KENWOOD

CD-RECEIVER

XXV-01D

INSTRUCTION MANUAL

Kenwood Corporation













Contents

Safety precautions

Notes	Tuning Tuning Mode	
About CDs	Direct Access Tuning Station Preset Memory	
About AAC, MP3 and WMA	Auto Memory Entry Preset Tuning	
Notes on Multi-function System	Frequency Step Setting TV Tuning	
General features	9 TV channel Preset Memory Preset TV Tuning	
Power	Direct TV Tuning	
Selecting the Source Volume Attenuator	CD/Audio file/External disc control features	30
Audio Control Audio Setup Subwoofer Output TEL Mute Sound Field Control Sound Management system Equalizer Control WOW Control Bypass Control Memory mode Memory Recall mode Theft Deterrent Faceplate Faceplate Angle Adjustment Display Type Selection Graphic part/ Spectrum Analyzer Display Switching Wallpaper selecting	Playing CD & Audio file Playing External Disc Fast Forwarding and Reversing Track/File Search Disc Search/Folder Search Direct Track/File Search Direct Disc Search Track/File/Disc/Folder Repeat Scan Play Random Play Magazine Random Play Disc Random Play Folder Select Switching the Play mode Letter Seek Text/Title Scroll	
Text Selection for Display	DAB tuner control features 3	35
Text Display Switching Icon Display Switching Font Color Select G-Analyzer display Switching	About DAB Tuner control Service Preset Memory Recalling a Preset Service	

Tuner/TV control features

Program Type (PTY) Function

Program Type preset

27

Station/Disc Naming (SNPS/DNPS)

Menu system	38
Menu System Security Code Touch Sensor Tone Manual Clock Adjustment Date Adjustment Date Mode DSI (Disabled System Indicator) Selectable Illumination Dimmer Contrast Adjustment Display-reversing Setting Built-in Amp Setting G-Counter Level set G-Analyzer Reset G-Analyzer Calibration setup G-Analyzer Stop Watch Dual Zone System Setting B.M.S. (Bass Management System) B.M.S. Frequency Offset AMP Control CRSC (Clean Reception System Circuit) Auxiliary Input Display Setting & Station/Disc Naming Text Scroll Built-in Auxiliary input Setting CD Read Setting Picture downloading Voice Index ACDrive firmware version display Unique ID display Menu Added for DAB	
Basic Operations of remote control	47
Accessories/ Installation Procedure	50
Connecting Wires to Terminals	51
Installation	52
Removing the Unit	54
Troubleshooting Guide	55

Specifications

WOW, SRS and **()** symbol are trademarks of SRS Labs, Inc. WOW technology is incorporated under license from SRS Labs, Inc.

The "AAC" logo is trademark of Dolby Laboratories.

58

AWARNING

To prevent injury or fire, take the following precautions:

- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit
- Never watch the G-Analyzer Display screen when you are driving. Otherwise, a car accident may result

ACAUTION

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

- Make sure to ground the unit to a negative 12V DC power supply.
- Do not install the unit in a spot exposed to direct sunlight or excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.
- Do not place the faceplate or the faceplate case in areas exposed to direct sunlight, excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.
- · To prevent deterioration, do not touch the terminals of the unit or faceplate with your
- Do not subject the faceplate to excessive shock, as it is a piece of precision equipment.
- When replacing a fuse, only use a new fuse with the prescribed rating. Using a fuse with the wrong rating may cause your unit to malfunction.
- Do not apply excessive force to the open faceplate or place objects on it. Doing so will cause damage or breakdown.
- Do not use your own screws. Use only the screws provided. If you use the wrong screws, you could damage the unit.

Attach the panel while you are on the vehicle

The panel lock arm appears when the panel is removed. Therefore, the panel must be attached while the electrical system of the car is operating.

Do Not Load 8 cm (3 in.) CDs in the CD slot

If you try to load a 8 cm (3 in.) CD with its adapter into the unit, the adapter might separate from the CD and damage the unit.

About CD players/disc changers connected to this unit

KENWOOD disc changers/ CD players released in 1998 or later can be connected to this unit. Refer to the catalog or consult your Kenwood dealer for connectable models of disc changers/ CD players.

Note that any KENWOOD disc changers/CD players released in 1997 or earlier and disc changers made by other makers cannot be connected to this unit. Connecting unsupported disc changers/CD players to this unit may result in damage.

Set the "O-N" Switch to the "N" position for the applicable KENWOOD disc changers/ CD players. The functions you can use and the information that can be displayed may differ depending on the models being connected.



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

Lens Fogging

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

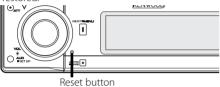
The marking of products using lasers (Except for some areas)

CLASS 1 LASER PRODUCT

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.

Notes

- · If you experience problems during installation, consult your Kenwood dealer.
- If the unit fails to operate properly, press the Reset button. The unit returns to factory settings when the Reset button is pressed.
- Press the reset button if the disc auto changer fails to operate correctly. Normal operation should be restored.



- The characters which can be displayed by ISO 8859-1.
- · There are places in this manual where lit indicators are described; however, the only time an indicator will light is in the following settings. When Indicator is selected as mentioned in <Text Display Switching> (page 21)
- The illustrations of the display and the panel appearing in this manual are examples used to explain more clearly how the controls are used. Therefore, what appears on the display in the illustrations may differ from what appears on the display on the actual equipment, and some of the illustrations on the display may represent something impossible in actual operation.

About ODD (Offset Dual Differential) D/A System

You can enjoy high quality sound play when playing music CDs with the ODD D/A System enabled. ODD D/A System has two built-in D/A converters and each D/A converter processes D/A conversion seperately on the front left and right channel. Since digital processing is performed for each channel seperately, noise occurance from interference between channels is completely suppressed and the seperation of audio sound output from two channels is distinguished and clear. Also, the ODD/A System produces the data by which the sound data is offset on the minus side and converts the two signals (original and offset data) to the analog signal, which has less noise and distortion, by the synthetic process.

However, ODD D/A System will be disabled if the following settings are selected.

- When "2ZONE" of <Audio Setup> (page 10) is "ON"
- When <Bypass Control> (page 16) is "Bypass".

Cleaning the Faceplate Terminals

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

About "Media Manager" of PC application

- "Media Manager" is recorded in the CD-ROM attached to this unit
- Refer to the attached installation manual for the installation method of "Media Manager".
- · Refer to the user's manual recorded in the installation CD-ROM and Help of "Media Manager" for the operation method of "Media Manager".
- The unit can play CD (hereafter called "ACDrive disc") created by "Media Manager".
- Refer to the following site for the updated information of "Media Manager". http://www.kenwood.mediamanager.jp
- Contact Kenwood for the function and operation of the "Media Manager".
- "Media Manager" is a product of PhatNoise.

Cleaning the Unit

If the faceplate of this unit is stained, wipe it with a dry soft cloth such as a silicon cloth.

If the faceplate is stained badly, wipe the stain off with a cloth moistened with neutral cleaner, then wipe neutral detergent off.



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

Handling CDs

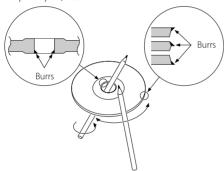
• Don't touch the recording surface of the CD.



- CD-R and CD-RW are easier to damage than a normal music CD. Use a CD-R or a CD-RW after reading the caution items on the package etc.
- Do not stick tape etc. on the CD, or use a CD with tape stuck on it.

When using a new CD

If the CD center hole or outside rim has burrs use the CD only after removing the burrs with a ballpoint pen, etc.

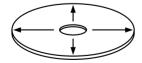


CD accessories

Don't use disc type accessories.

CD cleaning

Clean from the center of the disc and move outward.



Removing CDs

When removing CDs from this unit pull them out horizontally.

CDs that can't be used

CDs that aren't round can't be used.





- CDs with coloring on the recording surface or that are dirty can't be used.
- This unit can only play the CDs with





It may not correctly play discs which do not have the mark.

• A CD-R or CD-RW that hasn't been finalized can't be played. (For the finalization process refer to your CD-R/CD-RW writing software, and your CD-R/CD-RW recorder instruction manual.)

CD storage

- Don't place them in direct sunlight (On the seat or dashboard etc.) and where the temperature is hiah.
- · Store CDs in their cases.

About AAC, MP3 and WMA

The playable AAC/MP3/WMA file (hereafter called Audio file) and the media format has the following limitation. The Audio file, which is not comforming to the specification, may not play normally, or the file and folder names may not display correctly.



- Attach the correct extension for the Audio file (AAC: ".M4A", MP3: ".MP3", WMA: ".WMA")
- · Do not attach the extensions to files other than the Audio file. If the extension is attached, the file, which is not the Audio file, will play and outputs a loud noise, causing damage to the speaker.
- The files with copy protection cannot be played.

Plavable AAC file

• ".m4a" file encoded by AAC-LC format. Refer to http://www.kenwood.mediamanager.ip for the details.

Playable MP3 file

- MPEG 1/2 Audio Laver 3 file
- Transfer bit rate: 8-320 kbps
- Sampling frequency : 16, 22.05, 24, 32, 44.1, 48 kHz

Plavable WMA file

- The file in accordance with Windows Media Audio (Except for the file for Windows Media Player 9 or after which applies the new functions)
- Transfer bit rate: 48-192 kbps
- · Sampling frequency: 32, 44.1, 48 kHz

Playable media

· CD-ROM, CD-R, CD-RW



- · CD-RW discs which are quick formatted by the writing software cannot be used.
- · When recording to the maximum media capacity at once, the writing software is set to "Disc at once".

Playable disc format

- ISO 9660 Level 1/2
- Joliet
- Romeo
- · Long file name.

The maximum number of characters for display

File/Folder name: 128 characters MP3 ID3 Tag/ WMA Contents property : 30 characters

AAC song information: 60 characters



- File/Folder name is the number of the characters including the extensions
- AAC ID3 Tag cannot be displayed.

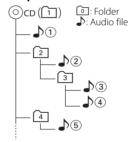
Limitation of structure for the file and the folder

- · Maximum number of directory levels: 8
- Maximum number of folders: 100
- Maximum number of files per folder: 4096

Playing order of the Audio file

The Audio file plays in the order which is written by writing software. You may be able to set the playing order by writing the play sequence numbers such as "01" to "99" at the beginning of the file name.

Example



Playing order

Playing order after 🗗 🛈 play. **→ 1**(2), **1**(3), **1**(4), **1**(5)...

· File search

Forward file search during ♪③ play. Push the Control knob toward $[\blacktriangleright \blacktriangleright I] \Rightarrow \triangle 4$

Folder search

Forward folder search during ♪② play. Push the Control knob toward $[FM] \Rightarrow [3]$, [4]...

Folder select

When the selection is set to directory 4, and you want to skip to the folder 2 at the same level. Push the Control knob towards [I◀◀] ➡ [2] When the selection is set to directory 37, moves the level up by folder select. Push the Control knob towards [FM] → 2

Notes on Multi-function System

What is the Multi-function System?

Multi-function System shows the Multi-function display, allowing you to select various functions and settings.

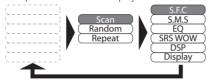
Functions available for the current source are displayed.

Operational

1 Press the [NEXT] button to Show the Multifunction display

Each time you press the [NEXT] button, the Multi-function display is switched among the Source Function display, System Function display, and blank display.

Example: Multi-function display for CD source





- The operation ends automatically if you do not operate within 10 seconds:
- 2 Turn the [VOL] knob to highlight the item you want to select.
- 3 Press the [VOL] knob to select the highlighted item.



• In the body text, steps 2 and 3 are described as follows:

Turn the [VOL] knob to select the item you want to select.

Press the [VOL] knob.

• During Multi-function System mode, the [VOL] knob or Control knob flashes to indicate that it is available for multi-function setting.

Returning to the Previous Display

Select "Return" on the Multi-function display, or press the [NEXT] button.

Real operational example of the Multifunction System

Example: Turning ON/OFF the Random Play during CD play.

1. Show the Multi-function display of the Random

Press the [NEXT] button.



2. Select the "Random" item. Rotate the [VOL] knob.





3. Turn ON/OFF the Random Play. Press the [VOL] knob. Each time you press the [VOL] knob under the "Random" function display the Random Play is turned ON/OFF

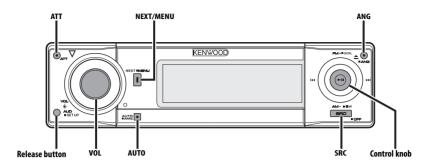






 In the body text, steps 2 and 3 are described as follows: Turn the [VOL] knob to select "Random". Press the [VOL] knob.

General features





Power

Turning ON the Power

Press the [SRC] button.



• When the power is ON, the <Security Code> (page 38) is displayed as "CODE ON" or "CODE OFF".

Turning OFF the Power

Press the [SRC] button for at least 1 second.

Selecting the Source

Press the [SRC] button.

Source required	Display
DAB (Optional accessory)	"DAB"
Tuner	"TUNER"
CD	"Compact Disc"
TV (Optional accessory)	"TV"
External disc (Optional accessory)	"CD Changer"

Auxiliary input	"AUX"	
Auxiliary input (Optional accessory)	"AUX EXT"	
Standby (Illumination only mode)	"STANDBY"	

Volume

Increasing Volume

Turn the [VOL] knob clockwise.

