

# KENWOOD

## DNX8160S DNX8160SM DNX8160DABS

GPS NAVIGATION SYSTEM  
**Quick Start Guide**

JVCKENWOOD Corporation

- Updated information (the latest Instruction Manual, system updates, new functions, etc.) is available from <http://www.kenwood.com/cs/ce/>.

**HDMI**™  
HIGH-DEFINITION MULTIMEDIA INTERFACE

**MHL**™

**Digital  
Radio**

**DVD  
VIDEO**

**DOLBY  
DIGITAL**



**Bluetooth**®

Made for  
**iPod iPhone**

Works with  
**Apple CarPlay**

Designed for  
**Windows  
Media**™

**android  
auto**

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# Before use

## About the Quick start guide

This Quick Start Guide describes basic functions of this unit. For functions not described in this Guide, refer to the Instruction Manual on the following website:  
<http://manual.kenwood.com/edition/im391/>



To refer to Instruction manual, a PC loaded with Microsoft® Windows XP/Vista/7/8/10 or Mac OS X® 10.4 or later is required in addition to Adobe® Reader™ 7.1 or Adobe® Acrobat® 7.1 or later.

The Instruction manual is subject to change for modification of specifications and so forth. Be sure to download the latest edition of the Instruction manual for reference.

## How to read this manual

- The panels shown in this guide are examples used to provide clear explanations of the operations. For this reason, they may be different from the actual panels.
- In operation procedures, bracket shape indicates the key or button you should control.
  - < >: indicates the name of panel buttons.
  - [ ]: indicates the name of touch keys

## Precautions

### ⚠ 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.
- Do not watch or fix your eyes on the unit's display when you are driving for any extended period.
- If you experience problems during installation, consult your KENWOOD dealer.

#### ■ Precautions on using this unit

- When you purchase optional accessories, check with your KENWOOD dealer to make sure that they work with your model and in your area.
- You can select language to display menus, audio file tags, etc. See **User Interface Setup (P.66)** in the Instruction Manual.
- The Radio Data System or Radio Broadcast Data System feature won't work where the service is not supported by any broadcasting station.
- The unit may not function properly if the connectors between the unit and front panel are dirty. Detach the front panel and clean the connector with a cotton swab gently, being careful not to damage the connector.

#### ■ Precautions on battery

- Put the remote control in a place where it will not move during braking or other operations. A dangerous situation could result, if the remote control falls down and gets wedged under the pedals while driving.
- Do not leave the battery near fire or under direct sunlight. A fire, explosion or excessive heat generation may result.
- Do not recharge, short, break up or heat the battery or place it in an open fire. Such actions may cause the battery to leak fluid. If spilled fluid comes in contact with your eyes or on clothing, immediately rinse with water

## Before use

and consult a physician.

- Place the battery out of reach of children. In the unlikely event that a child swallows the battery, immediately consult a physician.

### Protecting the monitor

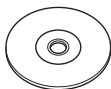
- To protect the monitor from damage, do not operate the monitor using a ballpoint pen or similar tool with the sharp tip.

### Lens fogging

When you turn on the car heater in cold weather, dew or condensation may form on the lens in the disc player of the unit. Called lens fogging, this condensation on the lens may not allow discs 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.

### Precautions on 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 disc type accessories.
- Clean from the center of the disc and move outward.
- When removing discs from this unit, pull them out horizontally.
- If the disc center hole or outside rim has burrs, use the disc only after removing the burrs with a ballpoint pen etc.
- Discs that are not round cannot be used.



- 8-cm (3 inch) discs cannot be used.
- Discs with coloring on the recording surface or discs 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 disc that has not been finalized. (For the finalization process see your writing software, and your recorder instruction manual.)

### Acquiring GPS signal

The first time you turn on this unit, you must wait while the system acquires satellite signals for the first time.

This process could take up to several minutes. Make sure your vehicle is outdoors in an open area away from tall buildings and trees for fastest acquisition.

After the system acquires satellites for the first time, it will acquire satellites quickly each time thereafter.

### About the front panel

When removing the product from the box or installing it, the front panel may be positioned at the angle shown in (Fig. 1). This is due to the characteristics of mechanism the product is equipped with.

When the product is first powered on works properly, the front panel will automatically move into the position (initial setting angle) shown in (Fig. 2).



(Fig. 1)



(Fig. 2)

### Cleaning the Unit

If the front panel of this unit is stained, wipe it with a dry soft cloth such as a silicon cloth. If the front panel is stained badly, wipe the stain off with a cloth moistened with neutral cleaner, then wipe it again with a clean soft dry cloth.

### CAUTION

- Applying spray cleaner directly to the unit may affect its mechanical parts. Wiping the front panel with a hard cloth or using a volatile liquid such as thinner or alcohol may scratch the surface or erase screened print.

## Before use

### Safety Precautions and Important Information

Read this information carefully before starting to operate the KENWOOD Car Navigation System and follow the instructions in this manual. Neither KENWOOD nor Garmin shall be liable for problems or accidents resulting from failure to observe the instructions in this manual.

#### **⚠WARNING**

**Failure to avoid the following potentially hazardous situations could result in an accident or collision resulting in death or serious injury.**

When navigating, carefully compare information displayed on the navigation system to all available navigation sources, including information from street signs, visual sightings, and maps. For safety, always resolve any discrepancies or questions before continuing navigation.

Always operate the vehicle in a safe manner.

Do not become distracted by the navigation system while driving, and always be fully aware of all driving conditions. Minimize the amount of time spent viewing the screen of the navigation system while driving, and use voice prompts when possible.

Do not enter destinations, change settings, or access any functions requiring prolonged use of the navigation system controls while driving. Stop your vehicle in a safe and legal manner before attempting such operations.

Keep the system volume at a low enough level to be able to hear outside noises while driving. If you can no longer hear outside noises, you may be unable to react adequately to the traffic situation. This may cause accidents.

The navigation system will not display the correct current position of the vehicle the first time it is used after purchase, or if the vehicle battery is disconnected. GPS satellite signals will soon be received, however, and the correct position will be displayed.

Be careful of the ambient temperature. Using the navigation system at extreme temperatures can lead to malfunction or

damage. Also note that the unit can be damaged by strong vibration, by metal objects, or by water getting inside the unit.

#### **⚠CAUTION**

**Failure to avoid the following potentially hazardous situations may result in injury or property damage.**

The navigation system is designed to provide you with route suggestions. It does not reflect road closures or road conditions, weather conditions, or other factors that may affect safety or timing while driving.

Use the navigation system only as a navigational aid. Do not attempt to use the navigation system for any purpose requiring precise measurement of direction, distance, location, or topography.

The Global Positioning System (GPS) is operated by the United States government, which is solely responsible for its accuracy and maintenance. The government system is subject to changes that could affect the accuracy and performance of all GPS equipment, including the navigation system. Although the navigation system is a precision navigation device, any navigation device can be misused or misinterpreted and, therefore, become unsafe.

## IMPORTANT INFORMATION

### **■ Vehicle Battery Preservation**

This navigation system can be used when the ignition key is turned to ON or ACC. To preserve the battery, however, it should be used with the engine running whenever possible. Using the navigation system for a long time with the engine switched off can cause the battery to run down.

### **■ Map Data Information**

One of the goals of Garmin is to provide customers with the most complete and accurate cartography that is available to us at a reasonable cost. We use a combination of governmental and private data sources, which we identify in product literature and copyright messages displayed to the consumer. Virtually all data sources contain some inaccurate or incomplete data. In some countries, complete and accurate map information is either not available or is prohibitively expensive.

# Initial settings

Various setup screens appear automatically before using.

## Initial setup

When you first turn on the unit, the screen of the configuration setting will appear.

### 1 Turn the ignition key of your car to ACC.

The unit is turned on.

Initial SETUP screen appears.

### 2 Touch the corresponding key and set the value.



#### Locale

Select the country for the navigation system.

- 1) Touch [Locale].
- 2) Select the desired country.

#### Language

Select the language used for the control screen and setting items. Default is "British English(en)". (Instruction Manual P.66)

- 1) Touch [Language].
- 2) Touch [Language Select].
- 3) Select the desired language.
- 4) Touch [↶].

#### Colour

Set the screen and button illumination color. You can select whether to perform color scan and adjust scanning color. (Instruction Manual P.71)

- 1) Touch [Colour].
- 2) Touch [Panel Colour].
- 3) Select the desired color.
- 4) Touch [↶] twice.

#### Camera

Set the parameters for the camera. (Instruction Manual P.73)

- 1) Touch [Camera].
- 2) Set each item and touch [↶].

#### DEMO

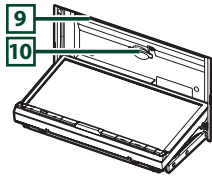
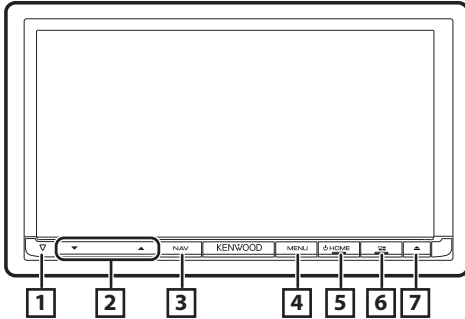
Set the demonstration mode. Default is "ON".

