

KENWOOD

DUAL DIN SIZED CD RECEIVER

DPX-MP5110U

DPX-MP4110

DPX-MP3110

INSTRUCTION MANUAL

Kenwood Corporation



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Playing AAC, MP3, and WMA data

This document refers to AAC, MP3, and WMA data stored in USB device, and CD-R/RW as "audio files". Refer to the section on "Audio Files" to control these data. See <About Audio file> (page 18) for details.

The "AAC" logo is trademark of Dolby Laboratories.

Before use

▲WARNING

To prevent injury or fire, take the following precautions:

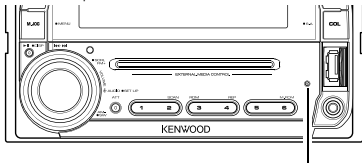
- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit.

Before using this unit for the first time

This unit is initially set on the Demonstration mode. When using this unit for the first time, cancel the <Demonstration mode Setting> (page 16).

How to reset your unit

- If this unit or the connected unit (disc auto changer, etc.) fails to operate properly, press the Reset button. The unit returns to factory settings when the Reset button is pressed.



Reset button

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 it again with a clean soft dry cloth.



- 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 erase characters.

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 condensation 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.

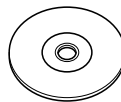
- If you experience problems during installation, consult your Kenwood dealer.
- When you purchase optional accessories, check with your Kenwood dealer to make sure that they work with your model and in your area.
- The characters which can be displayed by this unit are A-Z 0-9 @ " ' ` % & * + - = , . / \ < > [] () ; : ^ - { } ~ .
- 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 be inapplicable.

Handling CDs


- Do not touch the recording surface of the CD.
- Do not stick tape etc. on the CD, or use a CD with tape stuck on it.
- Do not use disc type accessories.
- Clean from the center of the disc and move outward.
- When removing CDs from this unit, pull them out horizontally.
- If the CD center hole or outside rim has burrs, use the CD only after removing the burrs with a ballpoint pen etc.

CDs that cannot be used

- CDs that are not round cannot be used.

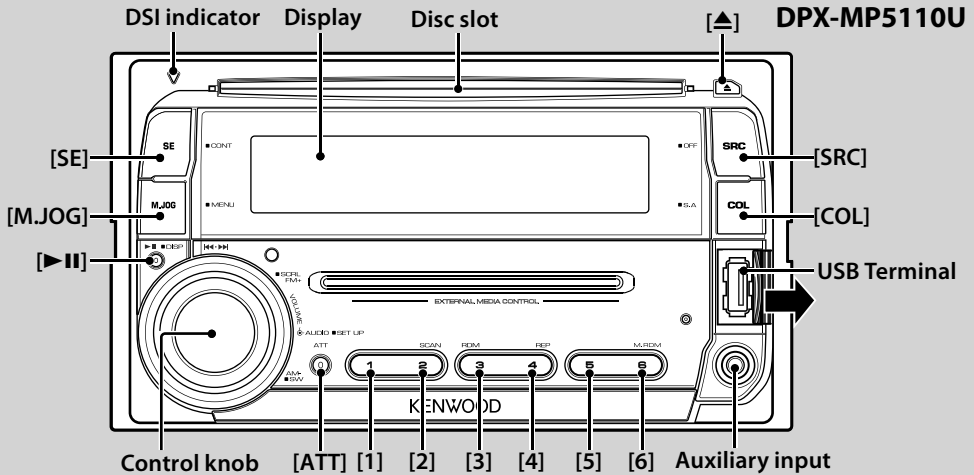


- CDs with coloring on the recording surface or CDs that are dirty cannot be used.

- This unit can only play the CDs with  This unit may not correctly play discs which do not have the mark.

- You cannot play a CD-R or CD-RW that has not been finalized. (For the finalization process refer to your CD-R/CD-RW writing software, and your CD-R/CD-RW recorder instruction manual.)

Basic Operation



General functions

Power/Source Select button [SRC]

Turns on the power.

When the power is on, the source switches between Tuner ("TUNER"), Tape** ("TAPE"), USB* ("USB"), CD ("CD"), Auxiliary input ("AUX"), and Standby ("STANDBY") each time this button is pressed. Press at least 1 second to turn off the power.

* Function of DPX-MP5110U.

** Function of DPX-MP4110.



- When the power is ON, the <Security Code> (page 14) is displayed as "Code On" or "Code Off".
- For whether USB devices can be connected, refer to <About Audio file> (page 18).
- When an optional accessory is connected, the source name for each device appears.

Volume control Control knob

Turn the knob to adjust the volume.

Attenuator [ATT]

Turning the volume down quickly.

Auxiliary input Auxiliary input

Connect a portable audio device with mini-plug cable (3.5 ϕ).



- Use the mini-plug cable which is stereo type and does not have any resistance.

Muting volume upon reception of phone call

When there is a call, "CALL" is displayed and the audio system is paused.

When the call ends, "CALL" disappears and the audio system comes back on.

The audio system comes back on when [SRC] is pressed during a call.

Subwoofer output Control knob

Switches between ON ("SW On") and OFF ("SW Off") each time pushing toward down for at least 2 seconds.

Tuner functions

Band select Control knob

Switches between FM1, FM2, and FM3 each time pushing toward up.

Switches to AM when pushing toward down.

Tuning Control knob

Changes the frequency when pushing toward left or right.



- During reception of stereo stations the "ST" indicator is ON.

Preset memory [1] - [6]

Memorize the station selected when pressing for at least 2 seconds.


Preset tuning [1] - [6]

Recalls the memorized station.

 : Indicates the button etc. to operate.

Disc & Audio file play functions

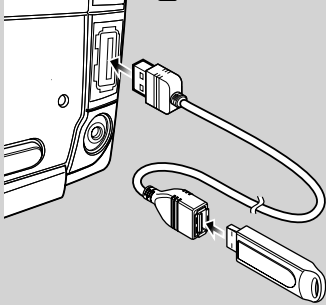
Disc play Disc slot


Starts playing when a disc is inserted.
When a CD is inserted, the  indicator is ON.



- 3 inch (8 cm) CD cannot be used. Attempt to insert using an adapter can cause malfunction.

USB device play USB Terminal



Connect the USB device to the USB cable (optional accessory) which is connected to the USB terminal. When the USB device is connected, the  indicator is ON.



- For the playable audio file, media, and devices, refer to <About Audio file> (page 18).

Pause and play [▶||]

Switches between pause and play each time this button is pressed.