Decreasing Volume

Turn the [VOL] knob counterclockwise.

Attenuator

Turning the volume down quickly.

Press the [ATT] button.

Fach time you press the button is pressed, the Attenuator turns ON and OFF

When the Attenuator is ON, the "ATT" indicator blinks.

Audio Control

- 1 Select the source to adjust Press the [SRC] button.
- 2 Enter Audio Control mode Press the [VOL] knob.

3 Select the Audio item to adjust Press the [VOL] knob.

Each time you press the knob, the item to be adjusted alternates between the items shown in the table below

4 Adjust the Audio item Turn the [VOL] knob.

Adjustment Item	Display	Range
Rear Volume *1	"REAR VOLUM	E" 0 — 35
Subwoofer level*2*3	"SW LEVEL"	-15 — +15
Balance	"BALANCE"	Left 15 — Right 15
Fader*3	"FADER"	Rear 15 — Front 15
Exit Audio Control mod	le	



- *1 You can control this item when "2ZONE" of <Audio Setup> (page 10) is set to "ON".
- *2 You can control this item when Speaker Select Subwoofer of <Sound Management system> (page 13) is set to any item other than "None".
- *2 You can control this item when <Subwoofer Output> (page 11) is set to "SUBWOOFER ON".
- *3 You can control this item when "2ZONE" of <Audio Setup> (page 10) is set to "OFF".

5 Exit Audio Control mode Press the [AUTO] or [NEXT] button.

Audio Setup

Setting the Sound system, such as Volume offset and Dual Zone.

- 1 Select the source to adjust Press the [SRC] button.
- 2 Enter Audio Setup mode Press the [VOL] knob for at least 1 second.

3 Select the Audio Setup item to adjust Press the [VOL] knob.

Each time you press the knob, the item to be adjusted alternates between the items shown in the table below.

4 Setup the Audio item Turn the [VOL] knob.

Adjustment Item	Display	Range
Volume offset	"VOLUME OFFSET"	-8 O
Dual Zone System	"2ZONE"	ON/OFF



- Volume offset: Sets each source's volume as a difference from the basic volume.
- · Dual Zone System

Main source and sub source (Auxiliary input) output Front channel and Rear channel separately.

- Set up the channel of sub source by < Dual Zone System Setting> (page 43).
- Select Main source by [SRC] button.
- Adjust the volume of Front channel by [VOL] knob.
- Adjust the volume of Rear channel by <Audio Control> (page 10).
- The Audio Control has no effect on sub source.
- You can use the Dual Zone System with the Auxiliary input sources listed below.
 - Internal auxiliary input
- You can use the Dual Zone System only when you have set the rear speaker to any mode other than "None" in the <Sound Management system> (page
- · When the "2ZONE" is ON, ignore the following setups.
 - < Sound Field Control > (page 12)
 - < Sound Management system> (page 13)
 - < Equalizer Control > (page 14)
 - < WOW Control> (page 15)
 - < Bypass Control > (page 16)
- · ODD D/A System is not effective when the "2ZONE" is

5 Exit Audio Setup mode

Press the [VOL] knob for at least 1 second.

Subwoofer Output

Turning the Subwoofer output ON or OFF.

Hold down on [AM] of the Control knob for at least 1 second.

Each time you press the button, Subwoofer output switches ON and OFF.

When it is ON, "SUBWOOFER ON" is displayed.



- · You can control this function when "2ZONE" of <Audio Setup> (page 10) is set to "OFF".
- · You can control this item when Speaker Select Subwoofer of <Sound Management system> (page 13) is set to any item other than "None".

TEL Mute

The audio system automatically mutes when a call comes in.

When a call comes in

"Call" is displayed.

The audio system pauses.

Listening to the audio during a call Press the [SRC] button.

The "Call" display disappears and the audio system comes back ON.

When the call ends

Hang up the phone.

The "Call" display disappears and the audio system comes back ON.

Sound Field Control

- 1 Select the source to adjust Press the [SRC] button.
- 2 Show the Multi-function display Press the [NEXT] button repeatedly until "S.F.C" appears.

Refer to <Notes on Multi-function System> (page

3 Enter Sound Field Control mode Turn the [VOL] knob to select "S.F.C". Press the [VOL] knob.



- · To get the best sound, first set the Cabin Setting and Speaker Select Front/Rear parameters using the <Sound Management system> (page 13).
- When "2ZONE" of <Audio Setup> (page 10) is ON, you cannot select "S.E.C".

4 Select the Sound Field Control item to adiust

- 1 Turn the [VOL] knob to select the item you want to select. Press the [VOL] knob.
- 2 Press the Control knob.
- 3 Push the Control knob towards [FM] or [AM].

1	2	3	Sound Field control item
"X'Over"	"HPF Front"	"fc"	Front High Pass Filter Frequency
		"SLP"	Front High Pass Filter Slope
	"HPF Rear"*1	"fc"	Rear High Pass Filter Frequency
		"SLP"	Rear High Pass Filter Slope
	"LPF	"fc"	Subwoofer Low Pass Filter Frequency
	SubWoofer"*2	"SLP"	Subwoofer Low Pass Filter Slope
		"Phase"	Subwoofer Low Pass Filter Phase
"DTA"	"DTA Front"		DTA Front
	"DTA Rear"*1		DTA Rear
	"DTA		DTA Subwoofer
	SubWoofer"*2		
"POSI"			Position Setting
"Preset"			Preset value storage/recalling



- · "Preset": You can store an adjusted sound control value by selecting "Memory". Refer to <Memory mode> (page 16). Also, you can recall it by selecting "Recall". Refer to <Memory Recall mode> (page 16).
- · You can adjust "SubWoofer" when <Subwoofer Output> (page 11) is set to "SUBWOOFER ON".

- X'Over (Crossover Network Setup) You can manually set a crossover frequency for the speakers.
- · DTA (Digital Time Alignment) Manually set the sound output timing of each
- *1 You can control this item when Speaker Select Rear of <Sound Management system> (page 13) is set to any item other than "None".
- *2 You can control this item when Speaker Select Subwoofer of <Sound Management system> (page 13) is set to any item other than "None".

5 Adjust the Sound Field Control item Push the Control knob towards [I◀◀] or [**▶**▶|].

Each time you push the knob, the setting alternates between the settings shown in the table below.

Sound Field Control Item	Range
Front High Pass Filter Frequency/ Rear High Pass Filter Frequency	Through/30 — 100/120/150/ 180/220/250 (Hz)
Front High Pass Filter Slope/ Rear High Pass Filter Slope/ Subwoofer Low Pass Filter Slope	-12/-18/-24 dB/Oct
Subwoofer Low Pass Filter Frequency	30 — 100/120/150/180/220/ 250 (Hz)/Through
Subwoofer Low Pass Filter Phase	Normal/ Reverse
DTA Front/DTA Rear DTA Subwoofer	0 — 610 (cm)
Position Setting	Front-Left/ Front-Right/ Front/ ALL



- When the "2ZONE" of <Audio Setup> (page 10) is "ON", the following setups are ignored.
 - "X'Over"
 - "DTA"
 - "POSI"
 - "Preset"

6 Exit Sound Field Control mode Turn the [VOL] knob to select "Return". Press the [VOL] knob.

Sound Management system

1 Select the source to adjust Press the [SRC] button.

2 Show the Multi-function display Press the [NEXT] button repeatedly until "S.M.S" appears.

Refer to <Notes on Multi-function System> (page 8).

3 Enter Sound Management mode Turn the [VOL] knob to select "S.M.S". Press the [VOL] knob.



• When "2ZONE" of <Audio Setup> (page 10) is ON, you cannot select "S.M.S".

4 Select the Sound Management item to adiust

Turn the [VOL] knob to select the item you want to select.

Press the [VOL] knob.

Multi-function item	Sound Management Item
"Cabin"	Cabin Setting
"Front"	Speaker Select Front
"Rear"	Speaker Select Rear
"Sub-W"	Speaker Select Subwoofer
"Preset"	Preset value storage/recalling



• "Preset": You can store an adjusted sound control value by selecting "Memory". Refer to <Memory mode> (page 16). Also, you can recall it by selecting "Recall". Refer to <Memory Recall mode> (page 16).

5 Adjust the Sound Management item Push the Control knob towards [I◀◀] or [**▶**▶|].

Each time you push the knob, the setting alternates between the settings shown in the table below

Sound Managemnt Item	Range
Cabin Setting	OFF/ Compact/ Full Size Car/ Wagon1/ Wagon2/ Minivan1/ Minivan2/ SUV/ Minivan (Long)
Speaker Select Front	16cm/ 17cm/ 18cm/ 4x6/ 5x7/ 6x8/ 6x9/ 7x10/ 0.E.M./ 10cm/ 13cm
Speaker Select Rear	16cm/ 17cm/ 18cm/ 4x6/ 5x7/ 6x8/ 6x9/ 7x10/ None/ 0.E.M./ 10cm/ 13cm
Speaker Select Subwoofer	25cm/ 30cm/ 38cm over/ None/ 16cm/ 20cm

6 Exit Sound Managemnt mode Turn the [VOL] knob to select "Return". Press the [VOL] knob.

Equalizer Control

- 1 Select the source to adjust Press the [SRC] button.
- 2 Show the Multi-function display Press the [NEXT] button repeatedly until "EQ"

Refer to <Notes on Multi-function System> (page 8).

3 Enter Equalizer Control mode Turn the [VOL] knob to select "EO". Press the [VOL] knob.



- When "2ZONE" of <Audio Setup> (page 10) is ON, you cannot select "EQ".
- 4 Select the Equalizer Control item to adjust Turn the [VOL] knob to select the item you want to select.

Press the [VOL] knob.

Multi-function item	nction item Equalizer Control Item		
"SystemQ"	System Q Setting		
"Front"	Equalizer Front Setting		
"Rear"*	Equalizer Rear Setting		
"Preset"	Preset value storage/recalling		



- 'Preset": You can store an adjusted sound control value by selecting "Memory". Refer to <Memory mode> (page 16). Also, you can recall it by selecting "Recall". Refer to <Memory Recall mode> (page 16).
- * You can control this item when Speaker Select Rear of <Sound Management system> (page 13) is set to any item other than "None".
- 5 Adjust the Equalizer control item

System Q Setting (Sound Type) Push the Control knob towards [I◀◀] or [**▶**▶|].

Each time you push the knob, the setting alternates between the settings shown in the table below.

Sound setting	Display	
User memory	"User"	
Natural	"Natural"	
Rock	"Rock"	
Pops	"Pops"	
Easy	"Easy"	
Top 40	"Top40"	
Jazz	"Jazz"	



- · User memory: The values set on the <Equalizer Front Setting/ Equalizer Rear Setting>.
- · Change each setting value with the <Sound Management system> (page 13). First, select the speaker type with the Speaker setting.

Equalizer Front Setting/ Equalizer Rear Setting

1 Select a frequency band you wish to adjust Press the Control knob.

Each time you press the button is pressed, the band alternates between "Band 1" and "Band 4".

2 Select the items to adjust for Equalizer.

Press the [FM] or [AM] button.

Each time you press the button is pressed, the item to be adjusted alternates between the items shown in the table below.

1	2	Equalizer Control Item
"Band1"/	"FREQ"	Equalizer Frequency
"Band2"/ "Band3"/	"Level"	Equalizer Level
"Band4"	"Q Factor"	Equalizer Quality

3 Adjust the Equalizer.

Push the Control knob towards [I◀◀] or [**▶▶**].

Each time you push the knob, the setting alternates between the settings shown in the table below.

Equarizer adjustment item	Range
Equalizer Front Frequency/ Equalizer Rear Frequency	Refer to the followings.
Equalizer Front Level/ Equalizer Rear Level	-9 +9
Equalizer Front Quality/ Equalizer Rear Quality	0.25/ 0.50/ 1.00/ 2.00



The frequency which can be selected by each Frequency band is shown below.

Band	Frequency
Band1	60/80/100/120/160/200 (Hz)
Band2	250/ 315/ 400/ 500/ 630/ 800/ 1k (Hz)
Band3	1.25/ 1.6/ 2/ 2.5/ 3.15/ 4 (kHz)
Band4	5/ 6.3/ 8/ 10/ 12.5/ 16 (kHz)



· To get the best sound, first set the Cabin Setting and Speaker Select Front/Rear parameters using the <Sound Management system> (page 13).

6 Exit Equalizer Control mode Turn the [VOL] knob to select "Return". Press the [VOL] knob.

WOW Control

- 1 Select the source to adjust Press the [SRC] button.
- 2 Show the Multi-function display Press the [NEXT] button repeatedly until "SRS WOW" appears.

Refer to <Notes on Multi-function System> (page 8).

3 Enter WOW Control mode Turn the [VOL] knob to select "SRS WOW". Press the [VOL] knob.



· When "2ZONE" of <Audio Setup> (page 10) is ON, you cannot select "SRS WOW".

