
```

```
CD     :    ►
          RDM
```

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

To cancel
Press the Random button.
The Random indicator disappears and Random play is cancelled. Normal CD play starts.

NOTE
When the CD play stops, the Random play function is cancelled.

Disc name preset

1

Play the CD whose name is to be preset.

2

Press the Name set button for more than two seconds.
"FILE SET" is displayed and the disc name preset mode is entered.
The cursor blinks at the position where the name can be input.
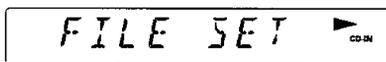
3 Select the input position
Press the |◄◄ or ►►| button.
You can enter characters at the blinking cursor position.
Press the |◄◄ button to move the cursor to the left, and press the ►►| button to move it to the right.

```
⊹�
⌣⌃⌣⌐-------    ►
                CD-IN
```
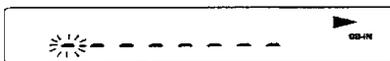
4 Select a character
Press the – or + button.
Position the cursor at the desired character.

```
Ⱪ⌣⌃⌣⌐------   ►
                CD-IN
```
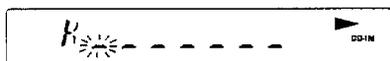
Repeat steps 3 and 4 to enter the disc name to be displayed.

```
Ⱪ Ε Ν Ⱳ Ο Ο Ⱦ⌣⌃⌣   ►
                CD-IN
```

NOTE
• Up to 8 characters can be set.
• You can display A ~ Z, 0 ~ 9, [,], ', +, -, *, =, <, and >.

To cancel
Press the name set button.
The disc name preset mode is terminated and the disc name is set. If you do nothing for 10 seconds, the input characters are automatically put into memory and the mode is canceled.

NOTE
• You can set up to 10 disc names. If you preset the 11th disc name, the first preset disc name is automatically erased.
• The discs are identified by the total recording time and the number of tracks. Discs with the same recording time and the same number of tracks cannot be distinguished.
• To change the disc name, perform steps 1 and 2 to display the previous disc name, and then perform steps 3 and 4.

CD player features
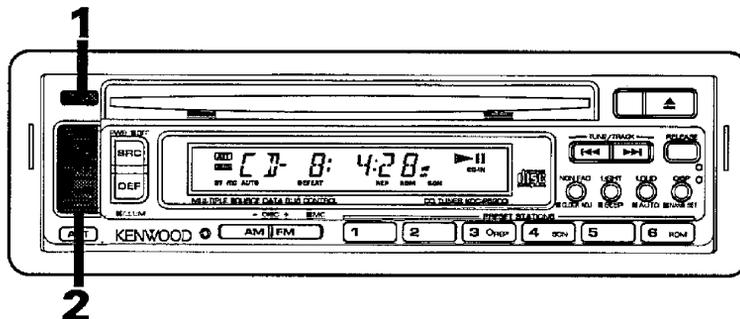
Audio controls

1 To select the control mode

Press the Audio button.

Each time you press this button, the adjustment mode changes as follows: Bass -> Treble -> Balance -> Fader -> Non-fading preout -> Volume. If you do not perform the next operation within five seconds, the Volume adjustment mode (normal mode) will return.

NOTE

Source tone memory

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

2 To adjust each mode

Press the Audio control button.

Adjust each mode according to the table.

To cancel

Press the Audio button for more than one second.

The Volume adjustment mode will return.

Other features

Display	Operation of Audio control button	
	Audio down button	**Audio up button**
Bass adjustment $BAS:$ 0 -12 … 0 … $+12$ Bass Flat Bass decreases. increases.	Bass decreases.	Bass increases.
Treble adjustment $TRE:$ 0 -12 … 0 … $+12$ Treble Flat Treble decreases. increases.	Treble decreases.	Treble increases.
Balance adjustment $BAL:$ 0 $L60$ … 0 … $R60$ Left channel Center Right channel emphasizes. emphasizes.	Left channel emphasizes.	Right channel emphasizes.
Fader adjustment $FAD:$ 0 $R80$ … 0 … $F80$ Rear sound Center Front sound emphasizes. emphasizes.	Rear sound emphasizes.	Front sound emphasizes.