Disc ejection [▲]



- You can eject the disc for 10 minutes after switching off the engine.

USB device removing [▲]

Press this button for 2 seconds and longer to select the remove mode, and the remove the USB device. During the remove mode, "Remove" is displayed.

Music search Control knob

Changes the music when pushing toward left or right. Fast reverses or forwards the music while keeping pushing toward left or right. (No sound is output while playing audio file.)

Folder search Control knob

Changes the folder containing the audio file when pushing toward up or down.

Select mode [M.JOG]

After pressing this button, you can quickly search songs with the control knob. See <List Select> (page 12) for details.

Track/ File/ Folder repeat play [4]

Switches between Track Repeat ("TRAC REP") and OFF ("REP Off") when pressed while playing a CD. Switches between File Repeat ("File REP"), Folder Repeat ("FOLD REP"), and OFF ("REP Off") when pressed while playing an audio file.

Scan play [2]

Successively plays the intro of the music in the disc or folder. When Scan Play is turned on, "TRAC SCN"/ "File SCN" is displayed.

Random play [3]

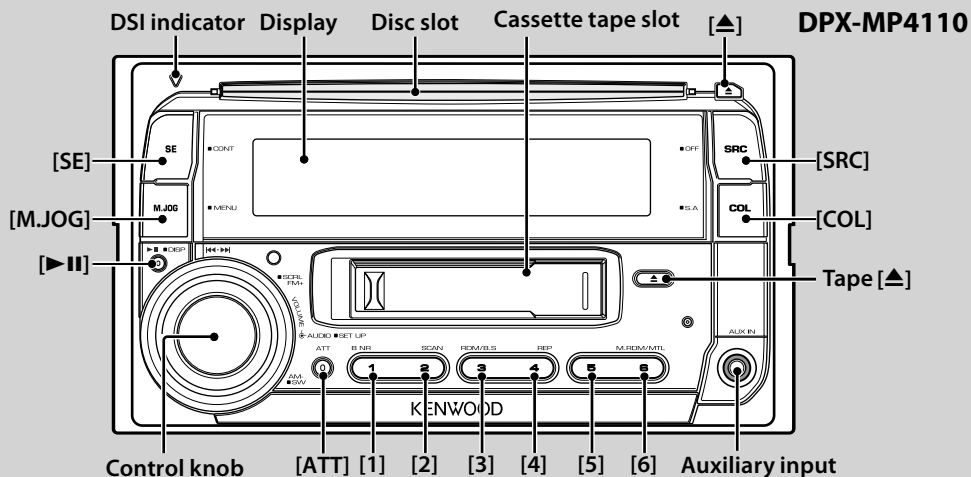
Randomly plays the music in the disc or folder. When Random Play is turned on, "Disc RDM"/ "FOLD RDM" is displayed.

Text/Title scroll Control knob

Scrolls the CD and audio file text display when pushing toward up for at least 2 seconds.


Basic Operation

 : Indicates the button etc. to operate.



Cassette play functions

Cassette play Cassette tape slot

Starts playing when a cassette tape is inserted.
When a Cassette is inserted, the  indicator is ON.

Direction [▶||]

When you want to listen to the reverse side.

Cassette tape ejection Tape [▲]

Fast Forwarding and Rewinding Control knob

Fast Forwarding: Push the Control knob toward up.
Rewinding: Push the Control knob toward down.

DPSS (Direct Program Search System)

Control knob

Indicating the music to skip, and Fast Forwarding or Rewinding.

Skipping to a later music: Push the Control knob toward right.

Skipping to a previous music: Push the Control knob toward left.



- Space between music and the first 5 seconds of the music are recognized as the previous music.
- As many as 9 music can be skipped.

Dolby B NR [1]

When Dolby B NR is ON, "B NR" indicator is ON.

Scan play [2]

Successively plays the intro of the music in the tape.
When Scan Play is turned on, "SCN" indicator is ON.

Blank Skip [3]

Fast forwarding automatically when an unrecorded portion continues for at least 10 seconds.
When the Blank Skip is turned on, "B.S" indicator is ON.

Music repeat play [4]

When Music repeat play is turned on, "REP" indicator is ON.

Selecting the Tape type [6]

Tape type	Display
CrO ₂ (Type II), FeCr (Type III), Metal (Type IV)	"MTL On"
Normal (Type I)	"MTL Off"

When MTL is turned on, "MTL" indicator is ON.

General Operation

Audio Control

You can adjust following Audio Control items ;

Adjustment Item	Display	Range
Rear volume	"R-VOL"	0 — 35
Subwoofer level	"SW L"	-15 — +15
System Q	"User"/"Rock"/ "Pops"/"Easy"/ "Top40"/"Jazz"/ "Natural"	User setting/Rock/Pops/Easy/ Top 40/Jazz/Natural (The indicator turns on according to the setting.)
Bass level*	"BasLV"	-8 — +8
Middle level*	"MidLV"	-8 — +8
Treble level*	"TreLV"	-8 — +8
Balance	"BAL"	Left 15 — Right 15
Fader	"FAD"	Rear 15 — Front 15

Exit Audio Control mode (Volume control mode)



* "USER": The customized Bass, Middle, and Treble levels are effective. This item can be selected at any time.

* You can adjust these items in detail. Refer to <Adjusting the detail of Audio Control> (Page 7).

* Source tone memory: Puts the set up value in the memory per source. (Detail Audio item is included)

1 Select the source to adjust

Press the [SRC] button.

2 Enter Audio Control mode

Press the Control knob.

3 Select the Audio item to adjust

Press the Control knob.

4 Adjust the Audio item

Turn the Control knob.

5 Exit Audio Control mode

Press any button.

Press a button other than the Control knob.

Adjusting the detail of Audio Control

Among the Basic Audio items, you can adjust the Bass level, Middle level, and Treble level in detail.

Bass level

Adjustment Item	Display	Range
Bass Center Frequency	"BasF"	40/50/60/70/80/100/ 120/150 Hz
Bass Q Factor	"BasQ"	1.00/1.25/1.50/2.00
Bass Extend	"B EX"	Off/On

Middle level

Adjustment Item	Display	Range
Middle Center Frequency	"MidF"	0.5/1.0/1.5/2.0 kHz
Middle Q Factor	"MidQ"	1.0/2.0

Treble level

Adjustment Item	Display	Range
Treble Center Frequency	"TreF"	10.0/12.5/15.0/17.5 kHz



- When you set the Bass Extend to ON, low frequency response is extended by 20%.
- You can exit the Audio Control mode at anytime by pressing any button except for Control knob and [ATT] button.

