

# KENWOOD

**KDC-4051UG**  
**KDC-4051UR**  
**KDC-4051URY**  
**KDC-415UA**  
**KDC-415UR**  
**KDC-4251URY**  
**KDC-4451UQ**  
**KDC-4551UB**  
**KDC-455UW**  
**KDC-4651URY**

CD-RECEIVER

## **INSTRUCTION MANUAL**

CD-RECEIVER

**BEDIENUNGSANLEITUNG**

РАДИОПРИЕМНИК С КОМПАКТ-ДИСКАМИ

**ИНСТРУКЦИЯ ПО ЭКСПЛУАТАЦИИ**

АВТОМАГНИТОЛА

**ІНСТРУКЦІЯ З ЕКСПЛУАТАЦІЇ**

Kenwood Corporation

- "Made for iPod" and "Made for iPhone" mean that an electronic accessory has been designed to connect specifically to iPod, or iPhone, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod or iPhone may affect wireless performance.
- iPhone, iPod, iPod classic, iPod nano, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.

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This symbol mark indicates that Kenwood manufactured this product so as to decrease harmful influence on the environment.



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GET0689-005A (E0/E20)

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# Safety

## WARNING

Stop the car before operating the unit.

### Important to know...

- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit.
- **Caution:** Adjust the volume so that you can hear sounds outside the car. Driving with the volume too high may cause an accident.
- **Condensation:** When the car is air-conditioned, moisture may collect on the laser lens. This may cause disc read errors. In this case, remove the disc and wait for the moisture to evaporate.
- This unit can only play the CDs with:  

- The illustrations in this manual are examples used to explain more clearly how the controls are used. Therefore, what appears on the illustrations may differ from what appears on the actual equipment.
- A USB connection cable, CA-U1EX (optional accessory) is required for connecting a USB device.
- You can connect an Apple iPod/iPhone with KDC-4551UB/ KDC-455UW/ KDC-4651URY. The word "iPod" appearing in this manual indicates the iPod or iPhone connected to this unit with a connection cable, KCA-iP101 (optional accessory).
- If you experience problems during installation, consult your Kenwood dealer.
- When you purchase external components, check with your Kenwood dealer to make sure that they work with your model and in your area.
- Detailed information and notes about the playable audio files are stated in an online manual on the following site:  
[www.kenwood.com/cs/ce/audiofile/](http://www.kenwood.com/cs/ce/audiofile/)



## Declaration of Conformity with regard to the EMC Directive 2004/108/EC

### Manufacturer:

Kenwood Corporation  
2967-3 Ishikawa-machi, Hachioji-shi, Tokyo,  
192-8525 Japan

### EU Representative's:

Kenwood Electronics Europe BV  
Amsterdamseweg 37, 1422 AC UITHOORN,  
The Netherlands

This Product is not installed by the manufacturer of a vehicle on the production line, nor by the professional importer of a vehicle into an EU Member State.

### Information on Disposal of Old Electrical and Electronic Equipment and Batteries (applicable for EU countries that have adopted separate waste collection systems)



Products and batteries with the symbol (crossed-out wheeled bin) cannot be disposed as household waste.



Old electrical and electronic equipment and batteries should be recycled at a facility capable of handling these items and their waste byproducts.

**Pb**

Contact your local authority for details in locating a recycle facility nearest to you. Proper recycling and waste disposal will help conserve resources whilst preventing detrimental effects on our health and the environment. Notice: The sign "Pb" below the symbol for batteries indicates that this battery contains lead.

## The marking of products using lasers



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.

### For Turkey

Bu ürün 26891 sayılı Resmi Gazete'de yayımlanan Elektrikli ve Elektronik Eşyalarda Bazı Zararlı Maddelerin Kullanımının Sınırlandırılmasına Dair Yönetmeliğe uygun olarak üretilmiştir.

This product complies with Directive, Number 26891 regarding "REGULATION ON THE RESTRICTION OF THE USE OF CERTAIN HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRONIC EQUIPMENT".

### Muting upon the reception of a phone call

To use this feature, connect the MUTE lead to your telephone using a commercial telephone accessory. (page 18, 19)

**When a call comes in,** "CALL" appears.

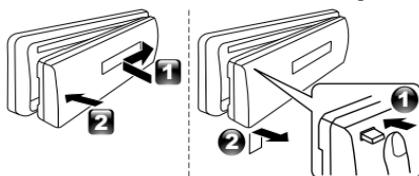
- The audio system pauses.
- To continue listen to the audio system during a call, press **⏻ SRC**. "CALL" disappear and the audio system resumes.

**When a call ends,** "CALL" disappear.

- The audio system resumes.

# Preparation

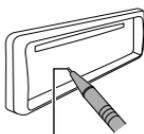
## How to attach/detach the faceplate



- Do not expose the faceplate to direct sunlight, excessive heat, or humidity. Also avoid places with too much dust or the possibility of water splashing.
- Keep the faceplate in its casing while detached.
- The faceplate is a precision piece of equipment and can be damaged by shocks or jolts.
- To prevent deterioration, do not touch the terminals of the unit and faceplate with your fingers.

## How to reset your unit

If this unit fails to operate properly, press the reset button.



Reset button

The unit returns to factory settings when the reset button is pressed.

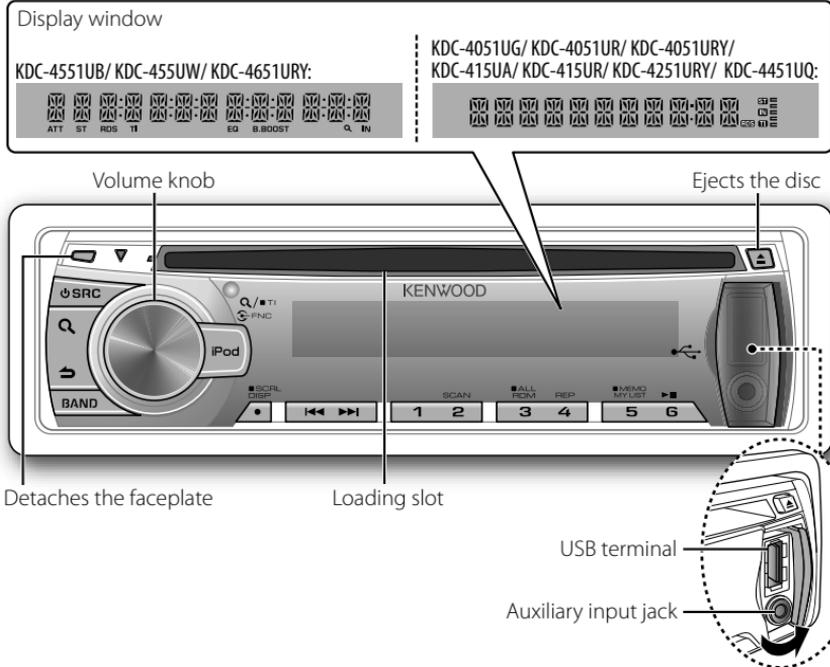
## Initial settings before operations

- 1 Press **SRC** to enter [STANDBY] mode.
- 2 Press the volume knob to enter [FUNCTION] mode.
- 3 Turn the volume knob to select [INITIAL SET], then press to enter.
- 4 Turn the volume knob to make a selection, then press to confirm. See table below for selection.
- 5 Hold **↶** to finish the procedure.