4 Select the WOW Control item to adjust Turn the [VOL] knob to select the item you want to select. Press the [VOL] knob.

Multi-function item	WOW Control Item	
"Effect"	Effect	
"FOCUS"	FOCUS	
"TB-F"	TruBass Front	
"TB-R"*	TruBass Rear	
"SRS 3D"	SRS 3D	



* You can control this item when Speaker Select Rear of <Sound Management system> (page 13) is set to any item other than "None".

5 Adjust the WOW control item Push the Control knob towards [I◄◄] or [**▶**▶|].

Each time you push the knob, the setting alternates between the settings shown in the table below

WOW Control Item	Range
Effect	Middle/High/User/Through/Low
FOCUS	0FF/1 — 9
TruBass Front	0FF/1 — 4
TruBass Rear	0FF/1 — 4
SRS 3D	0FF/1 — 4



· Effect: TruBass, FOCUS and SRS 3D are all set to values shown in the table below.

Effect	TruBass	FOCUS	SRS 3D
High	4	8	4
Middle	3	6	2
Low	2	3	1

- FOCUS: Adjusts the vertical position of the front speaker and sound image by virtual adjustment.
- TruBass: Assists the playback for the super bass sound.
- · SRS 3D: Makes a natural 3D sound field.
- You cannot set SRS 3D in tuner source.

6 Exit WOW Control mode Turn the [VOL] knob to select "Return". Press the [VOL] knob.



· To get the best sound, first set the Speaker select.

Bypass Control

Temorarily bypassing DSP (Digital Signal Processor) System.

- 1 Select the source to adjust Press the [SRC] button.
- 2 Show the Multi-function display Press the [NEXT] button repeatedly until "DSP" appears.

Refer to <Notes on Multi-function System> (page

3 Enter Bypass Control mode Turn the [VOL] knob to select "DSP". Press the [VOL] knob.



• When "2ZONE" of <Audio Setup> (page 10) is ON, you cannot select "DSP"

4 Set up Bypass

Press the [VOL] knob.

"Bypass": There is no effect by DSP. "Through": There is an effect by DSP.



- When the mode is set to "Bypass", DSP System cannot
- When the mode is set to "Bypass", ODD D/A System is not effective.

Memory mode

Storing the values of Sound Control in memory.

1 Setup Sound Control

Refer to the following operations to setup the Sound Control.

- < Audio Control> (page 10)
- < Sound Field Control > (page 12)
- < Sound Management system> (page 13)
- < Equalizer Control > (page 14)

2 Select the Preset Memory item

Turn the [VOL] knob to select "Preset". Press the [VOL] knob.

3 Enter Memory mode

Turn the [VOL] knob to select "Memory". Press the [VOL] knob.

4 Put in the memory

Turn the [VOL] knob to select "Memory1" or "Memorv2".

Press the [VOL] knob for at least 2 seconds.

The "MFMORY" display blinks 1 time.

5 Exit Memory mode

Turn the [VOL] knob to select "Return". Press the [VOL] knob.



- "Memory1": When you press the Reset, all the sources will be the setting value which is registered.
- · The following items cannot be registered. Rear Volume, Balance, Fader, Position Setting, System Q Setting

Memory Recall mode

Recall the value in the memory by the memory mode.

- 1 Select the source to adjust Press the [SRC] button.
- 2 Show the Multi-function display Press the [NEXT] button repeatedly until "S.F.C" appears.

Refer to <Notes on Multi-function System> (page

3 Select the key function which contains the item vou wish to recall

Turn the [VOL] knob to select "S.F.C"/ "S.M.S"/ "EO".

Press the [VOL] knob.

4 Select the Preset Memory item

Turn the [VOL] knob to select "Preset". Press the [VOL] knob.

5 Enter recall mode

Turn the [VOL] knob to select "Recall". Press the [VOL] knob.

6 Select the recall item

Turn the [VOL] knob to select "Recall1" or "Recall2".

Press the [VOL] knob for at least 2 seconds.

The "RECALL" display blinks 1 time.

"Recall1": Recall the value put in "Memory1" by <Memory mode> (page 16).

"Recall2": Recall the value put in "Memory2" by <Memory mode> (page 16).

7 Exit Memory Recall mode

Turn the [VOL] knob to select "Return". Press the [VOL] knob.

Theft Deterrent Faceplate

The faceplate of the unit can be detached and taken with you, helping to deter theft.

Removing the Faceplate

Press the Release button.

The faceplate is unlocked, allowing you to detach it

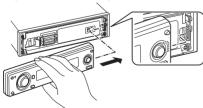




- The faceplate is a precision piece of equipment and can be damaged by shocks or jolts. For that reason, keep the faceplate in its special storage case while detached.
- Do not expose the faceplate or its storage case to direct sunlight or excessive heat or humidity. Also avoid places with too much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

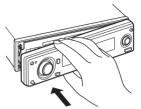
Reattaching the Faceplate

1 Align the shaft on the unit with the depression on the faceplate.



2 Push the faceplate in until it clicks.

The faceplate is locked in place, allowing you to use the unit.



Faceplate Angle Adjustment

Press the [ANG] button for at least 1 second.



• Do not apply excessive force to the faceplate. It can cause damage.

Display Type Selection

Changing the display mode.

1 Show the Multi-function display Press the [NEXT] button repeatedly until "Display" appears.

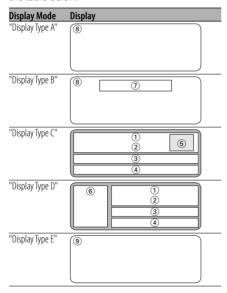
Refer to <Notes on Multi-function System> (page

2 Enter display control mode Turn the [VOL] knob to select "Display". Press the [VOL] knob.

3 Select the display mode Turn the [VOL] knob to select "Mode". Press the [VOL] knob.

4 Select the display Type Push the Control knob towards [I◄◀] or [**▶**▶|].

Each time you push the knob, the display mode alternates between the display modes shown in the table below.



- 1) 1st text display part
- 2) 2nd text display part
- (3) 3rd text display part
- 4 4th text display part
- (5) Indicator display part
- (6) Icon display part
- (7) Text display part

- (8) Graphic display part
- (9) G-Analyzer display part

5 Exit display control mode

Turn the [VOL] knob to select "Return". Press the [VOL] knob.



· Change the information by the Display Type. Refer to the page on the following table for the methods to alternate by the Display Type.

Display Type	Α	В	C	D	E
1st text ①	_	_	21	21	_
2nd text ②	_	_	21	21	_
3rd text ③	_	_	21	21	_
4th text 4	_	_	21	21	_
Icon ⑥	_	_	_	24	_
Text ①	_	20	_	_	_
Graphic ®	18	18	_	_	_
G-Analyzer (9)	_	_	_	_	25

Display Type A/ Display Type B

Graphic part/ Spectrum Analyzer Display Switching

Changing the graphic Display/ Spectrum analyzer display.

1 Show the Multi-function display Press the [NEXT] button repeatedly until "Display" appears.

Refer to <Notes on Multi-function System> (page

2 Enter display control mode Turn the [VOL] knob to select "Display". Press the [VOL] knob.

3 Select the display mode Turn the [VOL] knob to select "Mode". Press the [VOL] knob.

4 Select the display Type Push the Control knob towards [◄◄] or [**▶**▶|].

Select the "Display Type A"/ "Display Type B" display.

5 Select the graphic/spectrum analyzer display

Turn the [VOL] knob to select "SA/GRPH". Press the [VOL] knob.

6 Select the graphic/spectrum analyzer display part display

Push the Control knob towards [I◄◀] or $[\blacktriangleright \blacktriangleright]$.

Each time you press the button, the graphic display/ spectrum analyzer display alternates between the displays shown in the table below.

Graphic display/ Spectrum Analyzer display

Movie 1

Movie 2

Movie 3 (Movie 1 and Movie 2)

Spectrum analyzer 1

Spectrum analyzer 8

Wallpaper & *Downloaded Wallpaper

7 Exit display control mode Turn the [VOL] knob to select "Return". Press the [VOL] knob.



- * For Download Wall Paper, refer to <Picture downloading> (page 45).
- During standby, Spectrum analyzer cannot be selected.

Display Type A/ Display Type B

Wallpaper selecting

Selecting a wallpaper to display when Display Type is set to "Display Type A"/ "Display Type B".

1 Select the wallpaper display

Refer to <Graphic part/ Spectrum Analyzer Display Switching> (page 18).

2 Select the wallpaper

Display the wallpapers one after another

Press the Control knob.

Each time you press the knob, the Wallpaper scan is turned ON and OFF.

When scan is ON, "SCAN" is displayed.

When scan is ON, each wallpaper is displayed every several seconds.

Select wallpaper manually

1 Turn the wallpaper scan OFF.

Press the Control knob.

Each time you press the knob, the Wallpaper scan is turned ON and OFF.

2 Select the wallpaper.

Push the Control knob towards [FM] or [AM].

Each time you push the knob, the Wallpaper changes.

3 Exit Display Control mode

Turn the [VOL] knob to select "Return". Press the [VOL] knob.

Display Type B

Text Selection for Display

Selecting the text display.

1 Show the Multi-function display Press the [NEXT] button repeatedly until "Display" appears.

Refer to <Notes on Multi-function System> (page

2 Enter display control mode Turn the [VOL] knob to select "Display". Press the [VOL] knob.

3 Select the display mode Turn the [VOL] knob to select "Mode". Press the [VOL] knob.

4 Select the display Type Push the Control knob towards [I◄◀] or

5 Enter text select mode Turn the [VOL] knob to select "Text". Press the [VOL] knob.

Select the "Display Type B" display.

6 Select the text Push the Control knob towards [I◀◀] or [**▶**▶|].

In Tuner source

Information	Display
Station name	"BAND+ch+SNPS"*
Frequency	"BAND+ch+FREQ"
Clock	"Clock"
Date	"Date"

In CD & External disc source

Information	Display	
Disc title	"Disc Title"*	
Track title	"Track Title"*	
Track number & Play time	"P-Time"	
Disc Name	"DNPS"*1	
Clock	"Clock"	
Date	"Date"	

In Audio file source

Information	Display	
Song title & Artist name	"Title/Artist"*	
Album name & Artist name	"Album/Artist"*	

Folder name	"Folder Name"
File name	"File Name"
File number & Play time	"P-Time"
Clock	"Clock"
Date	"Date"

In DAR source

Information	Display
Service label	"Service Label"*
Dynamic label	"Dynamic Label"*2
PTY label	"PTY Label"*2
Component label	"Component Label"*
Audio quality	"Audio Quality"*2
Ensemble label	"Ensemble Label"*
Region label	"Region Label"*
Received Frequency	"Frequency"
Clock	"Clock"
Date	"Date"

In Auxiliary input source

Information	Display
Auxiliary input name	"AUX Name"/ "AUX EXT"
Clock	"Clock"
Date	"Date"

In Standby mode

Information	Display
Source name	"Standby"
Clock	"Clock"
Date	"Date"

7 Exit Display Control mode Turn the [VOL] knob to select "Return". Press the [VOL] knob.



- · Auxiliary input name is displayed for the Auxiliary input source.
- * If the contents of the information cannot be displayed, Play time or Frequency is displayed.
- *1 If the contents of the information cannot be displayed. "No Name" is displayed.
- · *2 If the contents of the information cannot be displayed, "No Text"/"None"/"Obscure Audio" is displayed.
- When LX-AMP is connected, the item setup by the Display mode of LX-AMP is displayed.
- · Track number at Audio file displays the last 3 digits when the track number exceeds 1000 songs.

Display Type C/ Display Type D

Text Display Switching

Changing the text display.

1 Show the Multi-function display Press the [NEXT] button repeatedly until "Display" appears.

Refer to <Notes on Multi-function System> (page 8).

2 Enter display control mode Turn the [VOL] knob to select "Display". Press the [VOL] knob.

3 Select the display mode Turn the [VOL] knob to select "Mode". Press the [VOL] knob.

4 Select the display Type Push the Control knob towards [I◄◀] or

Select the "Display Type C"/"Display Type D" display.

5 Enter text select mode Turn the [VOL] knob to select "Text". Press the [VOL] knob.

6 Select the text display part

Select the display mode Press the Control knob.

Each time you push the knob, the display mode alternates between the display modes shown in the table below

Display Type C	Display Typ	e D
(a) (1) (2) (3) (4)	6	(1) (2) (3) (4)
(b) (1) (2) (3) (4)	6	(1) (2) (3) (4)
© (1)	(a)	1

- (a) Source display and 2-item display
- (b) 4-item display
- © 1-item 4-row display
- 1) 1st text display part
- 2 2nd text display part

- (3) 3rd text display part
- (4) 4th text display part
- (5) Indicator display part
- (6) Icon display part

Select the row

Push the Control knob towards [FM] or [AM].

The cursor (>) moves to the selected text display part.

Select the text

Push the Control knob towards [I◀◀] or [**▶**▶|].

Refer to the table described later for setting items.

7 Exit Display Control mode Turn the [VOL] knob to select "Return".

Press the [VOL] knob.



