KENWOOD

DNX7150DAB
DNX715WDAB
DNX4150DAB
DNX4150BT
DNX4150BTR

GPS NAVIGATION SYSTEM
INSTRUCTION MANUAL

JVCKENWOOD Corporation

Before reading this manual, click the button below to check the latest edition and the modified pages.
http://manual.kenwood.com/edition/im386/

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

MHL™
Mobile High-Definition Link

DAB+
Digital Audio Broadcasting

aha™

Bluetooth®

DOLBY DIGITAL

DIVX™

SDHC™

microSDHC™

AUPEO!®
PERSONAL RADIO

DVD VIDEO™

Made for
iPod **iPhone**

Designed for
Windows Media™

IM386_Ref_E_En_03 (E/Q)

What Do You Want To Do?

Thank you for purchasing the KENWOOD GPS NAVIGATION SYSTEM.
In this manual, you will learn various convenient functions of the system.

Click the icon of the media you want to play.

With one-click, you can jump to the section of each media!

iPod	USB	VCD		Tuner	DAB
Disc Media	Music CD	DVD VIDEO			
SD card	aha	AUPEO!		App	BT Audio

Contents

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Before Use

⚠ WARNING

To prevent injury or fire, take the following precautions:

- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit.
- 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 *Language setup (P.83)*.
- The Radio Data System or Radio Broadcast Data System feature won't work where the service is not supported by any broadcasting station.

Protecting the monitor

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

Cleaning the unit

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

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

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.
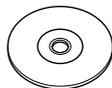
- 8-cm (3 inch) discs cannot be used.
- Discs with coloring on the recording surface or discs that are dirty cannot be used.
- This unit can only play the CDs with

  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.)

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How to Read this Manual

Return to the Top page
CD/Audio and Visual Files/iPod/App Operation

Search Operation

You can search music, video or picture files by the following operations.

> **NOTE**
> • If you use a remote control, you can jump directly to the desired track/file with entering the track/folder/file number, play time, etc. For details, see *Direct search mode (P.119)*.
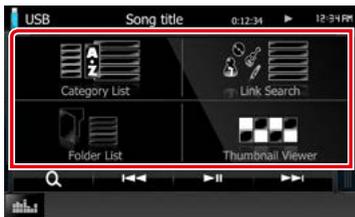
▮ List search

You can search tracks, folders, and files according to hierarchy.

1 Touch [🔍].
The search type screen appears.

2 Touch desired search way.

List Control screen appears.

3 Touch the desired folder.

4 Touch desired item from the content list.
Playback starts.

▮ Other search

When you want to narrow the list down, there are other search ways.
This function is not available when music CD is the current source.

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Link header
You can refer each section or top page with one-click.

Operation title
Introduces the function.

NOTE
Introduces some tips, notes, etc.

Reference mark
Displayed in blue notes.
With one-click, you can jump to the article related to the current section.

Operation procedure
Explains necessary procedures to achieve the operation.
< >: Indicates the name of panel buttons.
[ ]: Indicates the name of touch keys.

Screen shot
Shows some screen shots displayed during operation for reference.
The area or keys to touch are surrounded with a red frame.

> **NOTE**
> • The screens and panels shown in this manual are examples used to provide clear explanations of the operations.
> For this reason, they may be different from the actual screens or panels used, or some display patterns may be different.

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Basic Operations

Functions of the Buttons on the Front Panel

DNX7150DAB

NOTE

• 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 this manual, each model name is abbreviated as follows.
  DNX7150DAB: **DNX7**
  If above icon is showed, read the article applicable to the unit you use.

How to insert an SD Card

1) Press **7** <▲> button for 1 second.
   The panel fully opens.
2) Hold the SD card as the illustration in the right and insert it into the slot until it clicks.

● **To eject the card:**

Push the 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.

Labelled side
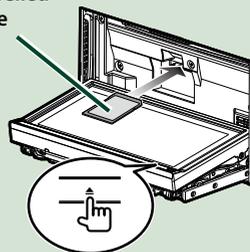
NOTE

• When detaching a part of the front panel, detach it toward the front side as shown in the diagram right. If it is detached upward, the front panel will be broken.

Number	Name	Motion
1	▽ (Reset)	• If the unit or the connected unit fails to operate properly, the unit returns to factory settings when this button is pressed *(P.113)*. • If the Security Indicator (SI) function is turned on, this indicator flashes when the panel is detached *(P.84)*.
2	▼, ▲ (Volume)	• Adjusts volume.
3	NAV	• Displays the navigation screen. • Pressing for 1 second switches AV out sources.
4	MENU	• Displays the option menu screen. • Pressing for 1 second turns the screen off.*1
5	HOME	• Displays the HOME screen *(P.19)*. • Pressing for 1 second turns the power off. • When the power off, turns the power on.
6	TEL	• Displays the Hands Free screen *(P.75)*. • Pressing for 1 second displays the Voice Recognition screen *(P.78)*.
7	▲ (Eject)	• Ejects the disc. • When the panel is opened, pressing closes the panel and pressing for 1 second ejects the disc forcibly. • When the panel is closed, pressing for 1 second fully opens the panel to the location of the SD card slot.
8	Disc insert slot	• A slot to insert a disc media.
9	SD card slot	• A slot to insert an SD card. • You can play audio/visual file in the card. *2 • The card is used for upgrading the map. For how to upgrade the map, refer to the instruction manual of the navigation system.

*1 The function of the [MENU] button can be changed to camera view function. See *User interface (P.82)*.

*2 If the map update file remains in the SD card, you cannot play audio/visual file.
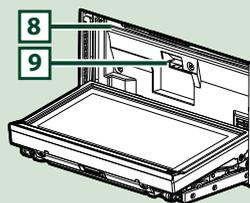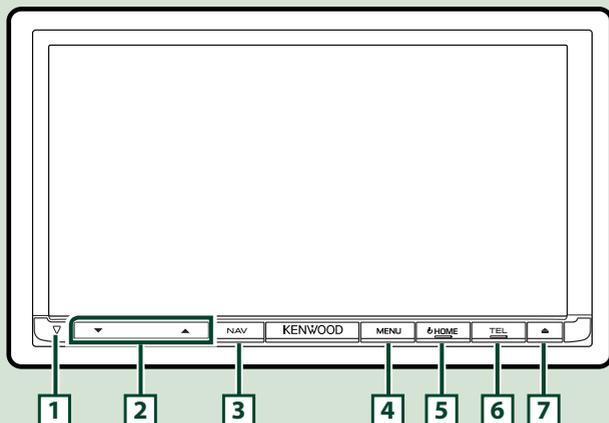
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DNX715WDAB

NOTE

- 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 this manual, each model name is abbreviated as follows.
  DNX715WDAB: **DNX7**
  If above icons are showed, read the article applicable to the unit you use.

How to insert a microSD Card
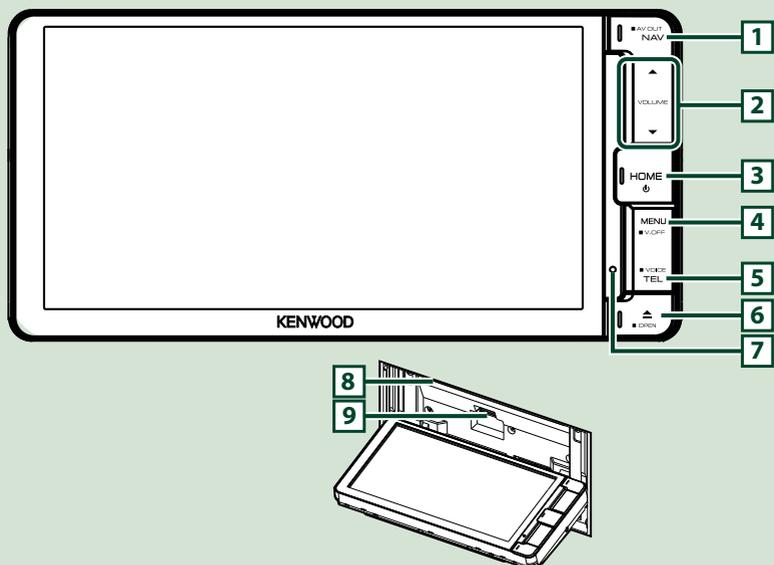
1) Press [6] <▲> button for 1 second.
   The panel fully opens.
2) Hold the SD card as the illustration in the right and insert it into the slot until it clicks.

● **To eject the card:**

Push the 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.

Labelled side

Number	Name	Motion
1	NAV	• Displays the navigation screen. • Pressing for 1 second switches AV out sources.
2	▼, ▲ (Volume)	• Adjusts volume.
3	HOME	• Displays the HOME screen **(P.19)**. • Pressing for 1 second turns the power off. • When the power off, turns the power on.
4	MENU	• Displays the option menu screen. • Pressing for 1 second turns the screen off.[*1]
5	TEL	• Displays the Hands Free screen **(P.75)**. • Pressing for 1 second displays the Voice Recognition screen **(P.78)**.
6	⏏ (Eject)	• Ejects the disc. • Pressing for 1 second ejects the disc forcibly.
7	Reset	• If the unit or the connected unit fails to operate properly, the unit returns to factory settings when this button is pressed **(P.113)**.
8	Disc insert slot	• A slot to insert a disc media.
9	SD card slot	• A slot to insert an SD card. • You can play audio/visual file in the card. [*2] • The card is used for upgrading the map. For how to upgrade the map, refer to the instruction manual of the navigation system.

*1 **The function of the [MENU] button can be changed to camera view function. See** *User interface (P.82)*.

*2 **If the map update file remains in the SD card, you cannot play audio/visual file.**

DNX4150DAB/ DNX4150BT/ DNX4150BTR
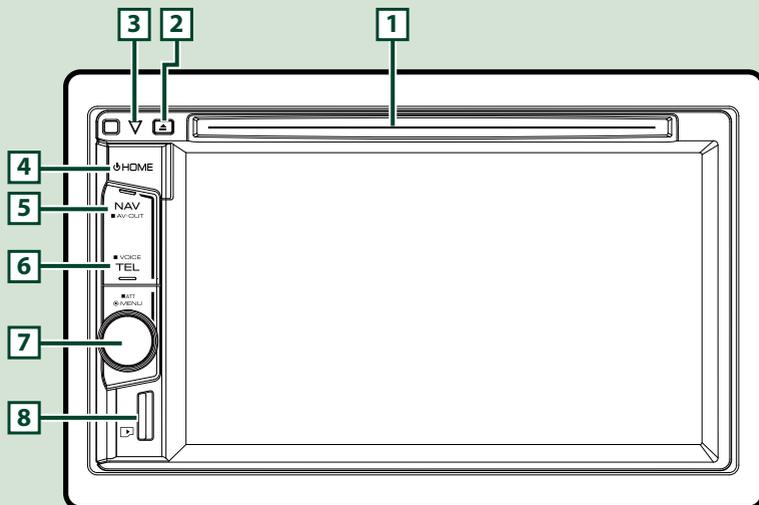
NOTE

• 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 this manual, each model name is abbreviated as follows.
  DNX4150DAB, DNX4150BT: **DNX4**
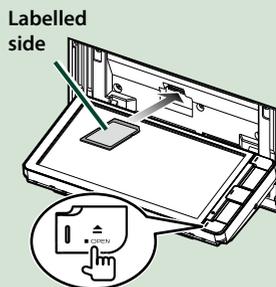 If above icons are showed, read the article applicable to the unit you use.

How to insert a microSD Card

NOTE

• A dummy micro SD card is inserted as the slot cover. Remove it before using and keep it in an appropriate place.

1) Hold the microSD card with the label side facing right and the notched section down, and insert it into the 8 slot until it clicks.

● **To eject the card:**

Push the 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.

Number	Name	Motion
1	Disc insert slot	• A slot to insert a disc media.
2	⏏ (Eject)	• Ejects the disc. • Pressing for 1 second ejects the disc forcibly.
3	▽ (Reset)	• If the unit or the connected unit fails to operate properly, the unit returns to factory settings when this button is pressed **(P.113)**. • If the Security Indicator (SI) function is turned on, this indicator flashes when the vehicle ignition is off **(P.84)**.
4	HOME	• Displays the HOME screen **(P.19)**. • Pressing for 1 second turns the power off. • When the power off, turns the power on.
5	NAV	• Displays the navigation screen. • Pressing for 1 second switches AV out sources.
6	TEL	• Displays the Hands Free screen **(P.75)**. • Pressing for 1 second displays the Voice Recognition screen **(P.78)**.[*1]
7	Volume Knob	• Turning adjusts volume up or down. • Displays the option menu screen. • Pressing for 1 second switches attenuation of the volume on/off.
8	microSD card slot	• A slot to insert a microSD card. • You can play audio/visual file in the card. [*2] (DNX4150DAB/ DNX4150BT only) • The card is used for upgrading the map. For how to upgrade the map, refer to the instruction manual of the navigation system.

*1 [TEL] button can also be used to switch to the rear view camera or turn off the display. See User interface (P.82).

*2 If the map update file remains in the microSD card, you cannot play audio/visual file.

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Turning on the Unit

The method of turning on is different depending on the model.

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

DNX7150DAB
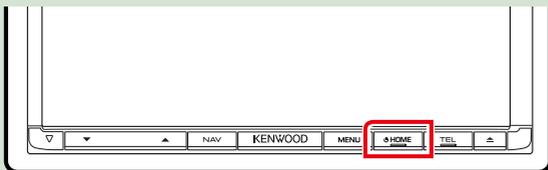
DNX715WDAB
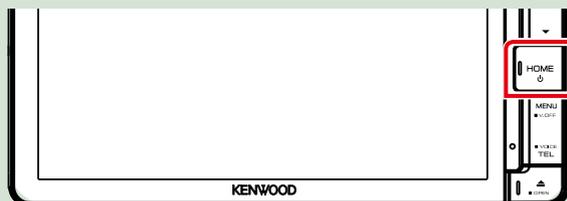
DNX4

The unit is turned on.

● **To turn off the unit:**

Press the <HOME> button for 1 second.

If it is your first time turning the unit on after installation, it will be necessary to perform *Initial setup (P.13)*.

Initial setup

Perform this setup when you use this unit first time or when you reset the unit *(P.113)*.

1 **Set each item as follows.**
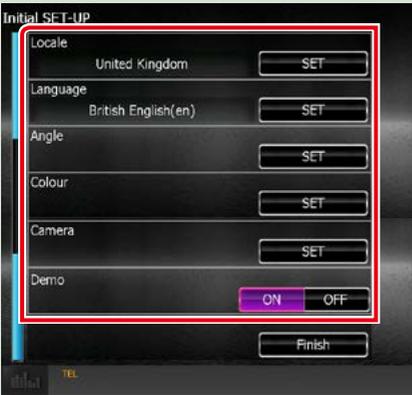
Locale
Select the country for the navigation system.

Select the country for the navigation system.

The language, the distance unit, and the gasoline unit are set.

After setting, touch [Enter].

① Touch [SET].

② Select the desired country.

Language

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

① Touch [SET].

② Touch [◄] or [►] to select the desired language.

③ Touch [Enter].

For detailed operation, see ***Language setup (P.83)***.

Angle DNX7

Adjust the position of the monitor. Default is "0".

① Touch [SET].

② Touch desired angle number and [🔙].

For detailed operation, see ***Monitor angle control (P.86)***.

Color

Set the screen and button illumination color. You can select whether to allow color scan operation or select a fixed color for operation.

① Touch [SET].

② Touch [ON] or [OFF] of [Panel Color Scan].

③ If you want to change color, touch [SET] of [Panel Color Coordinate].

④ Touch your desired color and [🔙].

For detailed operation, see ***Panel color coordinate (P.87)***.

Continued

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Camera

Set the parameters for the camera.
① Touch [SET].
② Set each item and touch [🔙].
For detailed operation, see *Camera Setup (P.90)*.

DEMO

Set the demonstration mode. Default is "ON".
① Touch [ON] or [OFF].

2 **Touch [Finish].**

NOTE
• These settings can be set from the SETUP menu. See *Setting Up (P.80)*.
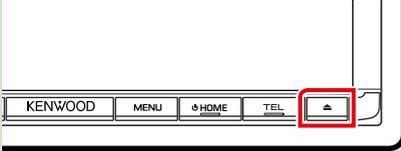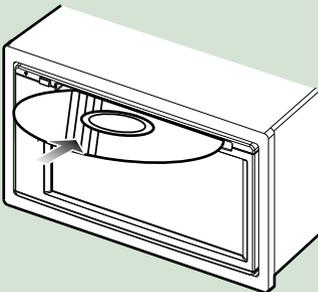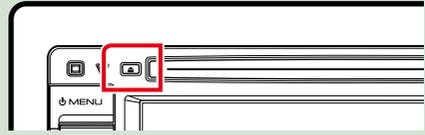
USB device

1 **Connect the USB device with the USB cable.**
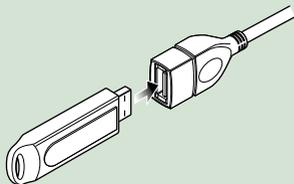
The unit reads the device and playback starts.

● **To disconnect the device:**

Touch screen from the left end to display the function panel.

Touch [⏏]. Disconnect the device from the cable.

iPod

1 **Connect the iPod.**

2 **Press the <HOME> button.**

3 **Touch [iPod] in the HOME screen.** *(P.19)*

> **NOTE**
> • For the details of the necessary cable and adapter to connect with iPod/iPhone, refer to *Music/ Video/Picture Basic Operation (P.36)*.

● **To disconnect the iPod/iPhone connected with the cable:**

Touch screen from the left end to display the function panel.

Touch [⏏]. Disconnect the iPod/ iPhone from the cable.

SD card

1

DNX7150DAB/ DNX715WDAB

Press the <⏏> button for 1 second to open the front panel.
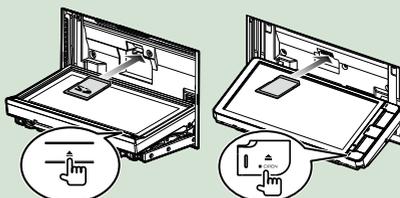
> **NOTE**
> • For details, see *Functions of the Buttons on the Front Panel (P.6)*.

2 **Insert the card into the slot until it clicks.**

The unit loads the card and playback starts.

DNX4150DAB/ DNX4150BT
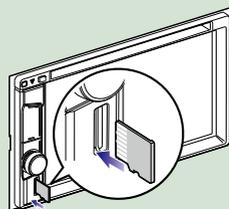
● **To remove:**

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.

> **NOTE**
> • A dummy micro SD card is inserted as the slot cover. Remove it before using and keep it in an appropriate place.

HDMI/ MHL source

You can display the screen of smartphones connected via the HDMI/MHL input terminal.

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

2 **Touch [HDMI/ MHL] in the HOME screen.** *(P.19)*

3 **Start an application or playback on your smartphone.**

● **About Miracast Dongles:**

This unit is compatible with Miracast Dongles. Connecting a Miracast Dongle (KCA-WL100: optional accessory) to the HDMI/MHL input terminal enables you to enjoy listening to music, watching videos, or viewing pictures over a wireless connection.

> **NOTE**
> • For details about Miracast Dongle settings, etc., refer to the instructions supplied with the Miracast Dongle.

TV tuner (DNX7/ DNX4150DAB/ DNX4150BT)

You can connect the TV tuner (commercially available) with this unit and watch TV.

> **Before use**
> • When you use TV control function, connect the TV tuner (commercially available) and set 3rd Party TV Tuner Control in **AV Input Setup (P.92)** to ON.
> • The TV tuner can be controlled with its supplied remote control through the remote sensor on the front panel of this unit.

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

2 **Touch [TV] in the HOME screen.** *(P.19)*
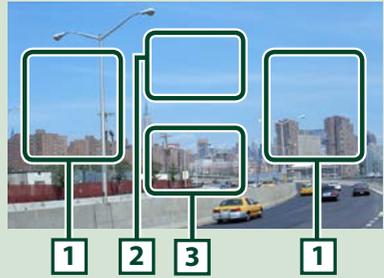
1 Switching channel area
Touch to switch the channel.

2 Menu display area
Touch to display the Menu control screen.

3 Key display area
Touch to display the control screen.

Menu control screen:

Touch 2 Menu display area to set the menu of the TV tuner.

Displays the menu/ Enters selected item
Touch [MENU/OK].

Moves the cursor
Touch [▲], [▼], [◄], [►].

Exits menu control
Touch [Exit].

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Detaching The Front Panel (DNX7150DAB)

You can detach the front panel to prevent theft.

1 **Press the <⏏> button for 1 second to open the front panel.**
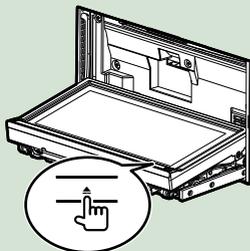
NOTE
• You can set the front panel to open automatically when the ignition is turned off. See *Monitor angle control (P.86)*.