Item	Selectable setting (Preset: *)
PRESET TYPE	<b>NORMAL/ NORM*</b> : Memorizes one station for each preset button in each band (FM1/ FM2/ FM3/ MW/ LW). ; <b>MIX</b> : Memorizes one station for each preset button regardless of the selected band (FM1/ FM2/ FM3/ MW/ LW).
KEY BEEP	<b>ON*/ OFF</b> : Activates/deactivates the keypress tone.
RUSSIAN SET	<b>ON</b> : Folder name, file name, song title, artist name, album name are displayed in Russian (if applicable). ; <b>OFF*</b> : Cancels.
P-OFF WAIT	Sets the duration when the unit will automatically turn off (while in standby mode) to save the battery. -----: Cancels; <b>20M*</b> : 20 minutes ; <b>40M</b> : 40 minutes ; <b>60M</b> : 60 minutes
BUILT-IN AUX/ BUILTIN AUX	<b>ON1*</b> : Outputs sound of the connected external component through the car speakers when "AUX" is selected as the source. ; <b>ON2</b> : Outputs sound from the connected external component when "AUX" is selected as the source. When you turn on the power, the sound attenuates (to prevent noise when no external component is connected). Turn the volume knob clockwise to return to the previous volume level. ; <b>OFF</b> : Disables "AUX" in source selection.
CD READ	<b>1*</b> : Automatically distinguishes between audio file disc and music CD. ; <b>2</b> : Forces to play as a music CD. No sound can be heard if an audio file disc is played.
SWITCH PREOUT/ SWITCH PRE	<b>REAR*/ SUB-W</b> : Selects whether rear speakers or a subwoofer are connected to the line out terminals on the rear of the unit (through an external amplifier).
SP SELECT	<b>OFF*/ 5/4/ 6 × 9/6/ OEM</b> : Selects the speaker size for optimum performance.
F/W UP xx.xx	<b>YES</b> : Starts upgrading the firmware. ; <b>NO*</b> : Cancels (upgrading is not activated). For details on how to update the firmware, see: <a href="http://www.kenwood.com/cs/ce/">www.kenwood.com/cs/ce/</a>

[SWITCH PREOUT/ SWITCH PRE] is selectable only with KDC-4051UG/ KDC-4051UR/ KDC-415UA/ KDC-415UR/ KDC-4251URY/ KDC-4551UB/ KDC-455UW/ KDC-4651URY.

# Basic operations



The illustration and button names used for explanation in this manual are of **KDC-4551UB/ KDC-455UW/ KDC-4651URY** (unless mentioned otherwise).

Refer to the table below for the difference:

KDC-4551UB/ KDC-455UW/ KDC-4651URY	KDC-4051UG/ KDC-4051UR/ KDC-4051URY/ KDC-415UA/ KDC-415UR/ KDC-4251URY/ KDC-4451UQ
iPod	
3 (ALL RDM)	3
5 (MEMO MY LIST)	5

The following indicator lights up when...

- ST** : A stereo broadcast is received.  
**IN** : A disc is in the unit.  
**TI** : Traffic Information function is turned on.  
**RDS** : Radio Data System service is available.

**KDC-4551UB/ KDC-455UW/ KDC-4651URY only:**

- ATT (blink)** : The sound attenuates.  
 (Applicable only for **KDC-4651URY** using the remote controller (RC-405), page 15.)  
**EQ** : [**SYSTEM Q**] is set to an EQ mode other than [**NATURAL**]. (page 13)  
**B.BOOST** : [**BASS BOOST**] is set to [**1**] or [**2**]. (page 13)  
**Q** : In Search Mode or when a Playlist is displayed.

When you press or hold the following button(s)...

Button	General operation
	<ul style="list-style-type: none"> <li>■ Turns on.</li> <li>■ Turns off if pressed and held.</li> <li>■ Selects the available sources (TUNER, USB or iPod, CD, AUX, STANDBY), if the power is turned on.               <ul style="list-style-type: none"> <li>• <i>If the source is ready, playback also starts. "iPod" and "CD" are selectable only when an iPod is connected or a disc is loaded.</i></li> </ul> </li> </ul>
Volume knob (turn)	<ul style="list-style-type: none"> <li>■ Adjusts the volume level.</li> <li>■ Selects items.</li> </ul>
Volume knob (press)	<ul style="list-style-type: none"> <li>■ Confirms selection.</li> <li>■ Enters <b>[FUNCTION]</b> settings.</li> </ul>
<b>BAND</b>	<ul style="list-style-type: none"> <li>■ Selects the FM bands (FM1/ FM2/ FM3) or MW/ LW.</li> <li>■ Selects the next folder.</li> </ul>
<b>6 (▶ II)</b>	Pauses/resumes playback of a disc/ USB device/ iPod.
	<ul style="list-style-type: none"> <li>■ Searches for radio station.</li> <li>■ Selects track/file.</li> <li>■ Fast-forwards/reverses tracks if pressed and held.</li> </ul>
<b>SCRL DISP</b>	<ul style="list-style-type: none"> <li>■ Changes the display information.</li> <li>■ Scrolls the display information if pressed and held.</li> <li>■ Enters clock adjustment mode directly (page 7) if pressed and held while in clock display screen.</li> </ul>
<b>iPod</b>	<p>KDC-4551UB/ KDC-455UW/ KDC-4651URY only:</p> <ul style="list-style-type: none"> <li>■ Selects "iPod" source.</li> <li>■ Switches the controlling terminal (HANDS ON/ HANDS OFF) for iPod playback if pressed and held. (page 12)</li> </ul>
	KDC-4051UG/ KDC-4051UR/ KDC-4051URY/ KDC-415UA/ KDC-415UR/ KDC-4251URY/ KDC-4451UQ only: Selects Random Play. (page 11)
	<ul style="list-style-type: none"> <li>■ Returns to the previous item.</li> <li>■ Exit from setting mode if pressed and held.</li> </ul>

#### About "KENWOOD Music Editor"

- This unit supports the PC application "KENWOOD Music Editor Light ver1.0" or later.
- When you use the audio file with database information added by the "KENWOOD Music Editor Light ver1.0," you can search a file by title, album or artist name using Music Search.
- In the Instruction manual, the term "USB device" is used to mean the device that contains audio files with database information added with KENWOOD Music Editor.
- "KENWOOD Music Editor Light ver1.0" is available from the following web site: [www.kenwood.com/cs/ce/](http://www.kenwood.com/cs/ce/)
- For further information on "KENWOOD Music Editor Light ver1.0," refer to the site above or the application help.