- Same information cannot be displayed in 1st 4th text display part. However, the blank display is able to have multiple selections.
- · * If the contents of the information cannot be displayed, either of the following is displayed:
 - In the 1st text display part(1), the play time or frequency is displayed.
 - In other modes, blank is displayed.
- *1 If the contents of the information cannot be displayed, "No Name" is displayed.
- *2 If the contents of the information cannot be displayed, "No Text"/"None"/"Obscure Audio" is displayed.
- · When LX-AMP is connected, the item setup by the Display mode of LX-AMP is displayed. (Other than 1item 4-row display(c))

Texts displayed on Display Type C/D display in 2-item display a mode

In Tuner source

Information (①②)	
Source name	
Frequency	

Information (34)	Display	
Station name	"SNPS"* ¹	
Spectrum Analyzer & Clock	"Speana/Clock"	
Date	"Date"	
No display	"Blank"	

In CD & External disc source

Information (1)(2)	
Source name	
Track number & Play time	

Information (34)	Display	
Disc title	"Disc Title"*	
Track title	"Track Title"*	
Disc name	"DNPS"*1	
Spectrum Analyzer & Clock	"Speana/Clock"	
Date	"Date"	
No display	"Blank"	

In Audio file source

Information (①②)	
Source name	
Folder number File number & Play time	

Information (34)	Display	
Song title & Artist name	"Title/Artist"*	
Album name & Artist name	"Album/Artist"*	
Folder name	"Folder Name"	
File name	"File Name"	
Spectrum Analyzer & Clock	"Speana/Clock"	
Date	"Date"	
No display	"Blank"	

In Standby

Information (12)	
Source name	

Information (34)	Display	
Clock	"Clock"	
Date	"Date"	
No display	"Blank"	

In Auxiliary input source Information (1)(2)

Source name	
Information (34)	Display
Spectrum Analyzer & Clock	"Speana/Clock"
Date	"Date"
No display	"Blank"

In DAB source

Information (12)	
Source name	
Frequency	

Information (34)	Display
Service label	"Service Label"*
Dynamic label	"Dynamic Label"*2
PTY label	"PTY Label"*2
Component label	"Component Label"*
Audio quality	"Audio Quality"*2
Ensemble label	"Ensemble Label"*
Region label	"Region Label"*
Spectrum Analyzer & Clock	"Speana/Clock"
Date	"Date"
No display	"Blank"

Texts displayed on Display Type C/D display in 4-item display(b) mode

In Tuner source

Information	Display	Condition
Station name	"BAND+ch+SNPS"*	1
Station name	"SNPS"*1	234
Frequency	"BAND+ch+FREQ"	1
Indicator	"Indicator"	1234
Spectrum Analyzer & Clock	"Speana/Clock"	1234
Date	"Date"	1234
No display	"Blank"	234

In CD & External disc source

Information	Display	Condition
Disc title	"Disc Title"*	1234
Track title	"Track Title"*	1234
Track number & Play time	"P-Time"	1
Disc name	"DNPS"*1	1234
Indicator	"Indicator"	1234
Spectrum Analyzer & Clock	"Speana/Clock"	1234
Date	"Date"	1234
No display	"Blank"	234

In Audio file source

Information	Display	Condition
Song title & Artist name	"Title/Artist"*	1234
Album name & Artist name	"Album/Artist"*	1234
Folder name	"Folder Name"	1234
File name	"File Name"	1234
File number & Play time	"P-Time"	1
Indicator	"Indicator"	1234
Spectrum Analyzer & Clock	"Speana/Clock"	1234
Date	"Date"	1234
No display	"Blank"	234

In Standby

Information	Display	Condition
Standby	"Standby"	1
Indicator	"Indicator"	1234
Clock	"Clock"	1234
Date	"Date"	1234
No display	"Blank"	234

In Auxiliary input source

Information	Display	Condition
Auxiliary input name	"AUX Name"/"AUX EXT"	1
Indicator	"Indicator"	1234
Spectrum Analyzer & Clock	"Speana/Clock"	1234
Date	"Date"	1234
No display	"Blank"	234

In DAB source

Information	Display	Condition
Service label	"Service Label"*	1234
Dynamic label	"Dynamic Label"*2	1234
PTY label	"PTY Label"*2	1234
Component label	"Component Label"*	1234
Audio quality	"Audio Quality"*2	1234
Ensemble label	"Ensemble Label"*	1234
Region label	"Region Label"*	1234
Received Frequency	"Frequency"	1
Indicator	"Indicator"	1234
Spectrum Analyzer & Clock	"Speana/Clock"	1234
Date	"Date"	1234
No display	"Blank"	234

Texts displayed on Display Type C/D in 1-item 4-row© mode

In CD & External disc source

"Disc Title"*
"Track Title"*

In Audio file source

Information	Display	
Song title & Artist name	"Title/Artist"*	
Album name & Artist name	"Album/Artist"*	
Folder name	"Folder Name"	
File name	"File Name"	

In DAB source

Information	Display
Dynamic label	"Dynamic Label"*



- If whole information cannot be displayed within four rows, hold down on [FM] of the Control knob for at least 1 second to display the remaining portion of the information.
- · External disc source can be selected when a unit supporting the text display function is connected.

Display Type D

Icon Display Switching

Changing the Icon Display 6.

1 Show the Multi-function display Press the [NEXT] button repeatedly until "Display" appears.

Refer to <Notes on Multi-function System> (page

- 2 Enter display control mode Turn the [VOL] knob to select "Display". Press the [VOL] knob.
- 3 Select the display mode Turn the [VOL] knob to select "Mode". Press the [VOL] knob.
- 4 Select the display Type Push the Control knob towards [I◄◀] or

Select the "Display Type D" display.

- 5 Enter Icon select mode Turn the [VOL] knob to select "Side". Press the [VOL] knob.
- 6 Switch the Icon display Push the Control knob towards [◄◄] or [**▶**▶|].

Each time you press the button is pressed, the setting alternates as shown below.

Icon display	Display
Source graphic	"Source"
Text label	"Text"
Play mode label (ACDrive disc)	"Play Mode"
Album art (ACDrive disc)	"Photograph"

7 Exit display control mode Turn the [VOL] knob to select "Return". Press the [VOL] knob.



- The Album art display function displays the image attached to the file by Media Manager. This function cannot display the image contained in the play list.
- · The Album art display function is not used to display the image corresponding to the tag recorded in the Audio file.
- If Album art display is selected during playback of an ACDrive disc on which no album art is recorded, a source icon is displayed.

· During album art downloading, "Down-loading" is displayed. Downloading requires a maximum of 30 seconds

Display Type B/ Display Type C/ Display Type D **Font Color Select**

Selecting the display font color.

1 Show the Multi-function display Press the [NEXT] button repeatedly until "Display" appears.

Refer to <Notes on Multi-function System> (page

- 2 Enter display control mode Turn the [VOL] knob to select "Display". Press the [VOL] knob.
- 3 Select the display mode Turn the [VOL] knob to select "Mode". Press the [VOL] knob.
- 4 Select the display Type Push the Control knob towards [I◀◀] or [**▶**▶]].

Select the "Display Type B"/"Display Type C"/"Display Type D" display.

- 5 Enter Font Color select mode Turn the [VOL] knob to select "FontCOL". Press the [VOL] knob.
- 6 Select the text display part

Select the Font Color mode Press the Control knob.

Each time you press the knob, the font color mode is switched between Basic (12 colors) and Detail (115 colors).

The cursor (>) is displayed in blue. In the Detail mode, it is displayed in red.

Select the row (Display Type C/Display Type D only)

Push the Control knob towards [FM] or [AM].

The cursor (➤) moves to the selected text display

Select the Font Color Push the Control knob towards [I◄◀] or $[\blacktriangleright \blacktriangleright]$.

7 Exit display control mode Turn the [VOL] knob to select "Return". Press the [VOL] knob.



- · When you selected the Display Type B display, select an easy viewable font color.
- The "Indicator" item of Display type C/D can be set; however, the actual display color does not change.
- This function can be set for each display type.

Display Type E

G-Analyzer display Switching

Alternates G-Analyzer display when the Display type is set to "Display Type E". (G: gravity)



 Never watch the G-Analyzer Display screen when you are driving.

Otherwise, a car accident may result.



- · Before alternating G-Analyzer display, you are required to setup <G-Counter Level set> (page 41) and <G-Analyzer Calibration setup> (page 42).
- 1 Show the Multi-function display Press the [NEXT] button repeatedly until "Display" appears.

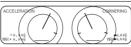
Refer to <Notes on Multi-function System> (page

- 2 Enter display control mode Turn the [VOL] knob to select "Display". Press the [VOL] knob.
- 3 Select the display mode Turn the [VOL] knob to select "Mode". Press the [VOL] knob. Select the "Display Type E" display.
- 4 Enter G-Analyzer display select mode Turn the [VOL] knob to select "G-Menu". Press the [VOL] knob.
- 5 Select the G-Analyzer display Push the Control knob towards [I◄◀] or [**▶**▶|].

G-Analyzer display



G- Graphic display



G-Meter display



G-Counter display



- · G-Graphic display:
 - Displays the condition of G in horizontal direction (e.g; when turning the curve) by the graphic.
- G-Meter display (Graphic part): Displays the maximum value of acceleration G, right direction G, and left direction G by the numerical value.

G-Meter display (Text part):

The maximum value of acceleration G, right direction G, and left direction G is displayed by the numerical value. The value of G is only the reference, so is different from the actual value.

- G-Counter display:
 - Adds the point of the acceleration level. The point is determined after a lapse of 1 hr drive or at power off (ACC Off), and then it will be displayed by the graph. Furthermore, the G-Counter displays the average of the past data by the line. (The scale of graph is determined along with the largest point among the past 10 data.)
- The value of G-Meter display and G-Counter display can be reset by <G-Analyzer Reset> (page 41).
- 6 Exit display control mode Turn the [VOL] knob to select "Return". Press the [VOL] knob.

Station/Disc Naming (SNPS/DNPS)

Attaching a title to a Station or CD.

1 Receive/play the station/disc you want to attach a title to



· A title cannot be attached to MD or Audio file media.

2 Enter Menu mode

Press the [MENU] button for at least 1 second. "MENU" is displayed.

3 Select Name set mode

Push the Control knob towards [I◀◀] or [**▶**▶|].

Select the "Name Set" display.

4 Enter Name set mode

Press the Control knob for at least 1 second.

5 Move the cursor to the enter character position

Push the Control knob towards [I◀◀] or

6 Select the character type

Press the Control knob.

Each time you press the knob, the character type alternates between the types shown in the table below

Character type	Display
Alphabet upper case	"A-Z"
Alphabet lower case	"a-z"
Numbers and symbols	"1•*"
Special characters (Accent characters)	"ë"

7 Select the characters

Push the Control knob towards [FM] or [AM].



· Enter characters by using a remote control with numbers buttons.

Example: If you are entering "DANCE".

Character	Button	Times pressed
"D"	[3]	1
"A"	[2]	1
"N"	[6]	2
"C"	[2]	3
"E"	[3]	2

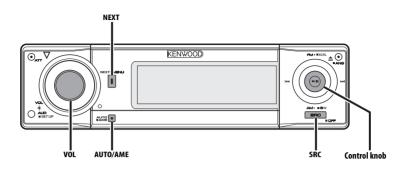
8 Repeat steps 5 through 7 and enter the name.

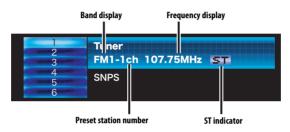
9 Exit Menu mode

Press the [MENU] button.



- When operation stops for 10 seconds the name at that time is registered, and Menu mode closes.
- Memory numbers
 - FM/AM: 30 stations
 - Internal CD player: 10 discs
 - External CD changer/ player: Varies according to the CD changer/ player. Refer to the CD changer/ player
- Change the title of station/CD by the same operation used to name it.





Tuning

Selecting the station.

1 Select tuner source Press the [SRC] button.

Select the "TUNER" display.

2 Select the band

Push the Control knob towards [FM] or [AM]. Each time you push the knob toward [FM], it switches between the FM1, FM2, and FM3 bands.

3 Tune up or down band Push the Control knob towards [◄◄] or [**▶**▶|].



· During reception of stereo stations the "ST" indicator

Tuning Mode

Choose the tuning mode.

Press the [AUTO] button.

Each time you press the button, the Tuning mode alternates between the modes shown in the table below.

Display	Operation
"Seek Mode: Auto1"	Automatic search for a station.
"Seek Mode: Auto2"	Search in order of the stations in the Preset memory.
"Seek Mode: Manual"	Normal manual tuning control.
	"Seek Mode: Auto1" "Seek Mode: Auto2" "Seek Mode:

Function of remote control

Direct Access Tuning

Entering the frequency and tuning.

- 1 Select the band Press the [FM] or [AM] button.
- 2 Enter Direct Access Tuning mode Press the [DIRECT] button on the remote control.

"- - - -" is displayed.

3 Enter the frequency Press the number buttons on the remote control.

Example:

Desired frequency	Press button	
92.1 MHz (FM)	[0], [9], [2], [1]	
810 kHz (AM)	[0], [8], [1], [0]	

Cancelling Direct Access Tuning

Press the [DIRECT] button on the remote control

Station Preset Memory

Putting the station in the memory.