2 **Detach the panel as the diagrams below.**
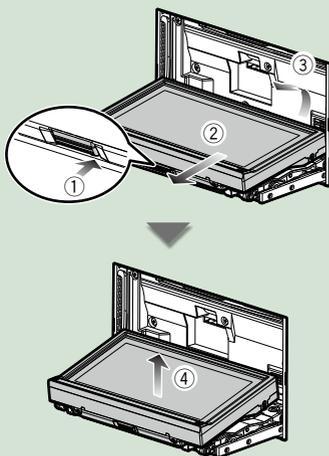
NOTE
• The attaching plate closes automatically in about 10 seconds after the front panel is released. Remove the panel before this happens.

● **Attaching the front panel:**

Hold the panel securely so as not to drop it accidentally, and fit it onto the attaching plate until it is firmly locked.
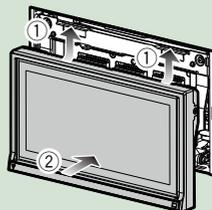
Operating with the HOME Screen

Most functions can be performed from the HOME screen.

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

DNX7150DAB
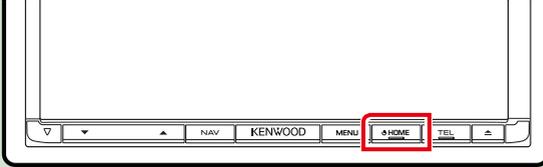
DNX715WDAB
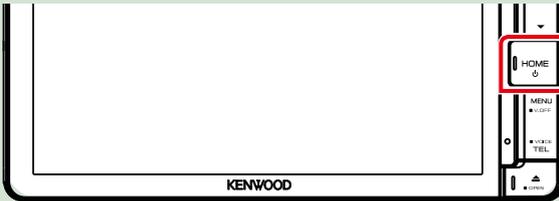
DNX4

HOME screen appears.

NOTE
• HOME screen can be
  changed by flicking
  left or right.

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● **Customizing 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.**

Customizing mode screen

From this screen, you can perform the following functions.

Function	Icon	Operation
Switch the audio source	etc.	Touch the icon of the desired source.
Switch the video source	etc.	Touch the icon of the desired video source.
Switch the application installed in the iPhone/iPod or Android.		Touch the icon of the desired application.
Switch the App source		Touch the icon of the desired App source.
Enter setup mode	etc.	Touch the icon of the desired setup function.
Display navigation screen	or	Touch [NAV] or navigation information.
Turn off all audio function		Touch [STANDBY].

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Common Operations

Introduces the common operations.

Popup menu

DNX7

1 **Press the <MENU> button.**
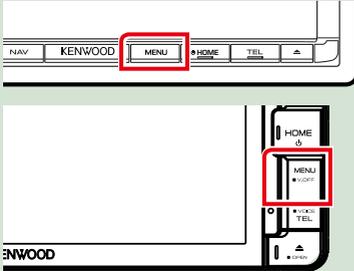
DNX4

1 **Press the volume knob.**
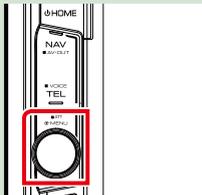
Popup menu appears.

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 camera view.

: 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.

General

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

(Graphic Equalizer)
Displays Graphic Equalizer screen.
(RETURN)
Returns to previous screen.
(common menu key)
Touch to display the common menu. The contents of the menu are as follows.

: 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.

: Closes the menu.

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List screen

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

ᐸᐸ (Scroll)
Scrolls the displayed text.
All ▷ etc.
Touch keys with various functions are displayed here. Displayed keys differ depending on the current audio source, status, etc. For examples of functions of each key, refer to the table below.

Key	Function
All ▷	Lists all the music in the lower hierarchy.
⬆ ⬆	Moves to the upper hierarchy.
🎵	Displays current category folder.
🎵 🖼 🎬	Displays music/picture/movie file list.

Flick scrolling

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

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Navigation Operation

For details on the navigation function, please refer to the Navigation Instruction Manual.

Display the navigation screen

1 **Press the <NAV> button.**
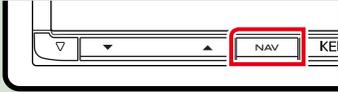
DNX7150DAB
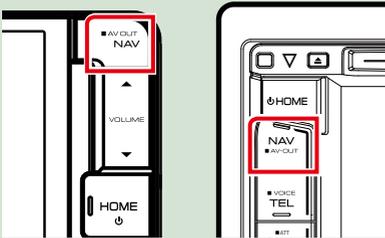
DNX715WDAB   **DNX4**

The navigation screen appears.

Control audio from the navigation screen

You can control audio sources while the navigation screen is displayed.

Also, you can view the navigation information while the source control screen is displayed.

1 **Touch the information bar.**

The navigation screen with audio information appears.

2 **Touch [ ] or [ ] in the navigation screen.**

Touching this area displays the audio screen.

[ ] : Displays the navigation and control keys of the current source.

[ ] : Displays the navigation and current video/picture playback display.

NOTE

- The screen switches between playback screen and camera view each time the viewing area is touched.
- Touching the source icon in the bottom of the screen displays the full audio screen.

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● **To return to the full navigation screen:**
Touch [🖼].

NOTE

• For details on control keys, refer to the instructions in each section.

KENWOOD Traffic Powered By INRIX (except DNX4150BTR)

You can receive INRIX traffic information and weather forecast by connecting your iPhone or Android smartphone in which the "KENWOOD Traffic Powered By INRIX" application is installed to this unit.

Preparation

• Install the latest version of the KENWOOD Traffic Powered By INRIX application on your iPhone or Android.
  – **iPhone:** Search for "KENWOOD Traffic Powered By INRIX" in the Apple App Store to find and install the most current version.
  – **Android:** Search for "KENWOOD Traffic Powered By INRIX" in Google play to find and install the most current version.
• For details, see "KENWOOD Traffic Powered By INRIX" application.

---

1 **To enter STANDBY source, touch [STANDBY] icon in the Top Menu screen.**

2 **Register the Android smartphone.**

See *Application link setup (P.56)*.

3 **Press the <NAV> button.**

DNX7150DAB
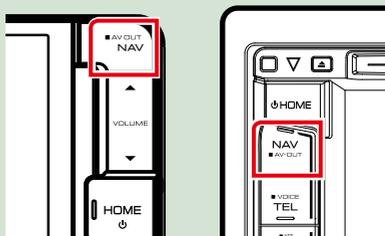
DNX715WDAB   DNX4

Navigation screen appears.
Touch [Apps] on the Main Menu screen and then an icon of your desired content
For details, see Navigation system manual.

DVD/Video CD (VCD) Operation

DVD/VCD Basic Operation

Most functions can be controlled from the source control screen and playback screen.

NOTE

• Set the remote control mode switch to DVD mode before starting operation, see ***Switching the operation mode (P.107)***.

• The screen shot below is for DVD. It may be different from the one for VCD.

Control screen   **Video screen**
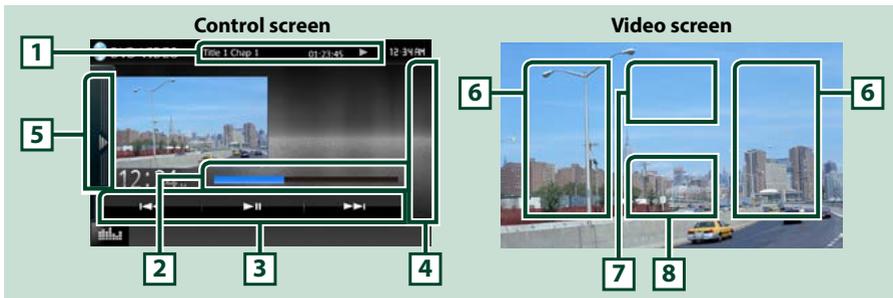
1 Information display

Displays the following information.

• **Title #, Chap #**: DVD title and chapter number display

• **Track #/Scene #**: VCD track or scene number display
Scene # is displayed only when Playback control (PBC) is on.

• ▶, ▶▶, ▶▶I, ■, etc.: Current play mode display
The meanings of each icon are as follows; ▶ (play), ▶▶ (fast forward), ◀◀ (fast backward), ▶▶I (search up), I◀◀ (search down), ■ (stop), **R** (resume stop), II (pause), I▶ (slow playback), ◀I (slow reverse playback).

Touch this area to display the disc lable name.

2 Status bar (DVD only)

For confirmation of current playing position.

3 Function bar

Various functions can be performed by using keys in this area. For details on the keys, see ***Function bar (P.27)***.

4 Control list

Unavailable in DVD/VCD source.

5 Function panel

Touch on the left side of the screen to display the function panel. Touch again to close the panel. For details on the keys, see ***Function panel (P.28)***.

6 Searching area

Touch to search the next/previous content.

Scrolling from center of display to left or right performs fast backward or fast forward. Each time you touch each area, the speed changes; standard, 2 times, 3 times. To stop fast backward/forward, touch center of the display.

7 Menu display area

This area functions differently depending on the current status.

• During DVD playback: Displays the DVD menu. During the menu display, displays the highlight control screen.

• During VCD playback: Displays the Zoom Control screen *(P.30)*.

8 Key display area

Touch to display the control screen.

NOTE

• If you use a remote control, you can jump directly to the desired image with entering the chapter number, scene number, play time, etc *(P.107)*.

■ Function bar

DVD

| ◄◄ | ►❚❚ | ►►❚ |

VCD

| ◄◄ | ►❚❚ | ►►❚ |

The functions of each key are as follows.

[❙◄◄] [►►❙]

Searches the previous/next content.

[►❚❚]

Plays or pauses.

Function panel

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

DVD **VCD**
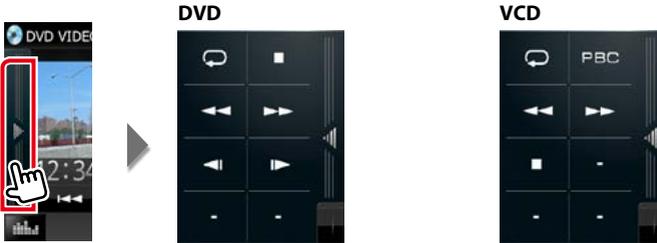
The functions of each key are as follows.

[⟳]

Repeats the current content. Each time you touch the key, repeat mode switches in the following sequence;
DVD: "title repeat" ⟳, "chapter repeat" ⟳, "function off" ⟳
VCD (PBC On): Does not repeat
VCD (PBC Off): "track repeat" ⟳, "function off" ⟳

[■]

Stops playback. When touched twice, the disc is played from the beginning when you play it the next time.

[◄◄] [►►]

Fast forward or fast backward. Each time you touch the key, the speed changes; standard, 2 times, 3 times.

[◄I] or [I►] (DVD only)

Plays in slow motion forward or backward.

[PBC] (VCD only)

Turn Playback control (PBC) on or off.

DVD Disc Menu Operation

You can set up some items in the DVD-VIDEO disc menu.

1 Touch illustrated area during playback.

Menu Control screen appears.

2 Perform desired operation as follows.
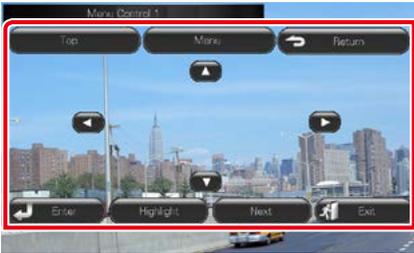
Displays the top menu

Touch [Top].*

Displays the menu

Touch [Menu].*

Displays the previous menu

Touch [Return].*

Enters selected item

Touch [Enter].

Enables direct operation

Touch [Highlight] to enter the highlight control mode *(P.29)*.

Moves the cursor

Touch [▲], [▼], [◄], [►].

* These keys may not function depending on the disc.

■ Highlight control

Highlight control lets you control the DVD menu by touching the menu key directly on the screen.

1 Touch [Highlight] in the Menu Control screen.

2 Touch desired item on the screen.

NOTE

• The highlight control is cleared automatically if you do not operate for a constant time.

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DVD play mode setting

You can select DVD play mode.

1 Touch [Next] in the Menu Control screen.

Menu Control 2 screen appears.

2 Touch the key which corresponds to desired setting item.

Switches the subtitle language

Touch [Subtitle]. Each time you touch this key, language is switched.

Switches the audio language

Touch [Audio]. Each time you touch this key, language is switched.

Controls zoom ratio

Touch [Zoom]. For details, see *step2 in Zoom Control For DVD And VCD (P.30)*.

Switches the picture angle

Touch [Angle]. Each time you touch this key, picture angle is switched.

Exits menu control

Touch [Exit].

Displays the Menu Control 1 screen

Touch [Previous].

Zoom Control For DVD And VCD

You can enlarge Playback screen for DVD and VCD.

1 For VCD, touch illustrated area during playback.

Zoom Control screen appears.

> **NOTE**
> • For DVD, please refer to *DVD play mode setting (P.30)* to display the Zoom Control screen.

2 Perform desired operation as follows.
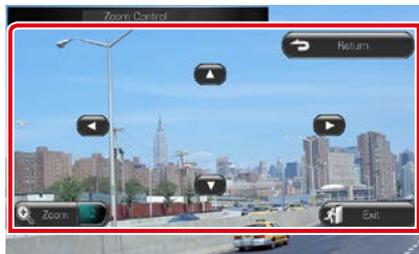
Switches zoom ratio

Touch [Zoom].

For DVD, changes the zoom ratio at 4 levels; Off, 2 times, 3 times, 4 times.

For VCD, changes the zoom ratio at 2 levels; Off, 2 times.

Scrolls the screen

Touch [▲], [▼], [◄], or [►] to scroll the screen in the direction you touch.

Exits menu control

Touch [Exit].

Displays the previous menu*

Touch [Return].

* This function may not be performed depending on the disc.

NOTE

• You cannot touch the menu keys directly on the screen when zooming.

DVD Setup

You can set up the DVD playback functions.

> **NOTE**
> • Each operation in this section can be started from the HOME screen. For details, see ***Operating with the HOME Screen (P.19)***.
> • Some setup items can only be set in standby mode.

1 Press the DNX7 **<MENU> button/** DNX4 **volume knob.**

Popup menu appears.

2 Touch [SETUP].

SETUP Menu screen appears.

3 Touch [Source].
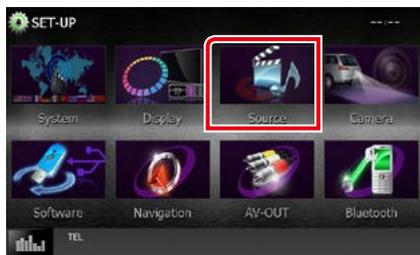
Source SETUP Menu screen appears.

4 Touch [DVD SETUP] in the list.

DVD SETUP screen appears.

5 Set each item as follows.

Menu/Subtitle/Audio Language*

See ***Language setup (P.33)***.

Dynamic Range Control*

Sets the dynamic range.

Wide: The dynamic range is wide.

Normal: The dynamic range is normal.

Dialog (Default): Makes the total sound volume larger than other modes. This is effective only when you are using Dolby Digital software.

Angle Mark

Sets an angle mark display.

ON (Default): An angle mark appears.

OFF: An angle mark does not appear.

Screen Ratio*

Sets the screen display mode.

16:9 (Default): Displays wide pictures.

4:3 LB: Displays wide pictures in the Letter Box format (having black stripes at the top and bottom of screen).

4:3 PS: Displays wide pictures in the Pan & Scan format (showing pictures cut at the right and left ends).

Parental Level*

See ***Parental level (P.34)***.

DISC SETUP

See ***Disc setup (P.34)***.

Stream Information

Displays the present source information.

The stream (Dolby Digital, Linear PCM, MPEG, WMA or AAC) appears.

* These items are disabled when a DVD is inserted.

■ Language setup

This setting is for the language used in the menu, subtitle, and voice. You cannot setup these items during DVD playback.

1 **Touch [SET] of the desired item; [Menu Language], [Subtitle Language], [Audio Language].**

Language Set screen appears.

2 **Enter the desired language code and touch [Enter].**

For language code, refer to ***DVD Language Codes (P.121)***.

Sets the entered language and returns to the DVD SETUP screen.

NOTE

- To cancel the setup and return to the previous screen, touch [Cancel].
- To clear the entered code, touch [Clear].
- To set the DVD's original language for audio language, touch [Original].

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Parental level

Sets a parental level. You cannot setup this item during DVD playback.

1 Touch [SET] of [Parental Level].

Parental Pass screen appears.

2 Enter the parental code and touch [Enter].

Parental Level screen appears.

> **NOTE**
>
> • The parental code is set to "0000" as default.
> • To cancel the setup and return to the previous screen, touch [Cancel].
> • To clear the entered code, touch [Clear].
> • Current parental level appears as [Level#].

3 Touch [◄] or [►] to select a parental level.

> **NOTE**
>
> • If a disc has higher parental lock level, you need to enter the code number.
> • The parental lock level varies depending on a loaded disc.
> • If a disc has no parental lock, anybody can play it back even when you have set the parental lock.

Disc setup

Performs setup when using disc media.

1 Touch [SET] of [DISC SETUP].

DISC SETUP screen appears.

2 Select an option as follows.

CD Read

Sets the motion of this unit when a music CD is played.

1 (**Default**): Automatically recognizes and plays back an audio file disc, a DVD or a music CD.

2: Forcibly plays back a disc as a music CD. Select [2] if you wish to play a music CD having a special format or if you cannot play a disc in [1] position.

On Screen DVD

Sets an on-screen display.

Auto: When updated, information appears for 5 seconds.

OFF (**Default**): Information does not appear.

> **NOTE**
>
> • [CD Read] is not available when a disc is in the unit.
> • You cannot play an audio file/VCD disc in the [2] position. Also, you may not play some music CDs in the [2] position.

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CD/Audio and Visual Files/iPod/App Operation

Music/Video/Picture Basic Operation

Most functions can be controlled from the source control screen and playback screen.

NOTE

- Set the remote controller mode switch to AUD mode before starting operation, see ***Switching the operation mode (P.107)***.
- 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 listen to music and watch video of APPS source
    - MHL device
    - KCA-MH100
    - Bluetooth profile: SPP
  - To listen to music of APPS source
    - Bluetooth profile: A2DP
    - Bluetooth profile: SPP

  - To listen to music of Bluetooth Audio source
    - Bluetooth profile: A2DP
    - Bluetooth profile: AVRCP

- 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 listen music and watch video with Lightning connector device
    - Lightning Digital AV Adapter
    - KCA-HD100
    - KCA-iP103
    - Bluetooth profile: SPP
  - To listen music with Lightning connector device
    - KCA-iP103
  - To listen music and watch video with 30-pin connector device
    - KCA-iP202
  - To listen music with 30-pin connector device
    - KCA-iP102
  - To listen to music via Bluetooth
    - Bluetooth profile: A2DP
    - Bluetooth profile: SPP

  When connecting with Lightning Digital AV Adapter some applications can be controlled from this unit. The operable functions depend on the application.

- Do not leave the cable or the adapter made by other makers inside the car. It might lead the malfunction caused by heat.
- Some settings are necessary to meet the connected iPod/iPhone or Android device. Refer to ***iPod/iPhone connection setup (P.54)*** and ***Application link setup (P.56)***.

See the following sections for each source operation.

- **Music CD** *(P.37)*
- **Disc media** *(P.37)*
- **USB device** *(P.39)*
- **SD Card** *(P.39)*

- **iPod** *(P.39)*
- **Aha** *(P.46)*
- **AUPEO!** *(P.49)*
- **Apps** *(P.51)*

■ Music CD and disc media

NOTE

• In this manual, "Music CD" will be referred to as the general CDs which include music tracks in.
  "Disc media" will be referred to as CD/DVD disc which includes audio, picture or video files.

• The screen shot below is for CD. It may be different from the one for disc media.

Control screen   **Content list panel**
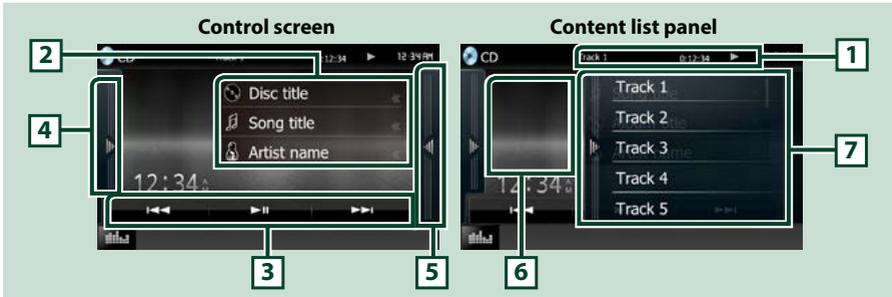
1 Information display

Displays the following information.

• **Track #**: Each time you touch this area, display switches between current track number, text, etc.

• ►, ►►, ►►I, ■, **etc.**: Current play mode display
  The meanings of each icon are as follows; ► (play), ►► (fast forward), ◄◄ (fast backward), ►►I (search up), I◄◄ (search down), ■ (stop), ℝ (resume stop), II (pause).

2 Track information

Displays the information of the current track.

However, only "No Information" is displayed for music CD.