# Getting started

## Canceling the display demonstration

The display demonstration is always turned on unless you cancel it.

When you turn on the power (or after you reset the unit), the display shows:

**[CANCEL DEMO] → [PRESS] → [VOLUME KNOB]**

- 1 Press the volume knob.  
[YES] is selected as the initial setup.
- 2 Press the volume knob again to confirm.  
[DEMO OFF] appears.
  - If no operation is done for about 15 seconds or if you turn the volume knob to select [NO] in step 2, [DEMO MODE] appears and the display demonstration starts.

## Setting the demonstration mode

- 1 Press the volume knob to enter [FUNCTION].
- 2 Turn the volume knob to select [DEMO MODE], then press to enter.
- 3 Turn the volume knob to select [ON] or [OFF].  
If [ON] is selected, display demonstration starts if no operation is done for about 20 seconds.
- 4 Hold  to finish the procedure.

## Adjusting the clock

- 1 Press the volume knob to enter [FUNCTION] mode.
- 2 Turn the volume knob to select [SETTINGS], then press to enter.
- 3 Turn the volume knob to select [CLOCK], then press to enter.
- 4 Turn the volume knob to select [CLOCK ADJUST/ CLOCK ADJ], then press to enter.  
Clock hour flashes on the display.

- 5 Turn the volume knob to adjust the hour, then press to enter minute adjustment.  
Clock minutes flashes on the display.

- 6 Turn the volume knob to adjust the minute, then press to confirm.

Press  /  to move between the hour and minute adjustment.

- 7 Hold  to finish the procedure.

## Maintenance

**Cleaning the unit:** Wipe off the dirt on the panel with a dry silicon or soft cloth. Failure to observe this precaution may result in damage to the monitor or unit.

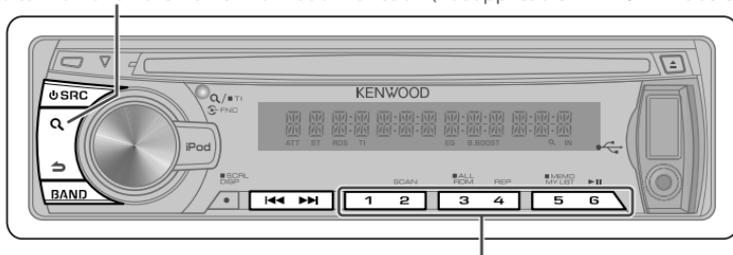
**Cleaning the connector:** Wipe off dirt on the connector of the unit and faceplate. Use a cotton swab or cloth.

## Handling discs

- Do not touch the recording surface of the disc.
- Do not stick tape etc. on the disc, or use a disc with tape stuck on it.
- Do not use any accessories for the disc.
- Clean from the center of the disc and move outward.
- Clean the disc with a dry silicon or soft cloth. Do not use any solvents.
- When removing discs from this unit, pull them out horizontally.
- Remove the rims from the center hole and disc edge before inserting a disc.

# Listening to the radio

Hold to turn on or off the Traffic Information function (not applicable if "MW/ LW" is selected).



Hold for about 2 seconds to memorize the current station or the selected Program Type. (Refer to [PTY SEARCH] on the table below to select the Program Type.)

- Press briefly to recall memorized station (or Program Type after entering the PTY search mode).

- 1 Press **SRC** to select "TUNER."
- 2 Press **BAND** repeatedly to select a band (FM1/ FM2/ FM3/ MW/ LW).
- 3 Press **◀▶** to search for a station.

## Adjust [SETTINGS] mode settings

While listening to the radio...

- 1 Press the volume knob to enter [FUNCTION] mode.
- 2 Turn the volume knob to select [SETTINGS], then press to enter.
- 3 Turn the volume knob to make a selection, then press to confirm.  
See table below for selection.
- 4 Hold **↶** to finish the procedure.

Item	Selectable setting (Preset: *)
LOCAL SEEK	<b>ON</b> : Searches only FM stations with good reception. ; <b>OFF*</b> : Cancels.
SEEK MODE	Selects the tuning mode for <b>◀▶</b> buttons. <b>AUTO1*</b> : Automatically search for a station. ; <b>AUTO2</b> : Search in the order of the stations in the preset memory. ; <b>MANUAL</b> : Manually search for a station.
AUTO MEMORY	<b>YES</b> : Automatically starts memorizing 6 stations with good reception. ; <b>NO*</b> : Cancels (automatic memorizing is not activated). (Selectable only if [NORMAL/ NORM] is selected for [PRESET TYPE].) (page 4)
MONO SET	<b>ON</b> : Improves the FM reception (but the stereo effect may be lost). ; <b>OFF*</b> : Cancels (stereo effect resumes).
PTY SEARCH	Selects the available Program Type (page 9). Then, press <b>◀▶</b> to start searching. Press the volume knob to enter PTY language selection. Turn the volume knob to select the PTY language ( <b>ENGLISH*</b> / <b>FRENCH</b> / <b>GERMAN</b> ), then press to confirm.
NEWS SET	<b>00M – 90M</b> : Sets the time for receiving the next news bulletin. ; <b>OFF*</b> : Cancels.
AF SET	<b>ON*</b> : Automatically searches for another station broadcasting the same program in the same Radio Data System network with better reception when the current reception is poor. ; <b>OFF</b> : Cancels.

Item	Selectable setting (Preset: *)
RDS REGIONAL/ RDS REG	<b>ON*</b> : Switches to another station only in the specific region using the "AF" control. ; <b>OFF</b> : Cancels.
AUTO TP SEEK/ ATP SEEK	<b>ON*</b> : Automatically searches for a station with better reception when the traffic information's reception is poor. ; <b>OFF</b> : Cancels.

- [PTY SEARCH] is selectable only when the source is "FM."
- [NEWS SET/ AF SET/ RDS REGIONAL/ RDS REG/ AUTO TP SEEK/ ATP SEEK] is selectable only when the source is "FM." If other playback source is selected, these settings are selectable under [RDS SET] item. (page 14)

#### ■ Available Program Type:

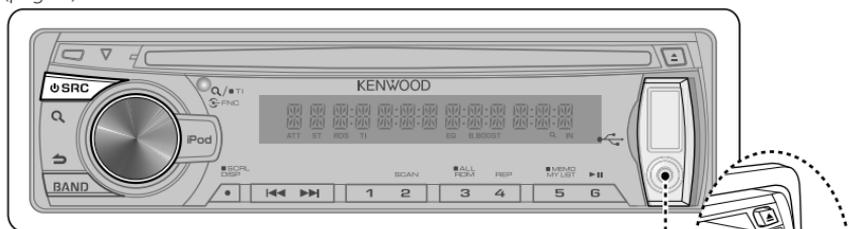
SPEECH	MUSIC	NEWS	AFFAIRS	INFO	SPORT	EDUCATE
DRAMA	CULTURE	SCIENCE	VARIED	POP M (music)	ROCK M (music)	EASY M (music)
LIGHT M (music)	CLASSICS	OTHER M (music)	WEATHER	FINANCE	CHILDREN	SOCIAL
RELIGION	PHONE IN	TRAVEL	LEISURE	JAZZ	COUNTRY	NATION M (music)
OLDIES	FOLK M (music)	DOCUMENT				

The unit will search for the Program type categorized under [SPEECH] or [MUSIC] if selected.  
[SPEECH] : White character item. ; [MUSIC] : Black character item.