1 Select the Basic Audio item

Select the desired item to be set in detail from followings;

- Bass level
- Middle level
- Treble level

For how to select Basic Audio items, see <Audio Control> (page 7).

2 Enter Detail adjustment mode of Audio Control

Press the Control knob for at least 1 second.

3 Select the Detail Audio item to adjust

Press the Control knob.

4 Adjust the Detail Audio item

Turn the Control knob.

5 Exit the Detail Audio Control mode

Press the Control knob for at least 1 second.

General Operation

Audio Setup

You can set Sound system, such as follows;

Adjustment Item	Display	Range
Front High Pass Filter	"HPF"	Through/40/60/80/100/120/150/180/220 Hz
Rear High Pass Filter	"HPR"	Through/40/60/80/100/120/150/180/220 Hz
Low Pass Filter	"LPF"	50/60/80/100/120/Through Hz
Subwoofer Phase	"PHAS"	Reverse (180°)/ Normal (0°)
Volume offset	"V-Off"	-8 — ±0 (AUX: -8 — +8)
Loudness	"LOUD"	Off/On
Dual Zone System	"2ZON"	Off/On



- Volume offset: Sets each source's volume as a difference from the basic volume.
- Loudness: Compensates for low and high tones during low volume. (Only the low tone is compensated for when the tuner is selected as a source.)
- 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 "Zone2" of <Menu System> (page 14).
 - Select Main source by [SRC] button.
 - Adjust the volume of Front channel by Control knob.
 - Adjust the volume of Rear channel by <Audio Control> (page 7).
 - The Audio Control has no effect on sub source.

- 1 Select the source to adjust**
Press the [SRC] button.
- 2 Enter Audio Setup mode**
Press the Control knob for at least 1 second.
- 3 Select the Audio Setup item to adjust**
Press the Control knob.
- 4 Adjust the Audio setup item**
Turn the Control knob.
- 5 Exit Audio Setup mode**
Press the Control knob for at least 1 second.

Speaker Setting

Fine-tuning so that the System Q value is optimal when setting the speaker type as follows;

Speaker type	Display
OFF	"SP Off"
For 5 & 4 in. speaker	"SP 5/4"
For 6 & 6x9 in. speaker	"SP 6*9/6"
For the OEM speaker	"SP OEM"

- 1 Enter Standby**
Press the [SRC] button.
Select the "STANDBY" display.
- 2 Enter Speaker Setting mode**
Press the Control knob.
"SP SEL" is displayed.
- 3 Select the Speaker type**
Turn the Control knob.
- 4 Exit Speaker Setting mode**
Press the Control knob.

Sound Enhancer Select

You can play back adding gorgeous heavy bass to the sound.

- 1 Enter the Sound Effect mode**
Press the [SE] button.
"SE SEL" is displayed.
- 2 Select the Sound effect item**
Turn the Control knob.

Sound effect	Display
Returns to the normal sound without Sound effect.	"SE Off"
Moves the sound image up a notch and adjusts bass.	"SE Low"
Moves the sound image up two notches and adjusts bass.	"SE High"
Changes to the value set in <Sound Enhancer Control> (page 9).	"SE User"

When the Sound effect is ON, the "SE" indicator is ON.

- 3 Exit the Sound Effect mode**
Press the [SE] button.

Sound Enhancer Control

Adjusts each function of Sound effect individually.

1 Enter the Sound Effect Control mode

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

"SE CTRL" is displayed.

2 Select the Sound effect item for adjustment

Push the Control knob towards right or left.

3 Adjust the Sound effect item

Push the Control knob towards up or down.

Adjustment Item	Display	Range
Bass setting	"Bas"	Off/Low/High
LV setting	"LV"	Off/Low/High

4 Exit the Sound Effect Control mode

Press the [SE] button.



- Bass: Assisting the playback for the super bass sound.
- LV: Adjusts the sound image by changing the vertical position of the speakers virtually and increases or decreases the soundscape.

Spectrum Analyzer Select

Selecting the Spectrum Analyzer display.

Spectrum Analyzer	Display
Scan of Spectrum Analyzer	"S.A Scan"
Peak Hold	"PeakHold"
Spectrum Analyzer 1	"Flash"
Spectrum Analyzer 2	"Meter"
Spectrum Analyzer 3	"Gravity"
Spectrum Analyzer 4	"Tension"
Spectrum Analyzer 5	"Hana-Bi"
Spectrum Analyzer 6	"Laser"
Spectrum Analyzer 7	"Dance"
Spectrum Analyzer 8	"Warp"
Spectrum Analyzer 9	"Jump"
Spectrum Analyzer off	"S.A Off"

1 Enter the Spectrum Analyzer Select mode

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

"SPEANA" is displayed.

2 Select the Spectrum Analyzer

Turn the Control knob.

3 Exit the Spectrum Analyzer Select mode

Press the [COL] button.



- Scan of Spectrum Analyzer:
The items from "PeakHold" to "Jump" are displayed in sequence.

Illumination Color Select

Select the illumination color for display, buttons and control knob.

1 Enter the Illumination color Select mode

Press the [COL] button.

"Color" is displayed.

2 Select the setting item

Push the Control knob towards right or left.

Display	Setting item
"All"	Sets the same color for all of items.
"Display"	Sets the display color.
"Key"	Sets the button color.
"Rotary"	Sets the control knob color.

3 Change the color

Turn the Control knob.

Color setting	Display
Scan of Color 1-10	"V.Scan"
Color 1	"Color 1"
Color 2	"Color 2"
:	:
Color 10	"Color 10"
User color	"User"

4 Exit the Illumination color Select mode

Press the [COL] button.



- You can adjust the illumination color to your taste using RGB setting. See <User Color Setting> (page 10) for detail.
- When illumination effect (I-EFCT) setting (page 14) is "2", you can not set color.
- When illumination effect (I-EFCT) setting (page 14) is "3", you can select "ALL" and set "color1" to "10".

General Operation

User Color Setting

Adjust the illumination color with R(Red), G(Green), B(Blue) setting. Adjusted set value is memorized in the <Illumination color Select> of User setting area.

- 1 Select the item to adjust and select "USER"**
See step1 to step3 of <Illumination Color Select> (page 9) for detail.
- 2 Enter the RGB adjusting mode**
Press the Control knob for at least 1 second.
- 3 Select the color to adjust**
Push the Control knob towards right or left.
Adjust the blinking color.
- 4 Adjust the RGB Color**
Turn the Control knob.
- 5 Exit the RGB adjusting mode**
Press the Control knob.