- 1) Touch [DEMO] and set ON or OFF.


### 3 Touch [Finish].

# Basics

## Functions of the Buttons on the Front Panel

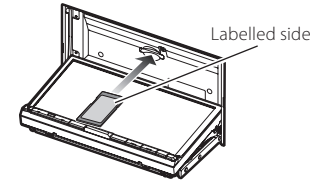


- 1** ▾
  - This indicator flashes when the vehicle ignition is off (Instruction Manual P.70).
- 2** ▲, ▼ (Volume)
  - Adjusts volume. The volume will go up until 15 when you keep pressing [▲].
- 3** NAV
  - Displays the navigation screen.

- 4** MENU
  - Displays the popup menu screen.
  - Pressing for 1 second switches view camera display on/off. (DNX8160S/ DNX8160SM only)
  - Pressing for 1 second turns the screen off. (DNX8160DABS only)
- 5** HOME
  - Displays the HOME screen (Instruction Manual P.14).
  - Pressing for 1 second turns the power off.
  - When the power off, turns the power on.
- 6** 
  - Displays the APP (CarPlay/ Android Auto/ Mirroring) screen.
  - Pressing for 1 second displays the Voice Recognition screen. (Instruction Manual P.61)
- 7** ▲
  - Displays the Angle Adjust screen.
    - [DISC EJECT]: Ejects the disc.
    - [OPEN]: Fully opens the panel to the location of the SD card slot.
  - When the panel is opened, pressing closes the panel.
  - To forcibly eject the disc, press it for 2 seconds and touch [DISC EJECT] after the message is displayed.
- 8** Disc insert slot
  - A slot to insert a disc media.
- 9** SD card slot
  - A slot to insert an SD card.  
See **How to insert an SD Card (P.6)**.
  - An SD card slot for upgrading the map. For how to upgrade the map, refer to the instruction manual of the navigation system.

## How to insert an SD Card

- 1** Press <▲> button.
- 2** Touch [OPEN] to the panel fully opens.
- 3** Hold the SD card with the label facing up, and insert it into the slot until it clicks.



- 4** Press <▲> button.
- Eject an SD Card**
- 1** Press <▲> button.
- 2** Touch [OPEN] to the panel fully opens.
- 3** Push the SD card until it clicks and then remove your finger from the card. The card pops up so that you can pull it out with your fingers.
- 4** Press <▲> button.

## Basics

### Operating with the HOME Screen

Most functions can be performed from the HOME screen.

#### 1 Press the <HOME> button.



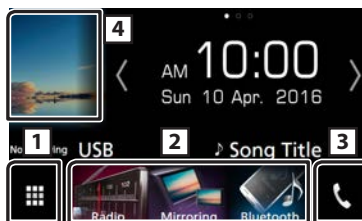
HOME screen appears.

#### 2 Flick the screen left or right to select the widget.

Touch the widget to display the detailed screen.



#### ■ Selecting the playback source on the HOME screen



- 1 Displays the source selection screen.
- 2 Short-cut buttons.
- 3 Displays the Hands Free screen (*P.19*).
- 4 Displays the control screen of current source.

#### 1 Touch [ ].

Source selection screen appears.



- 1 Displays the HOME screen.
- 2 Displays the SETUP screen.

#### 2 Flick the screen left or right to changes the page.

#### 3 Touch source icon to changes the playback screen.

#### ■ Customizing Short-cut buttons on HOME screen

You can arrange the position of the source icons as you like.

#### 1 Touch and hold the icon which you want to move to go into the customizing mode.

#### 2 Drag it where you want to move.



# Basics

## Common Operations

### ■ Pop up menu

1 Press the <MENU> button.

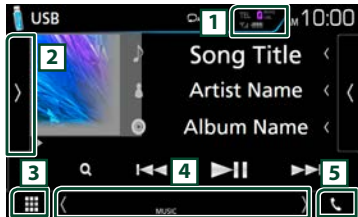


Touch to display the popup menu. The contents of the menu are as follows.

- : Displays the Screen Adjustment screen.
- : Turns the display off.
- : Displays the view camera.
- : Displays the SETUP Menu screen.
- : Displays the Audio Control Menu screen.
- : Displays the control screen of current source. Icon feature differs depending on the source.

### ■ Source control screen descriptions

There are some functions which can be operated from most screens.



Indicators



Navigation information



Short-cut buttons

- 1 Connected Bluetooth device information.  
 : Lights up when quick charging battery of the connected iPod/ iPhone/ Smartphone.
- 2 Displays the function panel (other operation button window).
- 3 Displays the source selection screen.
- 4 [] [] : The Secondary screen changes every time you touch it.
  - **Indicators:** Displays the current source condition and so on.
  - **Navigation information:** Displays the current location and the direction. The screen changes to the navigation screen when you touch here.
  - **Short-cut buttons:** The source changes to the one you have set as a short-cut. For the short-cut setting, refer to **Customizing Short-cut buttons on HOME screen (P.7)**.
- 5 Touch to display the Hands Free screen. (P.19)

### ■ List screen

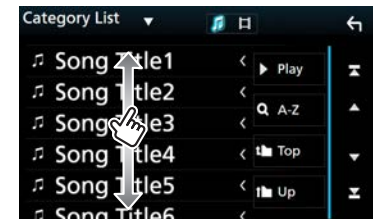
There are some common function keys in the list screens of most sources.



- 1 Returns to previous screen.
- 2 : Displays music/movie file list.
- 3 Scrolls the displayed text.
- 4 Keys with various functions are displayed here.
  - : Plays all tracks in the folder containing the current track.
  - : Jump to the letter you entered (alphabet search).
  - : Moves to the upper hierarchy.
- 5 You can change the page to display more items by pressing .  
 : Displays the top or bottom page.

### ■ Flick scrolling

You can scroll the list screen by flicking the screen up/down.





# Navigation

## How to Use the Navigation System

**1** Press the <NAV> button to display the navigation screen.

**2** Operate the desired function from the Main Menu screen.



[1] GPS satellite strength.

[2] Finds a destination.

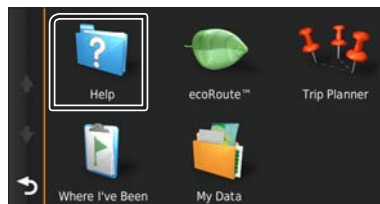
[3] Views the map.

[4] Uses the Apps such as ecoRoute and Help.

[5] Adjusts the settings.

### NOTE

- You can get additional information about using the navigation system from Help. To display Help, touch [Apps] and then touch [Help].



- For more information about your navigation system, download the latest version of the Owner's Manual from

<http://manual.kenwood.com/edition/im391/>

**3** Enter your destination and start the guidance.

- Finding points of interest
  - 1) Touch [Where To?].
  - 2) Select a category and a subcategory.
  - 3) Select a destination.
  - 4) Touch [Go!].

### NOTE

- To enter letters contained in the name, touch the Search bar and enter the letters.

**4** Follow your route to the destination.

### NOTICE

- The speed limit icon is for information only and does not replace the driver's responsibility to abide by all posted speed limit signs and to use safe driving judgment at all times. Garmin and JVC KENWOOD will not be responsible for any traffic fines or citations that you may receive for failing to follow all applicable traffic laws and signs.

Your route is marked with a magenta line. As you travel, your navigation system guides you to your destination with voice prompts, arrows on the map, and directions at the top of the map. If you depart from the original route, your navigation system recalculates the route.



[1] Views the Next Turn page or the junction view page, when available.

[2] Views the Turn List page.

[3] Views the Where Am I? page.

[4] Stops the current route.

[5] Displays traffic information on the route.

[6] Returns to the Main menu.

[7] Displays a different data field.

[8] Views the Trip Computer.

[9] Displays more options.

### NOTE

- Touch and drag the map to view a different area of the map.
- A speed limit icon could appear as you travel on major roadways.

### Adding a stop

- 1) While navigating a route, touch [ ] and then touch [Where To?].
- 2) Search for the extra stop.
- 3) Touch [Go!].
- 4) Touch [Add to Active Route] to add this stop before your final destination.

### Taking a detour

- 1) While navigating a route, touch [ ].
- 2) Touch [ ].

### Other Features

#### Manually avoiding traffic on your route

- 1) From the map, touch [ ].
- 2) Touch [Traffic On Route].
- 3) If necessary, touch the arrows to view other traffic delays on your route.
- 4) Touch [ ] > [Avoid].

#### Viewing the traffic map

- 1) The traffic map shows color-coded traffic flow and delays on nearby.

## Navigation

- About traffic (DNX8160S/ DNX8160SM)

- ✎ NOTICE

- Traffic service is not available in some areas or countries.
  - Garmin and JVC KENWOOD are not responsible for the accuracy or timeliness of the traffic information. With an FM traffic receiver, the navigation system can receive and use traffic information. When a traffic message is received, you can see the event on the map and change your route to avoid the incident.

- Updating the software

To update the navigation system software, you must have an SD card, a USB mass storage device and an internet connection.

- 1) Go to [www.garmin.com/kenwood](http://www.garmin.com/kenwood).
- 2) Select Update.
- 3) Follow the on-screen instructions.

- Updating maps

You can purchase updated map data from Garmin or ask your KENWOOD dealer or KENWOOD service center for details.