- 1 Select the band Push the Control knob towards [FM] or [AM].
- 2 Select the frequency to put in the memory Push the Control knob towards [◄◄] or [**▶**▶|].
- 3 Show the Multi-function display Press the [NEXT] button repeatedly until "1" — "6" appears.

Refer to <Notes on Multi-function System> (page

- 4 Select a preset number Turn the [VOL] knob.
- 5 Put the frequency in the memory Press the [VOL] knob for at least 2 seconds.

The preset number display blinks 1 time. On each band, 1 station can be put in the memory on each [1] — [6] number.

Auto Memory Entry

Putting stations with good reception in the memory automatically.

- 1 Select the band for Auto Memory Entry Push the Control knob towards [FM] or [AM].
- 2 Open Auto Memory Entry

Press the [AME] button for at least 2 seconds.

When 6 stations that can be received are put in the memory Auto Memory Entry closes.

Preset Tuning

Recalling the stations in the memory.

- 1 Select the band Push the Control knob towards [FM] or [AM].
- 2 Show the Multi-function display Press the [NEXT] button repeatedly until "1" — "6" appears.

Refer to <Notes on Multi-function System> (page

- 3 Select a preset number Turn the [VOL] knob.
- 4 Recall the station Press the [VOL] knob.

Frequency Step Setting

Changing the tuning frequency step. The original setting is FM band 50 kHz, and AM band 9 kHz.

- 1 Turn the power OFF Press the [SRC] button for at least 1 second.
- 2 Switch the frequency step While pressing the [ATT] and [AUTO] button, press the [SRC] button.

Release your fingers from the button after the display appears.

The frequency step changes to FM band 200 kHz, and AM band 10 kHz.



- When the same operation is repeated, the frequency step returns to the original setting.
- When the frequency step is changed, the frequencies in the memory are deleted.

Function of LX BUS Television

TV Tunina

Selecting the TV channel of a connected LX BUS Television (optional accessory).

The action depends on the setting of the connected LX BUS Television. Refer to the user instruction of the LX RLIS Television for details

1 Select TV source

Press the [SRC] button.

Select the "TV" display.

2 Select the TV band and Video input Press the [FM] button.

Each time you press the [FM] button, TV bands and Video input alternate.

3 Select the TV channel Push the Control knob towards [I◄◀] or $[\blacktriangleright \blacktriangleright]$.

Function of LX BUS Television

TV channel Preset Memory

Putting the TV channels in the memory.

- 1 Select the TV band Press the [FM] button.
- 2 Select the TV channel to put in the memory Push the Control knob towards [I◄◄] or [**▶**▶|].
- 3 Show the Multi-function display Press the [NEXT] button repeatedly until "1" — "6" appears.

Refer to <Notes on Multi-function System> (page

4 Select a preset number Turn the [VOL] knob.

5 Put the TV channel in the memory Press the [VOL] knob for at least 2 seconds.

The preset number display blinks 1 time. On each band, 1 TV channel can be put in the memory on each [1] — [6] number.

Function of LX BUS Television

Preset TV Tuning

Recalling the TV channels in the memory.

- 1 Select the TV band Press the [FM] button.
- 2 Show the Multi-function display Press the [NEXT] button repeatedly until "1" — "6" appears.

Refer to <Notes on Multi-function System> (page

- 3 Select a preset number Turn the [VOL] knob.
- 4 Recall the TV channel Press the [VOL] knob.

Function of remote control

Direct TV Tuning

Entering the TV channel and tuning.

- 1 Select the TV band Press the [FM] button.
- 2 Enter Direct TV Tuning mode Press the [DIRECT] button on the remote

"--" is displayed.

3 Enter the TV channel

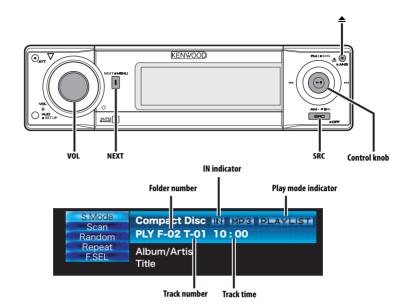
Press the number buttons on the remote control

Example:

Desired channel	Press button	
8 ch	[0], [8]	

Cancelling Direct TV Tuning

Press the [DIRECT] button on the remote control.



Playing CD & Audio file

When there is no disc inserted

1 Open the panel. Press the [▲] button.

2 Insert a disc.



- When the faceplate slides open, it might interfere
 with the shift lever or other vehicle function. If this
 happens, pay attention to safety and move the shift
 lever or take an appropriate action to remove the
 obstacle, then operate the unit.
- Insert the disc horizontal to the slot. If you insert the Disc as you push down on the Disc, it may scratch the Disc.



- Refer to <About AAC, MP3 and WMA> (page 7) for the Audio file by models you can play.
- You can play the disc (ACDrive disc) made by Media Manager by the same operation.
- You can cancel the announcement when selecting the folder by <Voice Index> (page 45) during the play of the ACDrive.
- · When a disc is inserted the "IN" indicator is ON.

 During AAC/MP3/WMA file playback, the AAC, MP3, and WMA indicators are lit.

When a disc is inserted

Press the [SRC] button.

Select the "Compact Disc" display.

Pause and play

Press the Control knob

Each time you press the knob, the audio pauses or plays.

Eject the disc

- 1 Eject the disc Press the [♠] button.
- 2 Return the panel to the original position Press the [▲] button.

Playing External Disc

Playing discs set in the optional accessory disc player connected to this unit.

Press the [SRC] button.

Select the display for the disc player you want.

Display examples:

Display	Disc player	
"CD Changer"	CD changer	
"MD Changer"	MD changer	

Pause and play

Press the Control knob.

Each time you press the knob, the audio pauses or plays.



 The functions that can be used and the information that can be displayed will differ depending on the external disc players being connected.

Fast Forwarding and Reversing

Fast Forwarding

Hold down toward [►►I] with the Control

Release your finger to play the disc at that point.

Reversing

Hold down toward [I◀◀] with the Control

Release your finger to play the disc at that point.



- · There is no sound while the Audio file is being
- · You cannot fast Forwarding and Reversing depending on AAC file format.

Track/File Search

Searching for a song on the disc or in the Audio file folder.

Push the Control knob towards [I◄◀] or [**▶**▶].

Function of disc changer/ Audio file

Disc Search/Folder Search

Selecting the disc set in the Disc changer or the folder recorded on the Audio file media

Push the Control knob towards [FM] or [AM].

Function of remote control

Direct Track/File Search

Doing Track/File Search by entering the track/file number

1 Enter the track/file number Press the number buttons on the remote control.



- You can select Direct File Search up to 999.
- 2 Do Track/File Search

Press the [I◀◀] or [▶▶I] button.

Cancelling Direct Track/File Search Press the [>II] button.

Function of disc changers with remote control

Direct Disc Search

Doing Disc Search by entering the disc number.

- 1 Enter the disc number Press the number buttons on the remote control.
- 2 Do Disc Search Press the [+] or [-] button.

Cancelling Direct Disc Search Press the [►II] button.

Track/File/Disc/Folder Repeat

Replaying the song, disc in the Disc changer or Audio file folder you are listening to.

1 Show the Multi-function display Press the [NEXT] button repeatedly until "Repeat" appears.

Refer to <Notes on Multi-function System> (page

2 Turn ON/OFF the Repeat Play Turn the [VOL] knob to select "Repeat". Press the [VOL] knob.

Each time you press the button, the Repeat Play alternates between the modes shown in the tables below.

In CD & External disc source

Repeat play	Display
Track Repeat	"Repeat ON"/ "Track Repeat ON"
Disc Repeat (In Disc Changer)	"Disc Repeat ON"
OFF	"Repeat OFF"

In Audio file

Repeat play	Display
File Repeat	"File Repeat ON"
Folder Repeat	"Folder Repeat ON"
OFF	"Repeat OFF"

Scan Play

Playing the first part of each song on the disc or Audio file folder you are listening to and searching for the song you want to hear.

1 Show the Multi-function display Press the [NEXT] button repeatedly until "Scan" appears.

Refer to <Notes on Multi-function System> (page 8)

2 Start Scan Play

Turn the [VOL] knob to select "Scan". Press the [VOL] knob.

"Scan ON"/"Track Scan ON" is displayed.

3 Release the button when the song you want to hear is played

Press the Control knob.

Random Play

Play all the songs on the disc or Audio file folder in random order.

1 Show the Multi-function display Press the [NEXT] button repeatedly until "Random" appears.

Refer to <Notes on Multi-function System> (page 8).

2 Turn ON/OFF the Random Play Turn the [VOL] knob to select "Random". Press the [VOL] knob.

Each time you press the button, Random Play turns ON or OFF.

When the Random mode is ON, "Random ON" is displayed.



· When you push the Control knob toward [▶▶I], the next random song starts.

Function of disc changer

Magazine Random Play

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

1 Show the Multi-function display Press the [NEXT] button repeatedly until "M.RDM" appears.

Refer to <Notes on Multi-function System> (page 8).

2 Turning ON/OFF the Magazine Random Play Turn the [VOL] knob to select "M.RDM". Press the [VOL] knob.

Each time you press the button, the Magazine Random Play turns ON or OFF.

When the Magazine Random mode is ON, "Magazine Random ON" is displayed.



• When you push the Control knob toward [▶▶I], the next random song starts.

Function of Audio file

Disc Random Play

Playing randomly from all of the Audio files recorded in the disc

1 Show the Multi-function display Press the [NEXT] button repeatedly until "Random" appears.

Refer to <Notes on Multi-function System> (page

2 Turn ON the Disc Random Play Turn the [VOL] knob to select "Random". Press the [VOL] knob for at least 1 second.

When the random mode is ON, "Disc Random, ON" is displayed.

Cancelling the Disc Random Play Turn the [VOL] knob to select "Random". Press the [VOL] knob.



 When you push the Control knob toward [►►I], the next random song starts.

Function of Audio file

Folder Select

Quickly selecting the folder you want to hear.

1 Show the Multi-function display Press the [NEXT] button repeatedly until "F.SEL" appears.

Refer to <Notes on Multi-function System> (page 8).



 The Folder Select does not function when <Disc Random Play> (page 33) is ON.

2 Enter Folder Select mode Turn the [VOL] knob to select "F.SEL". Press the [VOL] knob.

During Select mode the folder information is displayed as shown below.

Folder number display

Displays the number in the folder belonging to the currently selected folder.



Folder name display

Displays the current folder name.

3 Select the folder level*

Push the Control knob towards [FM] or [AM].

With the [AM] button, you move 1 level down and with the [FM] button, 1 level up.

Selecting a folder in the same level Push the Control knob towards [I◀◀] or [**▶**▶|].

With the [I◀◀] of the Control knob, you move to the previous folder, and with the [►►I] of the Control knob, to the next folder.

Returning to the top level* Turn the [VOL] knob to select "Home". Press the [VOL] knob.



 * You cannot operate this function when <Switching the Play mode> (page 34) is set to other than "Folder Mode" while playing ACDrive.

Scrolling the folder name display

Hold down on [FM] of the Control knob for at least 1 second.

4 Decide the folder to play

Turn the [VOL] knob to select "OK". Press the [VOL] knob.

The Folder Select mode releases, and the Audio file in the folder being displayed plays.

Cancelling the Folder Select mode

Turn the [VOL] knob to select "EXIT". Press the [VOL] knob.

Function of ACDrive disc

Switching the Play mode

Arrange the playing orders of the songs by categories.

1 Show the Multi-function display Press the [NEXT] button repeatedly until "S.Mode" appears.

Refer to <Notes on Multi-function System> (page

2 Select the Play mode

Turn the [VOL] knob to select "S.Mode". Press the [VOL] knob.

Each time you press the button, the Play mode alternates between the modes shown on the table below.

The Play mode indicator is ON.

Play mode	Category which is to be arranged
"PlayList Mode"	Play list order.
"Genre Mode"	By genre.
"Artist Mode"	By artist.
"Album Mode"	By album.
"Folder Mode"	By the folder recorded in Disc.



- · The category information of each song is the data registered in Media Manager when ACDrive disc is being generated.
- · You can cancel the announcement made when the mode is changed by <Voice Index> (page 45).
- · You can select the advancement of the Play mode information by [AM] and [FM] keys.

Function of the ACDrive disc

Letter Seek

You can search for the song, you want to play, by selecting the initial of Genre name, Artist name, or Album name.

1 Show the Multi-function display Press the [NEXT] button repeatedly until "S.Mode" appears.

Refer to <Notes on Multi-function System> (page

2 Enter the Letter Seek mode

Turn the [VOL] knob to select "S.Mode". Press the [VOL] knob for at least 1 second.



- This operation does not function when <Disc Random Play> (page 33) is ON.
- This function is available only when the Play mode is set Genre, Artist, or Album.

Cancelling the Letter Seek

Press the [VOL] knob.

3 Start the Letter Seek

Push the Control knob towards [I◀◀] or

The initial of Genre name, Artist name, or Album name is displayed and announced in order.



