



MONITOR WITH RECEIVER

KW-M960BW

INSTRUCTION MANUAL

JVCKENWOOD Corporation

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

Made for
 iPhone | iPod

 Works with
Apple CarPlay

android
auto



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Contents

Before Use 6

Precautions.....	6
How to read this manual	6

Basic Operations 7

Functions of the Buttons on the Front Panel ...	7
Turning on the Unit	8
Initial Settings.....	8
Adjusting the volume	11
Touch screen operations	11
Popup menu	12
HOME screen descriptions.....	13
Source selection screen description.....	13
Source control screen descriptions	16
List screen	17

Widget 18

Widget Basic Operation	18
Photo Frame Widget	18
Widget SETUP	19

APPS 20

Apple CarPlay Operation	20
Android Auto™ Operation	22
Wireless Mirroring Operation.....	25
USB Mirroring Operation.....	26

USB 28

Connecting a USB device	28
USB Basic Operation.....	28
Search Operation.....	30

iPod/iPhone 31

Preparation	31
iPod/iPhone Basic Operation	32
Search Operation.....	33

Tuner 34

Tuner Basic Operation	34
Memory Operation	35
Selecting Operation	35
Traffic Information	36
Tuner SETUP	36

Other External Components 37

View Camera	37
External audio/video players (AV-IN).....	39
Using the external navigation unit	39
TV tuner	40

Bluetooth Control 41

Information for using Bluetooth® devices.....	41
Register the Bluetooth device	42
Bluetooth Setup.....	43
Playing the Bluetooth Audio Device	45
Using the Hands-Free Unit.....	47
Hands-Free Setup.....	52

Setup 53

Monitor Screen Setup.....	53
System Setup	53
User Interface Setup.....	54
Special Setup	57
Display Setup	57
AV Setup	59

Controlling Audio 61

3-way speaker system setup	61
Speaker / X'over setup	62
Controlling General Audio	64
Equalizer Control	64
Volume Offset	65
Zone Control	66
Sound Effect	67
Listening Position / DTA	68
Audio Setup memory	70

Remote control 71

Functions of the Remote control Buttons	71
---	----

Connection/Installation 73

Before Installation	73
Installing the unit	75

Troubleshooting 80

Problems and Solutions	80
Error Messages	80

Appendix 82

Playable Media and Files.....	82
Specifications.....	83
About this Unit.....	85

Before Use

Precautions

▲ WARNINGS

■ 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 metallic 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 JVC dealer.

■ Precautions on using this unit

- When you purchase optional accessories, check with your JVC dealer to make sure that they work with your model and in your area.
- You can select a language to display menus, audio file tags, etc. See **User Interface Setup (P.54)**.
- The Radio Data System or Radio Broadcast Data System feature won't work in areas 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 a 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 it with a cloth moistened with neutral cleaner, then wipe it again with a clean soft dry cloth.

NOTE

- Applying spray cleaner directly to the unit may damage 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 the screened print.

■ Acquiring GPS signal

The first time you turn on this unit, you must wait while the system acquires satellite signals for the first time. This process could take up to several minutes. Make sure your vehicle is outdoors in an open area away from tall buildings and trees for fastest acquisition.

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

■ About GLONASS

This unit uses Global Navigation Satellite System (GLONASS) in addition to GPS.

Combining GPS and GLONASS can refine positioning accuracy than using GPS only.

■ Caution for Smartphone Users

Simultaneously running multiple applications on your smartphone while screen sharing places heavy demand on the microprocessor of the phone, potentially affecting communication and performance.

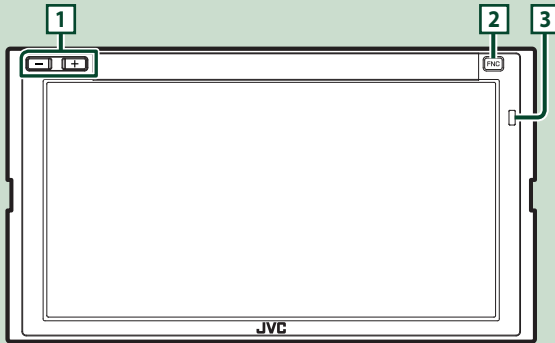
For best results while pairing with your JVC receiver, please be sure to close any unused applications.

How to read this manual

- The screens and panels shown in this manual are examples used to provide a clear explanation of operations. For this reason, they may be different from the actual screens or panels, or some display patterns may be different from the actual ones.
- **Display language:** English is used for the purpose of explanation. You can select a display language from the **SETUP** menu. See **User Interface Setup (P.54)**.

Basic Operations

Functions of the Buttons on the Front Panel



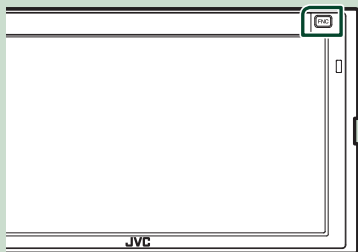
NOTE

- The panels shown in this manual are examples used to provide a clear explanation of operations. For this reason, they may be different from the actual panels.

Number	Name	Motion
1	-, + (Volume)	<ul style="list-style-type: none"> Adjusts the volume. The volume will go up to 15 when you keep pressing +. (P.11)
2	FNC	<ul style="list-style-type: none"> Displays the popup menu screen. Pressing for 1 second starts the voice recognition function (P.49). While Apple CarPlay or Android Auto is connected, starts the function on the Apple CarPlay or the Android Auto screen. When neither Apple CarPlay, Android Auto, nor a Bluetooth Hands-Free phone is connected, pressing and holding displays Bluetooth pairing waiting dialog. (P.42) When the power is off, turns the power on.
3	Remote Sensor	<ul style="list-style-type: none"> Receives the remote control signal.

Turning on the Unit

- 1 Press the **FNC** button.



► The unit is turned on.

NOTE

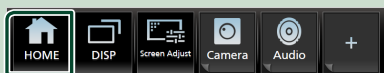
- If it is your first time to turn the unit on after installation, it will be necessary to perform Initial SETUP (P.8).

● To turn off the unit:

- 1 Press the **FNC** button.

► Popup menu appears.

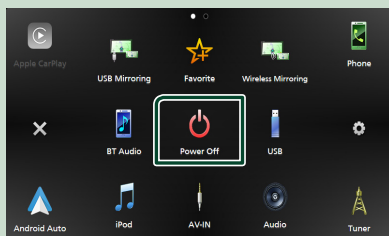
- 2 Touch .



► HOME screen appears.

- 3 Touch .

- 4 Touch **Power Off**.

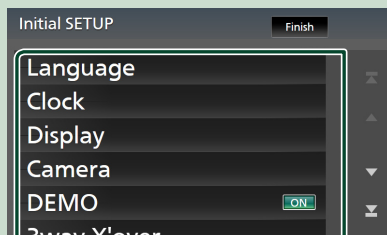


Initial Settings

Initial SETUP


Perform this setup when you use this unit first time.

- 1 Set each item as follows.



■ Language

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

- ① Touch **Language**.
- ② Touch **Language select**.
- ③ Select the desired language.
- ④ Touch .

For details, see **User Interface Setup (P.54)**.

■ Clock


Sets the synchronization of the clock and adjusts it.

For details, see **Calendar/clock settings (P.10)**.

■ Display

Set the display dimmer mode.


If it is hard to see the image on the screen even, adjust the viewing angle.

- ① Touch **Display**.
- ② Touch **Viewing Angle**.
- ③ Select a viewing angle.
- ④ Touch .

For details, see **Display Setup (P.57)**.

■ Camera

Set the parameters for the camera.

- ① Touch **Camera**.
- ② Set each item and touch .

For details, see **Camera Setup (P.37)**.

■ DEMO

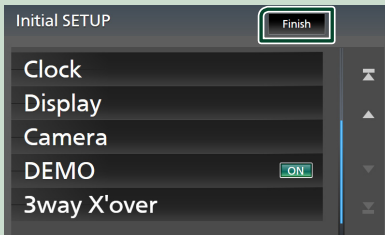
Set the demonstration mode. Default is "ON".

■ 3way X'over

Displays the message screen.

For details, see **3-way speaker system setup (P.61)**.

2 Touch Finish.



NOTE

- These settings can be made from the SETUP menu. See **Setup (P.53)**.

Security Code Setup

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

When the Security Code function is activated, the code cannot be changed and the function cannot be deactivated. Note that the Security Code can be set with a 4 to 8 digit number of your choice.