- 1) Go to [www.garmin.com/kenwood](http://www.garmin.com/kenwood).
- 2) Select Update.
- 3) Follow the on-screen instructions.

## DVD/ VCD

### Playing a disc

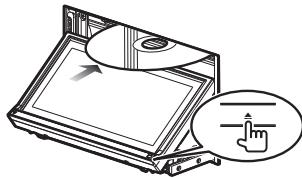
#### ■ Inserting a disc

**1** Press the <▲> button.

**2** Touch [DISC EJECT] to open the front panel.

**3** Insert the disc into the slot.

The panel closes automatically and playback starts.



#### ■ Ejecting a disc

- 1) Press the <▲> button.
- 2) Touch [DISC EJECT] to open the front panel. When removing a disc, pull it horizontally.
- 3) Press the <▲> button.

## DVD/ VCD

### Playback operations

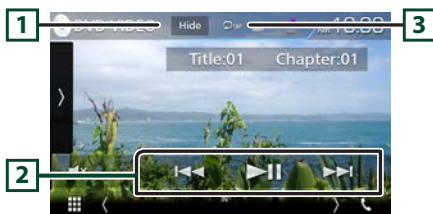
#### Video screen



- 1 Searches the next/previous content.
- 2 Displays the Source Control screen.

#### Control screen

1 Touch 2 area on the video screen.



- 1 Hides the control screen.
- 2 **▶||**: Plays or pauses.  
**◀◀▶▶**: Searches the previous/next content.  
Press and hold to fast forward or fast backward. (It will be cancelled automatically after about 50 seconds.)
- 3 **↺**: Repeats the current content.

#### NOTE

- The control screen disappears when no operation is done for 5 seconds.

#### Function panel

1 Touch on the left side of the screen.



- Stops playing.
- << >>** Fast forward or fast backward. Each time you touch the key, the speed changes; 2 times, 8 times.
- <| >** Plays in slow motion forward or backward. (DVD only)
- SETUP** Touch to display the DVD SETUP screen. (DVD only)
- MENU CTRL** Touch to display the DVD-VIDEO disc manu control screen. (DVD only)
- PBC** Turn Playback control (PBC) on or off. (VCD only)
- Audio** Change the audio output channel. (VCD only)

#### NOTE

- For other operations, refer to the Instruction Manual.

### Video menu operations

1 Touch on the left side of the screen.

Touch [MENU CTRL].

2 Perform desired operation as follows.



- |                    |   |
|--------------------|---|
| [TOP] *            | Displays the top menu   |
| [MENU] *           | Displays the menu   |
| [Return] *         | Displays the previous menu  |
| [Enter]            | Enters selected item  |
| [Highlight]        | Enables direct operation<br>The menu screen disappears when no operation is done for 5 seconds. |
| [▲], [▼], [◀], [▶] | Moves the cursor  |
| [Subtitle]         | Switches the subtitle language  |
| [Audio]            | Switches the audio language   |
| [Angle]            | Switches the picture angle  |

\* These keys may not function depending on the disc.

# Discs/ USB/ iPod/ SD/ APP

## Preparation

### NOTE

- For details about connecting Android. **(P.29)**
- For details about connecting iPod/iPhone. **(P.28)**
- Do not leave the cable or the adapter made by other makers inside the car. It might lead the malfunction caused by heat.

### Connecting Android

To connect the Android device with this unit, the cable (sold separately) and the profile which your Android device supports are necessary as follows:

- **To Android Auto source**
  - Android version 5.0 (Lollipop) or later
  - Micro USB to USB cable
  - Automotive Mirroring: ON
- **To listen to music and watch video of Mirroring source**
  - MHL or HDMI device
  - KCA-MH100 (MHL) or KCA-HD100 (HDMI)
  - Automotive Mirroring: OFF
- **To listen to music of Bluetooth Audio source**
  - Bluetooth Connection: Audio(A2DP)/App(SPP)

### Connecting iPod/iPhone

To connect the iPod/iPhone with this unit, the cable, adapter (both sold separately), and the profile which your iPod/iPhone supports are necessary as follows:

- **To Apple CarPlay source**
  - KCA-iP103
  - Automotive Mirroring: ON
- **To listen music and watch video with Lightning connector device**
  - Lightning Digital AV Adapter
  - KCA-HD100
  - KCA-iP103
  - Automotive Mirroring: OFF
  - APP Connection select: iPhone Bluetooth, HDMI/MHL
  - Bluetooth Connection: Audio(A2DP)/App(SPP)
- **To listen music with Lightning connector device**
  - KCA-iP103
  - Automotive Mirroring: OFF
  - APP Connection select: iPhone USB
- **To listen music with 30-pin connector device**
  - KCA-iP102
  - Automotive Mirroring: OFF
  - APP Connection select: iPhone USB
- **To listen to music via Bluetooth**
  - Automotive Mirroring: OFF
  - APP Connection select: iPhone Bluetooth
  - Bluetooth Connection: Audio(A2DP)/App(SPP)

### Selecting the Android/ iPod/ iPhone device to play and connection method

#### NOTE

- To connect an Android device or iPhone via Bluetooth, register it as the Bluetooth device and do the profile setting of the connection beforehand. **(P.18)**

**1 Press the <MENU> button.**

**2 Touch [SETUP].**

**3 Touch [AV].**

**4 Set [Automotive Mirroring] to [OFF].**

**5 Touch [APP/iPod SETUP].**

**6 Set each item as follows.**



#### APP Connection select

Select how to connect your smartphone.

**Android Bluetooth:** Connect an Android smartphone via Bluetooth.

**iPhone Bluetooth:** Connect an iPhone via Bluetooth.

**HDMI/MHL:** Connect an Android smartphone or iPhone via Bluetooth and watch its video via HDMI/MHL.

**iPhone USB:** Connect an iPhone through an USB cable.

#### iPod Connection

It shows how the device that is used in the iPod source is connected. It changes depending on the "APP Connection select".

**7 Touch [Done].**

## Discs/ USB/ iPod/ SD/ APP


### How to Play Music

You can play audio files from music CD, disc media, USB storage device, SD Card and iPod.

#### NOTE

- For details on playable file format, media format, iPod model, etc., refer to the Instruction Manual.

#### Connecting iPod/iPhone

- 1) Connect the iPod/iPhone.
- 2) Press the <HOME> button.
- 3) Touch [  ].
- 4) Touch [iPod].

#### NOTE

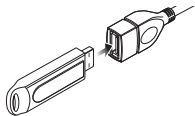
- For the details of the necessary cable and adapter to connect with iPod/iPhone, refer to "Connecting iPod/iPhone" (P.12).

#### To disconnect the iPod/iPhone connected with the cable:

Detach the iPod/iPhone.

#### Connecting a USB device

- 1) Connect the USB device with the USB cable.



- 2) Press the <HOME> button.
- 3) Touch [  ].
- 4) Touch [USB].

#### To disconnect the USB device:

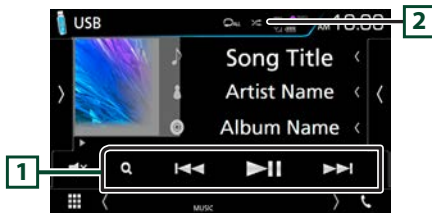
- 1) Press the <HOME> button.
- 2) Touch a source other than [USB].
- 3) Detach the USB device.






#### Inserting a disc

- To insert CD or DVD, refer to "Inserting a disc" (P.10).

### Playback operations

#### Control the music you are listening to on the source control screen.




- 1) : Plays or pauses.  
: Searches the previous/next content. Press and hold to fast forward or fast backward. (It will be cancelled automatically after about 50 seconds.)  
: Searches track/file. (Disc media, iPod and USB device only)
- 2) : Repeats the current content.  
: Plays all contents in random order.

#### Function panel

##### 1 Touch on the left side of the screen.





- 1) : Searches previous/next folder. (disc media and USB device only)

**USB DEVICE CHANGE**  
Switches to another USB device when two USB devices are connected. (Only for USB device)

#### Video screen



- 1) : Searches the next/previous content.
- 2) : Displays the Source Control screen.

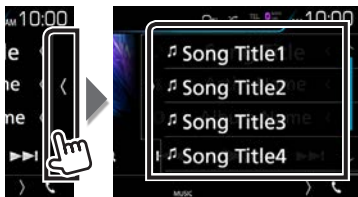
#### NOTE

- For other operations, refer to the Instruction Manual.

## Discs/ USB/ iPod/ SD/ APP

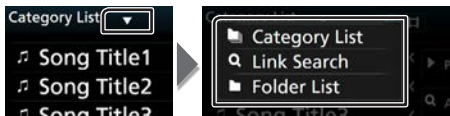
### List search

- 1) Touch on the right side of the screen. The content list of the media being played is displayed.

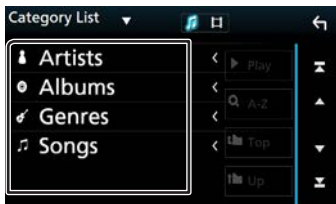


### Refined search

- 1) Touch [Q].
- 2) Touch [▼].
- 3) Touch the desired refinement method.  
The list is refined by the item you selected.