3 Function bar

Various functions can be performed by using keys in this area. For details on the menu, see ***Function bar (P.40)***.

4 Function panel

Touch on the left side of the screen to display the function panel. Touch again to close the panel. For details on the keys, see ***Function panel (P.41)***.

5 Content list

Touching on the screen or flicking the screen to left will display the Content list. Touching again or flicking to right will close the list.

6 Artwork

The jacket of the currently playing file is displayed. Nothing is displayed if there is no jacket data.

7 Content list panel

Displays the playing list. When you touch a track/file name on the list, playback will start.

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Video screen (disc media only)
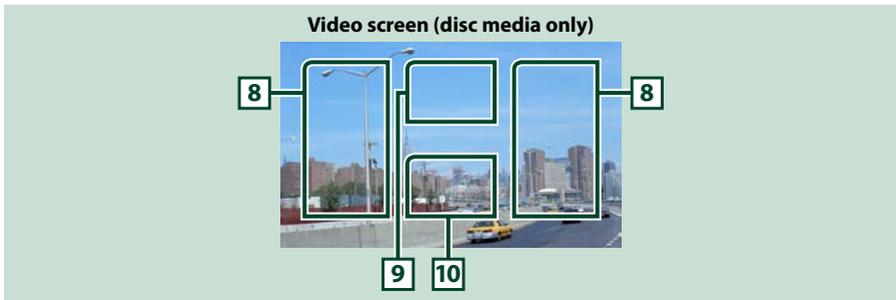
8 Searching file area (disc media only)

Touch to search the next/previous file.

Scrolling from center of display to left or right performs fast backward or fast forward. Each time you touch each area, the speed changes; standard, 2 times, 3 times. To stop fast backward/forward, touch center of the display.

9 Menu display area (disc media only)

Touch to display the disc menu. For details, see *Movie Control (P.45)*.

10 Key display area (disc media only)

Touch to display the control screen.

▌ USB device, SD card, and iPod

NOTE
- SD card is for DNX7150DAB, DNX715WDAB, DNX4150DAB and DNX4150BT only.
- The screen shot below is for USB device. It may be different from the one for iPod.

Control screen   **Content list panel**

---
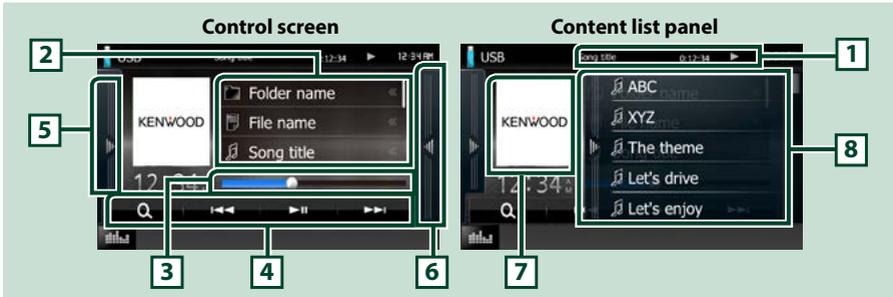
1 Information display

Displays the following information.
- **Current file name**: Each time you touch this area, display switches between file number/folder number and file name.
- **►, etc.**: Current play mode display
    The meanings of each icon are as follows; ► (play, searching), **II** (pause).

2 Track information

Displays the information of the current file.

3 Status bar

For confirmation of current playing position. You can drag the circle left or right to change the playing position.

4 Function bar

Various functions can be performed by using keys in this area. For details on the keys, see ***Function bar (P.40)***.

5 Function panel

Touch on the left side of the screen to display the function panel. Touch again to close the panel. For details on the keys, see ***Function panel (P.41)***.

6 Content list

Touching on the screen or flicking the screen to left will display the Content list. Touching again or flicking to right will close the list.

When you select the video source on the device connected with the Lightning connecter, the source is switched to Apps ***(P.51)*** automatically.

7 Artwork

The picture data is displayed if available from the current file. When the picture is not available, "No Photo" is displayed.

8 Content list panel

Displays the playing list. When you touch a track/file name on the list, playback will start.

Picture/video screen
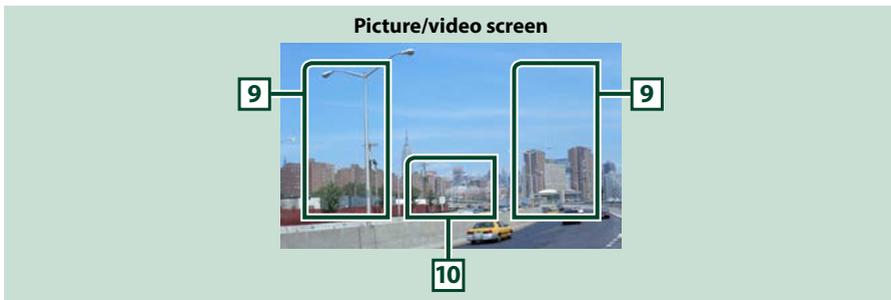
9 Searching file area (picture/video file only)

• Touch to search the next/previous file.

• During slide show in USB mode and SD card mode, touching each area searches the next/previous music file.

• Scrolling from center of display to left or right performs fast backward or fast forward. To stop fast backward/forward, touch center of the display. This function is not available when there is no music file in the current folder.

10 Key display area (picture/video file only)

Touch to display the control screen.

Function bar

Music CD

Disc media

iPod

USB device and SD card

The following functions can be performed by using keys in this area.

[🔍] (Disc media, iPod, USB device, and SD card only)

Searches track/file. For details on search operation, see *Search Operation (P.42)*.

[|◄◄] [►►|]

Searches the previous/next track/file.

[►II]

Plays or pauses.

■ Function panel

1 Touch on the left side of the screen.

	Music CD	Disc media	iPod	USB device and SD card
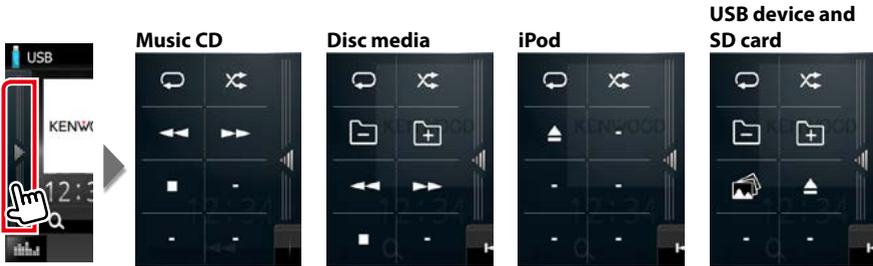
The following functions can be performed by using keys in this area.

[🔁]

Repeats the current track/folder. Each time you touch the key, repeat mode switches in the following sequence;

CD: "track repeat" 🔁, "repeat off" 🔁

iPod: "song repeat" 🔁, "all songs repeat" 🔁, "repeat off" 🔁

Disc media, USB device: "file repeat" 🔁, "folder repeat" 🔁, "repeat off" 🔁

[🔀]

Randomly plays all tracks in current folder/disc or in current playlist in the connected iPod.

Each time you touch the key, random mode switches in the following sequence;

CD: "track random" 🔀, "random off" 🔀

Disc media, USB device, SD card: "file random" 🔀, "random off" 🔀

iPod: "track random" 🔀, "album random" 🔀, "random off" 🔀

[◀◀] [▶▶] (Music CD and disc media only)

Fast forward or fast backward.

[⊞] [⊟] (disc media, USB device, and SD card only)

Searches previous/next folder.

[🖼] (picture files in USB device, and SD card only)

During picture playback, switches to picture display.

[■] (Music CD and disc media only)

Stops playback.

[▲] (USB device, SD card and iPod only)

Touch to disconnect the device. For details, see ***How to Play Media (P.15)***.

Search Operation

You can search music, video or picture files by the following operations.

> **NOTE**
> • If you use a remote control, you can jump directly to the desired track/file with entering the track/folder/file number, play time, etc. For details, see *Direct search mode (P.107)*.

List search

You can search tracks, folders, and files according to hierarchy.

1 Touch on the right side of the screen.

Control list appears.

2 Touch desired track/file.

Playback starts.

> **NOTE**
> • For disc media, you can switch the file list and folder list by touching [🔍].
> • For disc media, you cannot display the list during random play and stop.

Other search

When you want to narrow the list down, there are other search ways.
This function is not available when music CD is the current source.

1 Touch [🔍].
The search type screen appears.

2 Touch desired search way.

USB device and SD card
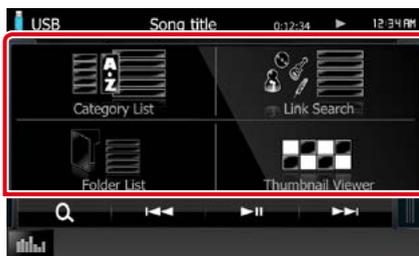
iPod
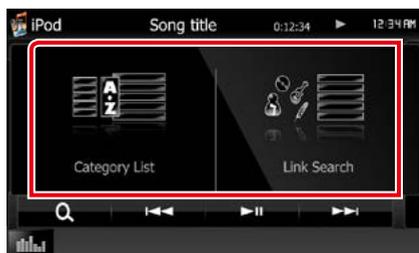
The list sorted in the way you selected appears.

See the following sections for each operation.

- **[Category List]: You can search a file by selecting category** *(P.43)*.
- **[Link Search]: You can search a file of same artist/album/genre/composer as the current track** *(P.43)*.
- **[Folder List]: You can search a file according to hierarchy** *(P.44)*.
- **[Thumbnail Viewer]: You can search a picture file** *(P.44)*.

> **NOTE**
> • For disc media, you can display the folder list directly by touching [🔍].

Category search (USB device, iPod, and SD card only)

1 Select whether you search by audio files 🎵 or video files 🎞.

2 Touch the desired category from the left part of the screen.

3 The list is sorted by selected category.

4 Touch desired item.
Playback starts.

> **NOTE**
> • To narrow the search you can select a letter from the alphabet list in the center of the display.
> • For operations in the list screen, see ***Common Operations (P.21)***.

Link search (USB device, iPod, and SD card only)

1 Touch the desired item from the left part of the screen. You can select from artist, album, genre and composer.
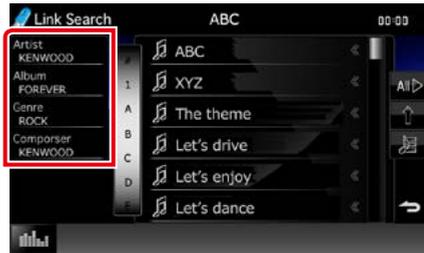
The list corresponding to your selection appears.

> **NOTE**
> • The list is sorted by the way you selected.
>   • **artist**: Displays the album list of the artist.
>   • **album**: Displays all tunes of the current album.
>   • **genre**: Displays the artists list in which artists belong to the same genre.
>   • **composer**: Displays the album list of the composer of the current file.

2 Touch to select desired item in the list. Repeat this step until you find the desired file.

> **NOTE**
> • To narrow the search you can select a letter from the alphabet list in the center of the display.
> • For operations in the list screen, see ***Common Operations (P.21)***.

Folder search (USB device, disc media, and SD card only)

1 Touch the desired folder.

Folders in the selected source are displayed in the center.

When you touch a folder its contents are displayed.

The hierarchy till the current folder is displayed on the left.

2 Touch desired item from the content list.

Playback starts.

NOTE
• For operations in the list screen, see ***Common Operations (P.21)***.

Picture search (USB device and SD card only)

1 Touch the desired picture.
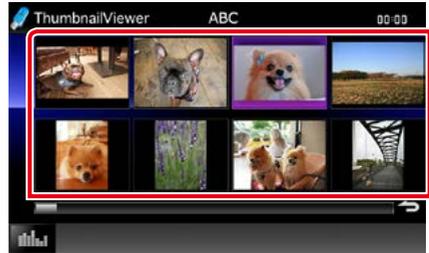
The selected picture appears in full screen.

See number 9-10 in ***USB device, SD card, and iPod (P.39)*** for operation of picture screen.

Movie Control

You can adjust the movie playback from a disc media.

1 **In the playback screen, touch illustrated area.**

Movie Control screen appears.

2 **Perform desired operation as follows.**

Changes subtitle language

Touch [Subtitle].

Changes audio language

Touch [Audio].

Exits the menu

Touch [Exit].

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Aha Operation

You can listen to the Aha on this unit by controlling the application installed in the iPhone or Android.

To enter Aha mode, touch [aha] icon in the HOME screen.

NOTE

• Install the latest version of the Aha application on your iPhone or Android. *(P.126)*
  iPhone: Search for "Aha" in the Apple App Store to find and install the most current version.
  Android: Search for "Aha" in the Google play to find and install the most current version.

• When you first select Aha as a source, the setting screen for the connection with the device installed the apps will appear. For the details, refer to *Application link setup (P.56)*.

Content List screen   **Text information screen**

---
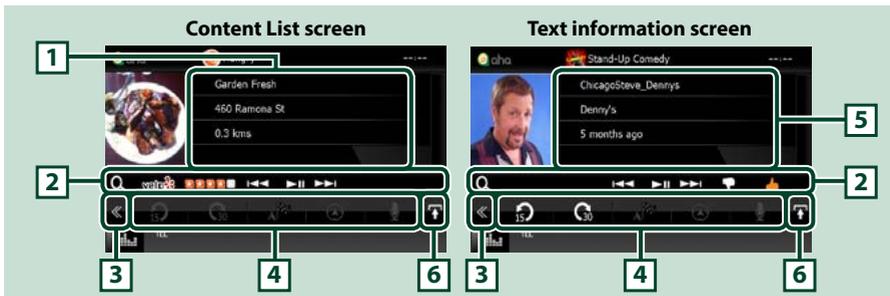
1 Content information

Displays the content of the current station being played.

2 Sub function menu

Various functions can be performed by using keys in this area. For details on the keys, see *Sub function menu (P.47)*.

3 Multi function key

Touch to switch the multi function menu. For details on the menu, see *Multi function menu (P.47)*.

4 Multi function menu

Various functions can be performed by using the keys in this area. For details on the keys, see *Multi function menu (P.47)*.

5 Text information

Displays the information of the current content being played.

6 List switching key

Touch to switch between the content list and the text information of current content.

Multi function menu

The following functions can be performed by using keys in this area.

[🔁]

Sets the content backward 15 seconds.

[🔁]

Sets the content forward 30 seconds.

[🎵]

Sets the received location information at the destination of navigation. See *Navigate (P.48)*.

[🧭]

Posts the location information to Facebook.

[🎤]

Sends the shout. See *SHOUT (P.48)*.

[🔁]

Redelivers by Twitter.

[📞]

Dials the received telephone number.

> **NOTE**
> • [SETUP], [AUDIO], and [REAR] functions same as iPod.

Sub function menu

The following functions can be performed by using keys in this area.

[🔍]

Searches for a station. For details on searching, see *Station list screen (P.48)*.

[◄◄] [►►]

Searches the previous/next track.

[►❙❙]

Plays or pauses.

[👎]

Touching the key "dislikes" current content.

[👍]

Touching the key "likes" current content.

SHOUT

1 Touch [🎤] in the control screen.

Status bar

Confirms the current location.

[Start]

Starts recording the voice.

[Stop]

Stops recording the voice.

[Send]

Sends the recorded voice.

[Cancel]

Cancels the voice and returns to the control screen.

> **NOTE**
> • This function is available from an iPhone (iOS 5 or later) connected via the KCA-iP103 or KCA-iP202 (optional accessory).
> • This function is not available from an Android device and iPhone connected via Bluetooth.

Station list screen

You can perform the following functions from this screen.

Selects the station

Touch the station name in the list.

> **NOTE**
> • You cannot select iPod as rear source when you select Aha as main source in dual zone function.

Navigate

Sets the location information received from Aha at the destination of navigation.

1 Touch [📍] in the control screen.

[☰]
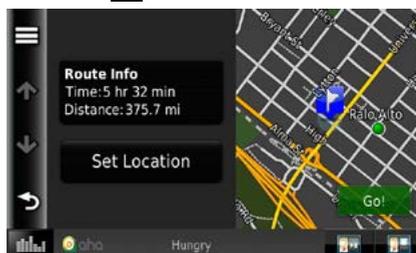
Saves the location information.

[Go!]

Sets the location information at the destination and starts navigation.

AUPEO! Operation

**You can listen to the AUPEO! on this unit by controlling the application installed in the iPhone or Android.**

To enter AUPEO! mode, touch [AUPEO!] icon in the HOME screen.

> **NOTE**
> • Install the latest version of the AUPEO! application "AUPEO!" on your iPhone or Android.
>   **iPhone:** Search for "AUPEO!" in the Apple App Store to find and install the most current version.
>   **Android:** Search for "AUPEO!" in Google play to find and install the most current version.
> • When you first select AUPEO! as a source, the setting screen for the connection with the device installed the apps will appear. For the details, refer to *Application link setup (P.56)*.

1 Artwork switching area

The picture data is displayed if available from current content. When the picture is not available, "No Photo" is displayed.

2 Multi function key

Touch to switch the multi function menu. For details on the menu, see *Multi function menu (P.50)*.

3 Multi function menu

Various functions can be performed by using the keys in this area. For details on the keys, see *Multi function menu (P.50)*.

4 Content information

Displays the information of the current content being played.

▐ Multi function menu

🔍   ♡   ►❙❙   ►►❙   ⃠

The following functions can be performed by using keys in this area.

[🔍]

Searches for a station. For details on searching, see ***Station search (P.50)***.

[♡]

Touching the key "Love" current song.

[►❙❙]

Plays or pauses.

[►►❙]

Skips the current song.

[⃠]

Touching the key "Ban" current song.

NOTE
• [SETUP], [AUDIO], and [REAR] functions same as iPod.

▐ Station search

You can list and select station.

1 Touch [🔍] in the control screen.
The Station Search screen appears.

Selects the category and station

Touch the category and station name in the list.

[⬆]

Returns to the previous category list.

Apps Operation

**You can listen to music or watch video from the Apps operating on iPod touch/iPhone or Android.
To enter Apps mode, touch [APPS] icon in the HOME screen.**

NOTE

• When you turn on the power and select apps as the source, the caution for the operation, watching video and listening music appears. With your acceptance, you can control apps, listen to music and watch video from apps when you are driving.

• When you first select APPS as a source, the setting screen for the connection with the device installed the apps will appear. For the details, refer to ***Application link setup (P.56)***.

• If the conditions below are satisfied, the touch keys will not appear, but the touch operation from the screen of the unit to the Android device becomes possible.
 – The unit and the Android device are connected with KCA-MH100 (sold separately) and over Bluetooth profile HID and SPP.
 – "Kenwood Smartphone Control" is installed on the Android device. For details, see web site. ***http://www.kenwood.com/products/car_audio/app/kenwood_smartphone_control/eng/index.html***
 – If you drive using an app that is prohibited from using while driving, the confirmation screen appears. As you select [Yes], the launcher of "Kenwood Smartphone Control" starts.

• Depending on the app, the touch keys may not work or be displayed.

When the touch keys appear   **When the touch operation is possible**

---

1 Multi function key (iPod touch/iPhone only)

Touch to switch the multi function menu.

2 Multi function menu (iPod touch/iPhone only)

The following functions can be performed by using keys in this area.

• **Plays or pauses**: Touch [▶], [❚❚], or [▶❚❚] (iPod only).

• **Searches the previous/next track/file**: Touch [◄◄] or [►►❘].

3 Sub function menu (iPod touch/iPhone only)

The following functions can be performed by using keys in this area.

• **Hides all keys (During video file playback only)**: Touch [✖]

USB/SD/iPod/App/DivX Setup

You can perform setup when using USB/ SD/ iPod/ App/ DivX.

> **NOTE**
> • Each operation in this section can be started from the HOME screen. For details, see *Operating with the HOME Screen (P.19)*.
> • Some setup items can only be set in standby mode.

1 **Press the** DNX7 **<MENU> button/** DNX4 **volume knob.**

Popup menu appears.

2 **Touch [SETUP].**

SETUP Menu screen appears.

3 **Touch [Source].**
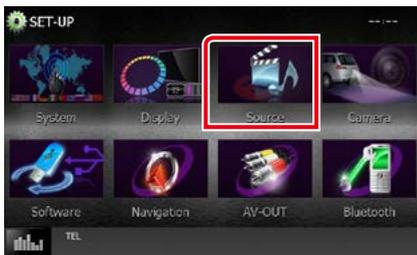
Source SETUP Menu screen appears.

4 **Touch [USB SETUP], [SD SETUP], [iPod SETUP], [APP SETUP], or [DivX(R) VOD] in the list.**

Each setup screen appears.

See the following section for each setting.

- *USB/SD setup (P.52)*
- *iPod setup (P.54)*
- *Application link setup (P.56)*
- *DivX(R) VOD (P.53)*

USB/SD setup

> **NOTE**
> • The screen shot below is for USB device. However, the setting items of USB and SD setup are quite the same.