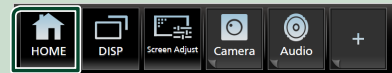
Preparation

- Set **DEMO** to **OFF** in the Special screen. (**P.57**)

1 Press the **FNC** button.

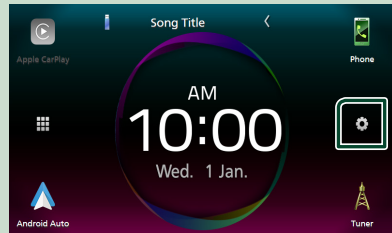
- Popup menu appears.

2 Touch .



- HOME screen appears.

3 Touch .



4 Touch **Security**.

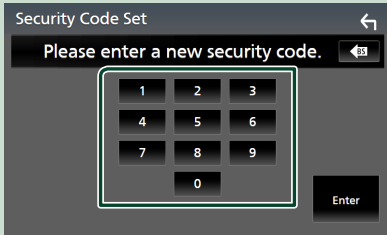


- Security screen appears.

5 Touch **Security Code Set** on the Security screen.

- Security Code Set screen appears.

- 6 Enter a security code with 4 to 8 digits and touch **Enter**.



- 7 Enter the same code again and touch **Enter**.
Now, your security code is registered.

NOTE

- Touch **BS** to delete the last entry.
- If you enter a different security code, the procedure returns to step 6 (for first code entry).
- If you have disconnected the Receiver from the battery, enter the correct security code as that you have entered in step 6 and touch **Enter**. You can use your receiver.


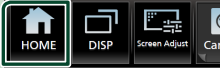
To change the security code:

- 1 Touch **Security Code Change** on the Security screen.
➤ Security Code Set screen appears.
- 2 Enter the current registered security code and touch **Enter**.
- 3 Enter a new security code with 4 to 8 digit number and touch **Enter**.
- 4 Enter the same code again and touch **Enter**.
The new security code is registered.

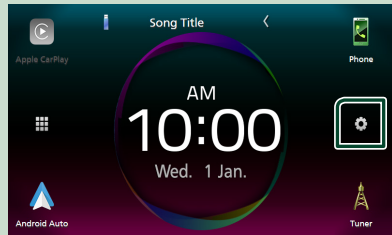
To clear the security code:

- 1 Touch **Security Code Cancellation** on the Security screen.
➤ Security Code Set screen appears.
- 2 Enter the current registered security code and touch **Enter**.
The security code is cleared.

Calendar/clock settings

- 1 Press the **FNC** button.
➤ Popup menu appears.
- 2 Touch .

➤ HOME screen appears.

- 3 Touch .



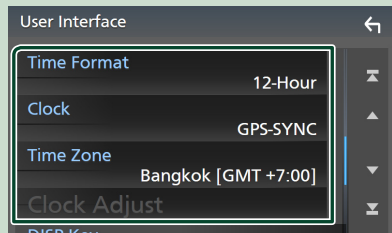
- 4 Touch **User Interface**.



➤ User Interface screen appears.

- 5 Touch **Time Zone**.
- 6 Select the time zone.
- 7 Set each item as follows.

Scroll the page to show hidden items.



■ Time Format

Select the time display format.

12-Hour (Default)/ **24-Hour**

■ Clock

GPS-SYNC (Default): Synchronizes the clock time with the GPS.

Manual: Set the clock manually.

■ Time Zone

Select the time zone.

■ Clock Adjust

If you select **Manual** for Clock, adjust the date and time manually. **(P.56)**

NOTE

- Please set the date and time. If they are not set, some functions may not work.

Adjusting the volume

You can adjust the volume (0 to 40).

Press **+** to increase, and press **-** to decrease.

Holding **+** increases the volume continuously to level 15.

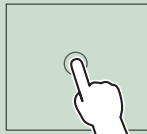


Touch screen operations

To perform operations on the screen, you need to touch, touch and hold, flick or swipe to select an item, display a setting menu screen or change pages.

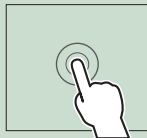
● Touch

Touch the screen gently to select an item on the screen.



● Touch and hold

Touch the screen and keep your finger in place until the display changes or a message is displayed.



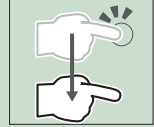
● Flick

Slide your finger quickly to the left or right on the screen to change the page. You can scroll a list screen by flicking up/down on the screen.



● Swipe

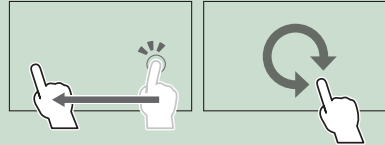
Slide your finger up or down on the screen to scroll the screen.



Gesture Touch Control:

You can also control playback by moving your finger on the touch panel as follows (for some sources, the gesture touch control function is not available).

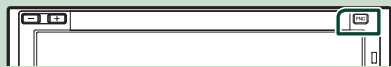
- Sliding the finger upward/downward: Equivalent to the operation of pressing **+** / **-** (Media). Tuner Preset broadcast stations are switched.
- Sliding the finger leftward/rightward: Equivalent to the operation of pressing **◀** / **▶**.
- Moving your finger clockwise or counter-clockwise: Increases/decreases the volume.



On the HOME screen, you can control the widget by sliding two fingers. **(P.18)**

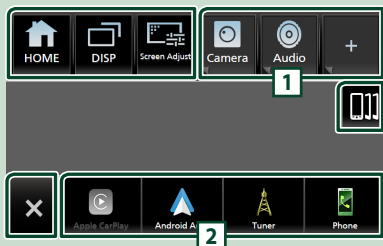
Popup menu

- 1 Press the **FNC** button.



➤ Popup menu appears.

- 2 Touch to display the popup menu.

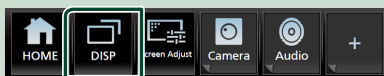


The contents of the menu are as follows.

	• Displays the HOME screen. (P.13)
	• Switches between screens. The screen to be switched to depends on the DISP Key setting on the User Interface screen. (P.54) • Touch and hold to turns the screen off.
	• Displays the Screen Adjustment screen. (P.53)
	• Close the popup menu.
	• Displays the Android Auto device list. This icon appears only when Android Auto is connected and two or more devices can be used as Android Auto source.
1	<ul style="list-style-type: none"> • Function key1 to 3: The current screen changes to the one you have set. The function key 1 and 2 are set to Camera and Audio function as default. For the function setting, refer to Customize popup menu functions (P.56). <ul style="list-style-type: none"> – : Displays the view camera screen. (P.37) – : Displays the Audio screen. (P.61) • Touch and hold to display the Customize FNC Menu screen. (P.56)
2	<ul style="list-style-type: none"> • Short-cut source icons: The source changes to the one you have set with a short-cut. For the short-cut setting, refer to Customize Short-cut source icons on HOME screen (P.15).

Turn off the screen

- 1 Touch and hold **DISP** on the popup menu.



NOTE

- Touch the display to turn on the screen.
- To display the clock while the screen is off, it is necessary to set "OSD Clock" to "ON". **(P.57)**

HOME screen descriptions

Most functions can be performed from the HOME screen.




- | | |
|---|---|
| 1 | • Short-cut playback source icons (P.14) |
| 2 | • Current source information.
• Touch to display the control screen of the current source. |
| 3 | • Displays the source selection screen. (P.14) |
| 4 | • Widget (P.18)
– You can change the display to big or split widget mode by sliding 2 fingers upward/downward. |
| 5 | • Displays the SETUP screen. (P.53) |

Display the HOME screen

- 1 Press the **FNC** button.



➤ Popup menu appears.

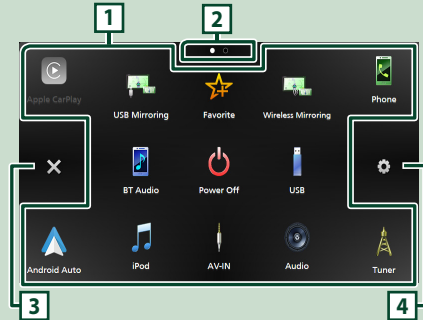
- 2 Touch .



➤ HOME screen appears.

Source selection screen description

You can display icons of all playback sources and options on the source selection screen. To change pages, flick your finger leftward/rightward on the screen.



- | | |
|---|---|
| 1 | • Changes playback sources.
For playback sources, see Select the playback source (P.14) . |
| 2 | • Page indication |
| 3 | • Returns to the previous screen. |
| 4 | • Displays the SETUP screen. (P.53) |

Select the playback source

1 Press the **FNC** button.





➤ Popup menu appears.

2 Touch .

➤ HOME screen appears.

3 Touch .

From the screen, you can select the following sources and functions.