- 4) Select whether you search by audio files or video files .
- 5) Touch the desired item.



### NOTE

- For details on searching operations, refer to **Search Operation (P.32)** in the Instruction Manual.

## Apple CarPlay

CarPlay is a smarter, safer way to use your iPhone in the car. CarPlay takes the things you want to do with iPhone while driving and displays them on the screen of the product. You can get directions, make calls, send and receive messages, and listen to the music from iPhone while driving. You can also use Siri voice control to make it easier to operate iPhone.

For details about CarPlay, visit <https://ssl.apple.com/ios/carplay/>.

### Preparation

- 1) Press the <MENU> button.
- 2) Touch [SETUP].
- 3) Touch [AV].
- 4) Set each item as follows.



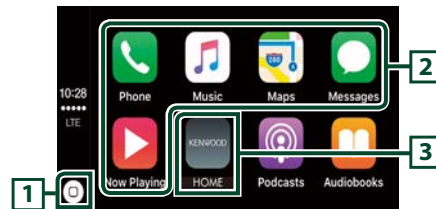
- **Automotive Mirroring** : Select "ON" to use Apple CarPlay.
  - **CarPlay Sidebar** : Select the position of the control bar (left or right) shown on the touch panel. "Left"/ "Right" (Default)
- 5) Connect iPhone using KCA-iP103. **(P.28)**  
When iPhone compatible with CarPlay is connected to the iPod terminal, the Bluetooth smartphone currently connected is disconnected.
  - 6) Unlock your iPhone.

### Operation buttons and available Apps on the home screen of CarPlay

You can use the Apps of the connected iPhone.

The items displayed and the language used on the screen differ among the connected devices.

- 1) Press the <HOME> button.
- 2) Touch .
- 3) Touch [Apple CarPlay].



- 1) • On the App screen: Displays the home screen of CarPlay.  
• On the home screen of CarPlay: Touch and hold to activate Siri.
- 2) Starts the application.
- 3) Exits the CarPlay screen and displays the Home screen.

### To exit the CarPlay screen

- 1) Press the <HOME> button.

### Using Siri

You can activate Siri.

- 1) Press the < > button for 1 second.
  - 2) Talk to Siri.
- **To deactivate**
    - 1) Press the < > button.

## Discs/ USB/ iPod/ SD/ APP

### Android Auto™

Android Auto enables you to use functions of your Android device convenient for driving. You can easily access route guidance, make calls, listen to music, and access convenient functions on the Android device while driving.

For details about Android Auto, visit <https://www.android.com/auto/> and <https://support.google.com/androidauto>.

#### ■ Preparation

Set [Automotive Mirroring] to [ON]. **(P.14)**

- 1) Connect an Android device via iPod/iPhone terminal. **(P.29)**

To use the hands-free function, connect the Android device via Bluetooth.

When an Android device compatible with Android Auto is connected to the iPod/iPhone terminal, the device is connected via Bluetooth automatically, and the Bluetooth smartphone currently connected is disconnected.

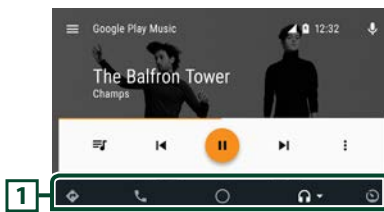
- 2) Unlock your Android device.

#### ■ Operation buttons and available Apps on the Android Auto screen

You can perform the operations of the Apps of the connected Android device.

The items displayed on the screen differ among the connected Android devices.

- 1) Press the <HOME> button.
- 2) Touch [  ].
- 3) Touch [Android Auto].



- 1) Starts the application or displays information.

#### • To exit the Android Auto screen

- 1) Press the <HOME> button.

#### ■ Using voice control

- 1) Press the <  > button for 1 second.
- #### • To cancel
- 1) Press the <  > button.

### Mirroring Operation

You can listen to music or watch video from the Mirroring operating on Android.

#### ■ Preparation

- Set [Automotive Mirroring] to [OFF]. **(P.14)**
- The unit and the Android device are connected with MHL (KCA-MH100 ; sold separately) or HDMI (KCA-HD100 ; sold separately) and over Bluetooth profile HID and SPP.

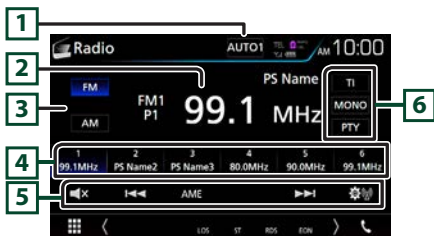
#### ■ Operation

- 1) Press the <HOME> button.
- 2) Touch [  ].
- 3) Touch [Mirroring].

# Radio/ Digital Radio

## Radio Basic Operation

- 1) Press the <HOME> button.
- 2) Touch [  ].
- 3) Touch [Radio].



### Auto memory

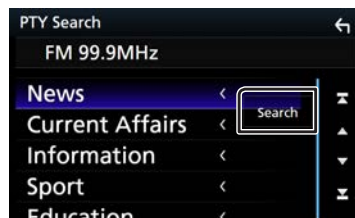
- 1) Touch [AM] or [FM] to select the band.
- 2) Touch [AME].
- 3) Touch [Yes].  
Auto memory starts.

### Recalling the preset station

- 1) Touch [AM] or [FM] to select the band.
- 2) Touch [#] (#:1-6).




### Search by program type

- 1) Touch [PTY].
- 2) Select a program type from the list.
- 3) Touch [Search].



### NOTE

- For other operations, see **Radio Basic Operation (P.40)** in the Instruction Manual.




- 1) Switches the seek mode in the following sequence; [AUTO1], [AUTO2], [MANUAL].
  - **AUTO1**: Tunes in a station with good reception automatically.
  - **AUTO2**: Tunes in stations in memory one after another.
  - **MANUAL**: Switches to the next frequency manually.
- 2) Displays the information of the current station.
- 3) **FM AM**: Switches the band.
- 4) Recalls the memorized station. When touched for 2 seconds, stores the current receiving station in memory.
- 5)
  - : Tunes in a station. The method of frequency switching can be changed.
    - **AME**: Presets stations automatically.
    - : Displays the Radio SETUP screen.
    - : Touch to mute or not to mute.
- 6)
  - **TI** \*: Sets the traffic information mode on.
  - **MONO** \*: Select the Monaural reception.
  - **PTY** \*: Searches a program by setting program type.

• \*1 FM Tuner only

## Digital Radio Basic Operation (DNX8160DABS)

- 1) Press the <HOME> button.
- 2) Touch [  ].
- 3) Touch [Digital Radio].



- 1) Switches the seek mode in the following sequence; [AUTO1], [AUTO2], [MANUAL].
  - **AUTO1**: Tunes in a ensemble with good reception automatically.
  - **AUTO2**: Tunes in ensemble in memory one after another.
  - **MANUAL**: Switches to the next ensemble manually.
- 2) Displays the information of the current station. Touching [  ] allows you to switch between Content A, Content B and Content C.
- 3) The picture data is displayed if available from current content. Touch to switch between the Control and Information screen.
- 4) : Tunes in a ensemble, service, and component. The seek mode switching can be changed. : Displays the Service List screen.
- 5) Recalls the memorized service.. When touched for 2 seconds, stores the current receiving service. in memory.
- 6) Displays the received signal strength.



## Radio/Digital Radio

### Function panel

- 1) Touch on the left side of the screen.



<b>TI</b>	Sets the traffic information mode on.
<b>SETUP</b>	Displays the Digital Radio SETUP screen.
<b>Instant Replay</b>	Change the Replay mode. (Live mode only)
<b>Live</b>	Change the Live mode. (Replay mode only)
<b>PTY</b>	Searches a program by setting program type.
<b>DLS</b>	Display the Dynamic Label Segment screen.

### Recalling the preset service

- 1) Touch [P#] (#:1-15).

### Service search

- 1) Touch [Q].
- 2) Select the desired content from the list.



- : Touch and hold to find the latest service list.
- [Q-A-Z]: Displays the keyboard screen. Jump to the letter you entered (alphabet search).

### Replay

You can replay last 30 minutes of current station.

- 1) Touch [Instant Replay] on the function panel.



- 3) : Plays or pauses.  
: Forward/backward 15 seconds when touch it.  
: Fast forward/fast backward when keep on touching.

### NOTE

- For other operations, see **Digital Radio Basic Operation (P.42)** in the Instruction Manual.

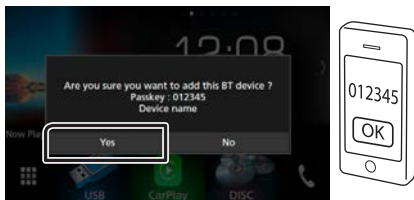
# Bluetooth smartphone

You can use your Bluetooth smartphone when paired to this unit.

## Register your smartphone to the unit

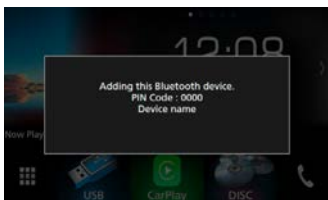
Follow as the procedures shown below. For detailed operation, see **Registering from the Bluetooth unit (P.53)** in the Instruction Manual.

- 1 Search the unit ("DNX\*\*\*\*") from your smartphone/cell-phone.
- 2 Confirm the request both on the smartphone/cell-phone and the unit.