1 **Set each item as follows.**

Picture Display Time

Selects length of time to display JPEG picture file in the screen. Select from [Short], [Middle], and [Long] (default).

On Screen USB/On Screen SD

Sets how to display the information of the USB device or SD card.

Auto (Default): Information appears for 5 seconds when updated.

OFF: Does not display any information.

DivX(R) VOD

1 **Set each item as follows.**

DivX(R) Registration Code

Checks the registration code. This code is needed when making a disc which has DRM (Digital Rights Management).

DivX(R) Deactivation

Deregisters the unit which is already registered. After you touch the key, a confirmation message appears. Follow the message and complete the operation.

NOTE

• [DivX(R) VOD] is disabled when a disc is being played.

• When downloading a DivX VOD file controlled by DRM, register the code appeared on the screen. Otherwise the file may not be able to play with this unit. Remaining number of viewing is displayed when playing a DivX VOD file with the viewing restriction. When the used number of viewing reached maximum number, a warning message appears and the file cannot be played.

---

iPod setup

1 Set each item as follows.
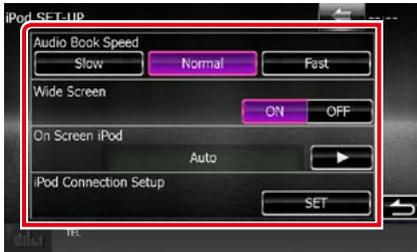
AudioBook Speed

Sets the audio book playback speed. Select from [Slow], [Normal] (default), and [Fast].

Wide Screen*

Sets Wide Screen. Set [ON] (default) or [OFF].

On Screen iPod

Sets how to display the information of the iPod.

Auto (Default): Information appears for 5 seconds when updated.

OFF: Does not display any information.

iPod connection setup

Sets the way to connect the iPod/iPhone with this unit For details on searching, see ***iPod/iPhone connection setup (P.54)***.

* This setting is not available when an iPod is connected.

iPod/iPhone connection setup

1 Press the <HOME> button.
HOME screen appears.

2 Touch [STANDBY].

3 Press the DNX7 <MENU> button/ DNX4 volume knob.
Popup menu appears.

4 Touch [SETUP].
SETUP Menu screen appears.

5 Touch [Source].
Source SETUP Menu screen appears.

6 Touch [iPod SETUP] in the list.

7 Touch [iPod Connection Setup] in the iPod Settings screen.
iPod connection setup screen appears.

8 Touch [CHANGE].
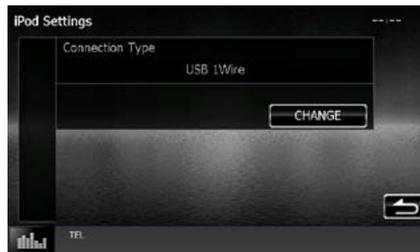
9 Select the way to connect the iPod/iPhone with this unit.

USB + AV-IN

Select when connecting with KCA-iP202.

USB 1Wire

Select when connecting with KCA-iP103 or KCA-iP102.

HDMI + BT

Select when connecting with KCA-HD100 and Lightning Digital AV Adapter.

Bluetooth

Select when connecting via Bluetooth only.

10 **Touch [Next].**

Confirmation screen appears.

11 **Touch [Done].**

NOTE

• For the details of the necessary cable and adapter to connect with iPod/iPhone, refer to *Music/ Video/Picture Basic Operation (P.36)*.

• When you select "HDMI + BT" or "Bluetooth" in step 9, Bluetooth device selection screen will appear. Select the iPod/iPhone to be connected.

If a connectable Bluetooth device is not displayed, touch [Search] and do the pairing of the devices.

Application link setup

Sets the device an application is installed in and the app is selected as the source.

1 Press the <HOME> button.

HOME screen appears.

**2 Touch [STANDBY].**

3 Press the DNX7 **<MENU> button/** DNX4 **volume knob.**

Popup menu appears.

4 Touch [SETUP].

SETUP Menu screen appears.

5 Touch [Source].

Source SETUP Menu screen appears.

6 Touch [APP SETUP] in the list.

7 Touch [CHANGE].

8 Select the device installed the apps.

iPod / iPhone

Select when using iPod/iPhone.

Android / Other

Select when using Android or BlackBerry device.

9 Touch [Next].

Connection setup screen appears.

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10 Select the way to connect the device with this unit.

When selecting [iPod / iPhone]

USB + AV-IN

Select when connecting with KCA-iP202.

USB 1Wire

Select when connecting with KCA-iP103 or KCA-iP102.

HDMI + BT

Select when connecting with KCA-HD100 and Lightning Digital AV Adapter.

Bluetooth

Select when connecting via Bluetooth only.

When selecting [Android / Other]

HDMI/MHL + BT

Select when connecting with KCA-MH100.

Bluetooth

Select when connecting via Bluetooth only.

11 Touch [Next].

Confirmation screen appears.

12 Touch [Done].

NOTE

• This setup can be set when in STANDBY source.

• To enable the touch operation on this unit, install "Kenwood Smartphone Control" and start it. Search for "Kenwood Smartphone Control" in Google play to find and install the most current version.

• When you select APPS source and APP Settings appears, touch [OK] after setting.
The screen will return to APP after you agree the caution.

• For the details of the necessary cable and adapter to connect with iPod/iPhonea and Android, refer to *Music/Video/Picture Basic Operation (P.36)*.

• When you select "HDMI + BT", "HDMI/MHL + BT" or "Bluetooth" in step 10, Bluetooth device selection screen will appear. Select the device to be connected.

If a connectable Bluetooth device is not displayed, touch [Search] and do the pairing of the devices.

• When you select "iPod/ iPhone" in Apps Setup, select "iPod" as the source, and select App on the iPod, the source of this unit is also changed to App automatically.

Radio Operation

Radio Basic Operation

Most functions can be controlled from the source control screen.

> **NOTE**
> • Set the remote controller mode switch to AUD mode before starting operation, see ***Switching the operation mode (P.107)***.

Control screen   **Control list screen**
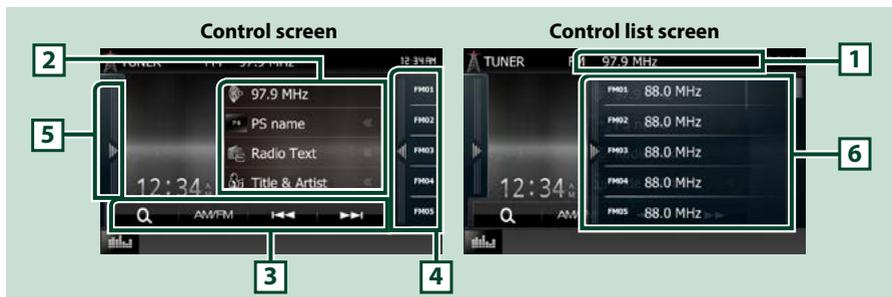
1 PS/Station name display (FM Tuner only)

Displays the PS name, Station name or Band, Frequency, Preset number.

2 Information display

Displays information about the current station: Frequency, PS name, Radio Text, Song Title, Artist Name, etc.

3 Function bar

Various functions can be performed by using keys in this area. For details on the menu, see ***Function bar (P.59)***.

4 Preset key

Recalls the memorized station or channel.

Touching on the screen or flicking the screen to left will display the Preset list. Touching again or flicking to right will close the list.

5 Function panel

Touch on the left side of the screen to display the function panel. Touch again to close the panel. For details on the keys, see ***Function panel (P.59)***.

6 Preset list

Recalls the memorized station or channel. When touched for 2 seconds, stores the current receiving station or channel in memory.

▮ **Function bar**

Q   AM/FM   ◄◄   ►►◄

The functions of each key are as follows.

[AM/FM]

Switches the band.

[◄◄] [►►◄]

Tunes in a station. The method of frequency switching can be changed. See ***Function panel (P.59)***.

[Q]

Selects the method of searching from preset stations selecting. For details on search operation, see ***Selecting Operation (P.63)***.

▮ **Function panel**

1 Touch on the left side of the screen.

The functions of each key are as follows.

[TI] (FM Tuner only)

Sets the traffic information mode on. For details, see ***Traffic Information (P.64)***.

[SEEK]

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.

[AME]

Selects the auto memory mode. For details, see ***Auto memory (P.62)***.

[PTY] (FM Tuner only)

Searches a program by setting program type. For details, see ***Search by program type (P.64)***.

[MONO] (FM Tuner only)

Select the Monaural reception.

[LO.S] (FM Tuner only)

Turns the Local Seek function on or off.

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Digital Radio Basic Operation
(DNX7150DAB, DNX715WDAB, DNX4150DAB only)

Most functions can be controlled from the source control screen.

NOTE

• Set the remote controller mode switch to AUD mode before starting operation, see *Switching the operation mode (P.107)*.

Control screen   **Control list screen**

---
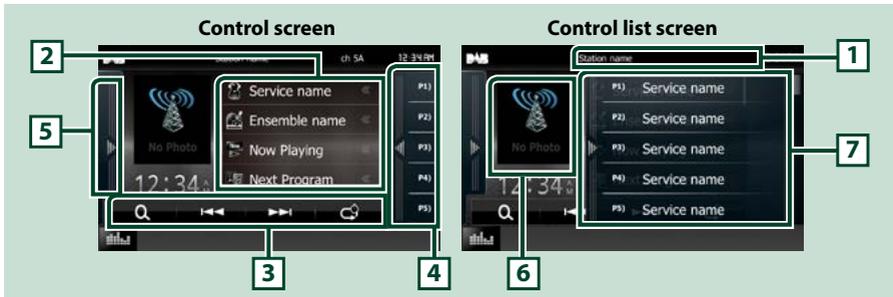
1 Service name display

Displays the Service name.

2 Information list

Displays information about the current music being played: Channel Name, Artist Name, Song Title, Content Info, Category Name, Channel Description, Similar Channels

3 Function bar

Various functions can be performed by using keys in this area. For details on the menu, see *Function bar (P.61)*.

4 Preset key

Recalls the memorized service.

Touching on the screen or flicking the screen to left will display the Preset list. Touching again or flicking to right will close the list.

5 Function panel

Touch on the left side of the screen to display the function panel. Touch again to close the panel. For details on the keys, see *Function panel (P.61)*.

6 Artwork area

The picture data is displayed if available from current content.
Touch to switch between the Control and Information screen.

7 Preset list

Recalls the memorized service. When touched for 2 seconds, stores the current service in memory.

■ Function bar

The functions of each key are as follows.

[|◄◄] [►►|]

Tunes in a ensemble, service, and component. The seek mode switching can be changed. See
Function panel (P.61).

[🔍]

Selects the method of searching from preset stations selecting or channel searching. For details on
search operation, see ***Selecting Operation (P.63)***.

[🔁]

Change the Replay mode. See ***Replay (P.65)***.

■ Function panel

1 Touch on the left side of the screen.

The functions of each key are as follows.

[TI]

Sets the traffic information mode on. For details, see ***Traffic Information (P.64)***.

[SEEK]

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.

[PTY]

Searches a program by setting program type. For details, see ***Search by program type (P.64)***.

[DLS]

Display the Dynamic Label Segment screen.

Memory Operation

Auto memory

You can store stations with good reception in memory automatically.
This function is for radio only.

> **NOTE**
> • Auto memory terminates when 6 stations are stored or when all stations are tuned in.
> • The operation ends automatically if you do not operate within 10 seconds.

1 **Touch desired band key.**

2 **Touch on the left side of the screen.**
   Touch [AME].

3 **Touch [◄◄] or [►►◄] in the sub function menu.**
   Auto memory starts.

Manual memory

You can store the current receiving station in memory.

1 **Select a station you wish to store in memory.**

2 **Touch [FM#] (#:1-15), [AM#] (#:1-5), or [P#] (#:1-15) in which you want to store the station for 2 seconds until a beep sounds.**

Selecting Operation

Preset select

You can list and select memorized station or channel.

Selecting from the preset list

1 **Touch on the right side of the screen.**

List Control screen appears.

2 **Select a station or channel from the list.**

NOTE

- Touching [🔍] and then [Preset List] displays the preset channel list. You can also select your desired channel from the list.

List select

You can select an ensemble from a list of memorized ensembles or select a service from a list of all services received.

1 **Touch [🔍] in the Function bar.**

The list type screen appears.

2 **Touch desired list way.**

List screen appears.

3 **Select a service from the list.**

Search by program type

You can tune to a station with a specific program type when listening to FM/ Digital Radio.

1 Touch on the left side of the screen. Touch [PTY].

PTY Mode screen appears.

2 Select a program type from the list.

3 Touch [Search].
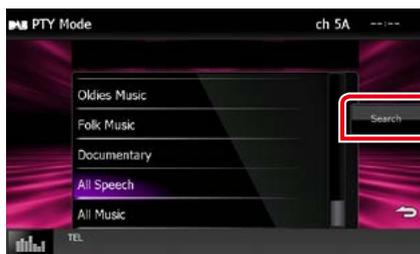
You can search a station of the selected program type.

Traffic Information

You can listen and watch the traffic information automatically when a traffic bulletin starts.

However, this feature requires a Radio Data System and Digital Radio that includes the TI information.

1 Touch on the left side of the screen. Touch [TI].
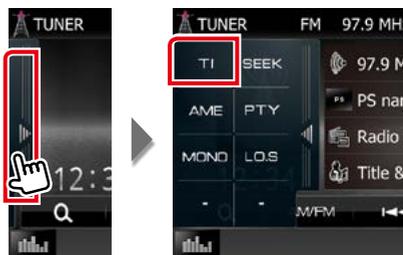
Traffic information mode is set.

When the traffic bulletin starts

The Traffic Information screen appears automatically.

> **NOTE**
> • It is necessary to have Traffic Information function set to on in order to have the Traffic Information screen appear automatically.
> • The volume setting during reception of traffic information is automatically stored. The next time the traffic information is received, this unit recalls the volume setting automatically.

Replay (Digital Radio only)

You can replay last 30 minutes of current station.

1 Touch [ ] in the Function bar.

[|◄◄] [►►|]

Forward/backward 15 seconds when touch it.

[►II]

Plays or pauses.

[◄◄] [►►]

Fast forward/fast backward when keep on touching.

Replay time bar

Display recorded capacity

[ ]

Change the Live mode

[ ]

Touch to display "Sub function menu".

[ ]

Touch to switch the multi function menu.

[P1] - [P15]

Selects the preset ensemble.

[TI]

Sets the traffic information mode on. For details, see ***Traffic Information (P.64)***.

[SEEK]

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.

NOTE
- PTY Watch starts operating and Replay function cannot be used while receiving a program.
- While replaying the current station, you can not store the station by ***Manual memory (P.62)***.

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Tuner Setup

You can set tuner related parameters.

1 **Press the** `DNX7` **<MENU> button/**
`DNX4` volume knob.

Popup menu appears.

2 **Touch [SETUP].**

SETUP Menu screen appears.

3 **Touch [Source].**
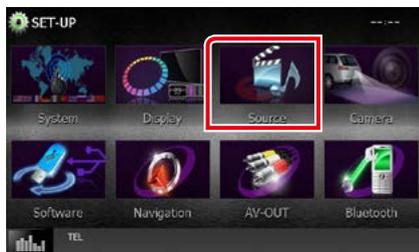
Source SETUP Menu screen appears.

4 **Touch [TUNER SETUP] in the list.**

TUNER SETUP screen appears.

5 **Set each item as follows.**

NEWS
Sets a news bulletin interrupt time. Default is "OFF".

AF
When station reception is poor, automatically switches to the station that is broadcasting the same program over the same Radio Data System network. Default is "ON".

Regional
Sets whether to switch to the station only in the specific region using the "AF" control. Default is "ON".

Auto TP Seek
When traffic information station reception is poor, automatically searches for a station that can be received better. Default is "ON".

Language Select
Selects a display language for the PTY function.

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Digital Radio Setup

You can set Digital Radio related parameters.

1 Press the DNX7 <MENU> button/ DNX4 volume knob.

Popup menu appears.

2 Touch [SETUP].

SETUP Menu screen appears.

3 Touch [Source].

Source SETUP Menu screen appears.

4 Touch [DAB SETUP] in the list.

Digital Radio SETUP screen appears.

5 Set each item as follows.
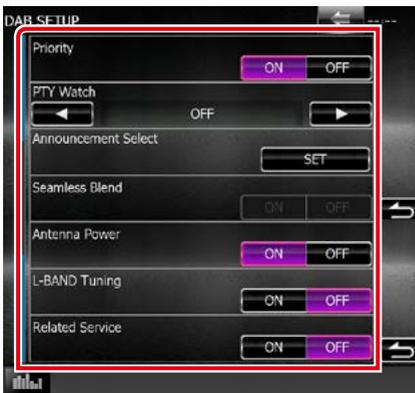
Priority

If the same service is provided by Digital Radio during Radio Data System reception, automatically switches to Digital Radio. If the same service is provided by Radio Data System when reception of the service being provided by Digital Radio becomes poor, automatically switches to Radio Data System.

PTY Watch

If the service of the set program type begins with the ensemble being received, switches from any source to Digital Radio for service reception.

Announcement Select

Switches to the set Announcement service. For details, see ***Announcement setup (P.68)***.

Seamless Blend

Prevents audio break when switching from Digital Radio to Analog Radio. Default is "ON".

Antenna Power*

Sets power supply to the Digital Radio antenna. Set to "ON" when the Digital Radio antenna in use is equipped with a booster. Default is "ON".

L-Band Tuning*

Sets L-band reception. When set to "ON", also receives L-band ensembles.

Related Service

When you select ON, the unit switches to a related service (if exists) when a DAB service network is not available.

Default is "OFF".

* This item can be set when in STANDBY source.

Announcement setup

When the service for which ON is selected starts, switches from any source to Announcement to receive it.

1 **Touch [SET] of [Announcement Select] in the DAB SETUP screen.**

The Announcement Select screen appears.

2 **Touch each Announcement list and set on or off.**
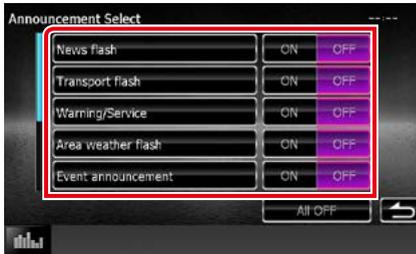
NOTE
• The volume setting during reception of Announcement service is automatically stored. The next time the Announcement service is received, this unit recalls the volume setting automatically.

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Bluetooth Control

Using the Bluetooth function, various functions can be used: listening to the audio file, making/receiving a call.

About the cell-phone and Bluetooth audio player

This unit conforms to the following Bluetooth specifications:

Version

Bluetooth Ver. 3.0+EDR Certified

Profile

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 (V1.4) (Audio/Video Remote Control Profile)

Sound codec

SBC, AAC, MP3

> **NOTE**
>
> • For the cell-phones verified for compatibility, access the following URL:
>   *http://www.kenwood.com/cs/ce/bt/*.
>
> • The units supporting the Bluetooth function have been certified for conformity with the Bluetooth Standard following the procedure prescribed by Bluetooth SIG.
>   However, it may be impossible for such units to communicate with your cell-phone depending on its type.

Registering And Connecting Bluetooth Unit

It is necessary to register the Bluetooth audio player or cell-phone to this unit before using the Bluetooth function.

You can register up to 5 Bluetooth units.

1 Press the DNX7 <MENU> button/ DNX4 volume knob.

Popup menu appears.

2 Touch [SETUP].

SETUP Menu screen appears.

3 Touch [Bluetooth].
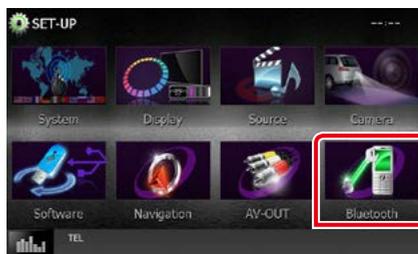
Bluetooth SETUP screen appears.

See the following section for each setting.

- **Registering the Bluetooth Unit** *(P.71)*
- **Connecting the Bluetooth unit** *(P.72)*
- **Registering from the Bluetooth unit** *(P.72)*
- **Change the PIN code** *(P.73)*

Registering the Bluetooth Unit

Preparation
• You cannot register the Bluetooth unit when you are using the following sources:
iPod, Bluetooth Audio, APPS, aha
If you want to register the Bluetooth unit while using one of the above mentioned sources, send the connection request from the Bluetooth unit and register it.

1 Press the <HOME> button.
HOME screen appears.

2 Touch [STANDBY].

3 Press the DNX7 <MENU> button/ DNX4 volume knob.
Popup menu appears.

4 Touch [SETUP].
SETUP Menu screen appears.

5 Touch [Bluetooth].
Bluetooth SETUP screen appears.

6 Touch [Search].
Searched Device List screen appears.

NOTE
• A new device cannot be registered if there are 5 registered Bluetooth units. Delete unnecessary registration. See *Connecting the Bluetooth unit (P.72)*.
• This unit is compatible with the Apple Easy Pairing function. When an iPod touch or iPhone is connected to this unit, an authentication dialog appears. Performing operation for authentication on this unit or iOS smartphone registers the smartphone as a Bluetooth device.
• If two Bluetooth units are connected, this unit will not start the search. In this case disconnect one of the Bluetooth units.