	• Switches to the Apple CarPlay screen from the connected iPhone. (P.20)
	• Switches to the Android Auto screen from the connected Android smartphone. (P.22)
	• Displays the Hands Free screen. (P.47) When neither Apple CarPlay, Android Auto, nor a Bluetooth Hands-Free phone is connected, displays Bluetooth pairing waiting dialog. *1 (P.42)
	• Switches to the Radio broadcast. (P.34)
	• Plays a Bluetooth audio player. (P.45)
	• Plays an iPod/iPhone. (P.31)
	• Plays files on a USB device. (P.28)
	• Switches to an external component connected to the AV-IN input terminal. *2 *4 (P.39)
	• Displays the Wireless Mirroring screen. (P.25)
	• Switches to the USB Mirroring screen from the connected iPhone/Android smartphone. (P.26)
	• Displays the Audio screen. (P.61)
	• Displays the screen you have set in the Customize Favorite Key screen. (P.55) • Touch and hold to display the Customize Favorite Key screen. *3
	• Turns off the AV source. (P.15)
	• Turns off the unit. (P.8)

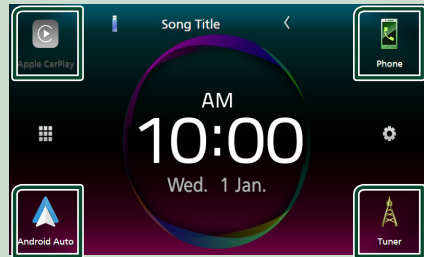
*1 When connecting as Apple CarPlay or Android Auto, it works as a phone provided in Apple CarPlay or Android Auto. If Apple CarPlay or Android Auto are connected during talking by the Bluetooth device, the current call will be continued.

*2 This can be selected when the AV-IN is set to **NONE** on the Camera Assignment Setting screen.

*3 This function is enabled on the HOME screen.

*4 When **TV Tuner Control (P.60)** is set to "ON", the AV-IN source will change to the TV source.

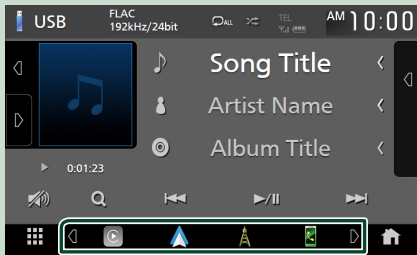
To select the playback source on the HOME screen




The 4 items displayed on the source selection screen with large icons are shown on the HOME screen.



You can change the items displayed on this area by customizing the source selection screen. **(P.15)**

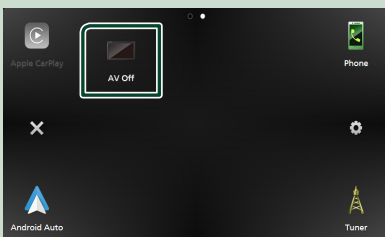
To select the playback source on the source control screen



Display source selection keys by touching  or flicking left or right on the source control screen, then select a playback source.



To turn off the AV source

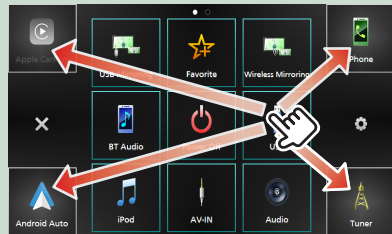
- 1 Press the **FNC** button.
 - ▶ Popup menu appears.
- 2 Touch .
 - ▶ HOME screen appears.
- 3 Touch .
- 4 Touch **AV Off**.



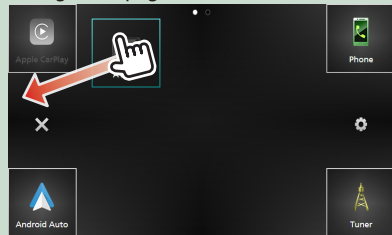
Customize Short-cut source icons on HOME screen

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

- 1 Press the **FNC** button.
 - ▶ Popup menu appears.
- 2 Touch .
 - ▶ HOME screen appears.
- 3 Touch .
- 4 Touch and hold the icon which you want to move in the customizing mode.
- 5 Drag the icon to the desired position.



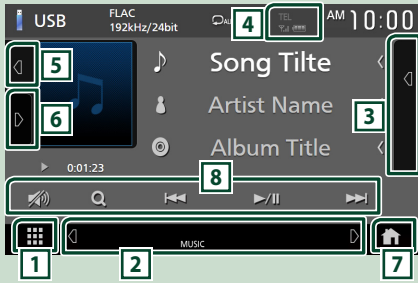
Changes the page



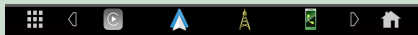
Source control screen descriptions

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

Indicators



Short-cut source icons



1 All sources icon

Displays the source selection screen. (P.14)

2 Secondary screen

- : The Secondary screen changes to another one every time you touch it. You can also change the Secondary screen by flicking left or right on the screen.
- Indicators: Displays the current source condition and so on.
 - **ATT**: The attenuator is active.
 - **DUAL**: The dual zone function is active.
 - **LOUD**: The loudness control function is active.
- Short-cut source icons: The source changes to the one you have set with a short-cut. For the short-cut setting, refer to **Customize Short-cut source icons on HOME screen (P.15)**.

3 Content list

Displays the track/file/station/channel list.

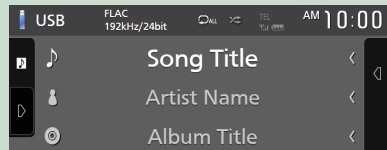
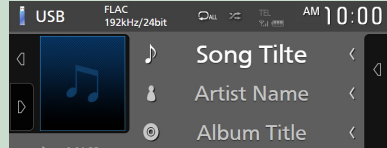


Connected Bluetooth device information.

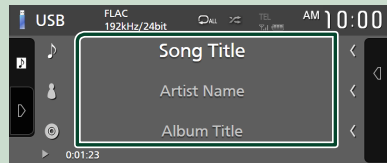
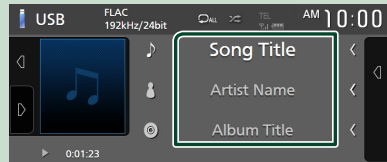
5 Artwork & information

You can select whether to display an artwork and song information or only song information in more detail.

Touching the artwork area switches to the VU meter. (The USB, iPod, Bluetooth audio sources only)



Change the text size of song information smaller when the “Small Audio Text” is set to “ON” in the User Interface screen. (P.54)



6 Function panel

Touch the left side of the screen to display the function panel. Touch again to close the panel.

7 HOME key

Displays the HOME screen. (P.13)

8 Operation keys

You can operate the current source with these operation keys. The available functions are different depending on the source type.

List screen

There are some common function keys in the list screens of most sources.
(P.30, 33, 47)

Display the list screen

For USB/iPod:

- 1 Touch **Q** or the item listed on the information area in the source control screen.

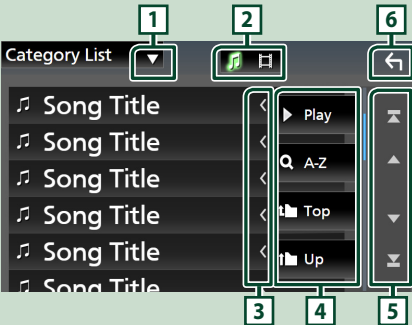
➤ The list screen appears.

For Bluetooth audio:

- 1 Touch **Q**.

➤ The list screen appears.

You can use following operation keys from this screen.



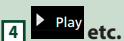
Displays the list type selection window.



Displays a music/movie file list.



Scrolls the displayed text.



Keys with various functions are displayed here.

- **Play**: Plays all tracks in the folder containing the current track.
- **A-Z**: Jumps to the letter you entered (alphabetical search).
- **Top** **Up**: Moves to the upper hierarchy level.



You can change pages to display more items by touching .

- : Displays the top or bottom page.



Returns to the previous screen.

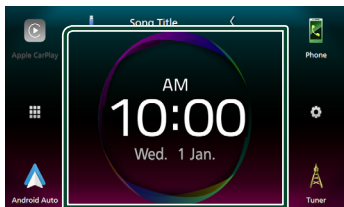
NOTE

- Depending on the current source or mode, some function key may not appear.

Widget

Widget Basic Operation

Big widget



Split widget



Widget list

- Clock/Spectrum analyzer Widget
- Current source information Widget
- Compass Widget
- VU meter Widget
- Photo Frame Widget

● To change the widget style

Touch the widget area. You can change the displayed information or design.

● To change the widget

Slide two fingers leftward/rightward.

When the split widget mode is selected, you should put the fingers on each of the windows before slide.



● To change the widget format

Slide two fingers upward/downward to switch between the big and the split widget mode.

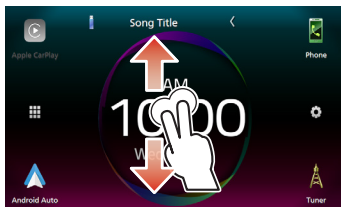


Photo Frame Widget

You can display a slideshow of the image files stored in the USB memory on the HOME screen.