- Input the PIN code in your smartphone/cell-phone.

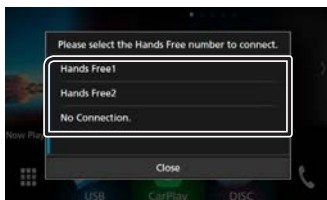
PIN code is set to "0000" as the default.



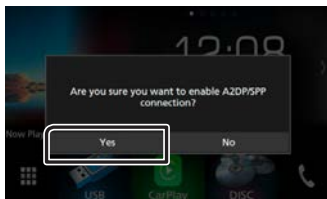
- 3 Select the hands-free number to connect.

A name of a smartphone is displayed when it has hands-

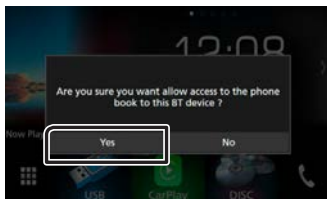
free connection with the unit.



- 4 Select if you want to use the audio player app in your smartphone over A2DP, and the other apps in your smartphone over SPP.



- 5 Select if you want to transfer your phonebook data.



The phonebook data transmission starts.

Some smartphones may request permission to access the data. The data transmission will start with your permission.

When the data transmission and connection have completed, the Bluetooth connection icon appears on the screen.

## Receive a phone call

- 1 Touch [📞].



- [📞]: Reject an incoming call.

### Operations during a call



- Ending a call
- Mute or not mute your voice.
- DTMF** You can send tones by touching desired keys on the screen.
- Switches the speaking voice output between cell-phone and speaker.

## Bluetooth smartphone

### Speech Quality

- **Microphone Level:** Adjust the microphone volume
- **Echo Cancel Level:** Adjusts the level of echo cancellation.
- **Noise Reduction Level:** Reduces the noises generated by surrounding environment without changing the microphone volume. Use this setting when the voice of caller is not clear.

x The Hands-Free popup screen is closed. To display it again, touch [📞].

- **Adjust the receiver volume**

Press the <▼> or <▲> button.

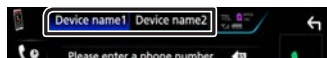


## Make a phone call

### 1 Touch [📞].



### 2 Select the device to use.



### 3 See the table below for each operation method.



#### Call by entering a phone number

- 1) Touch [📞].
- 2) Enter a phone number with number keys.
- 3) Touch [📞].

#### Call using call records

- 1) Touch [📞].
- 2) Select the phone number from the list.

#### Call using the phonebook

- 1) Touch [📖].
- 2) Touch [Q, A-Z].
- 3) Select the initial to sort the list in the alphabetical order.
- 4) Select the name from the list.
- 5) Select the number from the list.



#### Call using the preset number

- 1) Touch [★].
- 2) Touch the Name or phone number.

### Call by voice

You can make a voice call using the voice recognition function of the cell-phone.

- 1) Touch [🗣️].
- 2) Pronounce the name registered in the cell-phone.

### ☑ Phone number preset

You can register frequently used phone numbers to this unit.

- 1) Touch [★].
- 2) Touch [Edit].
- 3) Select where to preset.
- 4) Select how to preset.



- **[Add number from phonebook]:**  
Select the number to preset by referring to "Call using the phonebook".
- **[Add number direct]:**  
Enter the telephone number directly and touch [SET].

### 📖 NOTE

- For detailed operation, see **Using Hands-Free Unit (P.58)** in the Instruction Manual.

# Controlling Audio

1 Press the <MENU> button.

2 Touch [Audio].

Audio screen appears.



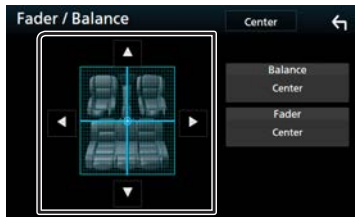
## NOTE

- For detailed operation, see **Controlling Audio (P.76)** in the Instruction Manual.

## Controlling General Audio

1 Touch [Fader / Balance] on the Audio screen.

2 Set each item as follows.



[◀] [▶] Adjust the right and left volume balance.

[▲] [▼] Adjust the front and rear volume balance.

## Equalizer Control

1 Touch [Equalizer] on the Audio screen.

2 Touch the screen and set the Graphic Equalizer as desired.



### Gain level (boxed area)

Adjust the gain level by touching the each frequency bar. You can select frequency bar and adjust its level by [▲], [▼].

### Preset Select

Displays the screen to recall the preset equalizer curve.

### Memory

Saves the adjusted equalizer curve to "User1" to "User4".

### Initialize

The current EQ curve returns to flat.

### ALL SRC

Apply the adjusted equalizer to all sources. Touch [ALL SRC] and then touch [OK] on the confirmation screen.

### Bass EXT (Bass Extend Settings)

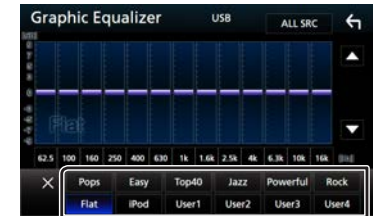
When turned on, the frequency lower than 62.5 Hz is set to the same gain level as 62.5 Hz.

### SW Level

Adjusts the subwoofer volume.

## Recall the EQ curve

- 1) Touch [Preset Select].
- 2) Select EQ curve.



## NOTE

- [iPod] is available only during iPod source.

## Save the EQ curve

- 1) Adjust the EQ curve.
- 2) Touch [Memory].
- 3) Select where to save.



# Installation

## Before Installation

Before installation of this unit, please note the following precautions.

### ⚠ WARNINGS

- 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.
- Do not cut out the fuse from the ignition wire (red) and the battery wire (yellow). The power supply must be connected to the wires via the fuse.

### ⚠ CAUTION

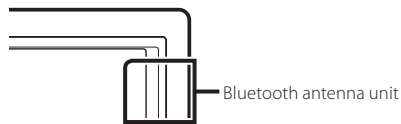
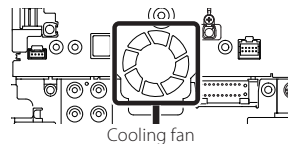
- Install this unit in the console of your vehicle.  
Do not touch the metal part of this unit during and shortly after the use of the unit. Metal part such as the heat sink and enclosure become hot.

### 🔧 NOTE

- Mounting and wiring this product requires skills and experience. For best safety, 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 ("There is an error in the speaker wiring. Please check the connections." 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, such as with battery wires, the battery may be drained.
- If the console has a lid, make sure to install the unit so that the

front panel 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.
- This unit has the cooling fan to decrease the internal temperature. Do not mount the unit in a place where the cooling fan of the unit is blocked. Blocking these openings will inhibit the cooling of the internal temperature and result in malfunction.



## ■ Supplied accessories for installation

①	x1	②	(1 m) x1
③	(3 m) x1	④	x1
⑤	(M5x6mm) x6	⑥	(M5x7mm) x6
⑦	x1	⑧	(3.5 m) x1
⑨	x1	⑩ <sup>(1)</sup>	x3
⑪ <sup>(1)</sup>	x1	⑫ <sup>(1)</sup>	x1
⑬ <sup>(1)</sup>	x1		

- Do not press hard on the panel surface when installing the unit to the vehicle. Otherwise scars, damage, or failure may result.
- Reception may drop if there are metal objects near the Bluetooth antenna.

<sup>(1)</sup> DNX8160DABS only

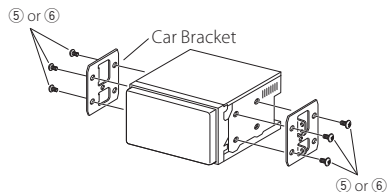
# Installation

## Installation procedure

- 1) To prevent a short circuit, remove the key from the ignition and disconnect the  $\ominus$  terminal of 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  $\ominus$  terminal of the battery.
- 8) Perform the Initial Setup. See **Initial settings (P.5)**.

## Installing the unit

### Japanese cars

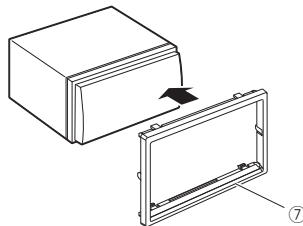


### NOTE

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

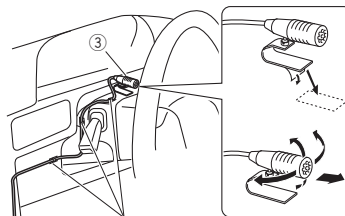
### Trim plate

- 1) Attach accessory ⑦ to the unit.



### Microphone unit

- 1) Check the installation position of the microphone (accessory ③).
- 2) Clean the installation surface.
- 3) Remove the separator of the microphone (accessory ③), and stick the microphone to the place shown below.
- 4) Wire the microphone cable up to the unit with it secured at several positions using tape or other desired method.
- 5) Adjust the direction of the microphone (accessory ③) to the driver.



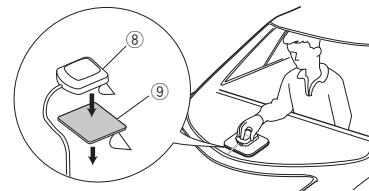
Fix a cable with a commercial item of tape.