7 Select the Bluetooth unit to register from the list.

NOTE
• If the unit cannot be searched in step 1, you can search the unit again by touching [Search] in above screen.
• Touch [Cancel] to cancel searching for the Bluetooth unit.

8 Enter PIN code form the cell-phone.

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Connecting the Bluetooth unit

1 Touch the device name you want to connect.
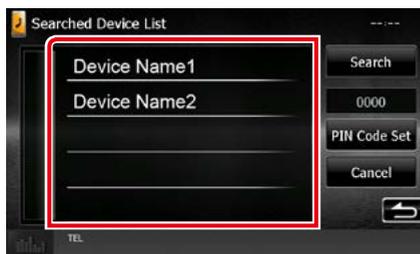
Profile select screen appears.

NOTE
• If the icon is lighted, it means that the unit will use that device.

2 Set each profile as follows.

TEL (HFP)

Means that the device is a cell-phone.

Audio (A2DP)

Means that the device is an audio player or cell-phone with audio player.

APP SETUP

Selects the device in which apps are installed and how to connect with the unit. Pressing [CHANGE], you will jump to the step 8 in page 56. See **Application link setup (P.56)**.

NOTE
• If a device has been paired, the Bluetooth unit cannot be connected from the paired device.
• Touching [Remove] of [Device Remove Confirm] removes registration information. After you touch the key, a confirmation message appears. Follow the message and complete the operation.

Registering from the Bluetooth unit

1 Search the unit ("DNX**") from your smartphone/cell-phone.**

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

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

SSP (Secure Simple Pairing of Bluetooth 2.1 or later)

1 Search the unit ("DNX**") from your smartphone/cell-phone.**

2 Confirm the request both on the smartphone/cell-phone and the unit.

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Change the PIN code

1 **Touch [PIN Code Set].**

PIN Code Set screen appears.

2 **Input the PIN code**

3 **Touch [Enter].**

Playing Bluetooth Audio Device

Bluetooth basic operation

| Simple Control screen | List Control screen |

1 Information display

Displays the name of the track information. If the information is not available, device name is displayed.

2 Multi function key

Touch to switch the multi function menu.

3 Multi function menu

The functions of each key are as follows.
• [◄◄] [►►]: Searches the previous/next content.*
• [►]: Plays.*
• [❚❚]: Pauses.*
• [■]: Stops playback.*
• [AUDIO]: Touch to display the Audio Control screen. See *Registering the Bluetooth Unit (P.71)*.
• [SETUP]: Touch to display the SETUP Menu screen. See *Setting Up (P.80)*.
• [REAR]: Touch to mute the rear speaker.

4 Control switching area

Touch to switch between the Simple Control and List Control screen.

5 File information

Displays the information of the current file.

6 Status bar

Displays the current play location, play time, and play mode.

* These items appear only when the audio player which supports AVRCP profile is connected.

> **NOTE**
> • If the operation keys do not appear, operate from the player.
> • Depending on your cell-phone or audio player, audio may be heard and controlled but text information may not appear.
> • If the volume is too low, raise it on your cell-phone or audio player.

Using Hands-Free Unit

You can use telephone function by connecting the Bluetooth telephone to this unit.

Making a call

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

DNX7150DAB

DNX715WDAB | DNX4 |
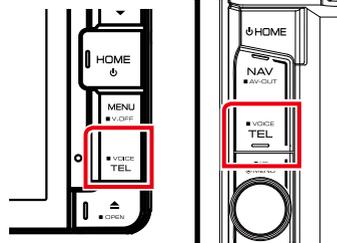
Hands Free screen appears.

NOTE

- When registration of your cell-phone is completed, the phone book of the cell-phone is automatically downloaded to this unit.

- Up to 600 phone numbers can be registered for each registered cell-phone.

- Up to 30 digits can be registered for each phone number along with up to 50 characters representing a name. (50 is the number of alphabetical characters. Fewer characters can be input depending on the type of characters.)

- Depending on the type of your cell-phone, the following restrictions are placed;

  - The phonebook data cannot be downloaded normally.

  - Characters in the phonebook are garbled.

- To cancel downloading the phonebook data, operate the cell-phone.

---

2 **Select a dialing method.**
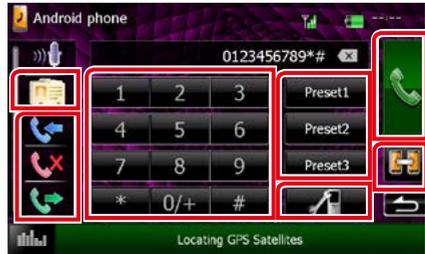
See the following table for each method.

Select the cell-phone to use

When you connect two cell-phones

① Touch [ ] to select the phone you want to use.

If you register a cell-phone (device) for both hands-free call and APP Link, and you select that cell-phone (device) for hands-free call, it is also selected as the device of APP Link automatically. See *Application link setup (P.56)*.

Call by entering a phone number

① Touch [ ].

② Enter a phone number with number keys.

③ Touch [ ].

Call using call records

① Touch [ ], [ ], or [ ].

② Select the phone number from the list.

③ Touch [ ].

Call using the phonebook

① Touch [ ].

② Select the name from the list.*[1]*[2]

③ Select the number from the list.

④ Touch [ ].

Call using the preset number

① Touch [Preset #] to start calling the corresponding phone number.

② Touch [ ].

Bluetooth SETUP

① Touch [ ].
Bluetooth SETUP screen appears.

Continued

*1 You can sort the list to begin with touched character.

- **Characters with no corresponding name will not appear.**
- **During search, a non-accent character such as "u" is searched for instead of an accent character such as "ü".**

*2 You can set the list to arrange in the order of last name or first name. For details, see *Hands-Free Setup (P.78)*.

NOTE
- If you edited the phonebook in your cell-phone, touch "Download" on top of the phonebook list in this unit to download it from your cell-phone. The phonebook in this unit will be updated with the latest downloaded data.
- While your car is moving, some functions are disabled for safety reasons. The keys associated with the disabled functions become ineffective if touched.
- The status icons such as battery and antenna displayed may differ from those displayed on the cell-phone.
- Setting the cell-phone in the private mode can disable the hands-free function.

Receiving a call

1 Touch [ ] to answer a phone call or [ ] to reject an incoming call.
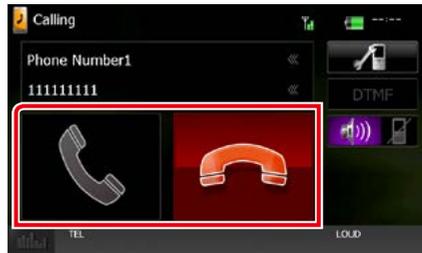
NOTE
- While monitoring the camera view, this screen does not appear even if a call comes in. To display this screen, press the <TEL> button or return the shift knob of car to the driver position.

Operations during a call

Adjust the receiver volume

DNX7150DAB

Press the <▼> or <▲> button.
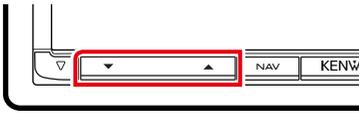
DNX715WDAB

Press the <▼> or <▲> button.
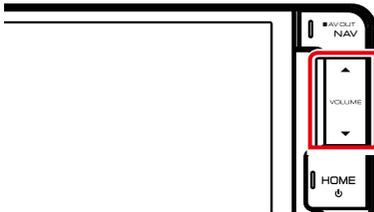
DNX4

Turn the volume knob.

Output the dial tone

Touch [DTMF] to display the tone input screen.

You can send tones by touching desired keys on the screen.

Switching the speaking voice output

Touching [🔊 📱]/ [🔇 🔊] each time switches the speaking voice output between cell-phone and speaker.

Call-waiting

When you receive a call while talking on another call, you can answer the newly received call by touching [📞]. The current call is on hold.

Each time you touch [📞], the caller will change.

When you touch [📞], the current call will end and switch to the call in hold.

Phone number preset

You can register frequently used phone numbers to this unit.

1 **Enter the number you want to register in Hands Free screen.**

2 **Touch [Preset 1], [Preset 2], or [Preset 3] for 2 seconds in the Hands Free screen.**

Voice Recognition

You can access the voice recognition function of the cell-phone connected to this unit. You can search the cell-phone phonebook by voice. (The functionality depends on the cell-phone.)

1 Press the <TEL> button for 1second.

DNX7150DAB

Press for 1 second

DNX715WDAB   **DNX4**

Press for 1 second   Press for 1 second
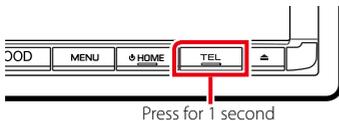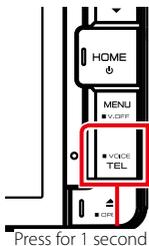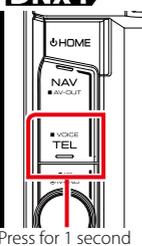
Voice Recognition screen appears.

2 Start speaking.

> **NOTE**
> • You can use voice recognition function by touching [🎙] on the Hands Free screen.

Hands-Free Setup

You can perform various setup about handsfree function.

1 Press the DNX7 <MENU> button/ DNX4 volume knob.
Popup menu appears.

2 Touch [SETUP].
SETUP Menu screen appears.

3 Touch [Bluetooth].

Bluetooth SETUP screen appears.

4 Touch [TEL SET-UP] in the Bluetooth SET-UP screen.

Hands-free SETUP screen appears.

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5 **Set each item as follows.**

Bluetooth HF/Audio

Select the speakers to output the sound from cell-phone (such as phone call voice and ringing tone) and Bluetooth audio player.

Front Only: Outputs from the front speakers.

All (Default): Outputs from all speakers.

Auto Response*

Sets an automatic response time to pick-up an incoming call.

OFF (Default): Automatic response is not available.

0-99: Set calling ring time (second).

Auto Pairing

When set to "ON", the Apple Auto Pairing function is turned on to automatically register the iPod touch or iPhone connected to this unit.

ON (Default): Uses Apple Auto Pairing function.

OFF: Not uses Apple Auto Pairing function.

Phone Information Use

Sets whether to use phonebook, outgoing, incoming and missed calls list.

ON (Default): Yes.

OFF: No.

Sort Order

Sets how to arrange the cell-phone phonebook.

First: Arranges in the order of first name.

Last (Default): Arranges in the order of last name.

Echo Cancel Level

Adjusts the level of echo cancellation.
Default is "1".

Microphone Level

Adjusts the sensitivity of the telephone microphone. Default is "3".

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. Default is "-10".

[Restore]

Resets the settings to the default settings.

* Either the time interval for automatic answer set on this unit or the time interval set on the cell-phone, whichever is shorter takes effect.

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Setting Up

Monitor Screen Setup

You can adjust image quality in iPod video, picture file, menu screen, etc.

1 Press the DNX7 <MENU> button/ DNX4 volume knob.

Popup menu appears.

2 Touch [Screen Adjustment].

Screen Control screen appears.

3 Adjust each item as follows.

iPod/ AV-IN/ Camera

DVD/ USB/ SD

Bright / Tint* / Color* / Contrast / Black / Sharpness*

Adjusts each item.

Dimmer

Select dimmer mode.

ON: The display and buttons dim.

OFF: The display and buttons do not dim.

SYNC (Default): Turns the dimmer function on or off when the vehicle light control switch is turned on or off.

NAV-SYNC: Turns the dimmer function on or off according to the Navigation Day/Night display setting.

Mode* (except USB/SD)

Select screen mode.

Full: Full picture mode
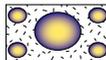
Just: Justify picture mode
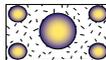
Zoom: Zoom picture mode
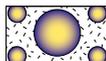
Normal: Normal picture mode
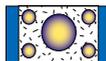
* Playback screen only

> **NOTE**
> • Adjusting items are different depending on the current source.
> • You can perform this function only when you have applied the parking brake.
> • The image quality can be set for each source.

View Camera Control DNX7

You can set up display when a CMOS-3xx Series view camera is used.

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

DNX715WDAB

DNX7150DAB
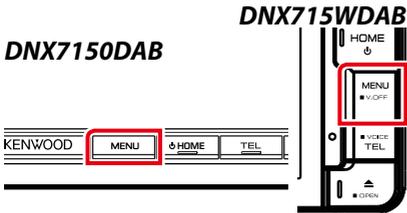
Camera view screen appears.

2 **Adjust each item as follows.**
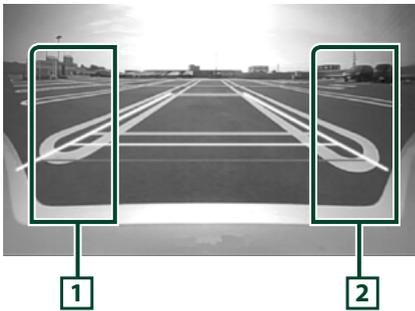
1 Guideline

Touching each time turns on or off the guideline display alternately.

2 Angle

Touching each time changes camera angles in the following order:

Super wide view/ Wide view/ Overhead view/ Wide view + Top view/ Corner view

For details, see the instruction manual of your camera.

NOTE

• The video camera controls described above may not be operable depending the connected cameras.

• [MENU Key Longer than 1 Second] must be set to "CAM". See ***User interface (P.82)***

System Setup

NOTE

• Each operation in this section can be started from the multi function menu.

1 **Press the** DNX7 **<MENU> button/** DNX4 **volume knob.**

Popup menu appears.

2 **Touch [SETUP].**

SETUP Menu screen appears.

3 **Touch [System].**

System Menu screen appears.

See the following section for each setting.

• **Set up the user interface** *(P.82)*
• **Adjust touch panel** *(P.83)*
• **Set up security** *(P.84)*
• **Set up memory** *(P.85)*

▮ User interface

You can setup user interface parameters.

1 Touch [User Interface] in the list.
User Interface screen appears.

2 Set each item as follows.

Beep

Turns the key touch tone on or off.
Default is "ON".

Language

Select the language used for the control
screen and setting items. See *Language setup
(P.83)*.

Text Scroll

Allows scrolling of text display on the source
control screen. Select from "Auto"/"Once"/"OFF".

Auto (Default): Scrolls the text automatically.

Once: Allows you to scroll the text only once
automatically when updated.

OFF: Does not scroll the text automatically.

Drawer Close

Sets whether to close the common menu
(P.21) automatically. Default is "Auto".

MENU Key Longer than 1 Second (**DNX7**)

You can set the operation performed when the
MENU key is pressed for 1 second. Select from
"V.OFF"/"CAM".

V.OFF (Default): Turn the display off.

CAM : Switches to the rear view camera video
display.

TEL Key Longer than 1 Second (**DNX4**)

You can set the operation performed when
the TEL key is pressed for 1 second. Select from
"Voice"/"V.OFF"/"R-CAM".

Voice (Default): Displays the Voice Recognition
screen. *(P.78)*.

V.OFF: Turn the display off.

R-CAM: Switches to the rear view camera
video display.

Animation

Sets whether to display animation. Default is "ON".

Secondary

Sets whether to display the navigation
information in the audio screen or vice versa.
Default is "ON".

DEMO

Set the demonstration mode. Default is "ON".

Vehicle Information*1

Displays the vehicle information.
This function requires a commercial adaptor.
Consult your Kenwood dealer for details.

Beep for Parking distance control*1

Sets whether to generate a warning tone
when the onboard proximity sensor detects a
human or object.

Consult your Kenwood dealer for details.

***1 This setting is available when a
commercial adaptor is connected.**

Language setup

1 Touch [SET] of [Language] in the User Interface screen.

Language Setting screen appears.

2 Set each item as follows.

Select Mode

Selects the mode to select a language.

Easy (Default): Selects a language easily.

Advanced: Allows you to select languages for respective items.*

Language Select

Selects a language.

***If you select [Advanced] for Select Mode, the following screen appears.**

GUI Language Select:

Selects the display language used for the control screen and so forth.

Navigation Language Select:

Selects the language used for navigation.

Text Language Select:

Selects the language used for tag text (song information).

3 Touch [Enter].

NOTE
• To cancel the language setup, touch [Cancel].

Touch panel adjustment

1 Touch [Touch] in the System Menu screen.

Touch Panel Adjustment screen appears.

2 Follow the instruction on the screen and touch the center of each ⊕.
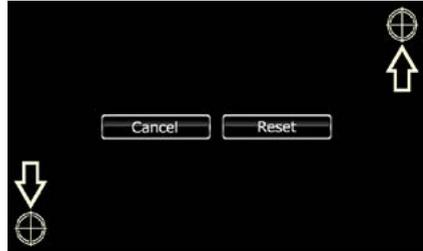
NOTE
• To cancel the touch panel adjustment, touch [Cancel].
• To reset to the initial status, touch [Reset].

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▣ Security setup

You can set up a security code to protect your receiver system against theft.

> **NOTE**
> • When the Security Code function is activated, the code cannot be changed and the function cannot be released. Note the Security Code can be set as the 4 digit number of your choice.

1 Touch [Security] in the System Menu screen.

Security screen appears.

2 Touch [ON] of [SI].
(DNX7150DAB, DNX4150DAB, DNX4150BT, DNX4150BTR only)

> **NOTE**
> • DNX7150DAB
> If "SI" is turned on, the SI indicator on the front panel flashes when the panel is detached. Default is "ON".
> • DNX4150DAB, DNX4150BT, DNX4150BTR
> If "SI" is turned on, the SI indicator on the front panel flashes when the vehicle ignition is off. Default is "ON".

3 Touch [SET] of [Security Code Set].

> **NOTE**
> • If you have already completed the code registration, [CLR] is displayed.

4 Enter a security code with four-digit number and touch [Enter].

5 Enter the same code again and touch [Enter].

Security code is registered.

> **NOTE**
> • If you enter a different security code, the screen returns to step 4 (for the first code entry).
> • If you have pressed <Reset> button or if you have disconnected the Receiver from battery, enter the correct security code as that you have entered in step 4 and touch [Enter]. You can use your receiver.

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Setup memory

Audio Control, AV-IN SETUP, Camera, and Audio SETUP settings can be memorized. The memorized settings can be recalled at any time. For example, even when the settings are cleared due to replacement of the battery, the settings can be restored.

1 **Touch [SETUP Memory] in the System Menu screen.**

SETUP Memory screen appears.

2 **Follow the instruction on the screen.**
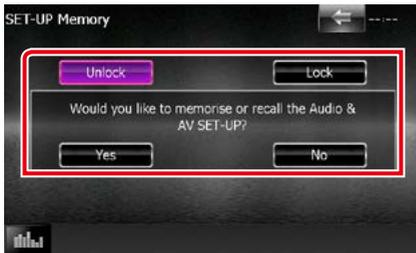
[Lock]/[Unlock]*

Locks or unlocks the AV-IN SETUP, and Audio SETUP settings.

Yes

Memorizes or recalls the settings.

No

Cancels the function or memorization.
The SETUP Menu screen appears again.

* When [Lock] is selected, you cannot change the AV-IN SETUP, and Audio SETUP settings. Also, the locked key mark is displayed under each setting icon in the setup menu.

3 **Follow the instruction on the screen.**

Recall

Recalls the memorized settings.

Memory

Memorizes the current settings.

Clear

Clears the currently memorized settings.

Cancel

Quits memorization/recalling of settings.

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Display Setup

1 Press the DNX7 **<MENU> button/** DNX4 **volume knob.**

Popup menu appears.

2 Touch [SETUP].

SETUP Menu screen appears.

3 Touch [Display].

Display Menu screen appears.

See the following section for each setting.

- **Control monitor angle** DNX7 *(P.86)*
- **Adjust panel color** *(P.87)*
- **Changing background image** *(P.88)*

Monitor angle control DNX7

You can adjust the position of the monitor.

1 Touch [Angle] in the Display Menu screen.

Angle setup screen appears.

2 Select a below number that represents your desired angle setting.

Default is "0".

NOTE

- You can store the current monitor angle as the angle during power off. Touch [Memory] when the desired angle is selected.

- The front panel can be set to open automatically when the ignition is turned off, so that it can be detached for antitheft purpose. Touch [ON] of [Auto Open]. (DNX7150DAB only)

■ Panel color coordinate

You can set the screen and button illumination color.
The selectable items differ depending on the unit.

1 **Touch [Color] in the Display Menu screen.**

Color screen appears.

2 **Touch [OFF] of [Panel Color Scan].**

3 **Touch [SET] of [Panel Color Coordinate].**

Panel Color Coordinate screen appears.

NOTE
- You can touch [SET] or [Initialize] when [Panel Color Scan] is set to off.
- Touch [Initialize] to reset the settings to the default settings.

4 **Touch the desired color.**

Registering original color

You can register your original color.

1 **Touch [Adjust] in the Panel Color Coordinate screen.**

Panel Color RGB Coordinate screen appears.