- The Radio Data System feature won't work where the service is not supported by any broadcasting station.
- If the volume is adjusted during reception of traffic information, the adjusted volume is memorized automatically. It will be applied the next time Traffic Information function is turned on.

## Listening to the other external components

**Preparation** : Make sure [ON1] or [ON2] is selected for [BUILT-IN AUX/ BUILTIN AUX].  
(page 4)



- 1 Press **SRC** to select "AUX."
- 2 Turn on the external component and start playing.
- 3 Turn the volume knob to adjust the volume.

Portable audio device  
(optional accessory)

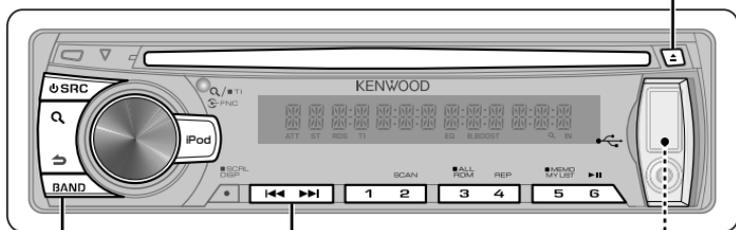


Auxiliary input jack

3.5 mm stereo mini plug  
(optional accessory)

# Listening to a disc/ USB device/ iPod

Ejects the disc. ("NO DISC" appears and "IN" indicator goes off.)



- Press to select track/file.
- Hold to fast-forwards/reverses.

Press to select next folder.

## Start playing a disc

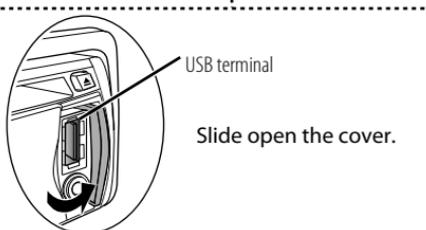
- 1 Press **SRC** to turn on the power.
- 2 Insert a disc into the loading slot.  
Playback starts automatically.
- 3 Press number button **6 (▶||)** to resume/pause playback (if necessary).

## Functions of KDC-4651URY with remote controller (RC-405)

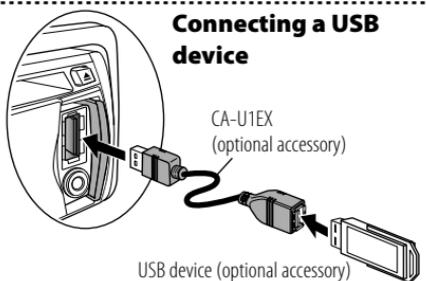
### Direct Music Search

• Not available if *Random Play*, *Scan Play*, *iPod playback* is selected.

- 1 Press **DIRECT** to enter Direct Music Search Mode.  
"---" appears.
  - 2 Press the number buttons to enter the track number.
  - 3 Press **◀▶** to search for the music.
- To cancel the Direct Music Search Mode, press **↶** or **EXIT**.



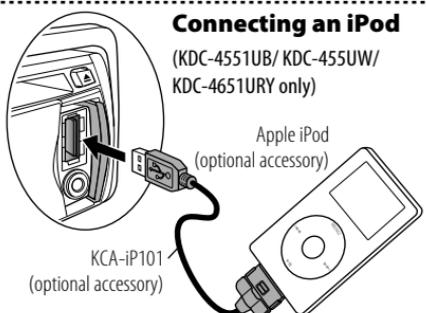
Slide open the cover.



### Connecting a USB device

CA-U1EX  
(optional accessory)

USB device (optional accessory)



### Connecting an iPod

(KDC-4551UB/ KDC-455UW/  
KDC-4651URY only)

Apple iPod  
(optional accessory)

KCA-iP101  
(optional accessory)

The source automatically switches, and playback starts.

## Selecting Repeat Play

Press number button **4 (REP)** repeatedly to make a selection.

Audio CD : TRACK/ TRAC (track) REPEAT,  
REPEAT OFF

AAC/MP3/WMA :

FILE REPEAT, FOLD (folder) REPEAT,  
REPEAT OFF

iPod : FILE REPEAT, REPEAT OFF

## Selecting Random Play

Press number button **3 (ALL RDM)** or  repeatedly to make a selection.

Audio CD : DISC RANDOM, RANDOM OFF

AAC/MP3/WMA/iPod :

FOLDER/ FOLD (folder) RANDOM,  
RANDOM OFF

- Press and hold number button **3 (ALL RDM)** or  to select "ALL RANDOM."
  - Applicable only if "RANDOM OFF" is selected initially.
  - KDC-4551UB/ KDC-455UW/ KDC-4651URY only: Changes the iPod browsing item to "songs."

## Selecting Scan Play

Press number button **2 (SCAN)** repeatedly to make a selection.

Audio CD : TRACK/ TRAC (track) SCAN,  
SCAN OFF

AAC/MP3/WMA : FILE SCAN, SCAN OFF

- If scan play is selected, the unit starts playing the first 10-second intro of the music in the disc/current folder. If "SCAN OFF" is selected, the unit resumes normal play of the current song.

## Selecting a folder/track/file

- 1** Press  to enter Music Search mode. "SEARCH" appears, then the current file name appears on the display.
- 2** Turn the volume knob to select a folder/ track/file, then press to confirm.

- To return to the root folder (or first track for audio CD), press **BAND**.
- To return to the previous folder, press .
- To cancel the Music Search mode, press and hold .
- < or > on the display indicates that preceded/next item is available.
- For USB device\* and iPod: To skip search, press  / .

\* This operation is effective only for the files registered in the database created with Kenwood Music Editor. (page 6)

- KDC-4551UB/ KDC-455UW/ KDC-4651URY only: To return to the top menu while in the search mode of an iPod, press **BAND**.

### Discs that cannot be used

- Discs that are not round.
- Discs with coloring on the recording surface or discs that are dirty.
- You cannot play a Recordable/ReWritable disc that has not been finalized. (For the finalization process refer to your disc writing software, and your disc recorder instruction manual.)
- 3-inch CD cannot be used. Attempt to insert using an adapter can cause malfunction.

### About USB device

- This unit can play AAC/MP3/WMA files stored on a USB mass storage class device.
- 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.
- Make sure all important data has been backed up to avoid losing the data.
- Connecting a cable whose total length is longer than 5 m can result in abnormal playback.