Non-fading preout adjustment $N-F:$ $0-$ … … … 0 … $+10$ Non-fading Non-fading preout decreases. preout increases.	Non-fading preout decreases.	Non-fading preout increases.
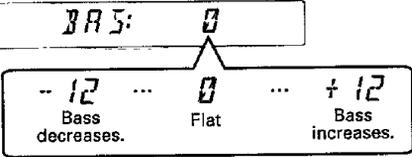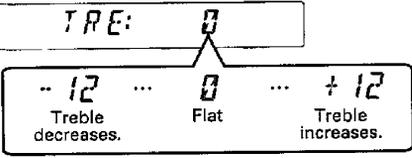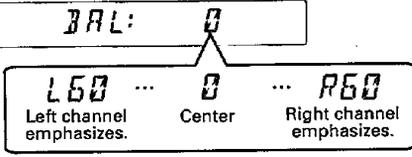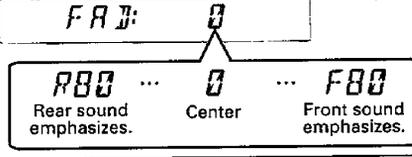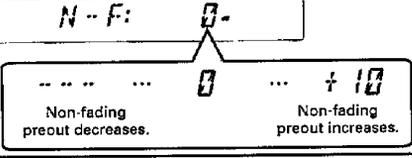
Other features

Defeat tone
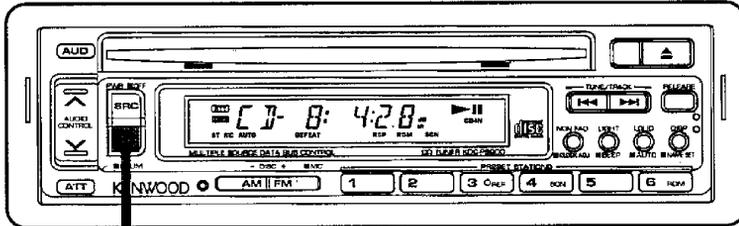
Defeat

To turn Defeat tone on

Briefly press the Defeat button.
Each time the button is pressed, the
tone (Bass and Treble) adjustment
function is turned on or off. When it
is on, the Defeat indicator lights and
the tone adjustment function is
bypassed and the tone is made flat.

ON

OFF
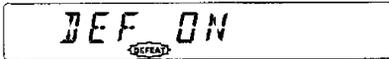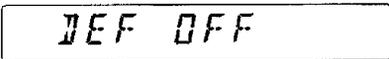
Non-fading preout
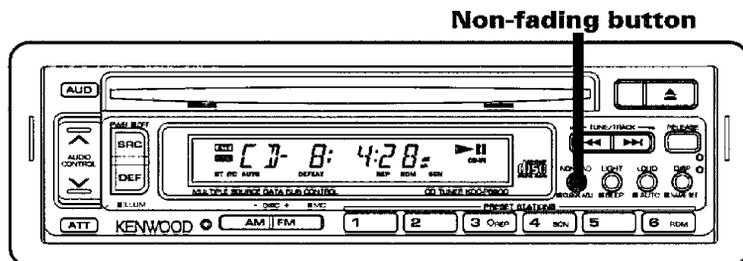
Outputting Non-fading tone

Briefly press the Non-fading button.
"N-F ON" is displayed, and the Non-fading tone is output.

```
N-F   ON
```
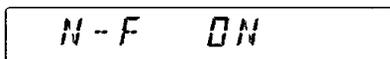
ON

Disabling Non-fading tone

Briefly press the Non-fading button.
"N-F OFF" is displayed, and the Non-fading tone is disabled.

```
N-F   OFF
```
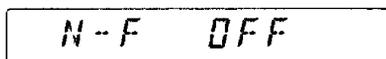
OFF

Other features

Selectable illumination/Illumination control
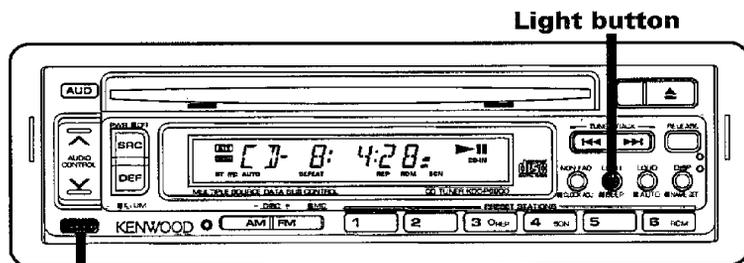
Light button

Illumination

To change illumination colour

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

Illumination control

Briefly press the Light button.