2 **Use [◄] and [►] to adjust each color value.**
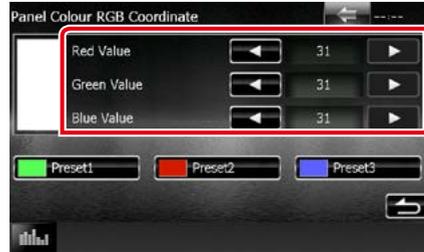
3 **Touch the desired preset key for 2 seconds.**

Panel color scan

You can set the panel color to continuously scan through the color spectrum.

1 **Touch [ON] of [Panel Color Scan] in the Color screen.**

Panel Color Scan is set to on.

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Changing background image

You can load an image from the connected USB device and set it for the background image.

Before operating this procedure, it is necessary to connect the device which has the image to load.

1 Touch [Background] in the Display Menu screen.

Background screen appears.

2 Touch [STANDBY].

3 Touch [Memory] of [User Background].

User Background File Select screen appears.

4 Select the image to load.
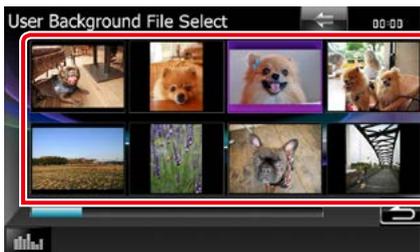
5 Touch [Enter].

The selected image is loaded and the

display returns to the Background screen.

NOTE
- Touching [ ] rotates counter clockwise.
- Touching [ ] rotates clockwise.

6 Touch [Change] of [Background Change] in the Background screen.

7 Select an image for background and touch [Enter].

NOTE
- See **_Playable Media and Files (P.114)_** for readable image specifications.
- Touching [Delete] in the Background screen deletes the background image. After you touch [Delete], a confirmation message appears. Follow the message and complete the operation.

Navigation Setup

You can set navigation parameters.

1 Press the DNX7 <MENU> button/ DNX4 volume knob.

Popup menu appears.

2 Touch [SETUP].

SETUP Menu screen appears.

3 Touch [Navigation].

Navigation SETUP screen appears.

4 Set each item as follows.
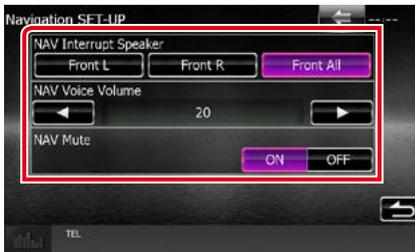
NAV Interrupt Speaker

Selects speakers used for voice guidance of the navigation system.

Front L: Uses the front left side speaker for voice guidance.

Front R: Uses the front right side speaker for voice guidance.

Front All (Default): Uses both front speakers for voice guidance.

NAV Voice Volume

Adjusts the volume for voice guidance of the navigation system. Default is "20".

NAV Mute

Mutes the volume of rear speakers during voice guidance of the navigation system. Default is "ON".

Camera Setup

You can set camera parameters.

1 Press the `DNX7` **<MENU> button/** `DNX4` **volume knob.**

Popup menu appears.

2 Touch [SETUP].

SETUP Menu screen appears.

3 Touch [Camera].

Camera SETUP screen appears.

4 Set each item as follows.

Selects the type of rear camera to use.

CMOS-3xx: When the CMOS-300 series with ID 1 set is connected.

Other (Default): When the other camera is connected.

R-CAM Interruption

Sets a method for switching the display.
Setting values are ON and OFF.

ON: Switches to the rear view camera video display when shifting to reverse or pressing the <MENU> (`DNX7`)/ <TEL> (`DNX4`) button for 1 second*³.

OFF (Default): Switches to the rear view camera video display when pressing the <MENU> (`DNX7`)/ <TEL> (`DNX4`) button for 1 second*³

R-CAM Settings*² `DNX7`

Adjusts the CMOS-300 series with ID 1 set. For details, see the instruction manual of your camera.

Parking Guidelines*⁴

You can display parking guidelines to enable easier parking when you shift the gear to the reverse (R) position.
Default is "ON".

Guidelines Setup*⁴

Adjust the parking guidelines. See ***Adjusting the parking guidelines (P.91)***.

*1 These settings become settable only when the parking brake is on.

*2 This setting becomes settable only when the parking brake is on and the CMOS-300 series is selected.

*3 [TEL Key Longer than 1 Second] or [MENU Key Longer than 1 Second] must be set to "R-CAM"/ "CAM". See ***User interface (P.82)***

*4 This setting becomes settable only when the "Rear Camera" is set to [Other].

Adjusting the parking guidelines

1 Touch [ON] of [Parking Guidelines] in the Camera SETUP screen.

2 Touch [Adjust] of [Guidelines Setup] in the Camera SETUP screen.

3 Adjust the parking guidelines by selecting the ✛ mark.

4 Adjusting the position of the selected ✛ mark.
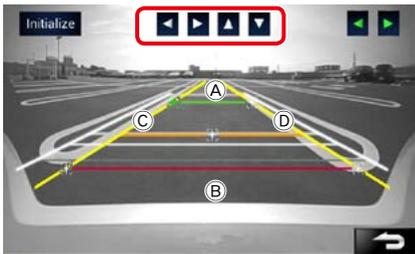
Make sure that Ⓐ and Ⓑ are horizontally parallel, and that Ⓒ and Ⓓ are the same length.

• Touch [Initialize] for 1 second to set all the ✛ marks to the initial default position.

Software Information

Check the software version of this unit.

1 Press the **DNX7** <MENU> button/ **DNX4** volume knob.

Popup menu appears.

2 Touch [SETUP].

SETUP Menu screen appears.

3 Touch [Software].

Software Information screen appears.

4 Confirm the software version. Touch [Update] as necessary.

NOTE
• For how to update the software, see the relevant update procedure manual which comes with the software.

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AV Input Setup

You can set AV input parameters.

1 Press the `DNX7` <MENU> button/
`DNX4` volume knob.

Popup menu appears.

2 Touch [SETUP].

SETUP Menu screen appears.

3 Touch [Source].
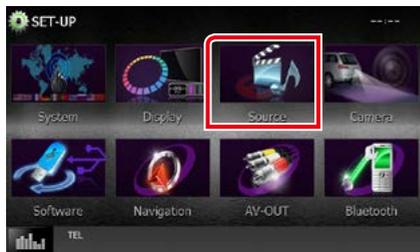
4 Touch [AV-IN SETUP] in the list.

AV-IN SETUP screen appears.

5 Set each item as follows.

TV Tuner Control (`DNX7`/ DNX4150DAB/ DNX4150BT)

Sets when connecting the TV tuner to AV INPUT.

ON: Set to ON when connecting the 3rd party TV tuner. AV-IN1 Name is set to TV. If you connect the TV tuner made by DOS and watch TV, you can perform some simple operations by touching the screen of this unit.

OFF (Default): Set to OFF when not connecting the 3rd party TV tuner.

AV-IN1 Name/ AV-IN2 Name

Sets a name to be displayed when you select a system that is connected via the AV INPUT port. Default is "VIDEO1" (AV-IN1)/ "VIDEO2" (AV-IN2).

AV Output Interface Setup

You can select an AV source to be output at the AV OUTPUT port. Default is "VIDEO1".

1 Press the DNX7 <MENU> button/ DNX4 volume knob.

Popup menu appears.

2 Touch [SETUP].

SETUP Menu screen appears.

3 Touch [AV-OUT].

AV-OUT Interface screen appears.

4 Touch [◄] or [►] to set [AV-OUT] to VIDEO1, DISC, iPod, USB, or OFF.

> **NOTE**
>
> • Only when you select "USB+AV-IN" in iPod Connection Setup, "USB" can be selected as AV output source. For the connection setting, refer to ***iPod/iPhone connection setup (P.54)***.

Controlling Audio

You can adjust the various settings such as audio balance or subwoofer level.

1 **Press the** `DNX7` **<MENU> button/** `DNX4` **volume knob.**

Popup menu appears.

2 **Touch [Audio].**

Audio screen appears.
See the following section for each setting.

Setting Audio

1 **Press the** `DNX7` **<MENU> button/** `DNX4` **volume knob.**

Popup menu appears.

2 **Touch [Audio].**

Audio screen appears.

3 **Touch [Audio SETUP].**

Audio SETUP screen appears.

See the following section for each setting.

◼ Speaker setup

You can select a speaker type and its size to get the best sound effects.

When the speaker type and size are set, the speaker crossover network is set automatically.

1 Touch [Speaker Select] in the Audio SETUP screen.

Speaker Select screen appears.

2 Touch the speaker you wish to adjust and set each item as follows.

Tweeter (DNX7150DAB only)

You can set the tweeter when you are selecting front speakers.
None, Small, Middle, Large

X'over

Displays the speaker crossover setup screen.

You can adjust the crossover setup that was set automatically when you selected the speaker type.

For details, see ***Crossover network setup (P.96)***

3 Select a speaker size using [◀] and [▶]. The speaker size is different depending on the speaker type and the unit.

Front

OEM, 8 cm, 10 cm, 12 cm, 13 cm, 16 cm, 17 cm, 18 cm, 4x6, 5x7, 6x8, 6x9, 7x10

Rear

None, OEM, 8 cm, 10 cm, 12 cm, 13 cm, 16 cm, 17 cm, 18 cm, 4x6, 5x7, 6x8, 6x9, 7x10

Subwoofer

None, 16 cm, 20 cm, 25 cm, 30 cm, 38 cm over

> **NOTE**
> • Select "None" if you have no speakers.

Crossover network setup

You can set a crossover frequency of speakers.

1 Touch the speaker to set the crossover in the Speaker Select screen.

2 Touch [X'over].

X'over screen appears.

3 Set each item as follows.
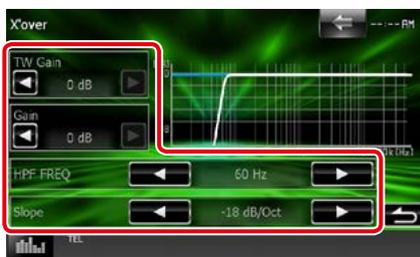
TW (Tweeter) Gain *[1] (DNX7150DAB only)

Adjusts the tweeter level. (When front is selected on Speaker Select screen)

Gain (DNX7150DAB only)

Adjusts the front speaker, rear speaker, or subwoofer level.

Phase*[2]

Sets the phase of subwoofer output.

The phase is reversed 180 degrees when set to "Reverse". (When subwoofer is selected on Speaker Select screen)

HPF FREQ

High Pass Filter adjustment. (When front or rear speaker is selected on Speaker Select screen)

LPF FREQ

Low Pass Filter adjustment. (When subwoofer is selected on Speaker Select screen)

Slope*[3]

Sets a crossover slope.

*[1] Only when "Tweeter" is set to "Small", "Middle", "Large" in <Speaker Setup>.

*[2] Only when "Subwoofer" is set to a mode other than "None" in <Speaker Setup>.

*[3] Only when "LPF FREQ"/"HPF FREQ" is set to a mode other than "Through" in <X'over>.

Car type setup

You can setup the car type and speaker network, etc.

1 Touch [Car Type] in the Audio SETUP screen.

Car Type screen appears.

2 Select your car type from the list.

NOTE

• If your car type is selected, the Delay Time Alignment is set automatically (for timing adjustment of sound output for each channel) to have the highest surround effects.

Speaker location setup

1 **In the Car Type screen, touch [Location].**
Speaker Location screen appears.

2 **Select the speaker locations using [►].**

Front Speaker

Select the location from "Door"/ "On Dash"/
"Under Dash".

Rear Speaker

Select the location from "Door"/ "Rear Deck",
"2nd Row"/ "3rd Row" (Minivan, Passenger Van).

DSP select

You can select whether using DSP (Digital Signal Processor) System.

1 **Touch [Bypass] or [Through] of [DSP Select] in the Audio SETUP screen.**
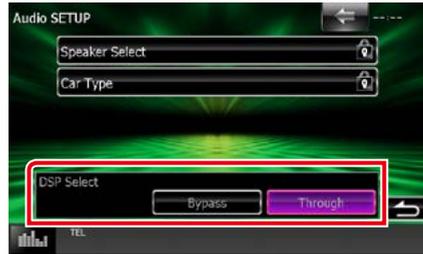
Bypass

There is no effect by DSP.

Through

There is an effect by DSP.

> **NOTE**
> • When the mode is set to [Bypass], DSP System cannot be adjusted.

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Controlling General Audio

1 Press the `DNX7` <MENU> button/ `DNX4` volume knob.

Popup menu appears.

2 Touch [Audio].

Audio screen appears.

3 Touch [Audio Control].

4 Set each item as follows.

Fader #/Balance

Adjust the volume balance around the touched area.

[◄] and [►] adjust the right and left volume balance.

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

Volume Offset*

Finely adjust the volume of the current source to minimize the difference in volume between different sources.

Subwoofer Level

Adjusts the subwoofer volume. This setting is not available when subwoofer is set to "None". See *Speaker setup (P.95)*.

Bass Boost

Sets the amount of bass boost among "OFF"/ "Level1"/ "Level2"/ "Level3".

* **If you have increased the volume first, then reduced the volume using the "Volume Offset", the sound generated if you suddenly switch to another source may be extremely loud.**

Equalizer Control

You can adjust equalizer by selecting the optimized setting for each category.

1 **Press the `DNX7` <MENU> button/ `DNX4` volume knob.**

Popup menu appears.

2 **Touch [Audio].**

Audio screen appears.

3 **Touch [Equalizer].**

Equalizer screen appears.

Operation

Controlling EQ curves

1 **Select EQ curve from [Natural], [Rock], [Pops], [Easy], [Top40], [Jazz], [Powerful], [iPod], and [User].**

> **NOTE**
> • [iPod] is available only during iPod source.

Controlling equalizer manually

This setting cannot be performed when you select [iPod] in the Equalizer screen.

1 Touch [EQ] in the Equalizer screen.

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

DNX7150DAB
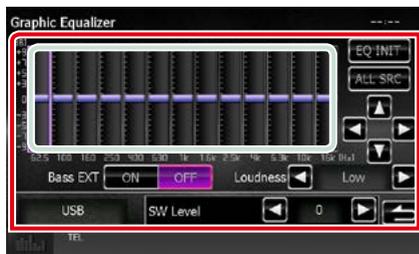
DNX715WDAB/ DNX4
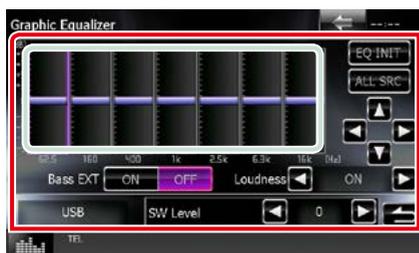
Gain level (light green boxed area)

Adjust the gain level by touching the each frequency bar.

Touching [◀], [▶], [▲] and [▼] can also adjust the level. Use [◀] and [▶] to select a frequency, and [▲] and [▼] to set the level.

EQ INIT

Returns to the previous level which the gain level is adjusted.

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.

Loudness

Sets the amounts of boost of low and high tones.

DNX7 "OFF", "Low", "High"
DNX4 "OFF", "ON"

SW Level

Adjusts the subwoofer volume. This setting is not available when subwoofer is set to "None". See *Speaker setup (P.95)*.

Zone Control

You can select different sources for both front and rear positions in the vehicle.

1 Press the **DNX7** <MENU> button/ **DNX4** volume knob.

Popup menu appears.

2 Touch [Audio].

Audio screen appears.

3 Touch [Zone Control].

Zone Control screen appears.

4 Touch [Dual Zone].

5 Set each source as follows.

[▶] (Front Source, Rear Source)

Select the audio source for each.

[▼], [▲] (Rear VOL.)

Adjusts the rear channel volume.

[Single Zone]

Touch to turn off the dual zone function.

> **NOTE**
> • When the rear speaker sound is switched, the audio source that is output at the AV OUTPUT terminal is also switched to the same source.
> • When the dual zone function is set to on, the following functions are not available.
> – Output from the subwoofer
> – Subwoofer Level/Bass Boost *(P.98)*
> – Equalizer Control/Sound Effect/Listening Position *(P.99, 102, 104)*
> – DSP Bypass Control/Speaker Setup/Car Type Setup *(P.97, 95, 96)*
> • Different sources from iPod/iPhone (apps) cannot be set as front source and rear source separately. Only one source (app) can be set as front and rear sources.

Sound Effect

You can set sound effects.

1 Press the DNX7 **<MENU> button/** DNX4 **volume knob.**

Popup menu appears.

2 Touch [Audio].

Audio screen appears.

3 Touch [Sound Effect].
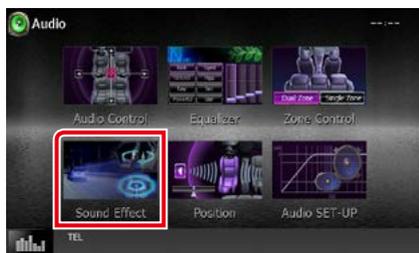
Sound Effect screen appears.

See the following section for each setting.

- **Set Space Enhancer (DNX7150DAB)** *(P.102)*
- **Set Drive Equalizer** *(P.103)*
- **Set up Sound Height Perception (DNX7150DAB)** *(P.103)*
- **Set up Realizer or Supreme (DNX7150DAB)** *(P.104)*

■ Space Enhancer (DNX7150DAB)

1 Touch [Space Enhancer] in the Sound Effect screen.

Space Enhancer screen appears.

2 Touch [Small], [Large], or [OFF].

Each setting value indicates the soundscape level.

> **NOTE**
> • This setting is not available during HD Radio tuner source.

Drive Equalizer setting

The sound quality is automatically adjusted.

1 **Touch [ON] or [OFF] of [Drive Equalizer+].**

DNX7150DAB, DNX715WDAB:
The sound quality is automatically optimized to meet the current car speed by GPS.

DNX4150DAB, DNX4150BT:
The sound quality is automatically optimized to meet the current volume level.

Sound Height Perception (DNX7150DAB)

You can adjust the height of speakers virtually to suit your listening position.

1 **Touch [Sound Height Perception] in the Sound Effect screen.**
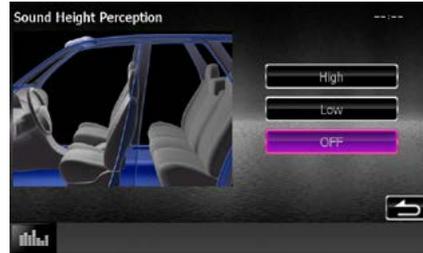
Sound Height Perception screen appears.

2 **Select for the virtual height of speakers from [High], [Low], or [OFF].**

▉ Realizer and Supreme (DNX7150DAB)

You can restore the sound lost due to audio compression to a realistic sound.

1 Touch the screen in the Sound Effect screen.

Realizer

Realizer is sound enhancement and boosting low frequencies (bass boost).

Select the level from "OFF"/ "Level1"/ "Level2"/ "Level3".

Supreme

Turns ON/OFF the Supreme function.

Technology to extrapolate and supplement with proprietary algorithm, the high-frequency range that is cut off when encoding.

This function works on DVD MEDIA, USB and iPod sources.

Listening Position

You can adjust the sound effects according to your listening position.

1 Press the `DNX7` <MENU> button/ `DNX4` volume knob.

Popup menu appears.

2 Touch [Audio].

Audio screen appears.

3 Touch [Position].
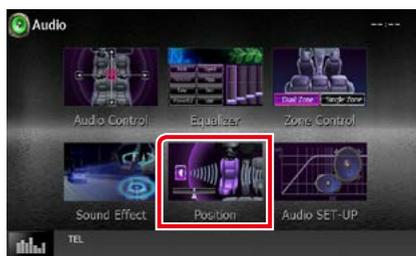
Position screen appears.

4 Select listening position from [Front R] (Right front), [Front L] (Left front), [Front All] (All front), and [All] using [◄] and [►].

▉ Position DTA control

You can fine-adjust your listening position.

1 In Position screen, touch [Adjust].

2 Select the speaker you wish to adjust by touching speaker icon.

3 Set DTA as follows.

[◄], [►]

Adjust the settings of the DTA position.

Gain

Touch to adjust the gain of each speaker.

NOTE

• Make fine adjustment of the delay time of the speaker output specified here to have a more suitable environment for your vehicle.

• If you specify the distance from the center of the currently set listening position to every speaker, the delay time will be automatically computed and set.

① Determine the center of the currently set listening position as the reference point.

② Measure the distances from the reference point to the speakers.

③ Calculate the differences between the distance of the furthest speaker and other speakers.

④ Input the differences calculated in step ③ for individual speakers.

⑤ Adjust gain for individual speakers. A sound image will be shifted to the speaker with increased gain.

Example: When [Front All] is selected as the listening position

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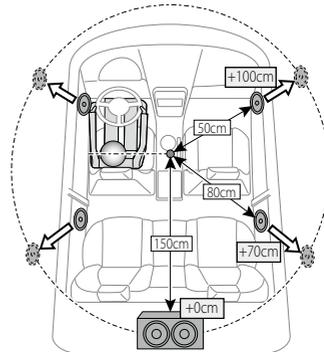
Remote control

This unit can be operated using the remote control.