Preparation

- Select "ON" for Photo Frame Widget in the Widget SETUP screen. (P.19)

● Acceptable Picture files



	Max. Picture size
JPEG (.jpg, .jpeg) *	5,000 × 5,000
PNG (.png)	1,000 × 1,000
BMP (.bmp)	1,000 × 1,000

- This unit can only play back files which are less than 50 MB.
- The maximum number of files per device is 500.
- Picture files may not be played depending on their condition.

* A progressive format is not supported.


Widget SETUP

Set up the widget on the HOME screen.


- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **User Interface**.



➤ User Interface screen appears.

- 5 Touch **Widget SETUP** in the User Interface screen.
- 6 Set each item as follows.
 - **Photo Frame Widget**
Determine whether to use the photo frame widget.
"ON" (Default)/"OFF"
 - **Photo Frame SETUP**
Make settings related to photo play display.
- 7 Touch .

To Photo Frame Setup

- 1 Touch **Photo Frame SETUP** on the Widget SETUP screen.
- 2 Set each item as follows.
 - **Sort Order**
Specify a file sorting criterion.
"By Name(Ascending)"/
"By Name(Descending)"/
"By Date(Newest First)" (Default)/
"By Date(Oldest First)"
 - **Slide Show Interval**
Specify the slideshow interval.
"5" (Default) to "30" seconds
 - **Photo Frame is**
Display help topics about the photo frame widget.
- 3 Touch .

APPS

Apple CarPlay Operation

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

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

Compatible iPhone devices

You can use Apple CarPlay with the following iPhone models.

- iPhone XS Max
- iPhone XS
- iPhone XR
- iPhone X
- iPhone 8 Plus
- iPhone 8
- iPhone 7 Plus
- iPhone 7
- iPhone SE
- iPhone 6s Plus
- iPhone 6s

Connecting an iPhone

Preparation

- To register an iPhone by the connection via the USB (Black) terminal
 - Connect an iPhone via the USB (Black) terminal and operate the iPhone according to the confirmation messages displayed on the iPhone. The iPhone is registered in **Apple CarPlay Device List**. Removing the iPhone from the USB (Black) terminal and selecting the registered iPhone from **Apple CarPlay Device List**, the iPhone will be connected wirelessly.
- To register an iPhone by the connection via Bluetooth
 - Touching  on the **Apple CarPlay Device List** screen (P.21), displays Bluetooth pairing waiting dialog. Referring to **Register the Bluetooth device (P.42)** and registering the iPhone, the iPhone will be connected wirelessly.

Wired connection

1 Connect your iPhone using KS-U62 via the USB (Black) terminal. (P.78)

When an iPhone compatible with Apple CarPlay is connected to the USB (Black) terminal, the Bluetooth Hands-Free phone currently connected is disconnected.

2 Unlock your iPhone.

Wireless connection

You can select the iPhone registered as the Bluetooth device from **Apple CarPlay Device List** and use it as the Apple CarPlay device.

1 Press the FNC button.

- Popup menu appears.

2 Touch .

- HOME screen appears.

3 Touch .

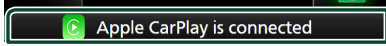
4 Touch **Apple CarPlay**. (P.14)

NOTE

- Turn on the Bluetooth function and Wi-Fi function of an iPhone.
- If two or more iPhones have been registered, select the iPhone to be used as the **Apple CarPlay** source. (P.21)
- You can also select the iPhone registered in **Apple CarPlay Device List (P.21)** even when the **Apple CarPlay** icon is not activated on the source selection screen.
- It is necessary to connect the GPS antenna and the speed pulse input in order to use a wireless Apple CarPlay.
- When the Wi-Fi connection becomes unavailable, the HOME screen is displayed.
- You cannot use Apple CarPlay if the iPhone's screen recording function is enabled.

To switch the current screen to the Apple CarPlay screen when connecting your iPhone

- Touch **Apple CarPlay** icon on the source selection screen. (P.14)
- Touch the following connection message if the message appears.





NOTE

- The connection message appears when;
 - The iPhone you used previously is connected again.
 - The screen other than HOME and the source selection screen is displayed.
- The connection message is displayed for about 5 seconds.

Select an Apple CarPlay device

If two or more iPhones compatible with Apple CarPlay have been registered, select the iPhone to be used as the Apple CarPlay source.

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **AV**.






- AV screen appears.

5 Touch Apple CarPlay Device List.

6 Select a device.

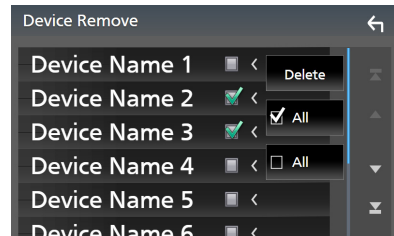
The Apple CarPlay device connected via the USB and the registered Apple CarPlay devices ready for wireless connection are displayed.



-  : Displays a Bluetooth pairing waiting dialog. For details, see **Register the Bluetooth device (P.42)**.
-  : Displays confirmation message to disconnect the device.
-  : Displays Device Remove screen. (P.21)

To delete the registered Apple CarPlay device

- 1 Touch .
- 2 Touch the device name to check.



- **ALL**
Selects all Apple CarPlay devices.
- **ALL**
Clears all check marks.

- 3 Touch **Delete**.
 - Confirmation message appears.
- 4 Touch **Yes**.
 - All the selected device(s) is deleted.

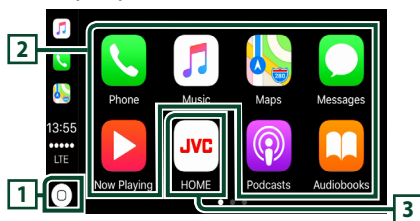
NOTE

- This operation also deletes the same device(s) from the Bluetooth device list screen. (P.44)

Operation keys and available Apps on the home screen of Apple CarPlay

You can use the Apps of the connected iPhone. The items displayed and the language used on the screen differ among the connected devices.

To enter the Apple CarPlay mode, touch **Apple CarPlay** icon on the source selection screen. (P.14)



- 1 *
 - Displays the home screen of Apple CarPlay.
 - Touch and hold to activate Siri.

2 Application keys

Starts the application.

3 HOME

Exits the Apple CarPlay screen and displays the HOME screen.

*The icon design may change depending on the iOS version.

To exit the Apple CarPlay screen

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.

Use Siri

You can activate Siri.

- 1 Press the **FNC** button for 1 second.



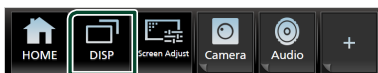
- 2 Talk to Siri.

To deactivate

- 1 Press the **FNC** button.

Switch to the Apple CarPlay screen while listening to another source

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch **DISP**.



NOTE

- This operation is available when **DISP Key** is set to **Mirroring** on the User Interface screen. (P.54)
- When listening to another source with the Apple CarPlay screen displayed, playing music in the Apple CarPlay mode will switch the current source to the Apple CarPlay source.

Android Auto™ Operation

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

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

Compatible Android smartphones

You can use Android Auto with Android smartphones of Android version 5.0 or later. For Wi-Fi connection, Android 8.0 or later.

NOTE

- Android Auto may not be available on all devices and may not be available in all countries or regions.

● About the placement of smartphone

Install the smartphone connected as Android Auto device in the place where it can receive the GPS signals.

When using the Google Assistant, install the smartphone in the place where the smartphone easily catch a voice by the microphone.

NOTE

- Do not put the smartphone in a spot exposed to direct sunlight or near an air blowing out port of an air conditioner. The placement of the smartphone in such places can lead to malfunction or damage of your smartphone.
- Do not leave the smartphone in the vehicle.

Connect Android smartphone

Wired connection

1 Connect an Android smartphone via the USB terminal. (P.79)

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

When an Android smartphone compatible with Android Auto is connected to the USB terminal, the device is connected via Bluetooth automatically, and the Bluetooth Hands-Free phone currently connected is disconnected.

2 Unlock your Android smartphone.

3 Press the **FNC** button.

➤ Popup menu appears.

4 Touch .

5 Touch .

6 Touch **Android Auto**. (P.14)

Wireless connection

When the Android smartphone is ready for wireless connection, connecting it via the USB registers Bluetooth and Wi-Fi automatically. Thus, the registered Android smartphone will be able to be connected wirelessly to be used as an Android Auto source.

1 Press the **FNC** button.

➤ Popup menu appears.

2 Touch .

3 Touch .

4 Touch **Android Auto**. (P.14)

NOTE

- Turn on the Bluetooth function and Wi-Fi function of Android smartphone.
- If two or more Android smartphones have been registered, select the Android smartphone to be used as the Android Auto source. (P.23)
- To change the password for wireless connection manually, refer to **Reset Android Auto Wireless Connection** (P.60).
- When the Wi-Fi connection becomes unavailable, the HOME screen is displayed.