## Alphabet Search and My Playlist for iPod

### Selecting a song by alphabet

- 1 Press **Q** to enter Music Search mode.  
"SEARCH" appears.
- 2 Turn the volume knob to select a category, then press to confirm.
- 3 Press **Q** again to enter alphabet search mode.  
"SEARCH < \_ \_ \_>" appears.
- 4 Turn the volume knob to select the character to be searched for.
- 5 Press **◀◀ / ▶▶** to move to the entry position.  
You can enter up to three characters.
- 6 Press the volume knob to start searching.
  - To cancel the Alphabet Search mode, press and hold **↶**.
  - A longer searching time is required if there are many songs or playlists in the iPod.
  - To search for a character other than A to Z and 0 to 9, enter only "\*".
  - The article (a, an, the) of songs name will be skipped during search.

### Registering songs in the playlist

- 1 Select and play the song you want to register. (page 11)
- 2 Press and hold number button **5 (MEMO MY LIST)** to register.  
"## STORED" (registration number) appears.  
You can register up to 10 songs. "MEMORY FULL" appears, if you try to register the eleventh song.
  - If you attempt to register a song from a different iPod, "NO INFO" followed by "MPLIST DELETE" appears.  
To delete the playlist, turn the volume knob to select "YES," then press to confirm.
  - You can also register the song displayed in the Music Search mode by following the same procedure.
  - Do not register Podcasts.

### Playing a song on the playlist

- 1 Press number button **5 (MEMO MY LIST)** to display the playlist.  
"MY PLAYLIST" appears.
- 2 Turn the volume knob to select the song you want, then press to confirm.
  - Random play cannot be performed during playback of a song in the playlist.

### Deleting a song on the playlist

- 1 Press number button **5 (MEMO MY LIST)** to display the playlist.  
"MY PLAYLIST" appears.
- 2 Turn the volume knob to select the song you want to delete, then press and hold the volume knob.
- 3 Turn the volume knob to select "DELETE ONE" or "DELETE ALL," then press to confirm.  
Select "DELETE ALL" to delete all the songs in the playlist.
- 4 Turn the volume knob to select "YES," then press to confirm.  
"COMPLETE" appears.

### iPod control by Hand Mode

Press and hold iPod to enter iPod mode.

HANDS ON :

Control iPod from the iPod. "iPod MODE" appears on the display.

HANDS OFF: Control iPod from the unit.

### Adjust [SETTINGS] mode settings

While listening to an iPod...

- 1 Press the volume knob to enter **[FUNCTION]** mode.
- 2 Turn the volume knob to select **[SETTINGS]**, then press to enter.
- 3 Turn the volume knob to make a selection, then press to confirm.  
See the following table for selection.
- 4 Hold **↶** to finish the procedure.

## Functions of KDC-4551UB/ KDC-455UW/ KDC-4651URY with iPod

Item	Selectable setting (Preset: *)
SKIP SEARCH	0.5%*/ 1%/ 5%/ 10%: Sets the ratio of skip when searching for a song in Music Search mode. (Holding <b>◀◀</b> / <b>▶▶</b> skips songs at 10% regardless of the setting made.)
MY PLAYLIST DELETE	YES: Deletes the saved My Playlist. ; NO*: Cancels.

### About compatible iPod/iPhone

Made for

- iPod touch (1st, 2nd, and 3rd generation)
- iPod classic
- iPod with video
- iPod nano (1st, 2nd, 3rd, 4th, and 5th generation)
- iPhone 4
- iPhone 3GS
- iPhone 3G
- iPhone

- For the latest compatible list and software version of iPod/iPhone, see: [www.kenwood.com/cs/ce/ipod](http://www.kenwood.com/cs/ce/ipod)
- If you start playback after connecting the iPod, the music that has been played by the iPod is played first. In this case, "RESUMING" is displayed without displaying a folder name, etc. Changing the browse item will display a correct title, etc.
- You cannot operate iPod if "KENWOOD" or "✓" displayed on iPod.

## Function settings

- 1 Press the volume knob to enter [FUNCTION] mode.
- 2 Turn the volume knob to select [AUDIO CONTROL/ AUDIO CTRL] or [SETTINGS], then press to enter.
- 3 Turn the volume knob to make a selection, then press to confirm.
  - See table below for selection.
  - Repeat step 3 until the desired item is selected/activated.
  - Press **↶** to return to the previous item.
- 4 Hold **↶** to finish the procedure.

[AUDIO CONTROL/ AUDIO CTRL] : While listening to any source except in STANDBY state...

Item	Selectable setting (Preset: *)
SUB-W LEVEL	-15 — +15 (Preset: 0): Adjusts the subwoofer output level.
BASS BOOST	B.BOOST LV1*/ B.BOOST LV2: Selects your preferred bass boost level. ; OFF: Cancels.
SYSTEM Q	NATURAL*/ USER/ ROCK/ POPS/ EASY/ TOP40/ JAZZ/ GAME: Selects a preset sound mode suitable to the music genre. (Selects [USER] to use the customized bass, middle, and treble settings.)
BASS ADJUST	BASS CTR FRQ/ BASS C FRQ: 60/ 80/ 100*/ 200: Selects the center frequency.
	BASS LEVEL: -8 — +8 (Preset: 0): Adjusts the level.
	BASS Q FACTOR/ BASS Q FCTR: 1.00*/ 1.25/ 1.50/ 2.00: Adjusts the Q factor.
	BASS EXTEND: ON: Turns on the extended bass. ; OFF*: Cancels.

Continued...

Item	Selectable setting (Preset: *)
MID ADJUST	MIC CTR FRQ/ MID C FRQ: 0.5K/ 1.0K*/ 1.5K/ 2.5K: Selects the center frequency.
	MID LEVEL: -8 — +8 (Preset: 0): Adjusts the level.
	MID Q FACTOR/ MID Q FCTR: 0.75/ 1.00*/ 1.25: Adjusts the Q factor.
TRE ADJUST	TRE CTR FRQ/ TRE C FRQ: 10.0K/ 12.5K*/ 15.0K/ 17.5K: Selects the center frequency.
	TRE LEVEL: -8 — +8 (Preset: 0): Adjusts the level.
BALANCE	L15 — R15 (Preset: 0): Adjusts the left and right speaker output balance.
FADER	R15 — F15 (Preset: 0): Adjusts the rear and front speaker output balance.
SUBWOOFER SET/ SUB-W SET	<b>ON*</b> : Turns on the subwoofer output. ; <b>OFF</b> : Cancels.
DETAILED SET/ DETAIL SET	
LPF SUBWOOFER/ LPF SUB-W:	<b>THROUGH*</b> : All signals are sent to the subwoofer. ; <b>85HZ/ 120HZ/ 160HZ</b> : Frequencies higher than 85 Hz/ 120 Hz/ 160 Hz are cut off.
SUB-W PHASE:	<b>REVERSE/ REV (180°)/ NORMAL/ NORM (0°)*</b> : Selects the phase angle of the subwoofer output to be in line with the speaker output for optimum performance. (Selectable only if a setting other than <b>[THROUGH]</b> is selected for <b>[LPF SUBWOOFER/ LPF SUB-W]</b> .)
SUPREME SET:	<b>ON*</b> : Creates realistic sound by interpolating the high-frequency components that are lost in AAC/ MP3/ WMA audio compression. ; <b>OFF</b> : Cancels. (Selectable only when playback an AAC/ MP3/ WMA disc or a USB device, except iPod.)
VOLUME OFFSET/ VOL OFFSET:	-8 — +8 (for AUX) ; -8 — 0 (for other sources): Presets the volume adjustment level of each source. The volume level will automatically increase or decrease when you change the source. (Before making an adjustment, select the source you want to adjust.)