Display Switching

Changing displayed information on each source following;

In Tuner source

Information	Display
Frequency	"FREQ"
Clock	"Clock"
Graphic	"Graphic"

In CD & External disc source

Information	Display
Disc title	"D-Title"
Track title (In External disc source)	"T-Title"
Play time & Track number	"P-Time"
Clock	"Clock"
Graphic	"Graphic"

In Audio file source

Information	Display
Music title & Artist name	"Title"
Album name & Artist name	"Album"
Folder name	"Folder"
File name	"File"
Play time & Music number	"P-Time"
Clock	"Clock"
Graphic	"Graphic"

In Tape source

Information	Display
Play time (Tape counter)	"Counter"
Clock	"Clock"
Graphic	"Graphic"

In Standby/ Auxiliary input source

Information	Display
Source name	"SRC Name"
Clock	"Clock"
Graphic	"Graphic"

- 1 Enter Switching Display mode**
Press the [▶|II] button for at least 1 second.
"DISP SEL" is displayed.
- 2 Select the Display item**
Push the Control knob towards up or down.
- 3 Exit Switching Display mode**
Press the [▶|II] button.



- When you select the clock display, the display setting of each source will be changed to the clock display.
- If the selected display item does not have any information, alternative information is displayed.

Tuner Operation

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 up or down.

2 Enter Menu mode

Press the [M.JOG] button for at least 1 second.

"Menu" is displayed.

3 Select the Auto Memory Entry mode

Push the Control knob towards up or down.

Select the "A-Memory" display.

4 Open Auto Memory Entry

Press the Control knob for at least 1 second.

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

Function of remote control

Direct Access Tuning

Entering the frequency and tuning.

1 Enter Direct Access Tuning mode

Press the [DIRECT] button on the remote control.

"----" is displayed.

2 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]

Canceling Direct Access Tuning

Press the [DIRECT] button on the remote control.



- You can enter the FM band frequency in steps of a minimum of 0.1 MHz.
- If you make no button operation for 10 seconds, this function is automatically canceled.

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 [1] and [5] buttons, 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.

Music disc/Audio file Operation

Play Functions of Disc Changer

While a disc in the disc changer is being played, the following play functions can be used.

Playing the Current Song or Disc Repeatedly. (Repeat play)

Press the [4] button.

Pressing the button repeatedly selects Track Repeat play on ("TRAC REP"), Disc Repeat play on ("Disc REP"), and Repeat play off ("REP Off") sequentially.

Randomly plays the music in the disc changer. (Magazine random play)

Press the [6] button.

Pressing the button toggles the setting between Magazine random play on ("MGZN RDM") and off ("RDM Off").

Function of remote control

Direct Music Search

Doing Music Search by entering the music number.

1 Enter the music number

Press the number buttons on the remote control.

2 Do music Search

Press the [◀◀] or [▶▶] button.

Cancelling Direct Music Search

Press the [▶II] button.



- Direct Music Search cannot be performed during Random play or scan play.
- If you make no button operation for 10 seconds, this function is automatically canceled.

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 [FM] or [AM] button.

Cancelling Direct Disc Search

Press the [▶II] button.



- Input "0" to select disc 10.
- Direct Disc Search cannot be performed during playing of Random play or scan play.

Function of USB/CD of Audio file

List Select

Search for the song you want to listen to by tracing the media file structure.

1 Enter Multi Jog Select mode

Press the [M.JOG] button.

"M. Jog On" is displayed.

Displays the current Audio file name.

2 Searching for and playing a song

Operation type	Operation
Movement between folders/files	Turn the Control knob.
Selection of folder/file	Press the Control knob.
Return to previous folder	Push the Control knob towards left.
Return to root folder	Push the Control knob towards left for at least 1 second.

Cancelling the Multi Jog Select mode

Press the [M.JOG] button.



- List Select cannot be performed during Random play or scan play.

Function of Music CD

Track Select

Select the song you want to listen to by turning the control knob.

1 Enter Multi Jog Select mode

Press the [M.JOG] button.

"M. Jog On" is displayed.

Displays the current music No.

2 Select the music

Turn the Control knob.

3 Play the selected song

Press the Control knob.

The Multi Jog Select mode is canceled and the selected song is played.

Cancelling the Multi Jog Select mode

Press the [M.JOG] button.



- Track Select is available only during playing of the built-in CD player.
- Track Select cannot be performed during Random play or scan play.

Cassette Operation

DPSS with the Remote control

Designating the music to be skipped with the remote control number buttons.

1 Designate the music to skip

Press number buttons on the remote.

2 Skipping to a later music

Press the [▶▶|] button.

Skipping to a previous music

Press the [◀◀|] button.

Cancelling DPSS

Press the [▶||] button.



- If you make no button operation for 10 seconds, this function is automatically canceled.

Menu Operation

Menu System

Set up the following functions;

Display	Setting	Setting overview	Source
"Code Set"	Refer to page 14	Sets security code.	SB
"I-EFCT"	0/1/2/3	Set the illumination color effect. (page 19)	—
"Beep"	On*/Off	Setting the operation check sound (beep sound) ON/OFF.	SB
"CLK ADJ"	Refer to page 15	Sets the clock.	SB
"DSI"	On*/Off	A red indicator will blink on the unit after the ACC is set to OFF, warning potential thieves.	SB
"CONT"	1— 5*— 11	Adjusting the display contrast.	SB
"SWPRE"	R*/SW	Sets the preout output.	SB
"Zone2"	R*/F	Specifies the destination of AUX input sound when the Dual Zone function is turned on.	SB
"AMP"	On*/Off	Turns on/off the built-in amplifier.	SB
"SPRM"	On*/Off	Turns ON/OFF the Supreme function.	AF
"Auto"	Auto1*/Auto2/Manual	Selects the tuning mode of the radio.	Tuner
"A-Memory"	Refer to page 11	Putting stations with good reception in the memory automatically.	Tuner
"CRSC"	Off/On*	Switches to Monaural to decrease noise when reception is poor.	FM
"Name Set"	Refer to page 15	Sets the display when switched to AUX source.	AUX
"SCL"	Auto*/MANU	Specifies whether the text is scrolled automatically.	—
"AUX"	Off/On*	Sets whether to display AUX during source selection.	SB
"CD Read"	1*/2	Sets the CD read mode.	SB
"DEMO"	Refer to page 16	Specifies whether to enable demonstration.	—

*Factory setting

Displayed item is depending on currently selected source. The mark in Source column shows the source to which the item is displayed.