Select an Android smartphone

If two or more Android smartphones have been registered, select the Android smartphone to be used as the Android Auto source.

1 Press the **FNC** button.

➤ Popup menu appears.

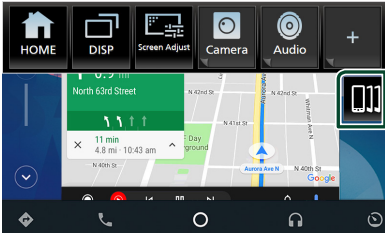
2 Touch .

3 Touch .

4 Touch **Android Auto**. (P.14)

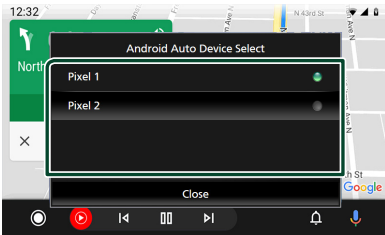
5 Press the **FNC** button.

6 Touch .



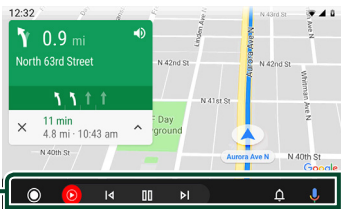
7 Select an Android smartphone.

The registered Android smartphones ready for wireless connection and the Android smartphone connected via the USB are displayed.



 **Operation keys and available Apps on the Android Auto screen**


You can perform the operations of the Apps of the connected Android smartphone. The items displayed on the screen differ among the connected Android smartphones. To enter the Android Auto mode, touch the **Android Auto** icon on the source selection screen. (P.14)



1 Application/information keys

Starts the application or displays information.

To exit the Android Auto screen

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.

 **Using voice control**

- 1 Press the **FNC** button for 1 second.



To cancel

- 1 Press the **FNC** button.

 **Switch to the Android Auto screen while listening to another source**

- 1 Press the **FNC** button.
 - Popup menu appears.

- 2 Touch **DISP**.



NOTE



- This operation is available when **DISP Key** is set to **Mirroring** on the User Interface screen. (P.54)
- When listening to another source with the Android Auto screen displayed, playing music in the Android Auto mode will switch the current source to the Android Auto source.

Wireless Mirroring Operation

You can display the same screen of the Android smartphone on the monitor of the unit using the Wireless Mirroring function of the Android smartphone.

Preparation



- You can use the Wireless Mirroring function with Android smartphones compatible with this function.
- This function may be called Wireless Display, Screen Mirroring, AllShare Cast, etc., depending on the manufacturer.
- The settings on the Android smartphone differ depending on the device type. For details, refer to the instruction manual supplied with your Android smartphone.
- If your Android smartphone is locked, Mirroring screen may not appear.
- If the Android smartphone is not ready for UIBC, you cannot perform touch operation.

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
- 4 Touch **Wireless Mirroring . (P.14)**
 - The App screen is displayed.
- 5 Operate your Android smartphone to activate the Wireless Mirroring function, then connect to this unit.
- 6 Select "KW-M960BW" as the network to use.
 - When the connection is established, then the same screen displayed on the Android smartphone is displayed.

NOTE

- Apps is discontinued when the power is turned ON/OFF or you leave the vehicle. To restart Apps, operate the Android smartphone.
- When the Apps source is displayed, you cannot register or reconnect a Bluetooth device. Switch the Apps source to another source, and then operate the Bluetooth device.

Change the device name

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **AV**.
 - AV screen appears.
- 5 Touch **Wi-Fi SETUP**.
- 6 Touch **Device Name**.
 - Change Device Name screen appears.
- 7 Touch and hold .
- 8 Input the device name.



➤ AV screen appears.



- 9 Touch **Enter**.

USB Mirroring Operation

With Mirroring for JVC application installed on your smartphone, you can display the screen of your smartphone on the screen of this unit and listen to either the audio of your smartphone or current source of this unit. You may access your smartphone from this unit.

You can use the USB Mirroring function with your smartphone compatible with this function.

Compatible devices

- Android smartphone
 - Bluetooth support
 - Android version 5.0 or later
 - Linux Kernel version 3.5 or later
- iPhone
 - Bluetooth support
 - iOS version 11 or later

Preparation

- Install the latest version of the Mirroring for JVC application and activate the application on your smartphone.

Android smartphone: Search for "Mirroring for JVC" in Google Play to find and install the most recent version.

iPhone: Search for "Mirroring for JVC" in Apple App Store to find and install the most recent version.

Mirroring for JVC application is a free application. You can check "how to" tutorial in Mirroring for JVC application.

Connect the device

Screen is mirrored through USB (Black) terminal connection while audio is shared via Bluetooth connection between this unit and your smartphone.

For Android smartphones:

- 1** Pair your Android smartphone with this unit via Bluetooth. See *Register the Bluetooth device (P.42)*.

Select **A2DP/SPP Audio/App**.

- 2** Press the **FNC** button.

- 3** Touch .

- 4** Touch .

- 5** Touch **USB Mirroring**. (P.14)

- 6** Connect your Android smartphone via the USB (Black) terminal. (P.79)

When you use Mirroring for JVC application for the first time, the terms of service are displayed. It is necessary to agree to the terms of service to use this function.

For iPhone:

- 1** Pair your iPhone with this unit via Bluetooth. See *Register the Bluetooth device (P.42)*.

Select **A2DP/SPP Audio/App**.

- 2** Touch "Mirroring for JVC" and start broadcast.

- 3** Press the **FNC** button.

- 4** Touch .

- 5** Touch .

- 6** Touch **USB Mirroring**. (P.14)

- 7** Connect your iPhone using **KS-U62** via the USB (Black) terminal. (P.78)

- 8** Operate your iPhone to complete followings.







- Launch "Settings", then touch "Control Center" and then "Customize Controls".
- Touch "Screen Recording" and add to "INCLUDE" list.
- Launch "Control Center" of your iPhone, then touch and hold Screen Recording icon.

NOTE

- USB (Gray) terminal does not support USB Mirroring.
- You cannot use the Bluetooth and iPod sources at the same time with Mirroring for JVC application.
- OSD lock is not shown on the mirroring screen of this unit regardless of the setting made for **OSD Lock (P.58)**.
- Depending on the connected Android smartphone, you may need to enable virtual keyboard setting on your smartphone to display software keyboard on the screen of this unit and on your smartphone.
- Mirroring for JVC application is discontinued by the following operations if you use the application with an iPhone:
 - Receiving an incoming call
 - iPhone's screen recording function is stopped
 - iPhone screen is turned off
 To resume the mirroring operation, disconnect the iPhone from the USB Audio cable, and try connecting it again.
- The audio may be of poor quality, interrupted or skipped, depending on several conditions such as network condition, the application and etc.
- If you perform pairing with another device during mirroring, mirroring (audio and/or video) will be disturbed or paused.
- Some applications may not support audio sharing.
- Some operations may not work depending on the compatibility between this unit, Mirroring for JVC application and your smartphone.


Operation keys on the mirroring screen

On the USB mirroring screen, the following virtual hard keys are available. The keys are hidden when no operation is done for about 5 seconds. You can display back them anytime by touching the screen.

-  : Changes the virtual hard keys position shown on the screen of this unit.
- : Returns to home page.
- : Closes the virtual hard keys.
- : Shows the recent applications (Android only).
- : Returns to the previous page (Android only).

NOTE

- These keys differ depending on the connected device and may differ from the function operated from the device.
- These keys can be displayed even if there is no hard key on the connected device.


Disconnect mirroring

You can disconnect mirroring by disconnecting your smartphone from the USB (Black) terminal from the rear panel.

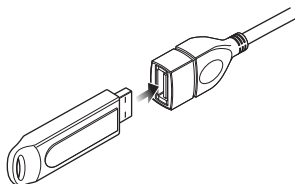
NOTE



- Once you disconnect from mirroring operations, stop broadcast on iPhone's screen recording function. Otherwise "iPod" source and "Bluetooth" source may not work correctly.

USB


Connecting a USB device

- 1 Connect the USB device with the USB cable. (P.78)



- 2 Press the **FNC** button.
 - Popup menu appears.
- 3 Touch .
 - HOME screen appears.
- 4 Touch .
- 5 Touch **USB**. (P.14)

Disconnect the USB device

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch a source other than **USB**.
- 4 Detach the USB device.

Usable USB device

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

The word “USB device” appearing in this manual indicates a flash memory device.

● About the file system

The file system should be the one of the following.