Each time the button is pressed, the illumination light is turned on or off.

NOTE

If the car's light control is turned on, the Auto illumination control function is automatically turned on even when the illumination is off.

Clock display/setting
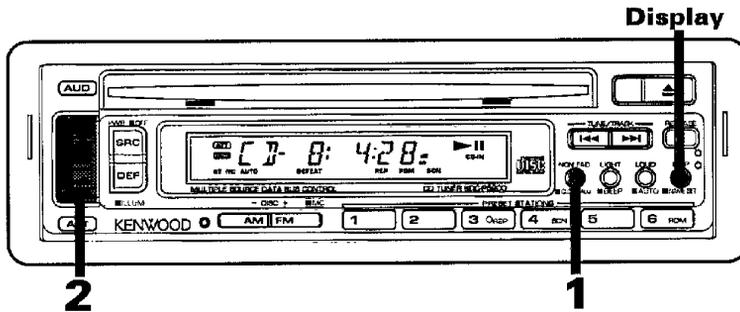
To recall clock display

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

Mode	Displays
Tuner	Frequency ↔ Time
CD	→"P-TIME" (Track performance time) ↓ "A-TIME" (Total CD playback time) ↓ "R-TIME" (CD remaining time display) ↓ CD name (CD preset name display) ↓ Time
All standby	"KENWOOD" ↔ Time

NOTE

If you attempt to display the CD name which is not preset, while it is being played, "NO FILE" is displayed.

```
NO  FILE
```

To set the clock

1

If the time is not displayed, press the Clock adjust button.
The time is displayed.

2

Hold down the Clock adjust button, and press the Audio button.
Press the Audio up button to adjust the hour and the Audio down button to adjust the minutes.

Other features

English **33**

Theft deterrent faceplate
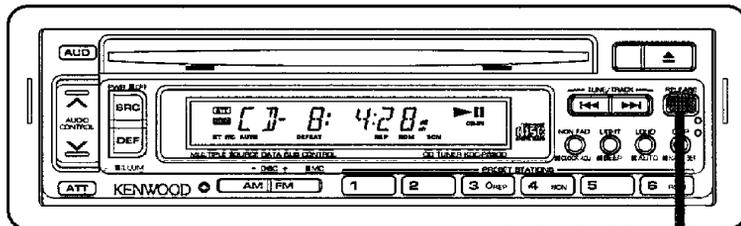
Release

To remove the faceplate

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

⚠ CAUTION

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

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

To install the faceplate

1

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

Projections

Grooves

2

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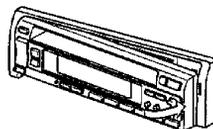
Other features

Disabled system indicator

1,2

2

1
Turn the power off.
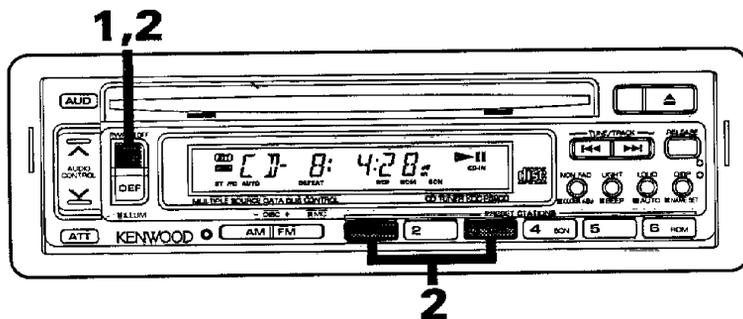
2
Hold down preset station buttons
"1" and "3" and turn the power on.
The Disabled system indicator
function turns off, and the LED does
not blink when the faceplate is
detached.

To turn the Disabled system indicator on
Perform steps 1 and 2 again.