- The announcement of the initial can be canceled by <Voice Index> (page 45).
- When you push the Control knob to the reverse [I◄◀] or [►►I] during Letter Seek, the initial is displayed and announced in the reversed order.
- Once Letter Seek starts, it cannot be cancelled.

4 Select the song to play

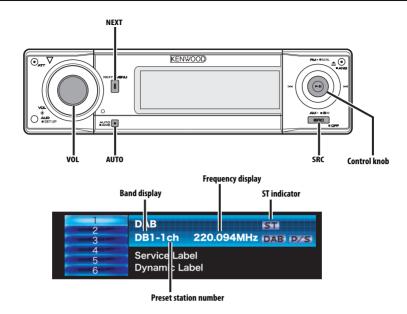
Press the Control knob when the initial of the song you are searching is displayed and announced.

The selected initial group plays.

Text/Title Scroll

Scrolling the displayed CD text, Audio file text, or MD title.

Push the Control knob toward [FM] for at least 1 second.



About DAB Tuner control

Refer to A*1*2*3*4 group on the Instruction manual of DAB Tuner KTC-9090DAB (optional accessory) for the control method of DAB Tuner function. However, the following control methods of the function for this unit may be differed from the Instruction manual; therefore, refer to the following supplemental instruction.

Service Preset Memory

Recalling the services in the memory.

1 Select the preset band Push the Control knob toward [FM].

Each time you press the button, the preset band switches between DB1, DB2, and DB3.

- 2 Receive the service to be preset.
- 3 Show the Multi-function display Press the [NEXT] button repeatedly until "1" — "6" appears.

Refer to <Notes on Multi-function System> (page

- 4 Select a preset number Turn the [VOL] knob.
- 5 Put the service in the memory Press the [VOL] knob for at least 2 seconds.

The preset number display blinks 1 time. On each band, 1 service can be put in the memory on each [1] — [6] number.

Recalling a Preset Service

- 1 Select the preset band Push the Control knob toward [FM].
- 2 Show the Multi-function display Press the [NEXT] button repeatedly until "1" — "6" appears.

Refer to <Notes on Multi-function System> (page 8).

- 3 Select a preset number Turn the [VOL] knob.
- 4 Recall the service Press the [VOL] knob.

Program Type (PTY) Function

This function permits desired program types from within the received Ensemble to be searched and monitored.

1 Enter PTY Mode

Press the Control knob.

"PTY Select" is displayed.



• This function cannot be used during the interruption of the announcement/ PTY Watch.

2 Select the program type

Push the Control knob towards [FM] or [AM].

Each time you push the knob, the program type changes.

Refer to the instruction manual of DAB tuner for <Program Type Display>.

3 Search a service of the selected program

Push the Control knob towards [I◄◀] or [**▶**▶|].

When you want to search for other service, push [I◄◀] or [▶▶I] of the Control knob again.



· If the selected program type is not found, the message ("No PTY", etc.) is displayed. When searching for a service of another program type, repeat procedures 2 and 3.

Switching to Another Service:

Repeat procedure 3.

Another service of the same program type will be searched.

Cancelling Search In the Middle:

Press the Control knob.

Searching by program type and language

1 Press the button while in program type selection mode. Press the [AUTO] button.

2 Selecting a language

Push the Control knob towards [FM] or [AM].

As for the available languages, refer to the instruction manual of DAB tuner for <Language Filter Search Mode>

3 Searching by the selected program type and language

Push the Control knob towards [I◄◄] or

4 Exiting: Press the [AUTO] button.

Languages to be displayed

Select English, French, German, Dutch, Spanish, Portuguese, Norwegian or Swedish in < Language Filter Search Mode> to display in the selected language. (Refer to the instruction manual of DAR tuner)

Program Type preset

Putting the Program Type in the Preset memory and quick recall.

Presetting the Program Type

1 Select the Program Type to preset

Refer to <Program Type (PTY) Function> (page 36).

- 2 Select a preset number Turn the [VOL] knob.
- 3 Preset the Program Type Press the [VOL] knob for at least 2 seconds.

Recalling the preset Program Type

1 Enter PTY mode

Refer to <Program Type (PTY) Function> (page 36).

- 2 Select a preset number Turn the [VOL] knob.
- 3 Recall the Program Type Press the [VOL] knob.





Menu System

Setting beep sound during operation, etc. functions.

The Menu system basic operation method is explained here. The reference for the Menu items and their setting content is after this operation explanation.

1 Enter Menu mode Press the [MENU] button for at least 1 second. "MENU" is displayed.

2 Select the menu item Push the Control knob towards [I◄◄] or

Example: When you want to set the beep sound select the "Beep" display.

3 Set the menu item

Push the Control knob towards [FM] or [AM].

Example: When you select "Beep", each time you push the knob it alternates between "Beep: ON" or "Beep: OFF". Select 1 of them as the setting.

You can continue by returning to step 2 and setting other items.

4 Exit Menu mode

Press the [MENU] button.



 When other items --those applicable to the basic operation method above--are displayed, their setting content chart is entered. (Normally the setting listed at the top of the chart is the original setting.) Also, the explanation for items that are not applicable (<Manual Clock Adjustment> etc.) are entered step by step.

In Standby mode

Security Code

Because authorization by the Security Code is required when the audio unit is removed from the vehicle, personalizing this unit by using the Security Code is helpful in preventing theft.



· When you activate the Security Code function, it cannot be released.

Note, your Security Code is the 4 digit number entered in your "Car Audio Passport" in this package.

1 Enter Standby

Press the [SRC] button.

Select the "STANDBY" display.

2 Enter Menu mode

Press the [MENU] button for at least 1 second. When "MENU" is displayed, "Security" is displayed.

3 Enter Security Code mode

Press the Control knob for at least 1 second.

When "Enter" is displayed, "CODE" is also displayed.

4 Select the digits to enter

Push the Control knob towards [I◄◄] or

- 5 Select the Security Code numbers Push the Control knob towards [FM] or [AM].
- 6 Repeat steps 4 and 5, and complete the Security Code.

7 Confirm the Security Code

Press the Control knob for at least 3 seconds.

When "Re-Enter" is displayed, "CODE" is also displayed.

8 Do the step 4 through 7 step operation, and reenter the security code.

"Appoved" is displayed.

The Security Code function activates.



 If you enter a Code different from your Security Code. you have to start over from step 4.

9 Exit Security Code mode Press the [MENU] button.

Press the Reset button when the audio unit is removed from the battery power source

- 1 Turn the power ON.
- 2 Do the step 4 through 7 step operation, and reenter the security code.

"Appoved" is displayed.

You can begin using the unit.



· If an incorrect code is entered, "Waiting" is displayed, and the input prohibition periods shown in the table below is generated.

After the input prohibition time lapses, "CODE" is displayed, and you can reenter the code.

Number of times the Input prohibited time incorrect code was input	
1	_
2	5 minutes
3	1 hour
4	24 hours

In Standby mode

Touch Sensor Tone

Setting the operation check sound (beep sound) ON/OFF.

Display	Setting	
"Beep: ON"	Beep is heard.	
"Beep: OFF"	Beep canceled.	

In Standby mode

Manual Clock Adjustment

1 Select Clock Adjustment mode Push the Control knob towards [I◄◀] or [**▶**▶|].

Select the "Clock Adjust" display.

2 Enter Clock Adjust mode

Press the Control knob for at least 1 second. The clock display blinks.

3 Adjust the hours

Push the Control knob towards [FM] or [AM].

Adjust the minutes

Push the Control knob towards [I◀◀] or [**▶**▶I].

4 Exit Clock adjustment mode Press the [MENU] button.

Date Adjustment

1 Select Date Adjust mode Push the Control knob towards [I◄◀] or

Select the "Date Adjust" display.

2 Enter Date Adjust mode

Press the Control knob for at least 1 second. The date display blinks.

3 Selecting the item (day, month, or year) to adjust

Push the Control knob towards [I◄◄] or

The items that are blinking are items that you can adjust.

4 Adjust each item

Push the Control knob towards [FM] or [AM].

- 5 Repeat step 3 and 4 operation and adjust the date.
- 6 Exit Date adjustment mode Press the [MENU] button.

In Standby mode

Date Mode

Setting the date format.

1 Select Date Mode

Push the Control knob towards [I◄◀] or

Select the "Date Mode" display.

2 Select the date format

Push the Control knob towards [FM] or [AM].

3 Exit Menu mode

Press the [MENU] button.

In Standby mode

DSI (Disabled System Indicator)

A red indicator will blink on the unit after the faceplate is removed, warning potential thieves.

Display	Setting	
"DSI: ON"	LED flashes.	
"DSI: OFF"	LED OFF.	

In Standby mode

Selectable Illumination

Selecting the button illumination color as green or red.

Display	Setting
"Button: Green"	The illumination color is green.
"Button: Red"	The illumination color is red.



 You can change the illumination color of [EJECT], [NEXT], [AUTO], and [ATT] buttons.

In Standby mode

Dimmer

Dimming this unit's display automatically when the vehicle light switch is turned ON.

Display	Setting
"Dimmer: ON"	The display dims.
"Dimmer: OFF"	The display doesn't dim.

In Standby mode

Contrast Adjustment

Adjusting the display contrast.

Display and Setting	
"Contrast: 1"	
:	
"Contrast: 4" (Original setting)	

Display-reversing Setting

If no operation is performed for a predetermined period of time, switching between negative and positive display modes takes place automatically. Display-reversing maintains the initial brightness of the display for a long period of time.

Display	Setting	
"Display N/P: Auto"	Auto reverse display	
"Display N/P: POSI"	Positive display only	



 Switching between negative and positive display may not take place depending on the displayed mode.

In Standby mode

Built-in Amp Setting

Controlling the built-in amplifier. Turning OFF this control enhances the preout quality.

Display	Setting
"AMP: ON"	The built-in amplifier activates.
"AMP: OFF"	The built-in amplifier deactivates.

In Standby mode

G-Counter Level set

Calibrating G-Point. Setting the level according to the kinds of vehicles.

Display	Setting	
"G-Counter: Level 1"	Counter is easy to go up.	
"G-Counter: Level 2"	:	
"G-Counter: Level 3"	Counter is hard to go up.	



· In the case of driving situations calling for few accelerations, set the G-Point up to "G-Counter: Level 1". In the case of frequent accelerations, set it up to "G-Counter: Level 3"

In Standby mode

G-Analyzer Reset

Resets the value of G-Meter and G-Counter.

1 Select G-Analyzer Reset mode Push the Control knob towards [I◀◀] or

Select the "G-Reset" display.

- 2 Enter G-Analyzer Reset mode Press the Control knob for at least 1 second.
- 3 Select the Reset item Push the Control knob towards [FM] or [AM]. "G-Meter Reset". Reset the value of G-Meter "G-Counter Reset": Reset the value of G-Counter
- 4 Reset the value Press the Control knob for at least 2 seconds. "Reset OK" is displayed.
- 5 Exit G-Analyzer Reset mode Press the [MENU] button.

G-Analyzer Calibration setup

G-Analyzer requires calibration for horizontal acceleration and braking.



· Detection of horizontal and straight directions should be done at horizontal location going straight.

1 Park the vehicle in a horizontal location

2 Select G-Analyzer Calibration setup mode Push the Control knob towards [I◀◀] or [**▶**▶|].

Select the "G-Calibration" display.

3 Enter G-Analyzer Calibration setup mode Press the Control knob for at least 1 second. "Stop" is displayed.

4 Start Calibration of horizontal direction Press the Control knob.

Once "Move Forward" appears on the display, the vehicle must be advanced

5 Start Calibration of straight direction

When the vehicle is driven in the straight direction, calibration of straight direction automatically starts.



• In order to operate the detection of straight direction.

When the Calibration is finished, "Calibration OK" is displayed.



• If you fail to complete the calibraton, "No Calibration" is displayed. In such a case, repeat steps 1 thru 6.

6 Exit G-Analyzer Calibration setup mode Press the [MENU] button.

G-Analyzer Stop Watch

The control of stop watch can be started by G-Analyzer function.



• Do not use G-Analyzer stop watch on the Public roads.

1 Select G-Analyzer Stop Watch mode Push the Control knob towards [I◄◀] or

Select the "Stop Watch" display.

2 Enter G-Analyzer Stop Watch mode Press the Control knob for at least 1 second.

"Stop" is displayed.

3 Enter Counter Ready mode Press the Control knob.

"Ready" is displayed.

4 Start Count

When G in the vertical direction is detected during the travel, the count automatically starts. "Running" is displayed.



You can also start the counter by pressing the Control

5 Stop Count

Press the Control knob.

"Stop" is displayed.



 The control will start again when you accelerate or press the Control knob. Do the operation after step3.

When you Reset the Count (While "Stop" is displayed)

Press the Control knob for at least 2 seconds.



• You can reset of count when the count is stopped.

6 Exit G-Analyzer Stop Watch mode Press the [MENU] button.



- · When "Running" is displayed (counted), the count is continued even though G-Analyzer Stop Watch mode is finished. If you want to stop the count, enter the menu mode then press the control knob.
- · When Power off (ex; ACC OFF) while counting, the value of 1 second or less will be "00".