- FAT16
- FAT32
- exFAT
- NTFS

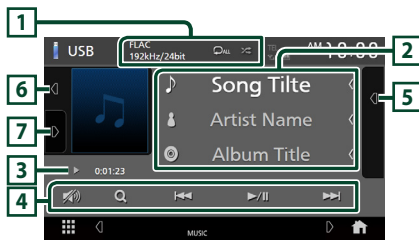
NOTE

- 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.

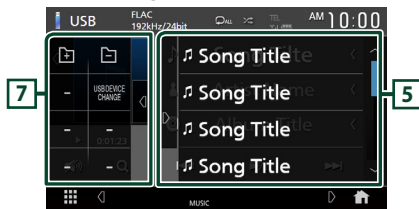
USB Basic Operation

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

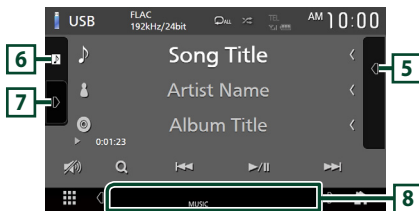
Control screen










Open the drawer



Close the drawer









1 CODEC / /

- When a high-resolution source is played, its format information is displayed.
- : Repeats the current track/folder. Each time you touch the key, repeat modes are switched in the following sequence: File repeat (), Folder repeat (), Repeat all ()
- : Randomly plays all tracks in the current folder. Each time you touch the key, random modes are switched in the following sequence: File random (), Random off ()

2 Track information






- Displays the information on the current file. Only a file name and a folder name are displayed if there is no tag information.
- Touch to display the Category List screen. See **Category search (P.30)**.
- Change the text size of the information smaller when the "Small Audio Text" is set to "ON" in the User Interface screen. (P.54)

3 Play mode indicator/Playing time

- , , etc.: Current play mode indicator
Meanings of individual icons are as follows:
 (play),  (fast forward),  (fast backward),  (pause).
- For confirmation of current playing position. You can drag the circle left or right to change the playing position. (Video file only)



4 Operation keys

- : Searches track/file. For details on search operation, see **Search Operation (P.30)**.
- , : Searches the previous/next track/file.
Touch and hold to fast forward or fast backward.
- : Plays or pauses.
- : Touch to attenuate/restore the sound.

5 Content list


- Touch the right side of the screen to display the Content list. Touch again to close the list.
- Displays the playing list. When you touch a track/file name on the list, playback will start.

6 Artwork/VU meter

- Displays/hides artwork area.
- The jacket of the currently playing file is displayed.
- When touched, switches the artwork to the VU meter.

7 Function panel

Touch the left side of the screen to display the function panel. Touch again to close the panel.

-  : Searches for the previous/next folder.

• USB DEVICE CHANGE

Switches to another USB device when two USB devices are connected.

8 Indicator Items

- **VIDEO**: Identifies the video file.
- **MUSIC**: Identifies the music file.

Video screen



9 File search area (Video file only)

Touch to search for the next/previous file.

10 Key display area (Video file only)

Touch to display the control screen.

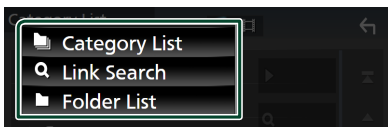
Search Operation

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

- 1 Touch **Q**.
- 2 Touch **▼**.



- 3 Select a list type.



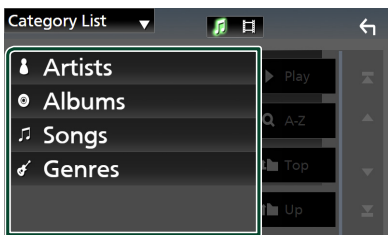
NOTE

• For operations on the list screen, see *List screen (P.17)*.

Category search

You can search for a file by selecting a category.

- 1 Touch **Category List**.
- 2 Select whether you search audio files or video files .
- 3 Touch the desired category.



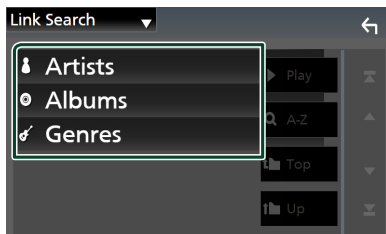
➤ The list corresponding to your selection appears.

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

Link search

You can search for a file of the same artist/album/genre as that in the current track.

- 1 Touch **Link Search**.
- 2 Touch the desired tag type. You can select from artists, albums and genres.



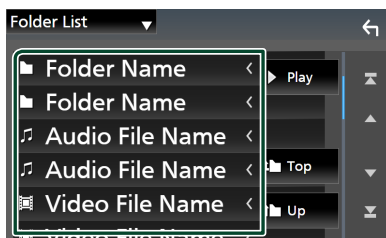
➤ The list corresponding to your selection appears.

- 3 Touch the desired item in the content list.

Folder search

You can search for a file according to hierarchy.

- 1 Touch **Folder List**.
- 2 Touch the desired folder.



When you touch a folder its contents are displayed.

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

iPod/iPhone

Preparation

Connectable iPod/iPhone

The following models can be connected to this unit.

Made for

- iPhone XS Max
- iPhone XS
- iPhone XR
- iPhone X
- iPhone 8 Plus
- iPhone 8
- iPhone 7 Plus
- iPhone 7
- iPhone SE
- iPhone 6s Plus
- iPhone 6s
- iPod touch (6th generation)

NOTE

- Latest compatible list of iPod/iPhone. For details, see www.jvc.net/cs/car/ipod/.
- By connecting your iPod/iPhone to this unit with the iPod connection cable KS-U62 (optional accessory), you can supply power to your iPod/iPhone as well as charge it while playing music. Note that the power of this unit must be held on.
- If you restart playback after connecting the iPod, the music that has been played by the iPod is played first.

Connect iPod/iPhone

Wired connection

Preparation

- Connect an iPod/iPhone with the KS-U62 (optional accessory) while Apple CarPlay is not connected.
- With an Apple CarPlay-capable iPhone, turn off Apple CarPlay by operating the iPhone at functional setup before connecting iPhone. For details of the setup method, contact the manufacturer of the terminal.
- Plug the iPod/iPhone into the gray USB terminal with the KS-U62 (optional accessory).
- Only one iPod/iPhone can be connected.

1 Connect the iPod/iPhone using the KS-U62. (P.78)

2 Press the **FNC** button.

➤ Popup menu appears.

3 Touch .

➤ HOME screen appears.

4 Touch .

5 Touch **iPod**. (P.14)

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

1 Detach the iPod/iPhone.

Bluetooth connection

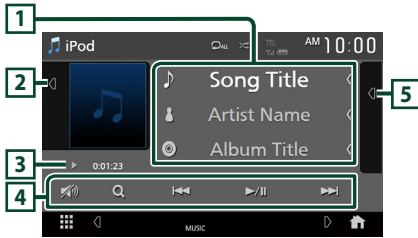
Pair the iPhone through Bluetooth.

Preparation

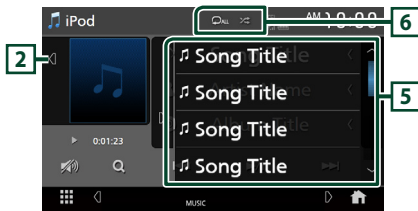
- To connect an iPhone via Bluetooth, register it as a Bluetooth device and do the profile setting for the connection beforehand. See **Register the Bluetooth device (P.42)** and **Connect the Bluetooth device (P.44)**.
- Connect an iPhone via Bluetooth while Apple CarPlay and an iPod/iPhone are not connected via USB.
- With an Apple CarPlay-capable iPhone, turn off Apple CarPlay by operating the iPhone at functional setup before connecting iPhone. For details of the setup method, contact the manufacturer of the terminal.

iPod/iPhone Basic Operation

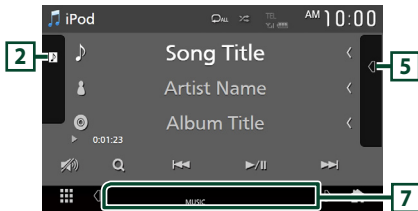
Control screen



Open the drawer



Close the drawer



1 Track information

- Displays the information on the current file.
- Touch to display the Category List screen. See **Category search (P.33)**.
- Change the text size of the information smaller when the “Small Audio Text” is set to “ON” in the User Interface screen. (P.54)

2 Artwork/VU meter

- Displays/hides artwork area.
- The jacket of the currently being played file is displayed.
- When touched, switches the artwork to the VU meter.

3 Play mode indicator/Playing time

- ▶, ▶▶, etc.: Current play mode indicator
Meanings of individual icons are as follows:
▶ (play), ▶▶ (fast forward), ◀◀ (fast backward), || (pause).