The LED blinks when the faceplate is
detached.

Other features
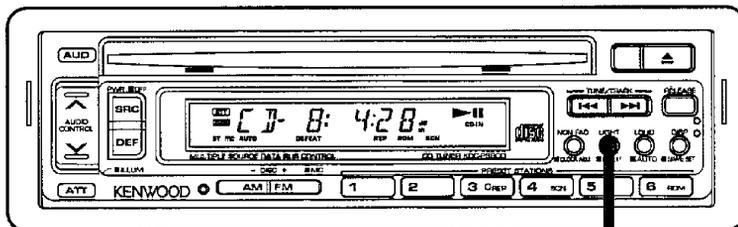
Touch sensor tone

Beep button

Touch sensor tone

Press the Beep button for more than a second.
Each time the button is pressed, the touch sensor tone is turned on or off.

Other features

$$BEEP \quad ON$$

ON

$$BEEP \quad OFF$$
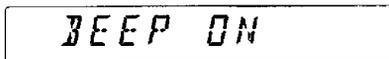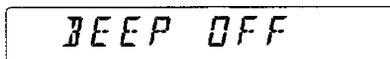
OFF

Output voltage selection

1,2

2

1

Turn the power off.

2
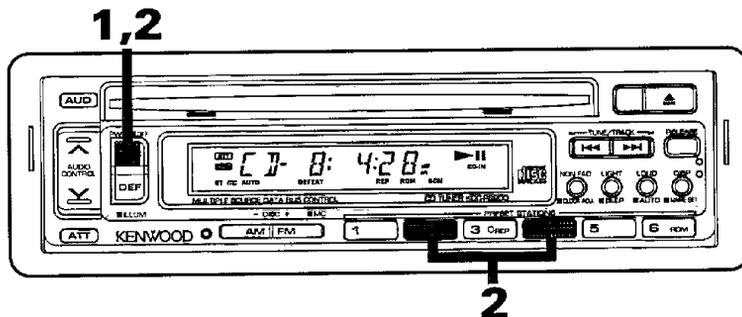
Hold down preset station buttons "2" and "4" and turn the power on. The output voltage of the preout terminal becomes 4 V.

Restoring the original output voltage

Perform steps 1 and 2 again. The output voltage of the preout terminal returns to 2 V.

NOTE

The factory setting is 2 V. Use 2 V when the unit is connected to a Kenwood system.

Other features

Accessories

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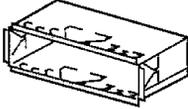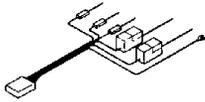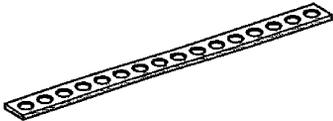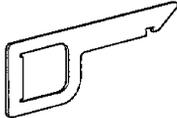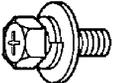
Installation procedure

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, memory backup cable, and power supply cable of the wiring harness in the order listed.

4. Connect the wiring harness connectors to the unit.

5. Install the unit in the car.

6. Connect the negative (-) terminal of the battery.

7. 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, winkers, and wipers work properly.

- This unit must be installed at an angle of less than 30° from the horizontal.

Installation angle

Installation

• Insert the unit until the tab locks securely into the Mounting sleeve.

Firewall or metal support

Screw with washer (M4 × 8)

• Attach the Mounting sleeve to the chassis by bending its lugs with a screwdriver.