The remote control is the optional accessory (KNA-RCDV331).

⚠**CAUTION**

- **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 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.**

Battery Installation

If the remote control operates only over shorter distances or does not operate at all, it is possible that the batteries are depleted.

In such instances, replace the both batteries with new ones.

1 **Insert two "AAA"/"R03"-size batteries with the ⊕ and ⊖ poles aligned properly, following the illustration inside the case.**
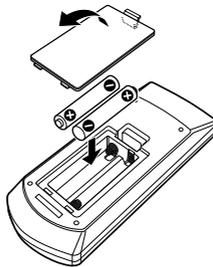
Functions of the Remote control Buttons

■ Switching the operation mode

The functions operated from the remote control differ depending on the position of the mode switch.
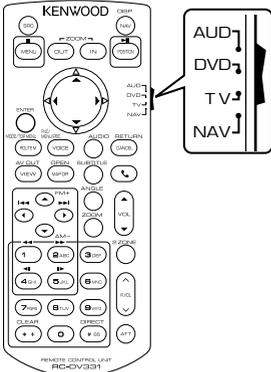
AUD mode

Switch to this mode when controlling a selected source or tuner source, etc.

DVD mode

Switch to this mode when playing a disc media including DVD, VCD, and CD.

NAV mode

Switch to this mode when controlling navigation function.

TV mode

Not used.

> **NOTE**
> • When controlling a player that is not integrated in the unit, select "AUD" mode.

■ Direct search mode

Using the remote control, you can jump directly to the desired file, track chapter, etc. with entering the number corresponding to the content.

> **NOTE**
> • This operation cannot be performed for USB device and iPod.

1 Press the <#BS> button several times until the desired content appears.

The available contents are different depending on the source.

DVD

Title number/Chapter number/Play time/Item number*

* You may not be able to use this function with some discs or scenes.

VCD 1.X and 2.X (PBC OFF)

Track number

VCD 2.X (PBC ON)

Scene number/number

Music CD

Track number/Play time

Audio files

Folder number/File number

Radio

Frequency value

2 Enter the number of the content you want to play using the numeric keypad.

3 For DVD or VCD, press the <ENTER> button.
For music CD or audio files, press the <POSITION> button.
For radio, press the <◄> or <►> button.

The content you entered is played.
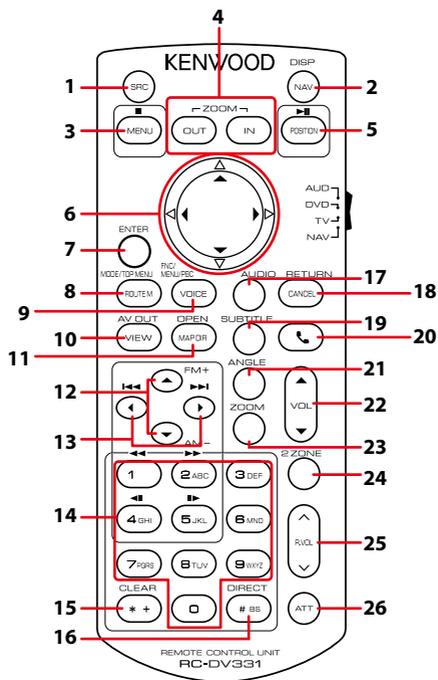
	Key Name	Location of the mode switch	Function
1	SRC	–	Switches to the source to be played. In hands-free mode, hangs up the phone.
2	NAV	–	Switches between the navigation and the source screens.
3	MENU	DVD	Stops playing and memorizes the last point where the disc stopped. The last point is deleted by pressing twice.
		NAV	Displays Main menu.
4	OUT, IN	NAV	Zooms in or out the navigation map.
5	POSITION	AUD, DVD	Pauses the track or file, and resumes playing by pressing twice. During radio source in AUD mode, switches the seek mode.
		NAV	Displays the current position.
6	Cursor Key	DVD	Moves the cursor in the DVD menu.
		NAV	Moves the cursor or scrolls the map.
7	ENTER	AUD, DVD	Performs the selected function.
		NAV	• Registers the selected position. • Performs the selected function.
8	ROUTE M	AUD	Screen mode changes each time you press this key during video playback.
		DVD	Returns to the DVD top menu.
		NAV	Displays Route Option menu.

	Key Name	**Location of the mode switch**	**Function**
9	VOICE	AUD	Switches navigation display on/off.
		DVD	Displays the DVD menu. Turns the playback control on or off while playing VCD.
		NAV	Speaks the voice guidance.
10	VIEW	AUD, DVD	Switches the AV source to be output.
		NAV	Switches between 2D and 3D map displays.
11	MAP DIR	AUD, DVD	**DNX7** Switches the display angle each time it is pressed.
		NAV	Switches between the heading up navigation and north up navigation map displays.
12	▲/▼	AUD, DVD	Selects the folder to be played. During radio source in AUD mode, select FM/ AM band to be received.
13	◄/►	AUD, DVD	Selects the track or file to be played. During radio source in AUD mode, switches to broadcast stations received by the unit.
14	Numeric Keypad	AUD	Specifies the number to search in direct search. For details on the direct search mode, see ***Direct search mode (P.107)***.
		DVD	• Press [1] [2] to fast forward/backward. Switches the fast forward/ backward speed each time you press this key. • Press [4] [5] to slow forward/backward. Switches the slow playback speed each time you press this key.* *DVD only
15	∗ +	DVD	Clears the number.
16	# BS	AUD, DVD	Switches to the direct search mode. For details on the direct search mode, see ***Direct search mode (P.107)***.
17	AUDIO	DVD	Switches the voice language each time you press this key.
18	CANCEL	DVD	Displays previous screen.
		NAV	Cancels the operations.
19	SUBTITLE	DVD	Switches the subtitle language.
20	📞	–	When a call comes in, answers the call.
21	ANGLE	DVD	Switches the picture angle each time you press this key.
22	Vol ▲▼	–	Adjusts the volume.
23	ZOOM	DVD	Switches the zoom ratio (2, 3, 4, Off) each time you press this key.
24	2 ZONE	AUD, DVD	Switches the Dual Zone function on and off.
25	R.VOL ⋀⋁	–	Adjusts volume at rear when the Dual Zone function is on.
26	ATT	–	Lowers the volume by pressing the key once. Restores the previous volume by pressing the key twice.

Troubleshooting

Problems and Solutions

If any trouble occurs, first check the following table for possible problems.

- **Some functions of this unit may be disabled by some settings made on this unit.**
- **What might seem to be a malfunction in your unit may just be the result of slight misoperation or miswiring.**

▮ About settings

Problem	Reason	Solution
• Cannot set up the subwoofer. • Cannot set up subwoofer phase. • No output from the subwoofer. • Cannot set up the low pass filter. • Cannot set up the high pass filter.	Subwoofer is not set to on.	Set the subwoofer to on. See ***Speaker setup (P.95)***.
	The dual zone function is enabled.	Set the dual zone function to off. See ***Zone Control (P.101)***.
• Cannot select the output destination of the subsource in the dual zone. • Cannot adjust the volume of the rear speakers.	The dual zone function is disabled.	Set the dual zone function to on. See ***Zone Control (P.101)***.
• Cannot set up the equalizer. • Cannot set up the crossover network.	The dual zone function is enabled.	Set the dual zone function to off. See ***Zone Control (P.101)***.
	"DSP Select" is set to "Bypass".	Set "DSP Select" to "Through". See ***DSP select (P.97)***.

▮ About audio operations

Problem	Reason	Solution
Radio reception is poor.	The car antenna is not extended.	Pull out the antenna all the way.
	The antenna control wire is not connected.	Connect the wire correctly. See "Connection" in the Quick Start Guide.
Cannot play audio files stored in a disc.	"CD Read" is set to "2".	Set "CD Read" to "1". See ***Disc setup (P.34)***.
Cannot select a folder.	The random play function is enabled.	Turn off the random function.
Cannot perform repeat play during VCD playback.	The PBC function is enabled.	Turn off the PBC function.
The specified disc does not play, but another one plays instead.	The disc is quite dirty.	Clean the disc. See ***Precautions on handling discs (P.4)***.
	The disc is severely scratched.	Try another disc instead.

Problem	Reason	Solution
The sound skips when an audio file is being played.	The disc is scratched or dirty.	Clean the disc. See **Precautions on handling discs (P.4)**.
	The recording condition is bad.	Record the file again or use another disc.

Other

Problem	Reason	Solution
The Touch Sensor Tone doesn't sound.	The preout jack is being used.	The Touch Sensor Tone cannot be output from the preout jack.

Error Messages

When you fail to operate the unit correctly, the cause of the failure appears as the message on the screen.

Error Message	Cause	Solution
Protect	Protective circuit has been activated because a speaker cord has shorted or it has come in contact with the car chassis.	Wire or insulate the speaker cord as appropriate and then push the <Reset> button **(P.113)**.
Hot Error	When the internal temperature of this unit rises to 60°C or more, the protection circuit is activated and you may not be able to operate the unit.	Use the unit again after reducing the temperature of the unit.
Mecha Error	The disc player is malfunctioning.	Eject the disc and try inserting it again. Contact the Kenwood dealer if this indicator continues blinking or the disc cannot be ejected.
Disc Error	An unplayable disc is inserted.	Change the disc. See **Playable Media and Files (P.114)**.
Read Error	The disc is quite dirty.	Clean the disc. See **Precautions on handling discs (P.4)**.
	Disc is upside down.	Load the disc with the labeled side up.
Region Code Error	The disc you wanted to play has a region code that cannot be played with this unit.	See **Region Codes in the World (P.120)** or try another disc.
Parental Level Error	The disc you wanted to play has a higher level than the parental level you set.	Set the parental level. See **Parental level (P.34)**.
Error 07–67	The unit is not operating correctly due to some reason or other.	Push the unit's Reset button. If the "Error 07–67" message does not disappear, see your nearest Kenwood dealer.
No Device (USB device, Bluetooth audio player)	The USB device is selected as a source although no USB device is connected.	Change the source to any source other than USB/iPod. Connect a USB device, and change the source to USB again.

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Error Message	Cause	Solution
Disconnected (iPod)	The iPod/Bluetooth audio player is selected as a source although no iPod/Bluetooth audio player is connected.	Change the source to any source other than iPod/Bluetooth. Connect an iPod/Bluetooth audio player, and change the source to iPod/Bluetooth again.
No Media file	The connected USB device contains no playable audio file. Media was played that doesn't have data recorded that the unit can play.	See **Playable Media and Files (P.114)** and try another USB device.
USB Device Error!!	The connected USB device is rated a current capacity higher than the allowable limit.	Check the USB device. Some trouble may have occurred to the connected USB device.
		Change the source to any source other than USB. Remove the USB device.
Authorization Error	Connection to the iPod has failed.	• Remove the iPod and then reconnect it. • The unit does not support the iPod. See **Connectable iPod/iPhone (P.116)**.
Update your iPod	The iPod's software is an older version which the unit can not support.	The unit may not support the connected iPod model. Confirm that the software for the iPod is the latest version. See **Connectable iPod/iPhone (P.116)**.
Navigation Error. Please turn on power again later.	The communication error has occurred due to severely cold temperature.	Turn on power again after warming your car interior.
Antenna Error	The antenna has a short-circuit and the protective circuit has activated.	Check the Digital Radio antenna. If a passive antenna without a booster is used, set Antenna Power "OFF".

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Resetting the Unit

If the unit or the connected unit fails to operate properly, reset the unit.

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

The unit returns to factory settings.

DNX7150DAB
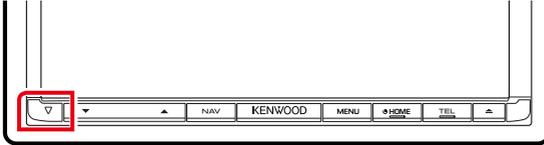
DNX715WDAB

DNX4
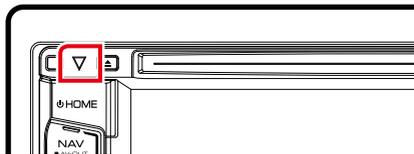
NOTE

• Disconnect the USB device before pressing the <Reset> button. Pressing the <Reset> button with the USB device connected can damage the data stored in the USB device. For how to disconnect the USB device, see ***How to Play Media (P.15)***.

• When the unit is turned on after resetting, the Initial SETUP screen appears. See ***Initial setup (P.13)***.

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Appendix

Playable Media and Files

You can play various kinds of media and files on this unit.

List of playable discs

Disc types	Standard	Support	Remark
DVD	DVD Video	○	
	DVD Audio	✕	
	DVD-VR	✕	
	DVD-R*1	○	• MP3/WMA/AAC/MPEG1/MPEG2/DivX playback • Multi-border/Multisession playback (Playback depends on authoring conditions)
	DVD-RW	○	
	DVD+R	○	
	DVD+RW	○	
	DVD-R DL (Dual layer)	○	Only video format
	DVD+R DL (Double layer)	○	
	DVD-RAM	✕	
CD	Music CD*1	○	CD-TEXT
	CD-ROM	○	• MP3/WMA/AAC/MPEG1/MPEG2 playback
	CD-R	○	• Multisession is supported.
	CD-RW	○	• Packet write is not supported.
	DTS-CD	✕	
	Video CD (VCD)	○	
	Super video CD	✕	
	Photo CD	✕	
	CD-EXTRA	△	Only music CD session can be played.
	HDCD	○	
	CCCD	✕	
Others	Dualdisc	✕	
	Super audio CD	△	Only CD layer can be played.

*1 Incompatible with 8 cm (3 inch) discs.

○ : Playback is possible.
△ : Playback is partly possible.
✕ : Playback is impossible.

> **NOTE**
> • When buying DRM enabled contents, check the Registration Code in the ***DivX(R) VOD (P.53)***. Each time a file with the displayed code is played and protected against copying, the code changes.
> • DivX can be played only from a DVD disc media.

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■ Use of DualDisc

When playing a "DualDisc" on this unit, the surface of the disc that is not played may be scratched while the disc is inserted or ejected. Since the music CD surface does not conform to the CD standard, playback may be impossible.

(A "DualDisc" is a disc with one surface containing DVD standard signals and the other surface containing music CD signals.)

■ About disc format

The disc format should be the one of the following.

• ISO 9660 Level 1/2

• Joliet

• Romeo

• Long file name

About files

The following audio, video, and picture files are supported.

■ Audio files

• AAC-LC (.m4a)

• MP3 (.mp3)

• WMA (.wma)

• Linear PCM (WAVE) (.wav)
Mass-storage-class USB device, SD card only

• FLAC (.flac)
Mass-storage-class USB device, SD card only

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.

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

■ Video files

• MPEG1 (.mpg, .mpeg, .m1v*)
*Mass-storage-class USB device, SD card only

• MPEG2 (.mpg, .mpeg, .m2v*)
*Mass-storage-class USB device, SD card only

• DivX (.divx, .div, .avi)
DVD only

• H.264/MPEG-4 AVC (.mp4, .m4v)
Mass-storage-class USB device, SD card only

• WMV 9 (.wmv, .m2ts)
Mass-storage-class USB device, SD card only

• MKV (.mkv)
*Mass-storage-class USB device, SD card only

■ Picture files

Only picture files in USB device can be displayed.

Files stored in disc media is not supported.
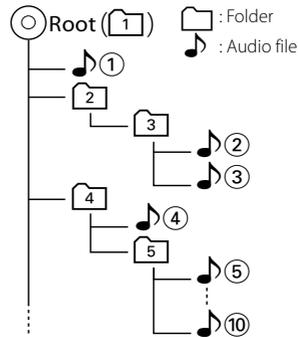
• JPEG (.jpg, .jpeg)

• PNG (.png)

• BMP (.bmp)

NOTE

• BMP and PNG can be set only as wallpaper.

■ Playing order of files

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

■ Connectable iPod/iPhone

The following models can be connected to this unit.

Made for
• iPhone 5s
• iPhone 5c
• iPhone 5
• iPhone 4S
• iPhone 4
• iPhone 3GS
• iPhone 3G
• iPhone
• iPod touch (5th generation)
• iPod touch (4th generation)
• iPod touch (3rd generation)
• iPod touch (2nd generation)
• iPod touch (1st generation)
• iPod classic
• iPod with video
• iPod nano (7th generation)
• iPod nano (6th generation)
• iPod nano (5th generation)
• iPod nano (4th generation)
• iPod nano (3rd generation)

> **NOTE**
> • For the details of the necessary cable and adapter to connect with iPod/iPhone, refer to ***Music/ Video/Picture Basic Operation (P.36)***.
> • For the conformity information on iPod/iPhone software,
>   access ***www.kenwood.com/cs/ce/ipod/***.
> • By connecting your iPod/iPhone to this unit with an optional accessory iPod connection cable KCA-iP202, KCA-iP103 or KCA-iP102, you can supply power to your iPod/iPhone as well as charge it while playing music. However, the power of this unit must be on.
> • If you start playback after connecting the iPod, the music that has been played by the iPod is played first.
>   In this case, "Reading" is displayed without displaying a folder name, etc. Changing the browse item will display a correct title, etc.
> • When the iPod is connected to this unit, "KENWOOD" or "✓" is displayed on the iPod to indicate that you cannot operate the iPod.

■ Usable USB device

You can use a mass-storage-class USB device on this unit.

The word "USB device" appearing in this manual indicates a flash memory device and digital audio players can be recognized as mass-storage.

■ About file system

The file system should be the one of the following.
• FAT16
• FAT32

> **NOTE**
> • When the USB device is connected to this unit, it can be charged through the USB cable.
> • Install the USB device in the place where it will not affect safe driving.
> • You cannot connect a USB device via a USB hub and Multi Card Reader.
> • Take backups of the audio files used with this unit. The files can be erased depending on the operating conditions of the USB device.
>   We shall have no compensation for any damage arising from any erased data.
> • No USB device comes with this unit. You need to purchase a commercially available USB device.
> • When connecting the USB device, usage of the CA-U1EX (option) is recommended. (However, maximum supply current of CA-U1EX is 500mA.) Normal playback is not guaranteed when a cable other than the USB compatible cable is used.

■ Usable SD card DNX7 and microSD card DNX4.

The unit is capable of playback of SD/ SDHC memory cards DNX7 or microSD/ microSDHC memory cards DNX4 complying with the SD or SDHC standard.

A special adapter is required to use a miniSD card, miniSDHC card, microSD card or microSDHC card.

The MultiMedia Card (MMC) cannot be used.

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Status Bar Indicator Items

Shown below is a list of indicators displayed on the status bar in the screen.
Current status of this unit is displayed on the bar.

Status bar

■ General

ATT

The attenuator is active.

DUAL

The dual zone function is on.

TEL

Indicates the connection state of the Bluetooth hands-free unit.
• White: Connected
• Orange: Not connected

LOUD

The loudness control function is on.

MUTE

The mute function is active.

■ DVD/CD

FO-REP

Folder repeat function is on.

IN

A disc is inserted.
• White: A Disc is inside the unit.
• Orange: Error at the disc player

VIDEO

Identifies the video file.

MUSIC

Identifies the music file.

RDM

The random function is on.

REP

The repeat function is on.

C-REP

The chapter repeat function is on.

T-REP

The title repeat function is on.

■ VCD

1chLL/2chLL

Identifies the left audio output of channel 1 or 2.

1chLR/2chLR

Identifies the monaural audio output of channel 1 or 2.

1chRR/2chRR

Identifies the right audio output of channel 1 or 2.

1chST/2chST

Identifies the stereo audio output of channel 1 or 2.

LL

Identifies the left audio output.

LR

Identifies the monaural audio output.

RR

Identifies the right audio output.

ST

Identifies the stereo audio output.

PBC

The PBC function is on.

VER1

The VCD version is 1.

VER2

The VCD version is 2.

REP

The repeat function is on.

■ USB/SD

FO-REP

The folder repeat function is on.

VIDEO

Identifies the video file.

MUSIC

Identifies the music file.

PICTURE

Identifies the picture file.

RDM

The random function is on.

REP

The repeat function is on.

■ iPod

MUSIC

Identifies the music file.

VIDEO

Identifies the video file.

RDM

The random function is on.

A-RDM

The album random function is on.

REP

The repeat function is on.

■ Digital Radio

DAB

Digital Radio is being received.

RDS

Radio Data System is being received.

AUTO1

Seek mode is set to AUTO1.

AUTO2

Seek mode is set to AUTO2.

MANU

Seek mode is set to MANUAL.

MC

Receiving service is displayed.
• White: Primary Component is received.
• Orange: Secondary Component is received.

■ Tuner

AUTO1

Seek mode is set to AUTO1.

AUTO2

Seek mode is set to AUTO2.

MONO

The forced monaural function is on.

AF

The AF search function is on.

EON

The Radio Data System station is sending EON.

Lo.S

The Local Seek function is on.

NEWS

News bulletin interruption is in progress.

RDS

Indicates the state of the Radio Data System
station when the AF function is on.
• White: Radio Data System is being received.
• Orange: Radio Data System is not being
          received.