4 Operation keys

- 🔍 : Searches for a track/file. For details on search operation, see **Search Operation (P.33)**.
- ◀◀ / ▶▶ : Searches for the previous/next track/file.
Touch and hold to fast forward or fast backward.
- ▶▶ || : Plays or pauses.
- 🔊 : Touch to attenuate/restore the sound.

5 Content list

- Touch the right side of the screen to display the Content list. Touch again to close the list.
- Displays the playing list. When you touch a track/file name on the list, playback will start.

6 Repeat / Shuffle

- 🔁 : Repeats the current track/album. Each time you touch the key, repeat modes are switched in the following sequence:
Song repeat (🔁), All songs repeat (🔁ALL), Repeat off (🔁)
- 🎲 : Randomly plays all tracks in the current album. Each time you touch the key, random modes are switched in the following sequence:
Song random (🎲), Random off (🎲)

7 Indicator Items

- MUSIC: Identifies the music file.

Search Operation

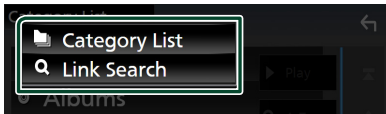
You can search music files by the following operations.

1 Touch **Q**.

2 Touch **▼**.



3 Select a list type.



NOTE

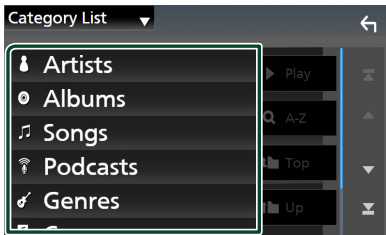
- For operations on the list screen, see **List screen (P.17)**.

Category search

You can search for a file by selecting a category.

1 Touch **Category List**.

2 Touch the desired category.



- The list corresponding to your selection appears.

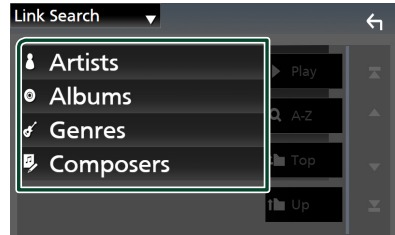
3 Touch to select the desired item in the list. Repeat this step until you find the desired file.

Link search

You can search for a file of the same artist/album/genre/composer as that in the current track.

1 Touch **Link Search**.

2 Touch the desired tag type. You can select from artists, albums, genres and composers.



- The list corresponding to your selection appears.

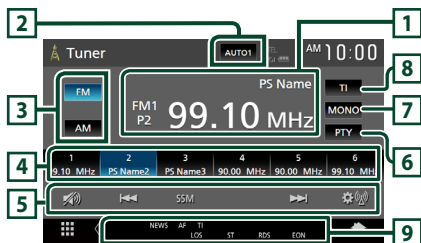
3 Touch the desired item in the content list.

Tuner

Tuner Basic Operation

Most functions can be controlled from the source control screen.

To enter Tuner source, touch **Tuner** icon in the source selection screen. (P.14)



1 Information display

Displays the information of the current station:
Frequency, PS name

P#: Preset number

2 Seek mode

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.

3 Band key

Switches the band (FM1/FM2/FM3, AM).

4 Preset key

Recalls the memorized station.

When touched for 2 seconds, stores the current receiving station in memory.

5 Operation keys

- **◀▶**: Tunes in a station. The method of frequency switching can be changed (see **2** in table).
- **SSM** (FM only): Presets stations automatically. For details, see **Auto memory (P.35)**.
- **⚙️**: Displays the Tuner SETUP screen. For details, see **Tuner SETUP (P.36)**.
- **🔊**: Touch to attenuates/restores the sound.

6 PTY (FM only)

Searches a program by setting program type. For details, see **Search by program type (P.35)**.

7 MONO (FM only)

Select the Monaural reception.

8 TI (FM only)

Sets the traffic information mode on. For details, see **Traffic Information (P.36)**.

9 Indicator Items

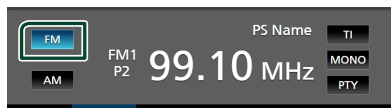
- **ST**: A stereo broadcast is being received.
- **MONO**: The forced monaural function is on.
- **AF**: The AF search function is on.
- **EON**: The Radio Data System station is sending EON.
- **LOS**: The Local Seek function is on.
- **NEWS**: News bulletin interruption is in progress.
- **RDS**: 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.
- **TI**: Indicates the reception state of traffic information.
 - White: TP is being received.
 - Orange: TP is not being received.

Memory Operation

Auto memory (FM only)

You can store stations with good reception in memory automatically.

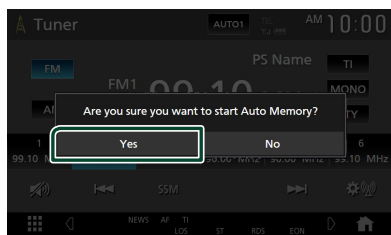
1 Touch FM.



2 Touch SSM.



3 Touch Yes.



➤ Auto memory starts.

Manual memory

You can store the current receiving station in memory.

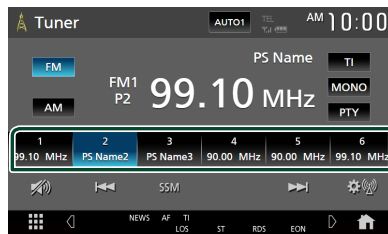
- 1 Touch desired band key.
- 2 Select a station you wish to store in memory.
- 3 Touch # (#:1-6) in which you want to store the station for 2 seconds until a beep sounds.

Selecting Operation

Preset select

You can list and select memorized station. This function can be used from the remote control. (P.72)

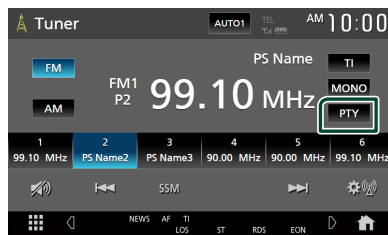
1 Select a station from the list.



Search by program type (FM only)

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

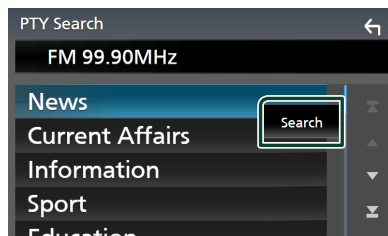
1 Touch PTY.



➤ PTY Search 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 (FM only)

You can listen and watch the traffic information automatically when a traffic bulletin starts. However, this feature requires a Radio Data System that includes the TI information.

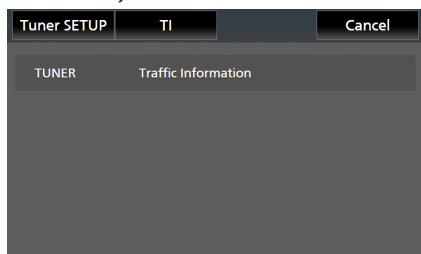
1 Touch TI.



➤ Traffic information mode is set.

When the traffic bulletin starts

The Traffic Information screen appears automatically.



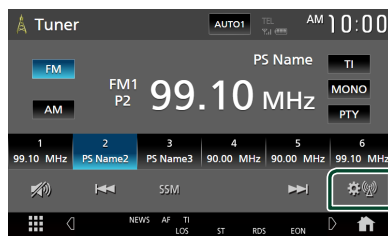
NOTE

- 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.
- To cancel Traffic Information: Touch **Cancel**.

Tuner SETUP

You can set tuner related parameters.

1 Touch .



➤ Tuner SETUP screen appears.

2 Set each item as follows.

■ NEWS (FM only)

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

■ AF (FM only)

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 "OFF".

■ Regional (FM only)

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

■ LO.S (FM only)

Turns the Local Seek function on or off.

■ Auto TP Seek (FM only)

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

■ Language Select (FM only)

Selects a display language for the PTY function.

■ Aerial Control

Allows you to turn off the Radio Data System function to prevent the motor-driven antenna from extending. Default is "ON".

Other External Components

View Camera

NOTE

- To connect a camera, see **Connecting the camera (P.79)**.
- To use a rear view camera, a REVERSE lead connection is required. **(P.76)**
- If **Rear Camera Interruption** is active the camera screen is displayed when you shift the gear to the reverse (R) position.
- The camera whose view was displayed last is kept and the same camera view will be displayed the next time. If its assignment setting is changed, the rear camera view is displayed.
- Rear/front camera interruption screen is not kept as the camera screen which will be displayed the next time.

Display the camera screen

You can display the camera screen manually if "Camera" is registered to a popup menu function key. **(P.56)**

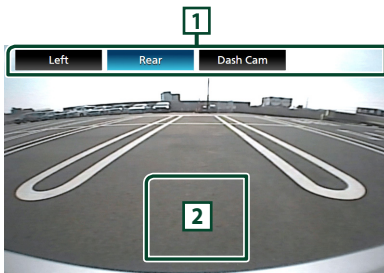
- 1 Press the **FNC** button.
 - Popup menu appears.