Self-tapping screw

Metal mounting strap

Mounting sleeve
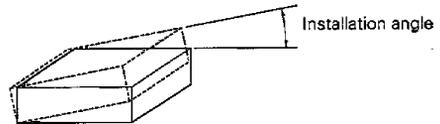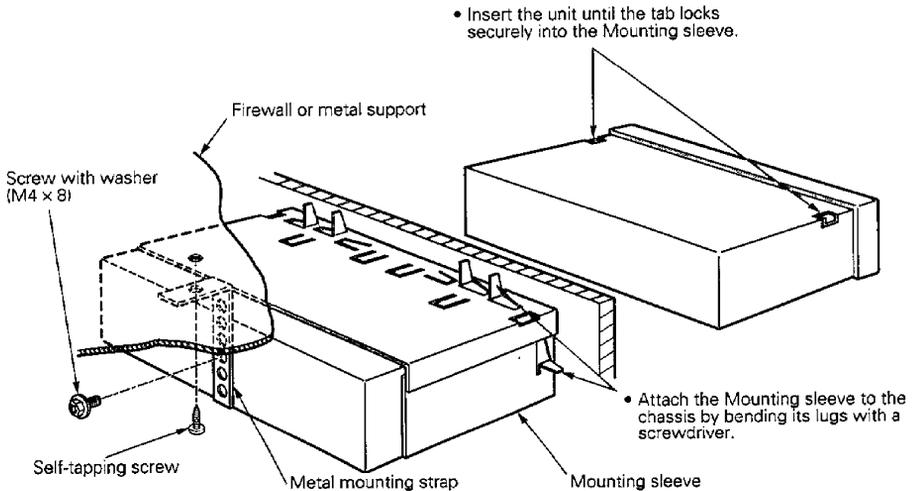
NOTE

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

To install in the Japanese car

When installing in some cars made in Japan, drive Machine screws (M5 × 6) (accessories) into the two holes corresponding to the car bracket.

8mm Max.

5mm

40 English

To remove the unit.
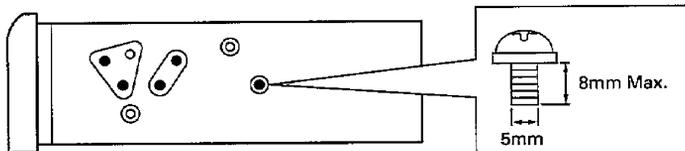
Screw with washer (M4 x 8)
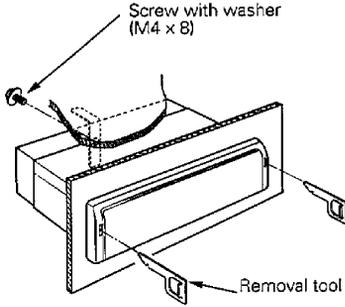
Removal tool

1. Remove the Screws with washer (M4 x 8) holding on the back panel.
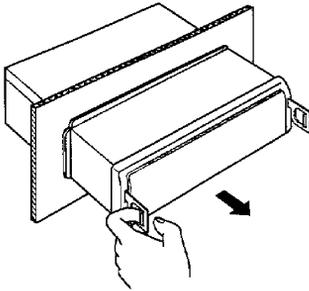
2. Insert the Removal tool into the slot in the unit and pull out the unit. The lock is released and the unit is detached.

Screwdriver
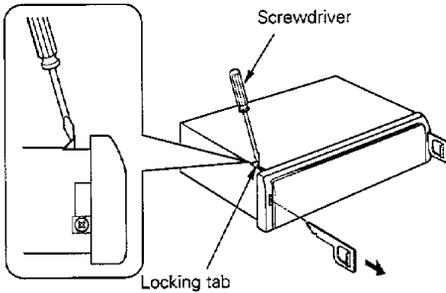
Locking tab

3. Pull out the Removal tool by pressing down the locking tabs on the top using a screwdriver.

Connections

Installation

FM/AM antenna input

Left (White)

FRONT

Front output   Right (Red)

Power amplifier
(Sold separately)

Front speakers

Left (White)

REAR

Rear output   Right (Red)

Power amplifier
(Sold separately)

Rear speakers

Left (White)

NON
FADING

Non-fading output   Right (Red)

Power amplifier
(Sold separately)

Speakers

Other K-BUS models

Digital output

Wiring harness (Accessory)

Full automatic power antenna control cable (Blue)

ANT CONT.

Automatic illumination/Dimmer control cable
(Orange/White) (To car light control switch)

ILLUMI

Power control cable (Blue/White)

P.CONT.OUT

Power control input

Power supply cable (Red)
⊕ (To ignition)

ACC

Ignition key switch

Memory backup cable (Yellow)
⊕ (To battery)

Car fuse box

Ground cable (Black) ⊖ (To car chassis)

Car fuse box (Main fuse)

⚠ WARNING

To prevent fire when the power supply cable (Red) or memory backup 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.