MANU

Seek mode is set to MANUAL.

ST

A stereo broadcast is being received.

TI

Indicates the reception state of traffic
information.
• White: TP is being received.
• Orange: TP is not being received.

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Region Codes in the World

The DVD players are given a region code according to the country or area it is marketed, as shown in the following map.

■ DVD disc marks

ALL
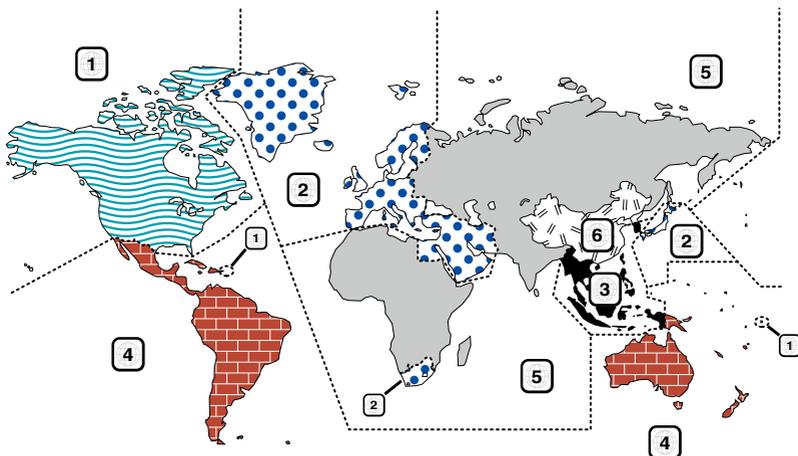
Indicates a region number. The discs with this mark can be played with any DVD player.

8)))

Indicates the number of audio languages recorded. Up to 8 languages can be recorded in a movie. You can select a favorite language.

32

Indicates the number of subtitled languages recorded. Up to 32 languages can be recorded.

9

If a DVD disc has scenes shot from multiple angles, you can select a favorite angle.

16:9 LB
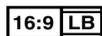
Indicates the type of screen for the image. The left mark indicates that a wide image picture (16:9) is displayed on a standard TV set screen (4:3) with a black band at both the top and bottom of the screen (letter box).

■ Operation regulatory marks

With this DVD, some functions of this unit such as the play function may be restricted depending on the location where the DVD is playing. In this case, the following marks will appear on the screen. For more information, refer to the disc manual.

Prohibition Mark

■ Discs with limited period of use

Do not leave discs with a limited period of use in this unit. If you load an already expired disc, you may not be able to remove it from this unit.

DVD Language Codes

Code	Language
aa	Afar
ab	Abkhazian
af	Afrikaans
am	Amharic
ar	Arabic
as	Assamese
ay	Aymara
az	Azerbaijani
ba	Bashkir
be	Byelorussian
bg	Bulgarian
bh	Bihari
bi	Bislama
bn	Bengali, Bangla
bo	Tibetan
br	Breton
ca	Catalan
co	Corsican
cs	Czech
cy	Welsh
da	Danish
de	German
dz	Bhutani
el	Greek
en	English
eo	Esperanto
es	Spanish
et	Estonian
eu	Basque
fa	Persian
fi	Finnish
fj	Fiji
fo	Faroese
fr	French
fy	Frisian
ga	Irish
gd	Scots Gaelic
gl	Galician
gn	Guarani
gu	Gujarati
ha	Hausa
he	Hebrew
hi	Hindi
hr	Croatian
hu	Hungarian
hy	Armenian

Code	Language
ia	Interlingua
ie	Interlingue
ik	Inupiak
id	Indonesian
is	Icelandic
it	Italian
ja	Japanese
jv	Javanese
ka	Georgian
kk	Kazakh
kl	Greenlandic
km	Cambodian
kn	Kannada
ko	Korean
ks	Kashmiri
ku	Kurdish
ky	Kirghiz
la	Latin
lb	Luxembourgish
ln	Lingala
lo	Laotian
lt	Lithuanian
lv	Latvian, Lettish
mg	Malagasy
mi	Maori
mk	Macedonian
ml	Malayalam
mn	Mongolian
mo	Moldavian
mr	Marathi
ms	Malay
mt	Maltese
my	Burmese
na	Nauru
ne	Nepali
nl	Dutch
no	Norwegian
oc	Occitan
om	(Afan) Oromo
or	Oriya
pa	Punjabi
pl	Polish
ps	Pashto, Pushto
pt	Portuguese
qu	Quechua
rm	Rhaeto-Romance

Code	Language
rn	Kirundi
ro	Romanian
ru	Russian
rw	Kinyarwanda
sa	Sanskrit
sd	Sindhi
sg	Sangho
sh	Serbo-Croatian
si	Singhalese
sk	Slovak
sl	Slovenian
sm	Samoan
sn	Shona
so	Somali
sq	Albanian
sr	Serbian
ss	Siswati
st	Sesotho
su	Sundanese
sv	Swedish
sw	Swahili
ta	Tamil
te	Telugu
tg	Tajik
th	Thai
ti	Tigrinya
tk	Turkmen
tl	Tagalog
tn	Setswana
to	Tongan
tr	Turkish
ts	Tsonga
tt	Tatar
tw	Twi
uk	Ukrainian
ur	Urdu
uz	Uzbek
vi	Vietnamese
vo	Volapuk
wo	Wolof
xh	Xhosa
yo	Yoruba
zh	Chinese
zu	Zulu

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Specifications

■ Monitor section

Picture Size
: DNX7150DAB, DNX715WDAB
: 6.95 inches (diagonal) wide
: 156.6 mm (W) x 81.6 mm (H)
: DNX4150DAB, DNX4150BT, DNX4150BTR
: 6.2 inches (diagonal) wide
:137.5 mm (W) x 77.2 mm (H)

Display System
: Transparent TN LCD panel

Drive System
: TFT active matrix system

Number of Pixels
: 1,152,000 (800H x 480V x RGB)

Effective Pixels
: 99.99 %

Pixel Arrangement
: RGB striped arrangement

Back Lighting
: LED

■ DVD player section

D/A Converter
: 24 bit

Audio Decoder
: Linear PCM/ Dolby Digita/ MP3/ WMA/ AAC

Video Decoder
: MPEG1/ MPEG2/ DivX

Wow & Flutter
: Below Measurable Limit

Frequency Response
• 96 kHz : 20 – 20,000 Hz
• 48 kHz : 20 – 20,000 Hz
• 44.1 kHz : 20 – 20,000 Hz

Total Harmonic Distortion (1 kHz)
: 0.010 % (1 kHz)

S/N Ratio (dB)
: 98 dB (DVD-Video 96 kHz)

Dynamic Range
: 98 dB (DVD-Video 96 kHz)

Disc Format
: DVD-Video/ VIDEO-CD/ CD-DA

Sampling Frequency
: 44.1/ 48/ 96 kHz

Quantifying Bit Number
: 16/ 20/ 24 bit

■ USB interface section

USB Standard
: USB 2.0 High speed

File System
: FAT 16/ 32

Maximum Power Supply Current
: DC 5 V $\dfrac{}{}$ 1 A

D/A Converter
: 24 Bit

Audio Decoder
: MP3/ WMA/ AAC/ WAV/ FLAC

Video Decoder
: MPEG1/ MPEG2/ MPEG4/ WMV/ H.264/ mkv

■ SD (DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT)

SD Standard
: SD / SD-HC

Compatible File System
: FAT 16/ 32

Capacity
: Maximum 32G Byte

Data Transfer Rate
: Maximum 24 Mbps

Audio Decoder
: MP3/ WMA/ AAC/ WAV/ FLAC

Video Decoder
: MPEG1/ MPEG2/ MPEG4/ WMV/ H.264/ mkv

■ Bluetooth section

Technology
: Bluetooth Ver. 3.0+EDR

Frequency
: 2.402 – 2.480 GHz

Output Power
: +4dBm (MAX), 0dBm (AVE), Power Class2

Maximum Communication range
: Line of sight approx. 10m (32.8 ft)

Audio Codec
SBC/ AAC/ MP3

Profile
• HFP (V1.6) (Hands Free Profile)
• SPP (Serial Port Profile)
• A2DP (Advanced Audio Distribution Profile)
• AVRCP (V1.4) (Audio/Video Remote Control Profile)
• HID (Human Interface Device Profile)
• PBAP (Phonebook Access Profile)
• GAP (Generic Access Profile)
• Multi Profile support

■ HDMI/ MHL section

HDMI
: HDMI Type-A

MHL Supported Version
: MHL 2

MHL Maximum Power Supply Current
: DC 5 V ⎓ 900 mA

■ DSP section

Graphics equalizer
DNX7150DAB
Band: 13 Band
Frequency (BAND1 – 13)
: 62.5/ 100/ 160/ 250/ 400/ 630/ 1k/ 1.6k/ 2.5k/ 4k/
6.3k/ 10k/ 16k Hz
DNX715WDAB, DNX4150DAB, DNX4150BT,
DNX4150BTR
Band: 7 Band
Frequency (BAND1 – 7)
: 62.5/ 160/ 400/ 1k/ 2.5k/ 6.3k/ 16k Hz

Gain
: -9/-8/-7/-6/-5/-4/-3/-2/-1/0/1/2/3/4/5/6/7/8/9 dB

X'Over
DNX7150DAB
High pass filter
Frequency: Through, 30/ 40/ 50/ 60/ 70/ 80/ 90/ 100/
120/ 150 / 180/ 220/ 250 Hz
Slope: -6/-12/-18/-24 dB/Oct.
Low pass filter
Frequency: 30/ 40/ 50/ 60/ 70/ 80/ 90/ 100/ 120/
150/ 180/ 220/ 250 Hz, Through
Slope: -6/-12/-18/-24 dB/Oct.
DNX715WDAB, DNX4150DAB, DNX4150BT,
DNX4150BTR
High pass filter
Frequency: Through, 50/ 60/ 80/ 100/ 120/ 150/ 180/
220 Hz
Slope: -6/-12/-18/-24 dB/Oct.
Low pass filter
Frequency: 50/ 60/ 80/ 100/ 120/ 150/ 180/ 220 Hz,
Through
Slope: -6/-12/-18/-24 dB/Oct.

Position
Front / Rear /Subwoofer Delay
: 0 – 6.1 m (0.02 m Step)
Gain
: -8 – 0 dB

Subwoofer level
: -50 – +10 dB

■ FM tuner section

Frequency Range (step)
: 87.5 MHz – 108.0 MHz (50 kHz)

Usable Sensitivity (S/N : 26 dB)
: 0.63 μV/75 Ω

Quieting Sensitivity (S/N : 46 dB)
: 15.2 dBf (1.6 μV/75 Ω)

Frequency Response (± 3.0 dB)
: 30 Hz – 15 kHz

S/N Ratio (dB)
: 75 dB (MONO)

Selectivity (± 400 kHz)
: Over 80 dB

Stereo Separation
: 45 dB (1 kHz)

■ AM tuner section

Frequency Range (step)
LW: 153 – 279 kHz (9 kHz)
MW: 531 – 1611 kHz (9 kHz)

Usable Sensitivity
MW: 25μV
LW: 45μV

■ DAB section (DNX7150DAB,
DNX715WDAB, DNX4150DAB)

Frequency Range
L-BAND: 1452.960 – 1490.624 (MHz)
BAND III: 174.928 – 239.200 (MHz)

Sensitivity
: -100 dBm

S/N Ratio (dB)
: 90 dB

■ Digital Antenna Connector section
(DNX7150DAB, DNX715WDAB,
DNX4150DAB)

Connector type
: SMB

Output Voltage (11 – 16V)
: 14.4 V

Maximum Current
: < 100 mA

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Appendix

■ Video section

Color System of External Video Input
: NTSC/PAL

External Video Input Level (RCA/mini jack)
: 1 Vp-p/ 75 Ω

External Audio Max Input Level (RCA/mini jack)
: 2 V/ 25 kΩ

Video Input Level (RCA jacks)
: 1 Vp-p/ 75 Ω

Video Output Level (RCA jacks)
: 1 Vp-p/ 75 Ω

Audio Output Level (RCA jacks)
: 1.2 V/ 10 kΩ

■ Audio section

Maximum Power (Front & Rear)
: 50 W x 4

Full Bandwidth Power (Front & Rear) (PWR DIN45324, +B=14.4V)
: 30 W x 4

Preout Level (V)
DNX7150DAB
: 5 V/ 10 kΩ
DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR
: 2 V/ 10 kΩ

Preout Impedance
DNX7150DAB
: ≤ 250 Ω
DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR
: ≤ 600 Ω

Speaker Impedance
: 4 – 8 Ω

■ Navigation section

Receiver
: High-sensitivity GPS receiver

Reception Frequency
: 1575.42 MHz (C/A code)

Acquisition Times
Cold : 29 seconds (typ)
(All satellites at -130 dBm Without aiding)

Update Rate
: 1/second, continuous

Accuracy
Position: <2.5 meters, CEP, at -130 dBm
Velocity: 0.1 meter/sec

Position Method
: GPS

Antenna
: External GPS antenna

■ General

Operating Voltage
: 14.4 V (10.5 – 16 V allowable)

Maximum Current Consumption
: 10 A

Installation Dimensions (W x H x D)
DNX7150DAB
: 182 x 112 x 163 mm
DNX715WDAB
: 178 x 100 x 160 mm
 206mm x 104mm x 175mm (Including the sub panel part)
DNX4150DAB, DNX4150BT, DNX4150BTR
: 182 x 112 x 156 mm

Operational Temperature Range
: -10 °C – +60 °C

Weight
DNX7150DAB: 2.6 kg
DNX715WDAB: 2.5 kg
DNX4150DAB, DNX4150BT, DNX4150BTR: 2.0 kg

NOTE
• Although the effective pixels for the liquid crystal panel is given as 99.99% or more, 0.01% of pixels may not light or may light incorrectly.

Specifications subject to change without notice.

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- DivX
  This DivX Certified® device has passed rigorous testing to ensure it plays DivX® video.
  To play purchased DivX movies, first register your device at vod.divx.com. Find your registration code in the DivX VOD section of your device setup menu. See **DivX(R) VOD (P.53)**.

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· **Requirements Aha™:**
iPhone or iPod touch
- Use an Apple iPhone or iPod touch running iOS4 or later.
- Search for "Aha" in the Apple App Store to find and install the most current version of the Aha™ application on your device.

Android™
- Use Android OS 2.2 or later.
- Download the Aha™ application to your smartphone from the Google play.

Note
- In the application on your device, log in and create a free account with Aha.
- Internet connection by 3G, EDGE, or WiFi.
- Because Aha™ is a third-party service, the specifications are subject to change without prior notice. Accordingly, compatibility may be impaired or some or all of the services may become unavailable.
- Some Aha™ functionality cannot be operated from this unit.
- aha, the Aha logo, and the Aha trade dress are trademarks or registered trademarks of HARMAN International Industries, used with permission.

· **About AUPEO!:**
iPhone or iPod touch
- Install the latest version of the AUPEO! application on your iPhone or iPod touch. (Search for "AUPEO!" in the Apple iTunes App Store to find and install the most recent version.)

Android™
- Visit Google play and search for "AUPEO!" to install.

Note
- Ensure you are logged in to your smartphone application. If you do not have an AUPEO! account, you can create one for free from your smartphone or at www.aupeo.com.
- Because AUPEO! is a third-party service, the specifications are subject to change without prior notice. Accordingly, compatibility may be impaired or some or all of the services may become unavailable.
- Some functions of AUPEO! cannot be operated from this unit.
- For issues using the application, contact AUPEO! at www.aupeo.com.
- An active internet connection.

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■ 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.

■ 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.
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.

Pb
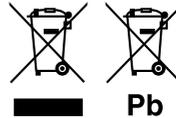
◾ **מידע בדבר השלכה לאשפה של ציוד חשמלי ואלקטרוני ישן וכן סוללות (רלוונטי למדינות שמשתמשות במערכת איסוף אשפה מופרדת).**

לא ניתן להשליך מוצרים וסוללות עם הסימון (פח אשפה עם X עליו) כאשפה ביתית רגילה.

יש למחזר ציוד חשמלי ואלקטרוני ישן וכן סוללות במתקן המסוגל לטפל בפריטים כאלה ובתוצרי הלוואי שלהם.

צרו קשר עם הרשות המקומית לקבלת פרטים אודות מתקן המיחזור הקרוב אליכם. מיחזור והשלכה לאשפה נאותים יעזרו לשמר משאבים ולמנוע השפעות שליליות על בריאותנו ועל הסביבה.

שימו לב: הסימון Pb שמתחת לסימון עבור סוללות מציין שהסוללה מכילה עופרת.

Pb
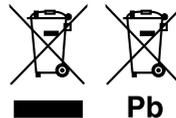
■ DNX4150BTR

Дата изготовления (месяц/год) находится на этикетке устройства.

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Appendix

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C E

Declaration of Conformity with regard to the EMC Directive 2004/108/EC
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 DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

Français
Par la présente JVC KENWOOD déclare que l'appareil DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.

Par la présente, JVC KENWOOD déclare que ce DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR est conforme aux exigences essentielles et aux autres dispositions de la directive 1999/5/CE qui lui sont applicables.

Deutsch
Hiermit erklärt JVC KENWOOD, dass sich dieser DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR in Übereinstimmung mit den grundlegenden Anforderungen und den anderen relevanten Vorschriften der Richtlinie 1999/5/EG befindet. (BMWi)

Hiermit erklärt JVC KENWOOD die Übereinstimmung des Gerätes DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR mit den grundlegenden Anforderungen und den anderen relevanten Festlegungen der Richtlinie 1999/5/EG. (Wien)

Nederlands
Hierbij verklaart JVC KENWOOD dat het toestel DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.

Bij deze verklaat JVC KENWOOD dat deze DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR voldoet aan de essentiële eisen en aan de overige relevante bepalingen van Richtlijn 1999/5/EC.

Italiano
Con la presente JVC KENWOOD dichiara che questo DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

Español
Por medio de la presente JVC KENWOOD declara que el DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.

Português
JVC KENWOOD declara que este DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

Polska
JVC KENWOOD niniejszym oświadcza, że DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR spełnia zasadnicze wymogi oraz inne istotne postanowienia dyrektywy 1999/5/EC.

Český
JVC KENWOOD tímto prohlasuje, ze DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR je ve shode se zakladnimi pozadavky a s dalsimi prislusnymi ustanoveni Narizeni vlady c. 426/2000 Sb.

Magyar
Alulírott, JVC KENWOOD, kijelenti, hogy a jelen DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR megfelel az 1999/5/EC irányelvben meghatározott alapvető követelményeknek és egyéb vonatkozó előírásoknak.

Croatia
Ovim putem tvrtka JVC KENWOOD izjavljuje da je ovaj uređaj DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR ünitesinin, 1999/5/EC Direktifinin başlıca gereksinimleri ve diğer ilgili hükümleri ile uyumlu olduğunu beyan eder.

Svenska
Härmed intygar JVC KENWOOD att denna DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR stär l överensstämelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

Suomi
JVC KENWOOD vakuuttaa täten että DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

Slovensko
S tem JVC KENWOOD izjavlja, da je ta DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR v skladu z osnovnimi zahtevami in ostalimi ustreznimi predpisi Direktive 1999/5/EC.

Slovensky
Spoločnosť JVC KENWOOD týmto vyhlasuje, že DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR spĺňa základné požiadavky a ďalšie prislušné ustanovenia Direktívy 1999/5/EC.

Dansk
Undertegnede JVC KENWOOD erklærer harved, at følgende udstyr DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.

Norsk
JVC KENWOOD erklærer herved at enheten DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR oppfyller grunnleggende krav og andre bestemmelser i direktiv 1999/5/EF.

Ελληνικά
ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ JVC KENWOOD ΔΗΛΩΝΕΙ ΟΤΙ DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.

Eesti
Sellega kinnitab JVC KENWOOD, et see DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR vastab direktiivi 1999/5/EC põhilistele nõudmistele ja muudele asjakohastele määrustele.

Latviešu
Ar šo, JVC KENWOOD, apstiprina, ka DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR atbilst Direktīvas 1999/5/EK galvenajām prasībām un citiem tās nosacījumiem.

Lietuviškai
Šiuo, JVC KENWOOD, pareiškia, kad šis DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR atitinka pagrindinius Direktyvos 1999/5/EB reikalavimus ir kitas svarbias nuostatas.

Malti
Hawnhekk, JVC KENWOOD, jiddikjara li dan DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.

Українська
Компанія JVC KENWOOD заявляє, що цей виріб DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR відповідає ключовим вимогам та іншим пов'язаним положенням Директиви 1999/5/EC.

Türkçe
Bu vesileyle JVC KENWOOD, DNX7150DAB, DNX715WDAB, DNX4150DAB, DNX4150BT, DNX4150BTR ünitesinin, 1999/5/EC Direktifinin başlıca gereksinimleri ve diğer ilgili hükümleri ile uyumlu olduğunu beyan eder.

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KENWOOD