SB : Can be set in other than standby state.

SB : Can be set in standby state.

AF : Can be set while Audio file source of CD/USB.

FM : Can be set during FM reception.

Tuner : Can be set during Tuner reception.

AUX : Can be set while accessing AUX source.

— : Can be set during all sources.

1 Enter Menu mode

Press the [M.JOG] button for at least 1 second.

"Menu" is displayed.

2 Select the Menu item

Push the Control knob towards up or down.

3 Set the Menu item

Push the Control knob towards right or left.

4 Exit Menu mode

Press the [M.JOG] button.



- Refer to the respective page for information on how to set the items with reference page number.
- "Zone2" is displayed when "2ZON" in <Audio Setup> (page 8) is set to "ON".
- Refer to the <Appendix> (page 18) for the details of the menu items.
- 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.

Security Code

When Security Code is set, possibility of theft is reduced because input of Security Code is prompted to turn on the unit once it is turned off.



- 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 Select Security Code item during Menu mode

Select the "Code Set" display.

For how to select menu items, refer to <Menu System>(page 14).

2 Enter Security Code mode

Press the Control knob for at least 1 second.

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

3 Select the digits to enter

Push the Control knob towards right or left.

4 Select the Security Code numbers

Push the Control knob towards up or down.

5 Repeat step 3 and 4, and complete the Security Code.

6 Confirm the Security Code

Press the Control knob for at least 3 seconds.

When "RE-Enter" is displayed, "Code" is also displayed.

7 Do the step 3 through 6 step operation, and reenter the security code.

"Approved" is displayed.

The Security Code function activates.



- If you enter a Code different from your Security Code, you have to start over from step 3.

8 Exit Security Code mode

Press the [M.JOG] button.

Entering Security Code

The Security Code is required to use the audio unit when the unit is first used after removed from the battery power source or the Reset button is pressed.

1 Turn the power ON.

2 Do the step 3 through 6 step operation, and reenter the security code.

"Approved" is displayed.



- 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 incorrect code was input	Input prohibited time
1	—
2	5 minutes
3	1 hour
4	24 hours

Manual Clock Adjustment

1 Select Clock Adjustment item during Menu mode

Select the "CLK ADJ" display.

For how to select menu items, refer to <Menu System>(page 14).

2 Enter Clock Adjust mode

Press the Control knob for at least 1 second.

The clock display blinks.

3 Adjust the time

Push the control knob towards up or down to adjust the hours and right or left to adjust the minutes.

4 Exit Clock adjustment mode

Press the [M.JOG] button.

Auxiliary Input Display Setting

Selecting the display below when changing to Auxiliary input source;

- "AUX"
- "DVD"
- "PORTABLE"
- "GAME"
- "VIDEO"
- "TV"

1 Select Auxiliary input display setting item during Menu mode

Select the "Name Set" display.

For how to select menu items, refer to <Menu System>(page 14).

2 Enter Auxiliary input display setting mode

Press the Control knob for at least 1 second.

The presently selected Auxiliary input display is displayed.

3 Select the Auxiliary input display

Push the Control knob towards up or down.

4 Exit Auxiliary input display setting mode

Press the [M.JOG] button.



- When operation stops for 10 seconds, the name at that time is registered, and the Auxiliary input display setting mode closes.
- The Auxiliary input display can be set only when the built-in auxiliary input or the auxiliary input of optional KCA-S220A is used. On the KCA-S220A, "AUX EXT" is displayed by default.

Menu Operation

Demonstration mode Setting

Turning the demonstration mode ON/OFF.

1 Select Demonstration item during Menu mode

Select the "DEMO" display.

For how to select menu items, refer to <Menu System>(page 14).

2 Set the Demonstration mode

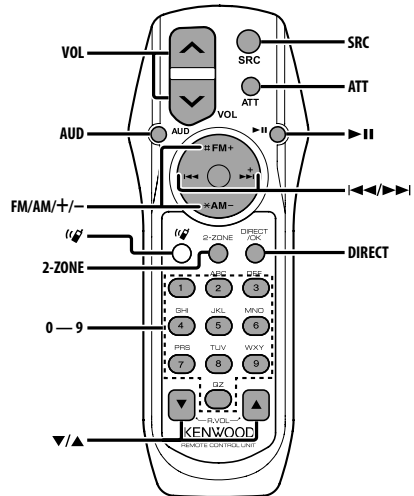
Press the Control knob for at least 2 second.

Pressing this button for 2 seconds or longer toggles the setting between "On" and "Off".

3 Exit Demonstration mode

Press the [M.JOG] button.


Basic Operations of remote control



General control

Volume control  [VOL]

Source select  [SRC]

Volume reduce  [ATT]

When the button is pressed again, the volume returns to the previous level. When the volume is reduced, the "ATT" indicator flashes.

In Audio control

Audio item select  [AUD]

Adjusts the Audio item  [VOL]



- Refer to <Audio Control> (page 7) 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 control

Dual zone system on and off  [2-ZONE]

Rear channel volume control  [▲]/[▼]

In Tuner source

Band select  [FM]/[AM]


Station select  [◀◀]/[▶▶]

Recall preset stations  [1] — [6]

In CD/USB source

Music select  [◀◀]/[▶▶]


Folder/Disc select  [FM]/[AM]

Pause/Play  [▶II]

In Cassette tape source

DPSS  [◀◀]/[▶▶]

Fast forwards/Rewinds  [FM]/[AM]

Direction  [▶II]

DPSS  [0] — [9]



When in <DPSS with the Remote control> (page 13), enter the number of music.



About []

This button is used when Bluetooth HANDS FREE BOX is connected. For more information, refer to the instruction manual of Bluetooth HANDS FREE BOX.



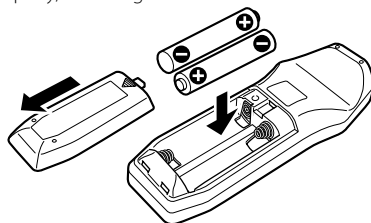
- Do not set the remote control in hot places such as on the dashboard.

Loading and Replacing the battery

Use two "AA"/"R6"-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.