### GPS antenna

GPS antenna is installed inside of the car. It should be installed as horizontally as possible to allow easy reception of the GPS satellite signals.

To mount the GPS antenna inside your vehicle:

- 1) Clean your dashboard or other surface.
- 2) Remove the separator of the metal plate (accessory ⑨).
- 3) Press the metal plate (accessory ⑨) down firmly on your dashboard or other mounting surface. You can bend the metal plate (accessory ⑨) to conform to a curved surface, if necessary.
- 4) Remove the separator of the GPS antenna (accessory ⑧), and stick the antenna to the metal plate (accessory ⑨).



### NOTE

- Depending on the type of car, reception of the GPS satellite signals might not be possible with an inside installation.
- Please install this GPS antenna in an area away from any antennas that are used with CB radios or satellite televisions.
- The GPS antenna should be installed at a position that is spaced at least 12 inch (30 cm) from cellular phone or other transmitting antennas. Signals from the GPS satellite may be interfered with by these types of communication.
- Painting the GPS antenna with (metallic) paint may cause a drop in performance.

# Installation

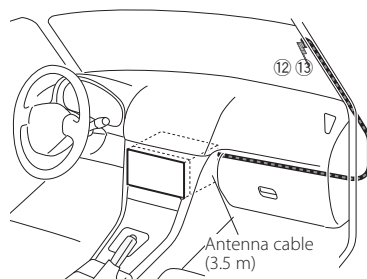
## Installation the Digital Radio antenna (DNX8160DABS)

### ⚠CAUTION

- This film antenna is exclusively for use inside the vehicle.
- Do not install at the following locations:
  - Where it may block driver's view
  - Where it may obstruct operation of safety devices such as air bags
  - On movable glass surface such as rear hatch
  - On the side of the vehicle (e.g. doors, front-side windows)
  - On rear windows
- Signal strength will decrease at the following locations:
  - On IR reflecting glass or where covered with mirror type glass film
  - Where it overlaps with genuine radio antenna (pattern)
  - Where it overlaps with window heating wires
  - When glass that blocks radio signals (e.g. IR reflecting glass, thermal insulation glass) is used
- Poor reception may occur:
  - Due to noise when the windshield wipers, air conditioner, or motor is turned on
  - Depending on the location of the broadcast station in relation to the vehicle (antenna)
- Thoroughly wipe oil and dirt from the pasting surface with the included cleaner (accessory ①).
- Do not bend or damage the film antenna (accessory ⑫).
- It may not be possible to install on some type of vehicle.
- Check the cable routing of the film antenna (accessory ⑫) and amplifier (accessory ⑬) before pasting.

### • Installation overview

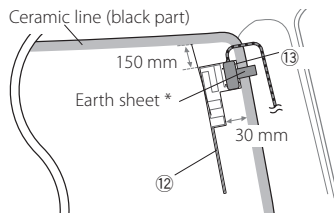
The antenna should be installed on the passenger side for safety.



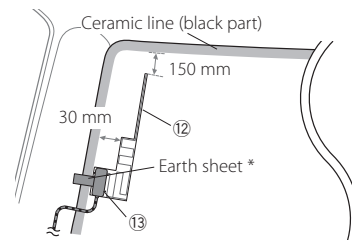
### • Determining the antenna installation location

- The direction of the film antenna (accessory ⑫) changes depending on whether the film antenna is installed on the right side or left side.
- Be sure to check the installation location of the film antenna (accessory ⑫) before installing. The film antenna cannot be reattached.
- Install the antenna at least 100 mm away from other antennas.
- Do not attach the amplifier unit (accessory ⑬) to the ceramic line (black part) around the windshield, as it will not stick sufficiently.

### When installing the antenna on the right side



### When installing the antenna on the left side



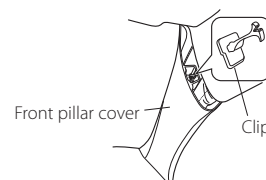
### NOTE

- \*Where the earth sheet of Amplifier (accessory ⑬) can be pasted on the metal part of the front pillar.

### ⚠CAUTION

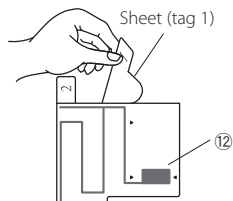
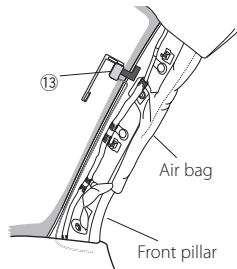
#### When installing the antenna cable inside a front pillar that contains an air bag

- The front pillar cover is secured with a special clip which may need to be replaced when the front pillar cover is removed. Contact your vehicle dealer for details on replacing the front pillar cover and availability of replacement parts.



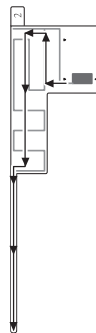
## Installation

- Install the amplifier unit (accessory 13) above the air bag so that the antenna and the air bag.

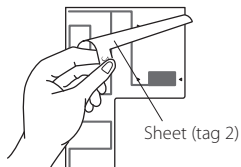


- Do not touch the pasting surface (adhesive side) of the film antenna (accessory 12).

- 4) Rub the film antenna (accessory 12) gently in the direction of the arrow shown below to firmly stick it to the windscreen.

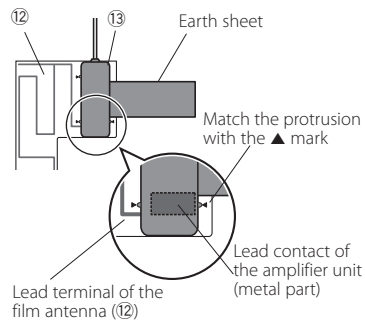


- 5) Remove the second sheet (tag 2) on the film antenna (accessory 12) vertically.

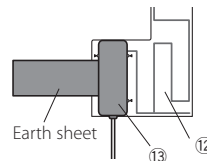


- 6) Match the protrusions of the amplifier unit (accessory 13) with the ◀ markings on the film antenna (accessory 12) and attach the amplifier. Do not touch the lead terminal or the adhesive side of the amplifier unit (-).

### When installing the antenna on the right side



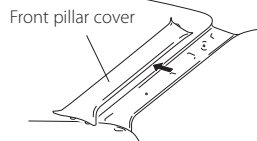
### When installing the antenna on the left side



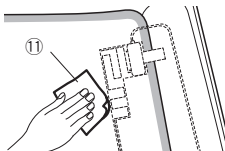
- 7) Remove the film covering the earth sheet and attach the earth sheet to the metal part of the vehicle. Provide sufficient space for the earth sheet so that it does not obstruct the interior parts (front pillar cover). Also take care that the interior parts do not obstruct the amplifier unit (accessory 13).

### • Determining the antenna installation location

- 1) Remove the front pillar cover of your car.



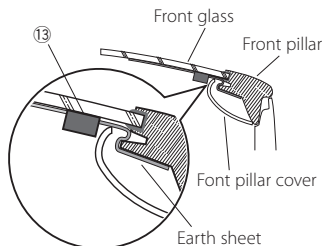
- 2) Clean the windscreen with the supplied cleaner (accessory 11).



- Wait until the glass surface is completely dry before pasting.
  - If the glass surface is cold, such as during winter, warm it with defroster or dryer.
- 3) Remove the first sheet (tag 1) of film antenna (accessory 12) horizontally and paste the antenna on the front glass.

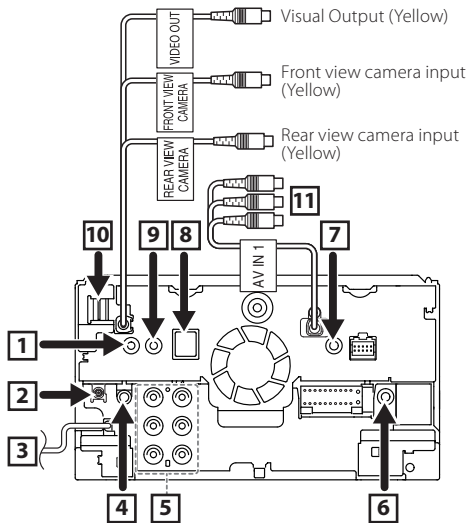


# Installation

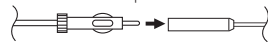


- 8) Wire the antenna cables.  
Use cord clumper (accessory 10) to secure the antenna cable to the pillar in several places.
- 9) Reattach the front pillar cover.
- 10) Be sure not to damage the earth sheet and amplifier unit (accessory 13) when reattaching.
- 11) Connect the amplifier unit (accessory 13) to the DAB input terminal on the rear of the unit.
- 12) Set <Antenna Power> to "ON". (**Instruction Manual P.50**)

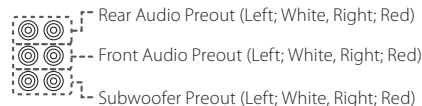
## ■ Connecting the system and external components



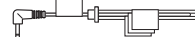
- 1 TV tuner remote output
- 2 Accessory 13 (DNX8160DABS only):  
Digital radio antenna
- 3 FM/AM antenna input
- 4 AV Audio output (ø3.5 mini jack)



- 5) When connecting to an external amplifier, connect its ground wire to the car's chassis to avoid damaging the unit.