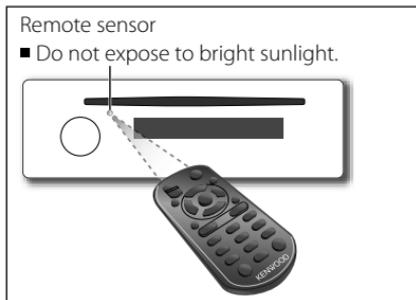
- Select a source before making a source tone memory adjustment, **[BASS ADJUST/ MID ADJUST/ TRE ADJUST]**.
- **KDC-4051UG/ KDC-4051UR/ KDC-415UA/ KDC-415UR/ KDC-4251URY/ KDC-4551UB/ KDC-455UW/ KDC-4651URY** only:  
**[SUB-W LEVEL/ SUBWOOFER SET/ SUB-W SET/ LPF SUBWOOFER/ LPF SUB-W/ SUB-W PHASE]** is selectable only if **[SWITCH PREOUT/ SWITCH PRE]** is set to **[SUB-W]**. (page 4)  
**[SUB-W LEVEL/ LPF SUBWOOFER/ LPF SUB-W/ SUB-W PHASE]** is selectable only if **[SUBWOOFER SET/ SUB-W SET]** is set to **[ON]**.

## [SETTINGS]

Item	Selectable setting (Preset: *)
AUX NAME SET/ AUX NAME	<b>AUX*/ DVD/ PORTABLE/ GAME/ VIDEO/ TV</b> : Selects the desired name for the connected component. (Selectable only if "AUX" is selected as the source.)
CLOCK	<b>CLOCK ADJUST/ CLOCK ADJ</b> : (For details, see page 7.)
	<b>TIME SYNC</b> : <b>ON*</b> : Synchronizes the Radio Data System station time data and the unit's clock. ; <b>OFF</b> : Cancels.
DISPLAY	<b>DIMMER SET</b> : <b>ON</b> : Dims the display illumination. ; <b>OFF*</b> : Cancels.
	<b>TEXT SCROLL</b> : <b>AUTO/ ONCE</b> : Selects to scroll the display information automatically, or scroll only once. ; <b>OFF*</b> : Cancels.
RDS SET	<b>NEWS SET/ AF SET/ RDS REGIONAL/ RDS REG/ AUTO TP SEEK/ ATP SEEK</b> : Selectable only if any source other than tuner source is selected. (For details, see page 8, 9.)

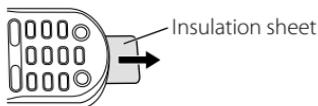
# Using the remote controller (RC-405)

Equipped for KDC-4651URY

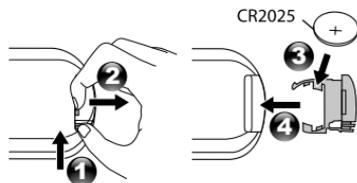


## Preparation:

When you use the remote controller for the first time, pull out the insulation sheet.



**If the effectiveness of the remote controller decreases, replace the battery.**



## Caution:

- Do not set the remote control in hot places such as on the dashboard.
- Lithium battery.  
Danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type.
- The battery pack or batteries shall not be exposed to excessive heat such as sunshine, fire or the like.
- Keep battery out of reach of children and in original package until ready to use. Dispose of used batteries promptly. If swallowed contact physician immediately.



## Basic operations:

**SRC** : Selects the available sources.

**VOL**  $\diamond$  : Adjusts the volume level.

**▲ / ▼** : Selects folders/files (in Music Search mode).

**ENT**  $\blacktriangleright$   $\blacktriangleleft$  : ■ Pauses/resumes playback.  
■ Confirms selection (in Music Search mode).

**\*AM- / #FM+** : ■ Selects bands.

■ Selects folders.

**◀◀ / ▶▶ (+)** : ■ Searches for radio station.

■ Selects track/file.

**1 - 6** : Selects preset station.

**AUD** : Enters **[AUDIO CONTROL]** settings directly.

**ATT** : Attenuates the sound. (To return to the previous level, press the button again.)

**↶** : Returns to the previous item (in Music Search mode).

**EXIT** : Exit from setting mode.

# Troubleshooting

Symptom	Remedy/Cause
Sound cannot be heard.	Adjust the volume to the optimum level. / Check the cords and connections.
"PROTECT" appears and no operations can be done.	Check to be sure the terminals of the speaker leads are covered with insulating tape properly, then reset the unit. If "PROTECT" does not disappear, consult your nearest service center.
The unit does not work at all.	Reset the unit.
[P-OFF WAIT] does not work.	Turn off the demonstration mode. (page 7)
Radio reception is poor. / Static noise while listening to the radio.	Connect the antenna firmly. / Pull the antenna out all the way.
"IN" flashes.	The CD player is not operating properly. Reinsert the disc properly. If the condition did not improve, turn off the unit and consult your nearest service center.
CD-R/CD-RW cannot be played back and tracks cannot be skipped.	Insert a finalized CD-R/CD-RW (finalize with the component which you used for recording).
Disc sound is sometimes interrupted.	Stop playback while driving on rough roads. / Change the disc. / Check the cords and connections.
"NA FILE" appears.	The unit is playing an unsupported audio file.
"NO DISC" appears.	Insert a playable disc into the loading slot.
"TOC ERROR" appears.	The CD is quite dirty. / The CD is upside-down. / The CD is scratched a lot. Try another disc instead.
"ERROR 99" appears.	The unit is malfunctioning for some reason. Press the reset button on the unit. If the "ERROR 99" code does not disappear, consult your nearest service center.
"COPY PRO" appears.	A copy-protected file is played.
"READ ERROR" appears.	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.
"NO DEVICE" appears.	No USB device is connected. Connect an USB device, and change the source to USB again.
"NO MUSIC" appears.	The connected USB device contains no playable audio file.
"NA DEVICE" appears.	Connect a supported USB device, and check the connections.
"USB ERROR" appears.	Remove the USB device, turn the unit off, then turn it on again. If the unit still showing the same display, try to connect another USB device.
"iPod ERROR" appears.	Reconnect the iPod. / Confirm that the software for the iPod is the latest version.
Noise is generated.	Skip to another track or change the disc.
Tracks cannot play back as you have intended them to play.	Playback order is determined when files are recorded.
"READING" keeps flashing.	Longer readout time is required. Do not use too many hierarchies and folders.
Elapsed playing time is not correct.	This is caused by how the tracks are recorded.
The number of songs contained in "SONGS" category of this unit is different from that contained in "SONGS" category of iPod.	Podcast files are not counted in this unit as this unit does not support the playback of podcast files.
Correct characters are not displayed (e.g. album name).	This unit can only display letters (upper case), numbers, and a limited number of symbols. Cyrillic alphabets (upper case) can also be displayed if [RUSSIAN SET] is set to [ON]. (page 4)