Appendix

About Audio file

• Playable Audio file

AAC-LC (.m4a), MP3 (.mp3), WMA (.wma)

• Playable disc media

CD-R/RW/ROM

• Playable disc file format

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

• USB device Playable Model

DPX-MP5110U

• Playable USB device

USB mass storage class

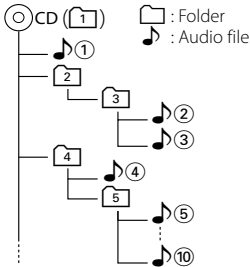
• Playable USB device file system

FAT16, FAT32

Although the audio files are complied with the standards listed above, the play maybe impossible depending on the types or conditions of media or device.

• Playing order of the Audio file

In the example of folder/file tree shown below, the files are played in the order from ① to ⑩.



An online manual about audio files is put on the site, www.kenwood.com/audiofile/. On this online manual, detailed information and notes which are not written in this manual are provided. Make sure to read through the online manual as well.



- In this manual, the word "USB device" is used for flash memories and digital audio players which have USB terminals.

About USB device

- When the USB device is connected to this unit, it can be charged up provided that this unit is powered.
- Install the USB device in the place where it will not prevent you from driving your vehicle properly.
- You cannot connect a USB device via a USB hub and Multi Card Reader.
- Take backups of the audio files used with this unit. The files can be erased depending on the operating conditions of the USB device. We shall have no compensation for any damage arising out of erasure of the stored data.
- No USB device comes with this unit. You need to purchase a commercially available USB device.
- When connecting the USB device, usage of the CA-U1EX (option) is recommended. Normal playback is not guaranteed when a cable other than the USB compatible cable is used. Connecting a cable whose total length is longer than 5 m can result in abnormal playback.

About Cassette tape

Cleaning the tape head

When there's noise or the sound quality is bad during tape play the tape head maybe dirty, clean the tape head.

About Cassette tape

- If the tape is slack tighten it.
- If the cassette tape label is peeling off glue it on again.
- Don't use deformed cassette tape.
- Don't place cassette tape on the dashboard etc. where the temperature is high.
- Don't use cassette tape that's 100 minutes long or longer.

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. This means that the unit is utilizing laser beams that are of a weaker class. There is no danger of hazardous radiation outside the unit.

Menu Glossary

• SWPRE (Switching Preout)

Switches the preout between rear output ("R") and subwoofer output ("SW").

• SUPREME

Technology to extrapolate and supplement with proprietary algorithm, the high-frequency range that is cut off when encoding at low bit rate (less than 128Kbps, Sampling frequency is 44.1kHz). Supplementing is optimized by compression format (AAC, MP3 or WMA) and processed according to bit rate.

The effect is negligible with music that is encoded at high bit rate, variable bit rate or has minimal high frequency range.

• CD READ

Sets the method for reading CD.

When unable to play special format CD, set this function to "2" to force playing. Note that some music CD may be unplayable even when set to "2". In addition, audio files cannot be played when set to "2". Normally, keep this set to "1".

1 : Automatically distinguishes between audio file disc and music CD when playing disc.

2 : Forces playing as music CD.

• ZONE2 (Dual Zone)

Set the destination (front speaker "F" or rear speaker "R") of the sub source (AUX IN) when the Dual Zone function is turned on.

• AMP

Selecting "Off" turns off the built-in amplifier. Turning off the built-in amplifier improves the quality of the sound from Preout.

• AUTO (Tuning mode select)

Select a tuning mode of the radio.

Tuning mode	Display	Operation
Auto seek	"Auto1"	Automatic search for a station.
Preset station seek	"Auto2"	Search in order of the stations in the Preset memory.
Manual	"Manual"	Normal manual tuning control.

• I-EFCT (Illumination effect)

Set the illumination color effect.

Illumination effect mode	Display
Mode off	"0"
Illumination color will change to variable, each time this unit is operated.	"1"
Illumination color will be mono-color and then illumination color will change variable with the playback tone of sound.	"2"
Illumination color will be mono-color and then illumination brightness will change with the playback tone of sound.	"3"

For operating KCA-BT100

To control KCA-BT100, operate as follows;

To make setting for <Selecting the Dialing Mode>, select <Menu System> (page 14). Pressing the [ATT] button at least 1 second after selecting the "DIALING MODE" item allows you to enter the dialing method selection mode. To exit from dialing method selection mode, press [ATT] button at least 1 second.

To make <Disconnecting a Call>, <Clearing the Disconnection Message>, and <Rejecting an Incoming call>, press [ATT] button for at least 1 second.


Moreover, some displays are different from the description of KCA-BT100 Instruction Manual.

Displays of KCA-BT100 Instruction Manual	Actual displays on this unit
"DISCONCT"	"HF D-CON"
"CONNECT"	"HF CON"
"PHN-DEL"	"DVC-DEL"
"P-STATUS"	"D-Status"
"BT-CON Y"	"HF-CON Y"
"BT-CON N"	"HF-CON N"

BT : Displays the bluetooth connection status.

This indicator turns on when a cell-phone is connected to this unit.

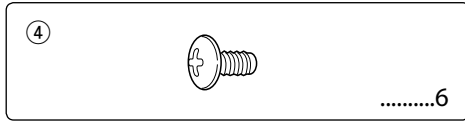
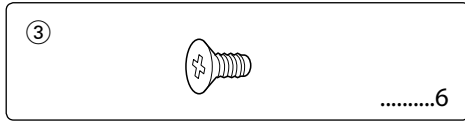
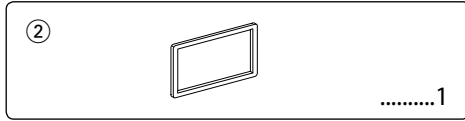
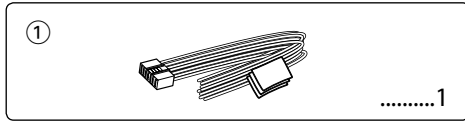
 : Displays the signal strength of cell-phone.

 : Displays the battery level of cell-phone.



Accessories/ Installation Procedure

Accessories



Installation Procedure

1. To prevent a short circuit, remove the key from the ignition and disconnect the ⊖ battery.
2. Make the proper input and output wire connections for 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.

▲WARNING

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 those wires to the power source running through the fuse box.