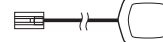


- 6) Accessory 4: Steering remote harness  
Connect to vehicle's steering remote harness. Contact your KENWOOD dealer for details.

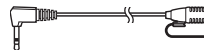


- 7) AV-IN2 (CA-C3AV; Optional Accessory) input

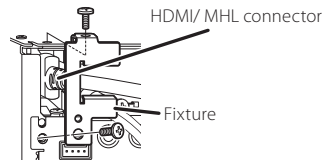
- 8) Accessory 8: GPS Antenna



- 9) Accessory 3: Bluetooth Microphone



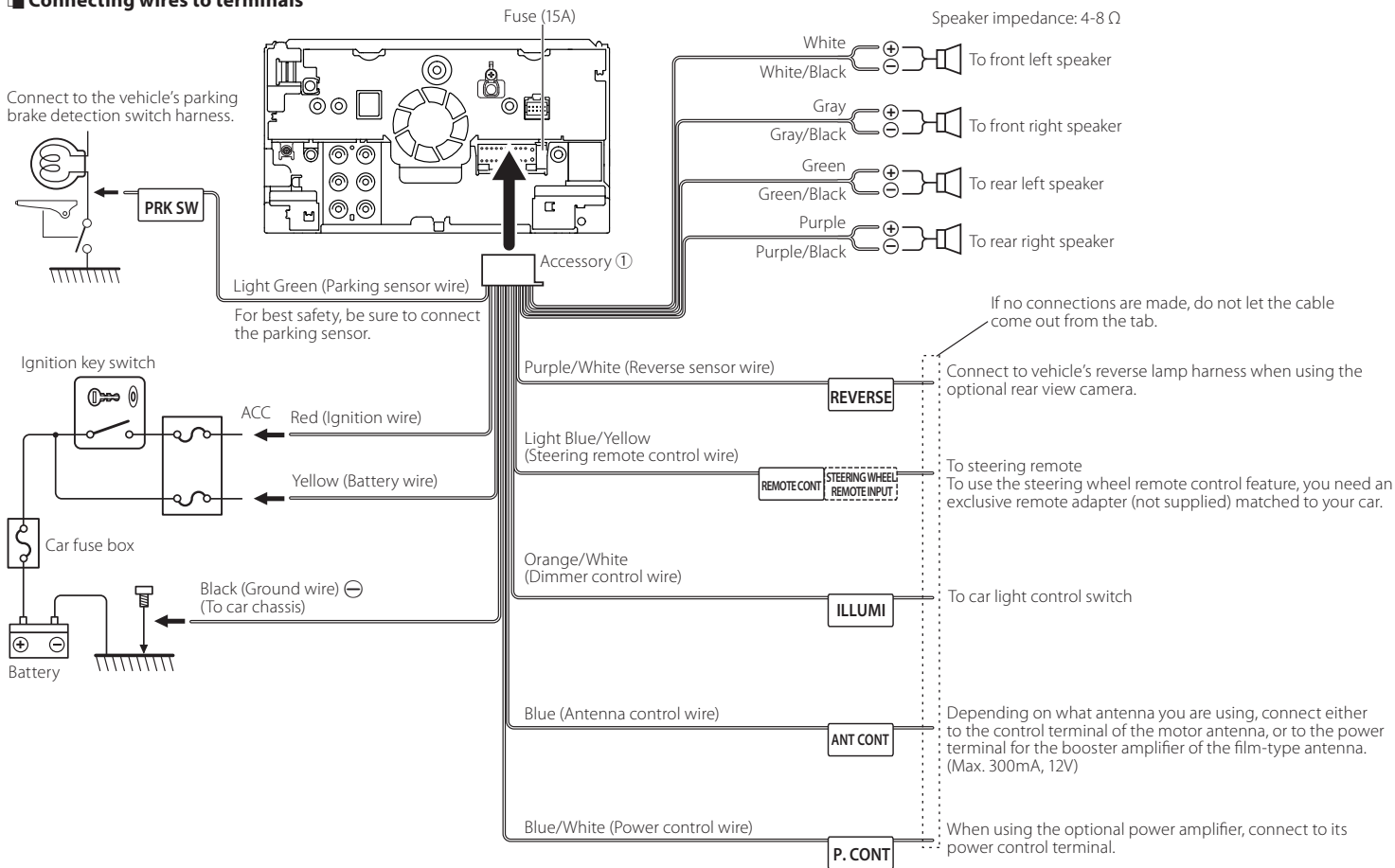
- 10) HDMI/MHL input  
MHL maximum power supply current : 5 V  $\bar{\bar{=}}$  900 mA  
When you connect the cable to HDMI/MHL terminal, remove the fixture. After connecting the cable, put the fixture again.



- 11) AV-IN1 input (Visual; Yellow, Left audio; White, Right audio; Red)

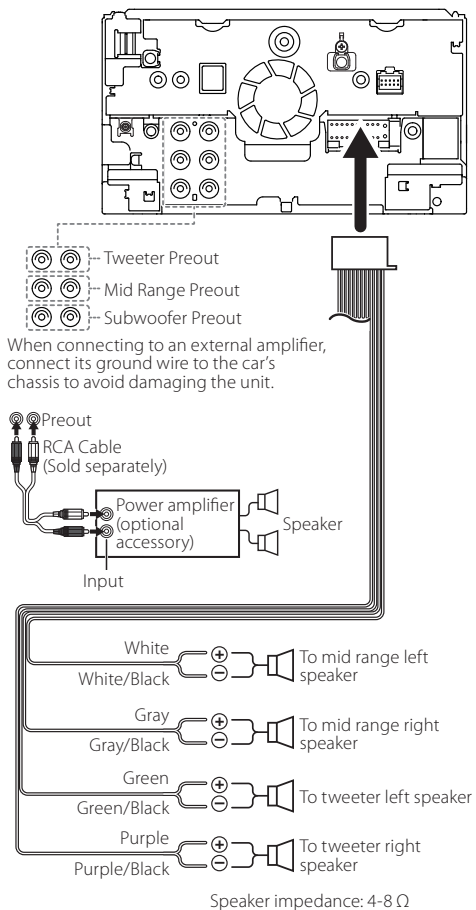
# Installation

## ■ Connecting wires to terminals



# Installation

## 3 way speaker system setup (DNX8160S)



### Switching between speaker systems

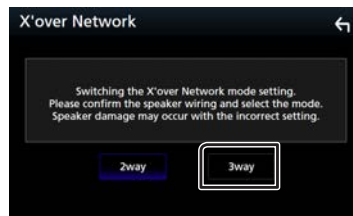
Select the appropriate crossover network mode according to the speaker system (2-way speaker system or 3-way speaker system).

- 1) Press the <HOME> button.
- 2) Touch [ ].
- 3) Touch [STANDBY].
- 4) Press the <▲> button and the <NAV> button for 1 second at the same time.



Speaker system select screen appears.

- 5) Select the crossover network mode.



A confirmation screen appears.

- 6) Touch [Yes].  
The 2 way speaker system is switched to the 3 way speaker system.

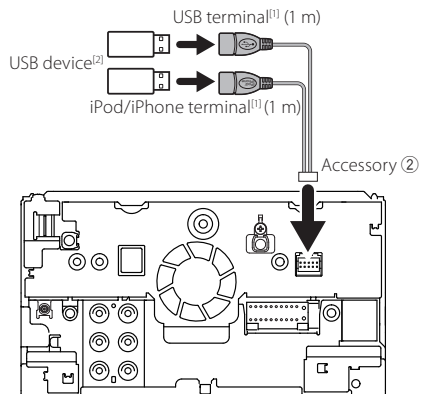
### NOTE

- When the 3-way speaker system is selected, the following functions are disabled. (See the Instruction Manual.)
  - Zone Control
  - Fader of Controlling General Audio
  - Front focus of Listening Position/ DTA
  - Front All of Listening Position/ DTA

- Select the speakers to output the sound from cell-phone of Bluetooth HF/Audio
- Beep of User Interface Setup
- For speaker setup and crossover setup, see Setting Audio in the Instruction Manual.
- For how to connect speaker wires to terminals other than speaker terminals and Preout terminals, see **Connecting the system and external components (P.25)** and **Connecting wires to terminals (P.26)**.