# Installation/connection

## Part list:

- Ⓐ Faceplate..... (x1)
- Ⓑ Escutcheon..... (x1)
- Ⓒ Mounting sleeve..... (x1)
- Ⓓ Casing for faceplate ..... (x1)
- Ⓔ Wiring harness..... (x1)
- Ⓕ Removal tool ..... (x2)

## Basic procedure

- 1 Remove the key from the ignition switch, then disconnect the  $\ominus$  terminal of the car battery.
- 2 Make proper input and output wire connections.
  - ➔ "Wiring connection" (page 18, 19)
- 3 Install the unit to your car.
  - ➔ "Installing the unit" (page 20)
- 4 Reconnect the  $\ominus$  terminal of the car battery.
- 5 Reset the unit. (page 4)

## Warning

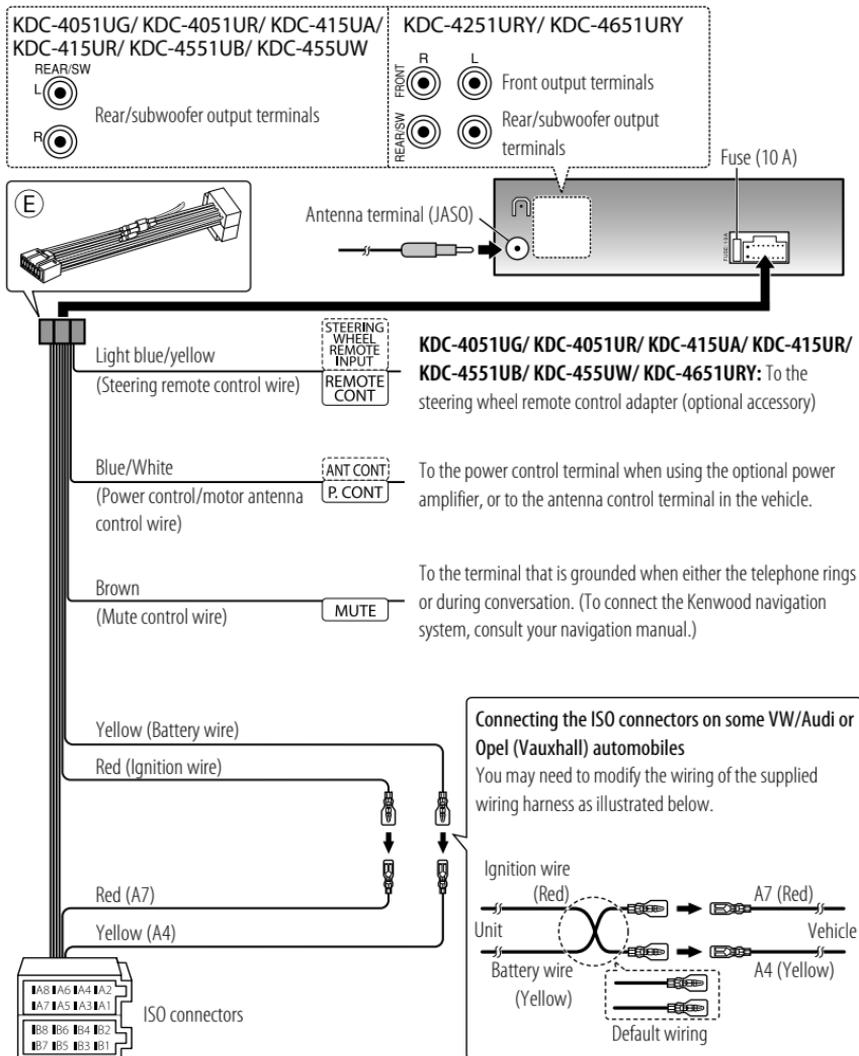
- The unit can only be installed in a car with a 12 V DC power supply, negative ground.
- If you connect the ignition wire (red) and the battery wire (yellow) to the car chassis (ground), you may cause a short circuit, that in turn may start a fire. Always connect those wires to the power source running through the fuse box.
- Disconnect the battery's negative terminal and make all electrical connections before installing the unit.
- Insulate unconnected wires with vinyl tape or other similar material. If no connections are made, do not let the wire come out from the tab to prevent short circuit.
- Be sure to ground this unit to the car's chassis again after installation.

## Caution

- 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.
- Do not use your own screws. Use only the screws provided.
- Install this unit in the console of your vehicle. Make sure the faceplate will not hit the lid of the console (if any) when closing and opening.
- 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.
- If the fuse blows, first make sure the wires are not touching to cause a short circuit, then replace the old fuse with one that has the same rating.
- 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  $\ominus$  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).
- Do not touch the metal part of this unit during and shortly after the use of the unit. Metal part such as the heat sink and enclosure become hot.
- Mounting and wiring this product requires skills and experience. For safety's sake, leave this work to professionals.
  - If you experience problems during installation, consult your Kenwood dealer.