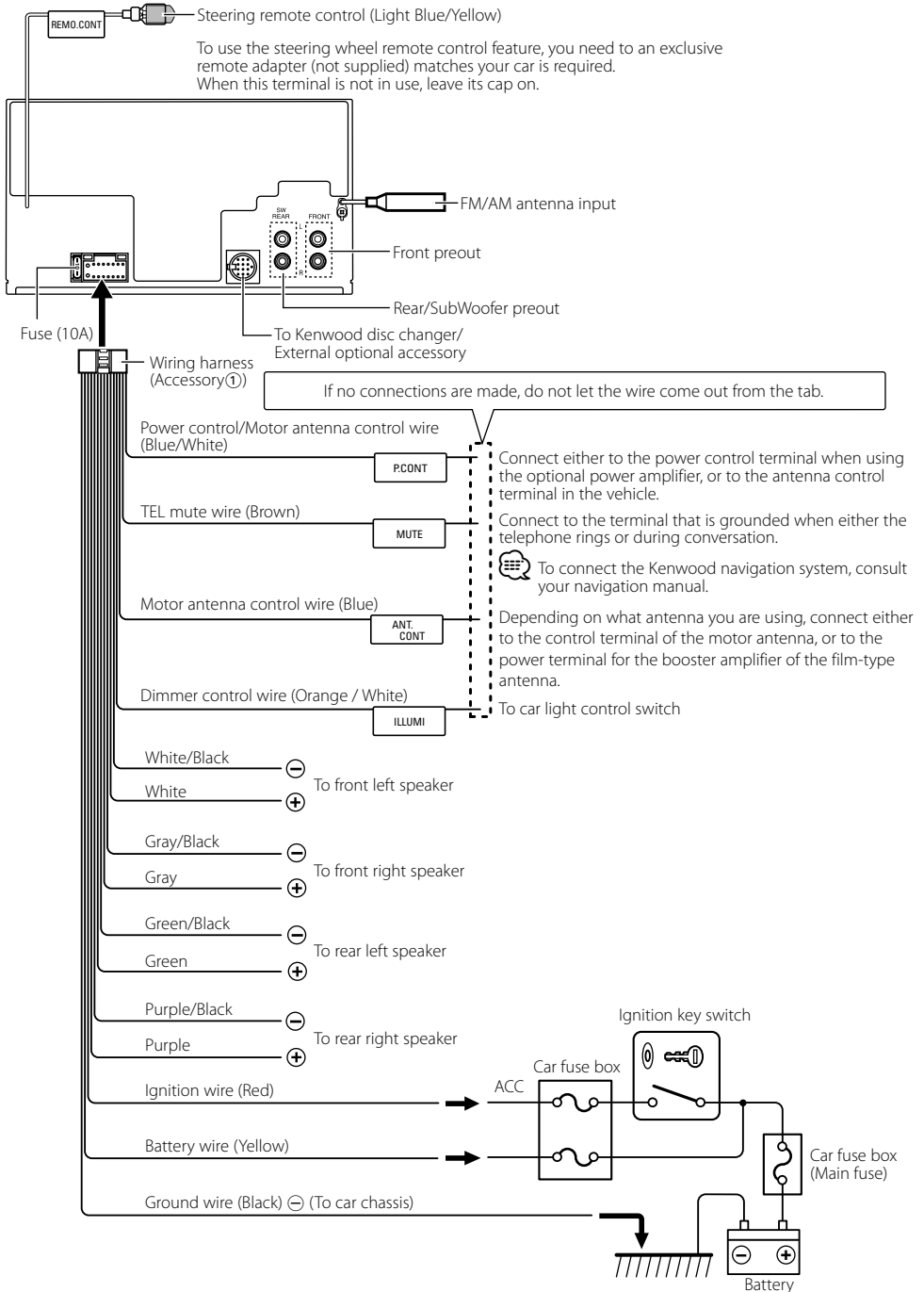
- Mounting and wiring this product requires skills and experience. For safety's sake, leave the mounting and wiring work to professionals.
- Make sure to ground the unit to a negative 12V DC power supply.
- Do not install the unit in a spot exposed to direct sunlight or excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.

- Do not use your own screws. Use only the screws provided. If you use the wrong screws, you could damage the unit.
- If the power is not turned ON ("Protect" is displayed), the speaker wire may have a short-circuit or touched the chassis of the vehicle and the protection function may have been activated. Therefore, the speaker wire should be checked.
- 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 opening.
- 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 ⊖ 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.

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.

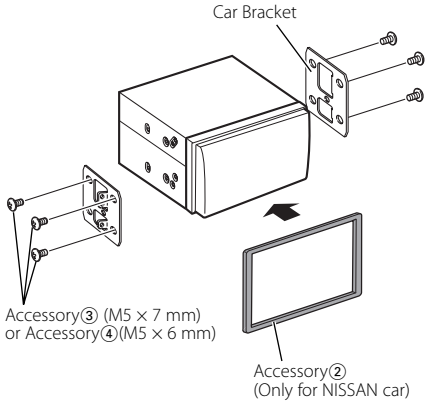
Connecting Wires to Terminals



Installation

Installation

Install onto the car bracket using the supplied screws (M5 × 6 mm, M5 × 7 mm). The holes of the car bracket to use will differ depending on the car model.



Troubleshooting Guide

Some functions of this unit may be disabled by some settings made on this unit.

- !** • **Cannot set up the subwoofer.**
- **Cannot set up the High Pass Filter.**
- **Cannot set up the Fader.**
- **No Audio control effect on AUX.**
 - ▶ Preout is not set to subwoofer. ☞ "SWPRE" of <Menu System> (page 14)
 - "Subwoofer output" of <Basic Operation> (page 4) is not set to On.
 - The Dual zone function is enabled. ☞ <Audio Setup> (page 8)

- !** • **Cannot set up the subwoofer phase.**
 - ▶ The Low Pass Filter is set to Through. ☞ <Audio Setup> (page 8)

- !** • **Cannot select the output destination of the subsource in the Dual zone.**
- **Cannot adjust the volume of the rear speakers.**
 - ▶ The Dual zone function is disabled. ☞ <Audio Setup> (page 8)

What might 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.

Tuner source

- ? Radio reception is poor.**
 - ✓ The car antenna is not extended.
 - ☞ Pull the antenna out all the way.

Disc source

- ? 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.
 - ☞ Eject the disc magazine and check the number for the specified disc.
 - ✓ The disc is severely scratched.
 - ☞ Try another disc instead.

Audio file source




- ? 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 <Handling CDs> (page 3).
 - ✓ The recording condition is bad.
 - ☞ Record the media again or use another media.
- ? Noise is heard when carrying out Folder Search.**
 - ✓ Noise may be produced if folders without audio files exist continuously in the playing media.
 - ☞ Do not make folders without audio files.