Other than Standby mode/ When the Dual Zone System is ON

Dual Zone System Setting

Setting the Front channel and Rear channel sound in the Dual Zone System.

Display	Setting
"Zone2: Rear"	Sub source (Auxiliary input source) is to be rear channel.
"Zone2: Front"	Sub source (Auxiliary input source) is to be front channel.

Other than Standby mode

B.M.S. (Bass Management System)

Adjust the bass boost level of the external amplifier using the main unit.

Display	Setting
"AMP Bass: Flat"	Bass boost level is flat.
"AMP Bass: +6"	Bass boost level is low (+6dB).
"AMP Bass: +12"	Bass boost level is mid (+12dB).
"AMP Bass: +18"	Bass boost level is high (+18dB).



- · Refer to the catalog or instruction manual for power amplifiers that can be controlled from this unit.
- · For amplifiers, there are the models you can set from Flat to +18 dB, and the models you can set from Flat to +12 dB.

When an amplifier that can only be set to +12 is connected to the unit, "AMP Bass: +18" will not work correctly even if it is selected.

Other than Standby mode

B.M.S. Frequency Offset

Setting the central frequency, boosted by B.M.S.

Display	Setting
"AMP FREQ: Normal"	Boost with the normal central frequency.
"AMP FREQ: Low"	Drop the normal central frequency 20%.

When LX AMP unit connecting

AMP Control

You can control the LX AMP connected to the unit

1 Select AMP Control mode Push the Control knob towards [◄◄] or [**▶**▶|].

Select the "AMP Control" display.

- 2 Enter AMP Control mode Press the Control knob for at least 1 second.
- 3 Select the AMP Control item for adjustment Push the Control knob towards [FM] or [AM].
 - · For the details on the AMP Control item, see the Instruction manual attached to the LX AMP
- 4 Adjust the AMP Control item Push the Control knob towards [I◀◀] or [**▶**▶|].
- 5 Exit AMP Control mode Press the [MENU] button.



 You cannot use the LX AMP operation during standby mode.

In FM reception

CRSC (Clean Reception System Circuit)

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

Display	Setting	
"CRSC: ON"	The CRSC is ON.	
"CRSC: OFF"	The CRSC is OFF.	



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

Auxiliary Input Display Setting & Station/Disc Naming

Selecting the display when changing to Auxiliary input source. For the Station/Disc Naming refer to the <Station/Disc Naming (SNPS/DNPS)> (page 26).

1 Select Auxiliary input source Press the [SRC] button.

Select the "AUX"/ "AUX EXT" display.

2 Enter Menu mode

Press the [MENU] button for at least 1 second. "MENU" is displayed.

3 Select Auxiliary input display setting mode Push the Control knob towards [i◄◄] or [▶▶i].

Select the "Name Set" display.

4 Enter Auxiliary input display setting mode Press the Control knob for at least 1 second.

The presently selected Auxiliary input display is displayed.

5 Select the Auxiliary input display Push the Control knob towards [i◄◄] or [▶▶i].

Each time you press the button, the display alternates as listed below.

- · "AUX"/ "AUX EXT"
- "DVD"
- "Portable"
- "Game"
- "Video"
- "TV"

6 Exit Menu mode Press the [MENU] button.



- When operation stops for 10 seconds, the name at that time is registered, and the Menu mode closes.
- The Auxiliary Input Display can be set only when the built-in auxiliary input or the auxiliary input of optional KCA-S210A is used.

Text Scroll

Setting the displayed text scroll.

Display	Setting	
"Scroll: Auto"	Repeats scroll.	
"Scroll: Manual"	Scrolls when the display changes.	



- · The text scrolled is listed below.
 - CD tex
 - Folder name/ File name/ Song title/ Artist name/ Album name
 - MD title
 - Dynamic Lable for the DAB tuner source

In Standby mode

Built-in Auxiliary input Setting

Set the Built-in Auxiliary Input function.

Display	Setting
"Built in AUX: OFF"	When selecting the source there's no Auxiliary Input.
"Built in AUX: ON"	When selecting the source there's Auxiliary Input.

In Standby mode

CD Read Setting

When there is a problem with playing a CD with special format, this setting plays the CD by force.

Display	Setting
"CD Read: 1"	Play CD and Audio file.
"CD Read: 2"	Play CD by force.



 Setting "CD Read: 2" cannot play Audio file.
 Some music CDs may not play even in the "CD Read: 2" mode.

Picture downloading

Downloading wallpapers. You can use downloaded pictures for the display of this unit.

1 Inset a CD-R/CD-RW.

Insert a CD-R/CD-RW containing files to be downloaded into this unit.

Refer to <Playing CD & Audio file> (page 30) for details.

Our URL http://www.kenwood.net-disp.com describes how to make CD-R/CD-RW.

2 Enter Standby

Press the [SRC] button.

Select the "STANDBY" display.

- 3 Enter Menu mode Press the [MENU] button for at least 1 second. "MENU" is displayed.
- 4 Select the downloading mode Push the Control knob towards [I◄◀] or [**▶**▶|].

Select the "DISP Data Download" display.

- 5 Enter the downloading mode Press the Control knob for at least 1 second. "File Check!!" is displayed.
- 6 Select files to be downloaded Push the Control knob towards [I◄◀] or [**▶**▶|].

7 Start downloading

Press the Control knob for at least 1 second.

"Downloading" is displayed. When the downloading finishes, "Finished Download" is displayed.



· Picture downloading may take as long as 20 minutes. Quantity Gradation Level



Cancelling Downloading

Press the [MENU] button.

8 Exit the downloading mode Press the [MENU] button.



- Do not operate this unit while "Downloading" is displayed to prevent data from being damaged.
- The number of files that can be downloaded. - Wallpaper: 1 file
- When a new wallpaper is downloaded, it will overwritte the currently downloaded wallpaper. There is no way to delete the downloaded pictures.
- The downloaded pictures can be used for display. <Graphic part/ Spectrum Analyzer Display Switching> (page 18)
 - <Wallpaper selecting> (page 19)
- When you cannot download the pictures to this unit, there may be a problem with the CD-R/CD-RW write method.

Refer to the URL http://www.kenwood.net-disp.com, and rewrite the CD-R/CD-RW.

Function of ACDrive disc

Voice Index

Setting the announcement during the play of ACDrive disc.

Display	Setting
"Voice Index: ON"	Guide is announced.
"Voice Index: OFF"	Not be announced.

In CD mode

ACDrive firmware version display

Displaying the firmware version with the ACDrive function.

1 Select the firmware version display mode Push the Control knob towards [I◀◀] or [**▶**▶|].

Select the "ACD F/W Version" display.

2 Display the ACDrive firmware version Push the Control knob towards [FM] or [AM].

Menu system

In CD mode

Unique ID display

Displaying the serial number for each product.

1 Select the unique ID display mode Push the Control knob towards [◄◄] or

Select the "ACD Unique ID" display.

2 Display the unique ID Push the Control knob towards [FM] or [AM].

In DAB mode

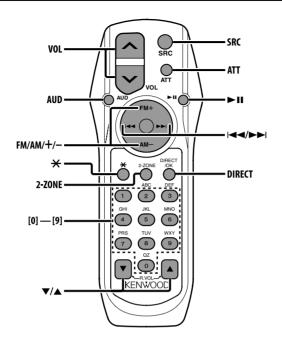
Menu Added for DAB

When you connect the DAB tuner, the following menu is displayed:

Display	Feature
"DRC:"	Dynamic Range Control (DRC)
"Regional ASW:"	Regional Announcement Function
"ASW Select"	Announcement select mode
"PTY Watch"	PTY Watch Select Mode
"Language Search"	Language Filter Search Mode



· For details on menu items, refer to the instruction manual of the DAB tuner.

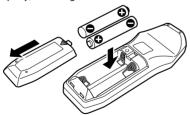


Loading and Replacing the battery

Use two "AA"-size batteries.

Slide the cover while pressing downwards to remove it as illustrated.

Insert the batteries with the + and - poles aligned properly, following the illustration inside the case.



▲WARNING

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



· Do not set the remote control in hot places such as above the dashboard.

Basic operations

[VOL] buttons

Adjusts the volume.

[SRC] button

Each time you press the button, the source alternates.

For the source alternating order refer to <Selecting the Source> (page 9).

[ATT] button

Turns the volume down quickly. When the button is pressed again, the volume returns to the previous level.

[*] button

Adjusts the Faceplate Angle.

Audio Control

[AUD] button

Selects the Audio item to be adjusted.

[VOL] buttons

Adjusts the Audio item.



- Refer to <Audio Control> (page 10) for the operation method, such as the procedures for Audio control and others operations.
- · The remote control can only select and adjust the Basic Audio item. Selecting and adjusting of the Detail Audio item cannot be done.

Dual Zone System

[2-ZONE] button

Each time you press the button, "2ZONE" of <Audio Setup> (page 10) is turned ON or OFF.

[▲]/[▼] buttons

Adjusts the volume of the rear channel. The rear channel activates while the Dual Zone System is ON.

In Tuner source

[FM]/[AM] buttons

Selects the band.

Each time you press the [FM] button, the band alternates between the FM1, FM2, and FM3 bands.

[I◀◀]/[▶▶I] buttons

Tune up or down band.

[0] — [9] buttons

Press buttons [1] — [6] to recall preset stations.

[DIRECT] button

Enters and cancels the <Direct Access Tuning> (page 28) mode.

In Disc source

[I◄◄]/[►►I] buttons

Going forwards and backwards between track/ files.

[+]/[-] buttons

Going forwards and backwards between disc/

[►II] button

Each time you press the button, the song pauses or plays.

[0] — [9] buttons

When in <Direct Track/File Search> (page 31) and <Direct Disc Search> (page 31), enters the track/ file/disc number.

In TV source

[FM] button

Selects the TV band and Video input. Each time you press the [FM] button, TV bands and Video input alternates.

[I◀◀]/ [▶▶I] buttons

Selects the TV channel.

[0] — [9] buttons

Press buttons [1] — [6] to recall preset TV channels.

[DIRECT] button

Enters and cancels the <Direct TV Tuning> (page 29) mode.

In DAB source

[FM] button

Preset Band Switching.

Each press of the [FM] button switches one step among the DB1, DB2, and DB3 bands.

[AM] button

Primary/Secondary Switching.

Each press of the [AM] button switches between Primary/secondary within the services.

[**|◄◄**]/ [**▶▶**|] buttons

Service Switching.

Each press of the button switches the services from within the Ensemble.

Switching the ensemble.

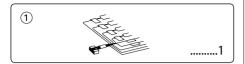
Each time the button is pressed and held for longer than 1 seconds, the Ensemble changes.

[0] — [9] buttons

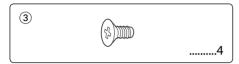
Press buttons [1] — [6] to recall preset services.

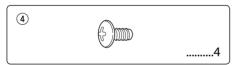
Accessories/Installation Procedure

Accessories











Installation Procedure

- 1. To prevent a short circuit, remove the key from the ignition and disconnect the

 battery.
- 2. Connect the proper input and output wire to each unit.
- 3. Connect the speaker wires of the wiring harness.
- 4. Connect the wiring harness wires in the following order: ground, battery, ignition.
- 5. Connect the wiring harness connector to the unit.
- 6. Install the unit in your car.
- 7. Reconnect the (-) battery.
- 8 Press the reset button

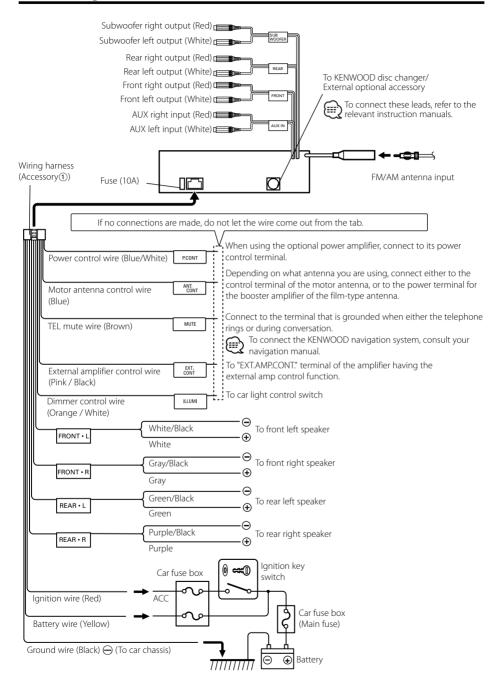
AWARNING

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



- If the power is not turned ON (or it is ON, but will be OFF) immediately), the speaker wire may have a short-circuit or touched the chasis of the vehicle and the protection function may have been activated. Therefore, check the speaker wire.
- If your car's ignition does not have an ACC position. connect the ignition wires to a power source that can be turned on and off with the ignition key. If you connect the ignition wire to a power source with a constant voltage supply, as with battery wires, the battery may die.
- If the console has a lid, make sure to install the unit so that the faceplate will not hit the lid when closing and openina.
- If the fuse blows, first make sure the wires aren't touching to cause a short circuit, then replace the old fuse with one with the same rating.
- · Insulate unconnected wires with vinyl tape or other similar material. To prevent a short circuit, do not remove the caps on the ends of the unconnected wires or the terminals.
- Connect the speaker wires correctly to the terminals to which they correspond. The unit may be damaged or fail to work if you share the \bigcirc wires or ground them to any metal part in the car.
- · When only two speakers are being connected to the system, connect the connectors either to both the front output terminals or to both the rear output terminals (do not mix front and rear). For example, if you connect the (+) connector of the left speaker to a front output terminal, do not connect the (-) connector to a rear output terminal.
- · After the unit is installed, check whether the brake lamps, blinkers, wipers, etc. on the car are working properly.
- · Mount the unit so that the mounting angle is 30° or less.