# Installation

## ■ Connecting a USB device

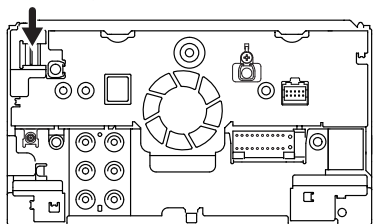


<sup>[1]</sup>iPod/iPhone / USB maximum power supply current :  
DC 5 V  $\equiv$  1.5 A

<sup>[2]</sup>Sold separately / Use CA-U1EX to extend the cable if necessary. (Max 500 mA, 5V)

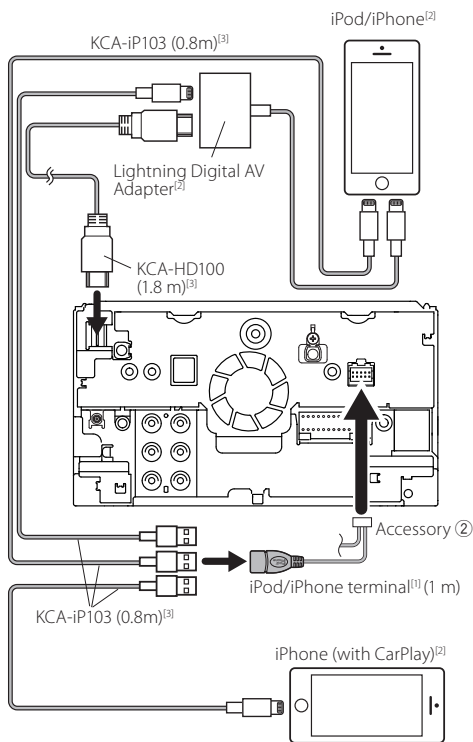
## ■ Connecting the Wireless Display Adapter to use smartphone/iPod/iPhone over a wireless connection

Wireless Display Adapter: KCA-WL100  
(Sold separately)



## ■ Connecting an iPod/iPhone

### • Lightning connector

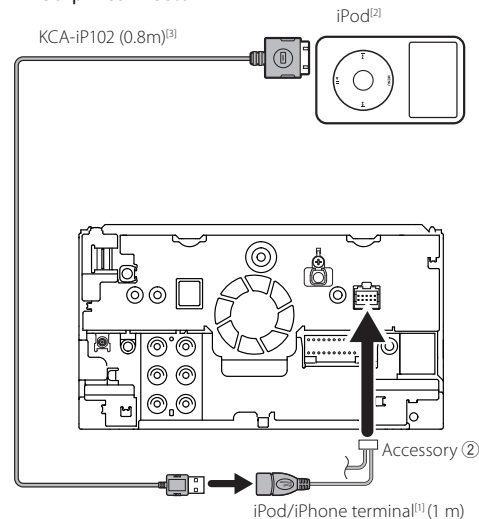


<sup>[1]</sup>iPod/iPhone maximum power supply current :  
DC 5 V  $\equiv$  1.5 A

<sup>[2]</sup>Sold separately

<sup>[3]</sup>Optional accessory

### • 30-pin connector

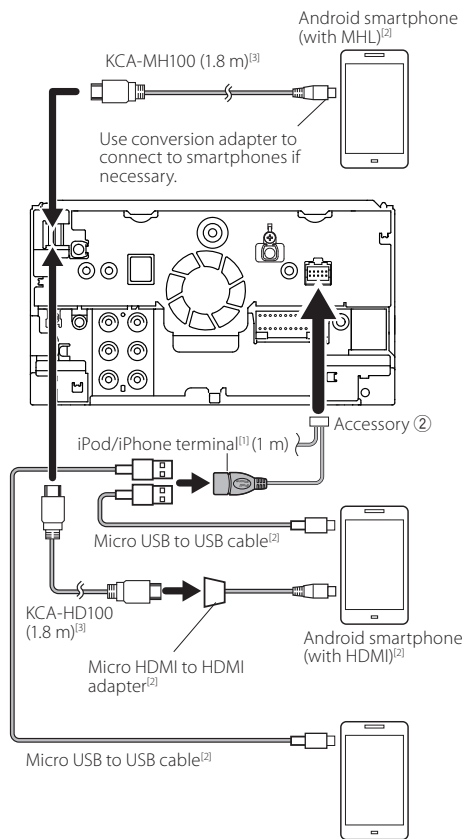


### NOTE

- When you connect iPod/iPhone with HDMI cable, the necessary cable differs depended on the type of the connector like Lightning or 30-pin. Refer to "Connecting iPod/iPhone" (P.12) for the necessary cable.
- The setting is necessary to meet the connected iPod/iPhone or Android device. Refer to "Selecting the Android/ iPod/ iPhone device to play and connection method" (P.12).

## Installation

### ■ Connecting an Android smartphone



<sup>[1]</sup>iPod/iPhone maximum power supply current : DC 5 V  $\overline{\text{---}}$  1.5 A

<sup>[2]</sup>Sold separately

<sup>[3]</sup>Optional accessory

## About this Unit

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## About this Unit

### Connectable iPod/iPhone

The following models can be connected to this unit.

Made for

- iPhone 6s Plus
- iPhone 6s
- iPhone 6 Plus
- iPhone 6
- iPhone 5s
- iPhone 5c
- iPhone 5
- iPhone 4s
- iPod touch (6th generation)
- iPod touch (5th generation)

### About the Bluetooth smartphone and Bluetooth audio player

This unit conforms to the following Bluetooth specifications:

#### Version

Bluetooth Ver. 3.0

#### Profile

##### Smartphone/ Cell-phone:

HFP (V1.6) (Hands Free Profile)  
SPP (Serial Port Profile)  
HID (Human Interface Device Profile)  
PBAP (Phonebook Access Profile)  
GAP (Generic Access Profile)

##### Audio player:

A2DP (Advanced Audio Distribution Profile)  
AVRCP (V1.5) (Audio/Video Remote Control Profile)

#### Sound codec

SBC, AAC

#### NOTE

- For the cell-phones verified for compatibility, access the following URL: <http://www.kenwood.com/cs/ce/bt/>.

### Playable Audio files

(A) Bit rate : (B) Sampling frequency : (C) Bit count

- AAC-LC (.m4a)  
(A) 8 – 320kbps, VBR : (B) 16 – 48 kHz : (C) 16 bit
- MP3 (.mp3)  
(A) 8 – 320kbps, VBR : (B) 16 – 48 kHz : (C) 16 bit
- WMA (.wma)  
(A) 8 – 320kbps : (B) 16 – 48 kHz : (C) 16 bit
- Linear PCM (WAVE) (.wav)  
(A) – : (B) 16 – 48 kHz (Disc), 16 – 192 kHz (USB/ SD) :  
(C) 16/ 24 bit
- FLAC (.flac)  
(A) – : (B) 16 – 48 kHz (Disc), 16 – 192 kHz (USB/ SD) :  
(C) 16/ 24 bit

- Vorbis (.ogg)  
(A) VBR : (B) 16 – 48 kHz : (C) 16 bit

#### NOTE

- If music of normal CD and other playback systems are recorded in the same disc, only the playback system recorded at the first setout is played.
- WMA and AAC of which is covered with DRM cannot be played.
- Although the audio files are complied with the standards listed above, the play may be impossible depending on the types or conditions of media or device.

### Acceptable Video files

Video Format (A) Profile : (B) Max. Picture size : (C) Max. bit rate)

: (D) Audio format

- MPEG-1 (.mpg, .mpeg)  
(A) – : (B) 352 × 240, 352 × 288 : (C) 1.5M bps :  
(D) MPEG Audio Layer 2
- MPEG-2 (.mpg, .mpeg)  
(A) MP@ML : (B) 720 × 480, 720 × 576 : (C) 8M bps :  
(D) MPEG Audio Layer 2
- H.264/MPEG-4 AVC (.mp4, .m4v, .avi, .flv, .f4v)  
(A) Baseline Profile, Main Profile : (B) 1280 × 720 (30 fps) :  
(C) 8M bps : (D) MP3, AAC
- MPEG-4 (.mp4, .avi)  
(A) Advanced Simple Profile : (B) 1920 × 1080 (30 fps) :  
(C) 8M bps : (D) MP3, AAC
- WMV (.wmv)  
(A) Main Profile : (B) 1920 × 1080 (30 fps) : (C) 8M bps :  
(D) WMA
- MKV (.mkv)  
(A), (B), (C) Video Format follows H.264/MPEG-4 AVC, MPEG-4,  
WMV : (D) MP3, AAC, WMA, Vorbis, FLAC

## ■ The marking of products using lasers

**CLASS 1  
LASER PRODUCT**

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

## ■ Eski Elektrik ve Elektronik Ekipmanların İmha Edilmesi Hakkında Bilgi (ayrı atık toplama sistemlerini kullanan ülkeleri için uygulanabilir)



Sembollü (üzerinde çarpı işareti olan çöp kutusu) ürünler ev atıkları olarak atılamaz.

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# KENWOOD

## ■ DNX8160SM



**Declaration of Conformity with regard to the EMC Directive**

**Declaration of Conformity with regard to the R&TTE Directive 1999/5/EC**

**Declaration of Conformity with regard to the RoHS Directive 2011/65/EU**

**Manufacturer:**

JVC KENWOOD Corporation  
3-12, Moriyacho, Kanagawa-ku, Yokohama-shi, Kanagawa  
221-0022, JAPAN

**EU Representative:**

JVCKENWOOD NEDERLAND B.V.  
Amsterdamseweg 37, 1422 AC UITHOORN, The Netherlands

### English

Hereby, JVC KENWOOD declares that this unit DNX8160SM is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

### Türkçe

Bu vesileyle JVC Kenwood, DNX8160SM ünitesinin, 1999/5/EC Direktifinin başlıca gereksinimleri ve diğer ilgili hükümleri ile uyumlu olduğunu beyan eder.

### For Turkey

Bu ürün 28300 sayılı Resmî Gazete’de yayımlanan Atık Elektrikli ve Elektronik Eşyaların Kontrolü Yönetmeliğe uygun olarak üretilmiştir.

## ■ DNX8160SM

**TRA**

**REGISTERED No. : ER45957/16**

**DEALER No. : DA0077455/11**