Cassette tape source

- ? The sound quality is poor or distorted.**
 - ✓ The tape head is dirty.
 - ☞ Clean the tape head.
- ? The DPSS, Tape Advance and Music Repeat don't operate correctly.**
 - ✓ The space between the songs on the tape can't be recognized because it's too short.
 - ☞ Have at least 5 seconds between songs.
 - ✓ The space between songs can't be recognized because there's too much noise between songs.
 - ☞ Reduce the noise between songs.
- ? The blank skip doesn't work.**
 - ✓ Because noise is too loud, the non-recorded part can't be recognized.
 - ☞ Reduce the noise between songs.
- ? Blank Skip functions at places that are recorded.**
 - ✓ Because the recording level is low, it's recognized as not recorded.
 - ☞ Turn Blank Skip OFF.

Troubleshooting Guide

The messages shown below display your systems condition.

Eject:	<ul style="list-style-type: none">• No disc magazine has been loaded in the changer. The disc magazine is not completely loaded.• No CD in the unit.	NA File:	An Audio file is played with a format that this unit can't support.
No Disc:	No disc has been loaded in the disc magazine.	Copy PRO:	A copy-protected file is played.
TOC ERR:	<ul style="list-style-type: none">• No disc has been loaded in the disc magazine.• The CD is quite dirty. The CD is upside-down. The CD is scratched a lot.	Reading:	The unit is reading the data on the disc.
E-05:	The disc is unreadable.	Hold:	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.
E-77:	The unit is malfunctioning for some reason. ⇨ Press the reset button on the unit. If the "E-77" code does not disappear, consult your nearest service center.	READ Error:	The file system of the connected USB device is broken. ⇨ Copy the files and folders for the USB device again. If the error message is still displayed, initialize the USB device or use other USB devices.
E-99:	Something is wrong with the disc magazine. Or the unit is malfunctioning for some reason. ⇨ Check the disc magazine. And then press the reset button on the unit. If the "E-99" code does not disappear, consult your nearest service center.	No Device:	The USB device is selected as a source although no USB device is connected. ⇨ Change the source to any source other than USB. Connect an USB device, and change the source to USB again.
 (Blink):	The CD player section is not operating properly. ⇨ Reinsert the CD. If the CD cannot be ejected 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.	NA Device:	An unsupported USB device is connected. ⇨ Remove the USB device without entering the remove mode.
 (Blink):	The tape player section is not operating properly. ⇨ Reinsert the Tape. If the tape cannot be ejected or the display continues to flash even when the tape has been properly reinserted, please switch off the power and consult your nearest service center.	No Music/E-15:	<ul style="list-style-type: none">• The connected USB device contains no playable audio file.• Media was played that doesn't have data recorded that the unit can play.
Protect:	The speaker wire has a short-circuit or touches the chassis of the vehicle, and then the protection function is activated. ⇨ Wire or insulate the speaker cable properly and press the reset button. If the "Protect" code does not disappear, consult your nearest service center.	USB ERR/  (Blink):	Some trouble may have occurred to the connected USB device. ⇨ Remove the USB device, then cycle the power switch to ON. If the same display is repeated, use another USB device.
		Remove:	The Remove mode has been selected for the USB device. You can remove the USB device safely.

Specifications

FM tuner section

Frequency range
: 200 kHz space : 87.9 MHz – 107.9 MHz
: 50 kHz space : 87.5 MHz – 108.0 MHz
Usable sensitivity (S/N = 30dB)
: 9.3dBf (0.8 μ V/75 Ω)
Quieting Sensitivity (S/N = 50dB)
: 15.2dBf (1.6 μ V/75 Ω)
Frequency response (\pm 3 dB)
: 30 Hz – 15 kHz
Signal to Noise ratio (MONO)
: 70 dB
Selectivity (\pm 400 kHz)
: \geq 80 dB
Stereo separation (1 kHz)
: 40 dB

AM tuner section

Frequency range
: 10 kHz space : 530 kHz – 1700 kHz
: 9 kHz space : 531 kHz – 1611 kHz
Usable sensitivity (S/N = 20dB)
: 28 dB μ (25 μ V)

CD player section

Laser diode
: GaAlAs
Digital filter (D/A)
: 8 Times Over Sampling
D/A Converter
: 24 Bit
Spindle speed
: 500 – 200 rpm (CLV)
Wow & Flutter
: Below Measurable Limit
Frequency response (\pm 1 dB)
: 10 Hz – 20 kHz
Total harmonic distortion (1 kHz)
: 0.008 %
Signal to Noise ratio (1 kHz)
: 105 dB
Dynamic range
: 93 dB
MP3 decode
: Compliant with MPEG-1/2 Audio Layer-3
WMA decode
: Compliant with Windows Media Audio
AAC decode
: AAC-LC ".m4a" files

USB Interface (DPX-MP5110U)

USB Standard
: USB1.1/ 2.0
Maximum Supply current
: 500 mA
File System
: FAT16/ 32

MP3 decode
: Compliant with MPEG-1/2 Audio Layer-3
WMA decode
: Compliant with Windows Media Audio
AAC decode
: AAC-LC ".m4a" files

Cassette player section (DPX-MP4110)

Tape speed
: 4.76 cm/sec.
Wow & Flutter (WRMS)
: 0.1 %
Frequency response (70 μ s)
: 40 Hz – 20 kHz (\pm 3 dB)
Separation (1 kHz)
: 35 dB
Signal to Noise ratio
Dolby NR Off : 50 dB
Dolby B NR On : 60 dB

Audio section

Maximum output power
: 50 W x 4
Full Bandwidth Power (at less than 1% THD)
: 22 W x 4
Speaker Impedance
: 4 – 8 Ω
Tone action
Bass : 100 Hz \pm 8 dB
Middle : 1 kHz \pm 8 dB
Treble : 10 kHz \pm 8 dB
Preout level / Load (CD)
: 2500 mV/10 k Ω
Preout impedance
: \leq 600 Ω

Auxiliary input

Frequency response (\pm 1 dB)
: 20 Hz – 20 kHz
Input Maximum Voltage
: 1200 mV
Input Impedance
: 10 k Ω

General

Operating voltage (11 – 16V allowable)
: 14.4 V
Current consumption
: 10 A
Installation Size (W x H x D)
: 178 x 100 x 155 mm
Weight
: 1.60 kg (DPX-MP5110U)
: 1.95 kg (DPX-MP4110)
: 1.55 kg (DPX-MP3110)

Specifications subject to change without notice.

KENWOOD