Battery

42 English

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 42).
The unit does not work properly when a button is pressed.	The microcomputer malfunctions.	Press the Reset button on the front panel.
Sound quality is poor. (Sound distortion)	The volume level is too high.	Use the appropriate volume level.
	A speaker cable is pressed by a screw in the car.	Check the speaker cabling.
	A speaker cable is shared.	Connect the speaker output connectors to the separate speaker connectors.
Poor radio reception.	The car antenna is not extended.	Extend the antenna.
	The antenna control cable is not connected.	Connect the cable correctly. See "Connections (Page 42)"
When the ignition key switch is set to OFF, the memory contents disappear.	The Memory backup cable is not connected correctly.	Connect the cable correctly. See "Connections (Page 42)".
A Disc cannot be inserted.	Another disc has already been inserted.	Eject the previous disc before inserting another.
A disc is ejected immediately after being inserted.	The disc is upside down.	Insert the disc with the title side up.
	The disc is very dirty.	Check and, if possible, clean the disc See "Cleaning your discs" (Page 6).
As disc plays, you hear skipping.	The disc is dirty or damaged.	Check and, if possible, clean the disc See "Cleaning your discs" (Page 6).
Sound quality is poor.	The recording of the disc is poor.	Try playing another disc. If the sound is good, the fault was with the original disc.
	The disc is dirty or damaged.	Check and, if possible, clean the disc See "Cleaning your discs" (Page 6).
The specified disc is not played.	The player is set to RANDOM PLAY.	Turn off RANDOM PLAY.

Specifications

Specifications subject to change without notice.

Disc Section

Laser Diode.. GaAlAs (λ=780 nm)
Digital Filter .... 8 Times Over Sampling
D/A Converter .... 1 bit
Spindle Speed.. 500~200 rpm (CLV)
Wow & Flutter .... Below Measurable Limit
Frequency Response .... 5 Hz ~ 20 kHz (±1 dB)
Total Harmonic Distortion (1 kHz) .... 0.004 % (2 V/TONE DEFEAT ON)
                                                                                       0.002 % (4 V/TONE DEFEAT ON)
Signal to Noise Ratio.. 96 dB/102 dB (TONE DEFEAT ON)
Dynamic Range... 98 dB
Channel Separation... 90 dB

Laser Diode Properties
   Material .... GaAlAs
   Wavelength .... 780 nm
   Emission Duration .... Continuous
   Laser Output Power... Less than 44.6 µW
*This output is the value measured at a distance of 200 mm from the objective lens
 surface on the Optical Pick-up Block.

FM tuner section
(Frequency Range/Channel Space Switchable)

Frequency Range (200 kHz Space) ....87.9 MHz ~ 107.9 MHz
               (50 kHz Space) ....87.5 MHz ~ 108.0 MHz
Usable Sensitivity (S/N = 30 dB)................................9.3 dBf (0.8 µV/75 Ω)
50 dB Quieting Sensitivity ....15.2 dBf (1.6 µV/75 Ω)
Frequency Response ....30 Hz ~ 15 kHz (±3 dB)
Signal to Noise Ratio ....73 dB
Selectivity ....100 dB
Capture Ratio ....1.5 dB
Image Response Ratio...70 dB
IF Response Ratio..120 dB
Stereo Separation ....40 dB (1 kHz)

AM tuner section
(Frequency Range/Channel Space Switchable)

Frequency Range (10 kHz Space) ....530 kHz ~ 1700 kHz
               (9 kHz Space) ....531 kHz ~ 1611 kHz
Usable Sensitivity ....28 dB (30 µV)

Audio section

Tone Action...Bass: ±10 dB (100 Hz)
                                                                                   Treble: ±10 dB (10 kHz)
Preout Level / Load..2/4 V (SWITCHABLE) RMS/ 10 kΩ

General

Operating Voltage ....14.4 V (11 ~ 16 V)
Current consumption ....0.9 A
Operating Temperature ....−10 ~ 50 °C
Installation size (W × H × D).......................................182 × 52 × 155 mm
                                                                                   (7-3/16 × 2-1/16 × 6-1/8 in.)
Weight ....1.6 kg (3.3 lb)

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