Connecting Wires to Terminals



non-Japanese cars

Metal mounting strap (commercially available) Firewall or metal support Bend the tabs of the mounting sleeve with a screwdriver or similar utensil and attach it in place. Self-tapping screw (commercially available)

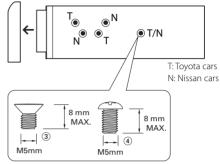


Screw (M4X8) (commercially available)

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

Japanese cars

- **1** Refer to the section < Removing the hard rubber frame> (page 54) and then remove the hard rubber frame.
- **2** Align the holes in the unit (two locations on each side) with the vehicle mounting bracket and secure the unit with the accessory screws.



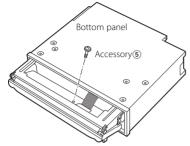
Accessory(3)...for Nissan car Accessory 4 ... for Toyota car



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

Screwing the Faceplate on the Unit

If you want to fasten the faceplate to the main unit so that it does not fall off, screw in the provided screws in the holes shown below.

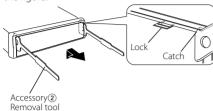




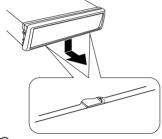
Never insert the screw in any other screw hole than the one specified. If you screw them in another hole, it will contact and may cause damage to the mechanical parts inside the unit.

Removing the hard rubber frame

1 Engage the catch pins on the removal tool and remove the two locks on the upper level. Upper the frame and pull it forward as shown in the figure.



2 When the upper level is removed, remove the lower two locations

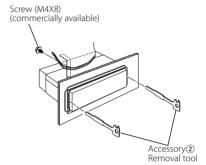




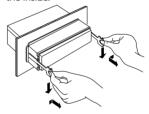
· The frame can be removed from the bottom side in the same manner.

Removing the Unit

- **1** Refer to the section < Removing the hard rubber frame> (page 54) and then remove the hard rubber frame.
- **2** Remove the screw (M4 \times 8) on the back panel.
- **3** Insert the two removal tools deeply into the slots on each side, as shown.

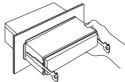


4 Lower the removal tool toward the bottom, and pull out the unit halfway while pressing towards the inside.





- Be careful to avoid injury from the catch pins on the removal tool.
- **5** Pull the unit all the way out with your hands, being careful not to drop it.



Troubleshooting Guide

What may seem to be a malfunction in your unit may just be the result of slight misoperation or miswiring. Before calling service, first check the following table for possible problems.

General

? The power does not turn ON.

- The fuse has blown.
 - After checking for short circuits in the wires. replace the fuse with a new one with the same rating.
- The speaker wire has a short-circuit or touches the chassis of the vehicle, and the protection function is activated
 - Wire or insulate the speaker cable properly and press the reset button.

? There is a source you cannot change.

- ✓ There is no media inserted.
 - Set the media you want to hear. If there is no media in this unit, you cannot change to each source.
- The Disc changer is not connected.
 - Connect the Disc changer. If the Disc changer is not connected to it's input terminal. You cannot change to an external disc source.

? The memory is erased when the ignition is turned OFF.

- ✓ The ignition and battery wire are incorrectly. connected.
 - Connect the wire correctly, referring to the section on <Connecting Wires to Terminals>.

? The TEL mute function does not work.

- ✓ The TEL mute wire is not connected properly. Connect the wire correctly, referring to the section on <Connecting Wires to Terminals>.
- ? The TEL mute function turns ON even though the TEL mute wire is not connected.
 - ✓ The TEL mute wire is touching a metal part of the
 - Pull the TEL mute wire away from the metal part of the car.

? No sound can be heard, or the volume is low.

- ✓ The fader or balance settings are set all the way to one side.
 - Center the fader and balance settings.
- ✓ The input/output wires or wiring harness are connected incorrectly.
 - Reconnect the input/output wires or the wiring harness correctly. See the section on <Connecting Wires to Terminals>.
- ✓ The values of Volume offset are low.
 - Turn up the Volume offset, referring to the section on <Audio Control> (page 10).
- The <Built-in Amp Setting> (page 41) is OFF. Turn it ON.

? The sound quality is poor or distorted.

- ✓ One of the speaker wires is being pinched by a screw in the car.
- Check the speaker wiring.
- ✓ The speakers are not wired correctly.
 - Reconnect the speaker wires so that each output terminal is connected to a different speaker.

? The Touch Sensor Tone does not sound.

- ✓ The preout jack is being used.
 - The Touch Sensor Tone cannot be output from the preout iack.

? The Dimmer function does not work.

- ✓ The Dimmer wire is not connected correctly.
 - Check the Dimmer wire connection.
- The <Dimmer> (page 40) is OFF. Turn it ON.

? The sound is not output from Subwoofer or it outputs a different sound.

- ✓ When "2ZONE" of <Audio Setup> (page10) is set to ON.
 - ™ Turn OFF "2ZONE" of <Audio Setup>.

? There are no audio control effects.

✓ FOCUS/ SRS 3D item on <WOW Control> (page) 15) have no effect in rear output.

? Switching between negative and positive display modes takes place automatically.

- ✓ Switching between negative and positive display modes takes place automatically to maintain the initial brightness of the display for a long period of
 - You can select "Display N/P: POSI" as mentioned in <Display-reversing Setting> (page 41).

Troubleshooting Guide

Tuner source

? Radio reception is poor.

- ✓ The car antenna is not extended.
 - Pull the antenna out all the way.
- The antenna control wire is not connected.
 - Connect the wire correctly, referring to the section on <Connecting Wires to Terminals>.

? The desired frequency cannot be entered with the Direct Access Tuning.

- ✓ A station that cannot be received is being entered. Enter a station that can be received.
- ✓ You are trying to enter a frequency with a 0.01
 - The FM band is designated to 0.1 MHz.

Disc source

? "AUX EXT" is displayed without achieving External disc control mode.

- Unsupported disc changer is connected.
 - use the disc changer mentioned in the <About CD players/disc changers connected to this unit> (page 4) of the section on <Safety precautions>.

? The specified disc does not play, but another one plays instead.

- ✓ The specified CD is quite dirty.
 - Clean the CD.
- ✓ The disc is loaded in a different slot from that specified.
 - Fiect the disc magazine and check the number for the specified disc.
- The disc is severely scratched. Try another disc instead.

? A CD ejects as soon as it is loaded.

- ✓ The CD is quite dirty.
 - Clean the CD, referring to the CD cleaning of the section on <About CDs> (page 6).

? Can't remove disc.

- ✓ The cause is that more than 10 minutes has. elapsed since the vehicle ACC switch was turned OFF
 - The disc can only be removed within 10 minutes of the ACC switch being turned OFF. If more than 10 minutes has elapsed, turn the ACC switch ON again and press the Eject button.

? The disc will not insert.

✓ There is already another disc inserted. Press the [▲] button and remove the disc.

Direct Search cannot be done.

- ✓ Another function is ON.
 - Turn Random Play or other functions OFF.

? Track Search cannot be done.

- ✓ For the discs first or last song.
 - For each disc, Track Search cannot be done in the backward direction for the first song or in the forward direction for the last song.

Audio file source

? Cannot play an Audio file.

- The media is scratched or dirty.
 - Clean the media, referring to the CD cleaning of the section on <About CDs> (page 6).

? The sound skips when an Audio file is being played.

- ✓ The media is scratched or dirty.
 - Clean the media, referring to the CD cleaning of the section on <About CDs> (page 6).
- The recording condition is bad.
 - Record the media again or use another media.

? The Audio file track time is not displayed correctly.

- - There are times when the track time is not displayed correctly according to the Audio file recording conditions.

The messages shown below display your systems condition.

Eject: No disc magazine has been loaded in the changer. The disc magazine is not

completely loaded.

> Load the disc magazine properly.

No CD in the unit. Insert the CD.

No disc has been loaded in the disc No Disc:

magazine.

Doad a disc into the disc magazine.

TOC Frror: No disc has been loaded in the disc

magazine.

Load a disc into the disc magazine. The CD is quite dirty. The CD is upsidedown. The CD is very scratched. Clean the CD and load it correctly.

Error 05: The CD is upside-down.

➡ Load the CD correctly.

Blank Disc: Nothing has been recorded on the MD.

No Track Disc: No tracks are recorded on the MD.

although it has a title.

Frror 15: Media was played that does not have data

recorded that the unit can play.

Use media that has data recorded that the unit can play.

No Panel: The faceplate of the slave unit being

connected to this unit has been removed.

Replace it.

Error 77: The unit is malfunctioning for some reason.

Press the reset button on the unit. If the "Error 77" code does not disappear. consult your nearest service center.

Mecha Error: Something is wrong with the disc

magazine. Or the unit is malfunctioning for

some reason.

Check the disc magazine. And then press the reset button on the unit. If the . "Mecha Error" code does not disappear, consult your nearest service center.

Hold Error: The protective circuit in the unit activates

when the temperature inside the automatic disc changer exceeds 60°C (140°F), stopping all operation.

Cool down the unit by opening the windows or turning on the air conditioner. As the temperature falls below 60°C (140°F), the disc will start

playing again.

Waiting: Text for the DAB tuner source is being

received.

Load: Exchanging discs in the Disc changer.

Reading: Reading the data on the disc.

IN (Blink): The CD player section is not operating

properly.

Reinsert the CD. If the CD cannot be eiected or the display continues to flash even when the CD has been properly reinserted, please switch off the power and consult your nearest service center.

Unsupported File:

An Audio file with a format that this unit

cannot support is playing.

ದ> ----

Copy Protection:

A copy-protected file is playing.

Can't Download:

Download Error:

This unit does not work properly for some

reason

Press the reset button to download it again. If this error is still displayed, consult a local Kenwood dealer.

No Display File: No file that can be downloaded is

contained in the CD-ROM.

A Make sure that a files created with referring to <http://www.kenwood.netdisp.com> is contained in the CD-ROM. Do not delete the extension (.kbm) created when the file was created.

Incorrect File: The file selected to be downloaded has a

format that this unit cannot read.

Recreate the file.

Writing failed while the file was Writing Error:

downloaded

Try the downloading again.

Specifications

Specifications subject to change without notice.

FM tuner section

Frequency range

50 kHz space: 87.5 MHz - 108.0 MHz

200 kHz space: 87.9 MHz - 107.9 MHz

Usable sensitivity (S/N = 30dB)

: 9.3dBf (0.8 μV/75 Ω)

Quieting Sensitivity (S/N = 50dB)

: 15.2dBf (1.6 μ V/75 Ω)

Frequency response (±3 dB)

: 30 Hz - 15 kHz

Signal to Noise ratio (MONO)

: 70 dB

Selectivity (±400 kHz)

: ≥ 80 ďB

Stereo separation (1 kHz)

: 40 dB

AM tuner section

Frequency range

9 kHz space: 531 kHz - 1611 kHz

10 kHz space: 530 kHz - 1700 kHz

Usable sensitivity (S/N = 20dB)

: 28 dBµ (25 µV)

CD player section

Laser diode

: GaAlAs

Digital filter (D/A)

: 8 Times Over Sampling

D/A Converter

· 1 Bit

Spindle speed (Audio file)

: 1000 - 400 rpm (CLV 2times)

Wow & Flutter

: Below Measurable Limit

Frequency response (±1 dB)

: 10 Hz - 20 kHz

Total harmonic distortion (1 kHz)

: 0.008 %

Signal to Noise ratio (1 kHz)

: 110 dB

Dynamic range

: 93 dB

Channel separation

: 96 dB

MP3 decode

: Compliant with MPEG-1/2 Audio Layer-3

WMA decode

: Compliant with Windows Media Audio

AAC decode

: AAC-LC ".m4a" files

Audio section

Maximum output power

· 50 W x 4

Full Bandwidth Power (at less than 1% THD)

: 30 W x 4

Tone action

Band 1: 60 - 200 Hz +9 dB

Band2: 250 - 1k Hz ±9 dB

Band3: 1.25k - 4k Hz ±9 dB

Band4: 5k - 16k Hz +9 dB

Preout level / Load (during disc play)

: 5000 mV/10 kΩ

Preout impedance

: ≤ 80 Ω

Auxiliary input

Frequency response (±1 dB)

: 20 Hz - 20 kHz

Input Maximum Voltage

: 1200 mV

Input Impedance

: 100 kÖ

General

Operating voltage (11 - 16V allowable)

: 14.4 V

Current consumption : 10 A

Installation Size $(W \times H \times D)$

 $: 182 \times 50 \times 155 \text{ mm}$

Weiaht

: 3.64 lbs (1.65 kg)