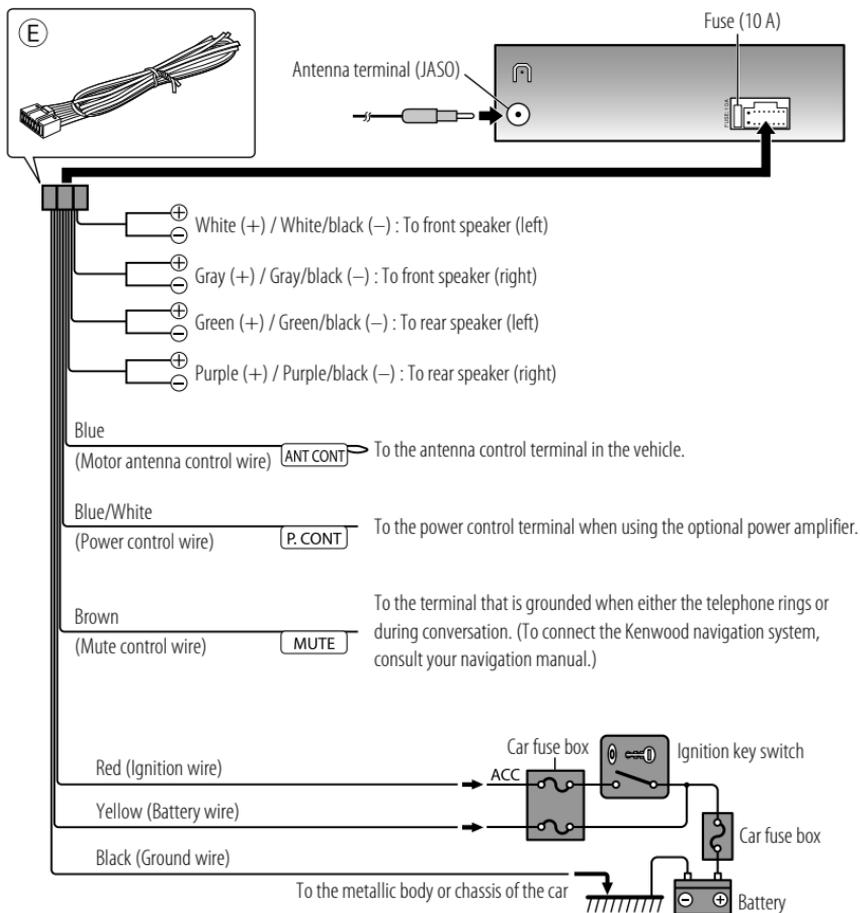
## Wiring connection

For KDC-4051UG/ KDC-4051UR/ KDC-415UA/ KDC-415UR/ KDC-4251URY/ KDC-4551UB/ KDC-455UW/ KDC-4651URY



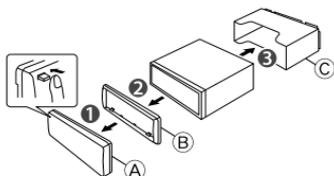
Pin	Color and function	Pin	Color and function
A4	Yellow Battery	B1 / B2	Purple ⊕ / Purple/black ⊖ Rear speaker (right)
A5	Blue/White Power control	B3 / B4	Gray ⊕ / Gray/black ⊖ Front speaker (right)
A7	Red Ignition (ACC)	B5 / B6	White ⊕ / White/black ⊖ Front speaker (left)
A8	Black Earth (ground) connection	B7 / B8	Green ⊕ / Green/black ⊖ Rear speaker (left)

For KDC-4051URY/ KDC-4451UQ



## Installing the unit

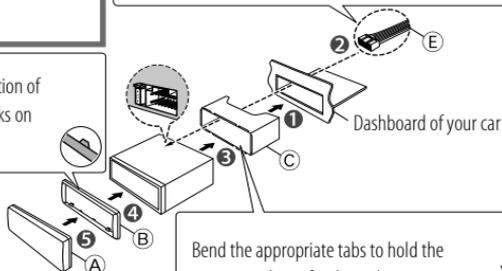
1



Connect the wiring harness to the unit. Other wiring connection has been completed earlier. (page 18, 19)

2

Before attaching, make sure the direction of the escutcheon is correct. (Wider hooks on the top side.)

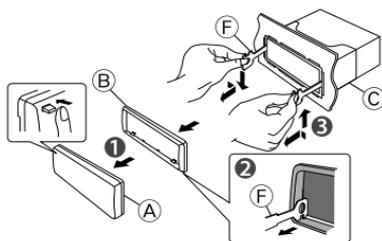


Bend the appropriate tabs to hold the mounting sleeve firmly in place.



## Removing the unit

- 1 Detach the faceplate.
- 2 Engage the catch pin on the removal tools into the holes on both sides of the escutcheon, then pull it out.
- 3 Insert the removal tools deeply into the slots on each side, then follow the arrows instructions as shown on the right.



### 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.
- Playable USB device file system: FAT16, FAT32

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

# Specifications

## FM tuner section

Frequency range:

FM1/ FM2/ FM3 (50 kHz space):  
87.5 MHz — 108.0 MHz

For KDC-4451UQ:

FM1/ FM2 (50 kHz space):  
87.5 MHz — 108.0 MHz

FM3 (30 kHz space):  
65.00 MHz — 74.00 MHz

Usable sensitivity (S/N= 26 dB): 1.0  $\mu$ V/75  $\Omega$

Quieting sensitivity (DIN S/N = 46 dB): 2.5  $\mu$ V/75  $\Omega$

Frequency response ( $\pm 3$  dB): 30 Hz — 15 kHz

Signal-to-Noise ratio (MONO): 63 dB

Stereo separation (1 kHz): 40 dB

## MW tuner section

Frequency range (9 kHz space):

531 kHz — 1 611 kHz

Usable sensitivity (S/N= 20 dB): 36  $\mu$ V

## LW tuner section

Frequency range: 153 kHz — 279 kHz

Usable sensitivity (S/N = 20 dB): 57  $\mu$ V

## CD player section

Laser diode: GaAlAs

Digital filter (D/A): 8 Times Over Sampling

D/A converter: 24 Bit

Spindle speed: 500 rpm — 200 rpm (CLV)

Wow & Flutter: Below Measurable Limit

Frequency response ( $\pm 1$  dB): 20 Hz — 20 kHz

Total harmonic distortion (1 kHz): 0.01 %

Signal-to-Noise ratio (1 kHz): 105 dB

Dynamic range: 90 dB

AAC decode: AAC-LC “.m4a” files

MP3 decode: Compliant with MPEG-1/2 Audio  
Layer-3

WMA decode: Compliant with Windows  
Media Audio

## USB interface

USB standard: USB1.1/ 2.0 (Full speed)

Maximum supply current: 500 mA

File system: FAT16/ 32

AAC decode: AAC-LC “.m4a” files

MP3 decode: Compliant with MPEG-1/2 Audio  
Layer-3

WMA decode: Compliant with Windows  
Media Audio

## Audio section

Maximum output power: 50 W  $\times$  4

Output power (DIN 45324, +B = 14.4 V): 30 W  $\times$  4

Speaker impedance: 4  $\Omega$  — 8  $\Omega$

Tone action: Bass: 100 Hz  $\pm 8$  dB

Middle: 1 kHz  $\pm 8$  dB

Treble: 10 kHz  $\pm 8$  dB

For KDC-4051UG/ KDC-4051UR/ KDC-415UA/

KDC-415UR/ KDC-4251URY/ KDC-4551UB/

KDC-455UW/ KDC-4651URY:

Preout level / load (CD): 2 000 mV/10 k $\Omega$

Preout impedance:  $\leq 600 \Omega$

## Auxiliary input section

Frequency response ( $\pm 3$  dB): 20 Hz — 20 kHz

Input maximum voltage: 1 200 mV

Input impedance: 10 k $\Omega$

## General

Operating voltage (11 V — 16 V allowable): 14.4 V

Maximum current consumption: 10 A

Installation size (W  $\times$  H  $\times$  D):

182 mm  $\times$  53 mm  $\times$  158 mm

Weight: 1.3 kg

Subject to change without notice.