- 2 Touch **Camera**.



➤ View camera screen appears.

- 3 Adjust each item as follows.



1 Camera Switching Keys*1

Touch to switch the view camera. It is necessary to set "Camera Assignment



Settings" beforehand except "Rear". See **To set up the camera assignment settings (P.38)**.

2 Camera off

Touch to exit the camera screen.

*1 When two or more cameras of rear, front, left, and right are connected with this unit.

Camera Setup

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **Camera**.



➤ Camera screen appears.

- 5 Set each item as follows.

■ Camera Assignment Settings

Set up the camera assignment. See **To set up the camera assignment settings (P.38)**.

■ Rear Camera Interruption

ON (Default): Displays the picture from the rear view camera when you shift the gear to the reverse (R) position.

OFF: Select this when no camera is connected.

■ Rear Camera Message*1

Always display (Default): Always displays the caution message on the rear camera interruption screen.

Clear after 5 seconds: Displays the caution message for about 5 seconds on the rear camera interruption screen.

Other External Components

■ Parking Guidelines

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

■ Guidelines SETUP

If you select **ON** for **Parking Guidelines**, you can adjust the parking guidelines. See **To adjust the parking guidelines (P.39)**.

■ Front Camera Interruption ^{*2}

10 sec / 15 sec (Default) / **20 sec**: The front camera screen is displayed when return the gear from the reverse (R) position.

OFF: Cancel.

^{*1} To use the function, it is necessary to set **Rear Camera Interruption** to **ON**.

^{*2} To use the function, it is necessary to set **Rear Camera Interruption** to **ON** and to assign front position to the view camera in **Camera Assignment Settings**.
(P.38)

■ To set up the camera assignment settings

1 Touch **Camera Assignment Settings** on the Camera screen. (P.37)

2 Select the item to set up.

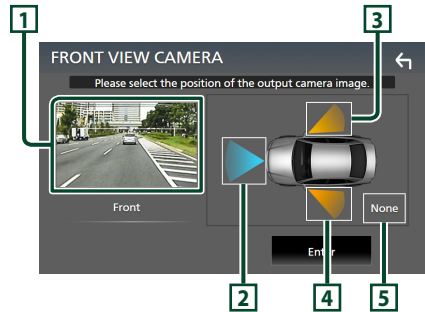
■ FRONT VIEW CAMERA

Set the camera assignment from view camera connected to Front view camera input terminal.

■ AV-IN

Set the camera assignment from view camera connected to AV-IN input terminal.

3 Select the view camera to set up.



1 Picture from view camera

Displays the picture from view camera connected to the input terminal to be set.
(P.79)

2 Front

Assign front position to the view camera connected to the selected input terminal.

3 Right

Assign right position to the view camera connected to the selected input terminal.

4 Left

Assign left position to the view camera connected to the selected input terminal.

5 None

Assign no position to the view camera connected to the selected input terminal.

4 Touch **Enter**.


NOTE

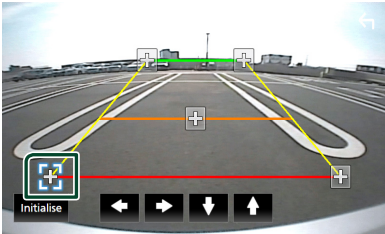
- The screen shot above is for the **FRONT VIEW CAMERA** setting screen. It may be different from the one for **AV-IN**.

To adjust the parking guidelines

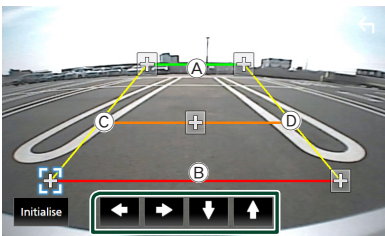
NOTE

- Install the rear view camera in the appropriate position according to the instruction manual supplied with the rear view camera.
- When adjusting the parking guidelines, make sure to apply the parking brake to prevent the car from moving.

- 1 Touch **Parking Guidelines** in the Camera screen and set to **ON**. (P.37)
- 2 Touch **Guidelines SETUP** on the Camera screen.
- 3 Adjust the parking guidelines by selecting the  mark.




- 4 Adjusting the position of the selected mark.



Make sure that lines **(A)** and **(B)** are horizontally parallel, and that lines **(C)** and **(D)** are of the same length.

NOTE

- Touch **Initialise** and then touch **Yes** to set all the  marks to their initial default position.

External audio/video players (AV-IN)

- 1 Connect an external component to the AV-IN input terminal. (P.77)
- 2 Select **AV-IN** as the source. (P.14)
- 3 Turn on the connected component and start playing the source.

NOTE

- To select the AV-IN source, it is necessary to set "AV-IN" to "None" in **Camera Assignment Settings**. (P.38)

Using the external navigation unit

You can connect a navigation unit (commercially available) to the navigation input terminal so that you can view the navigation screen. (P.77)

The navigation guidance comes out of the front speakers even when you are listening to an audio source.


Display the navigation screen

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch **DISP**.





- The navigation screen appears.

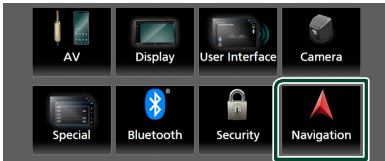
NOTE

- Touch  on the popup menu screen to navigation screen. This operation is available when **DISP Key** is set to **NAV** in the User Interface screen. (P.54)

Other External Components

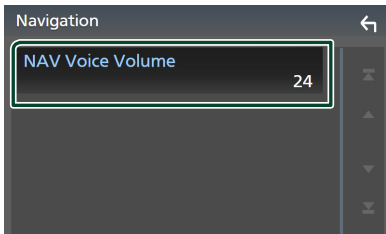
Navigation Setup

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **Navigation**.



➤ Navigation screen appears.

- 5 Set each item as follows.



■ NAV Voice Volume



Adjusts the volume for voice guidance of the navigation system. Default is "24".

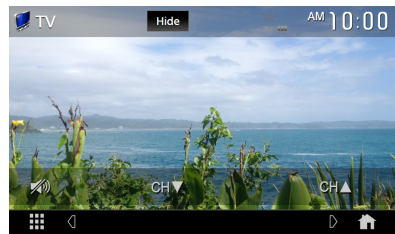
TV tuner

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

Preparation

- When you use TV control function, connect the TV tuner (commercially available) and set 3rd Party TV Tuner Control in **AV Setup (P.59)** 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 **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
- 4 Select **TV** as the source. (P.14)
- 5 Touch Key display area.



■ Hides the indicators and keys.

Touch **Hide**.

■ Change the channel.

Touch **CH▲**, **CH▼**.

Bluetooth Control

Using the Bluetooth function allows you to use various functions such as listening to the audio file and making/receiving a call.

Information for using Bluetooth® devices



Bluetooth is a short-range wireless radio communication technology for mobile devices such as cell-phones, portable PCs, and other devices.

Bluetooth devices can be connected without cables and communication with each other.

NOTE

- While driving, do not perform complicated operations such as dialing numbers, using the phonebook, etc. When you perform these operations, stop your car in a safe place.
- Some Bluetooth devices may not be connected to this unit depending on the Bluetooth version of the device.
- This unit may not work for some Bluetooth devices.
- Connecting conditions may vary depending on your environment.
- Some Bluetooth devices are disconnected when this unit is turned off.
- The Bluetooth devices cannot be used while using Apple CarPlay.
- The Bluetooth currently connected with other device is disconnected when an iPhone compatible with Apple CarPlay is connected.

About the cell-phone and Bluetooth audio player

This unit conforms to the following Bluetooth specifications:

Version

Bluetooth Ver. 5.0

Profiles

Cell-phone:

HFP (V1.7) (Hands Free Profile)

SPP (Serial Port Profile)

PBAP (Phonebook Access Profile)

Audio player:

A2DP (Advanced Audio Distribution Profile)

AVRCP (V1.6) (Audio/Video Remote Control Profile)

Sound codec

LDAC, SBC, AAC

NOTE

- The units supporting the Bluetooth function have been certified for conformity with the Bluetooth Standard according to the procedure prescribed by Bluetooth SIG. However, it may be impossible for such units to communicate with your cell-phone depending on its type.

Register the Bluetooth device

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

You can register up to 10 Bluetooth devices.

NOTE

- Up to 10 Bluetooth devices can be registered. If an attempt is made to register the 11th Bluetooth device, the Bluetooth device connected on the earliest date will be deleted to register the 11th one.
- 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.

1 Press the **FNC** button.

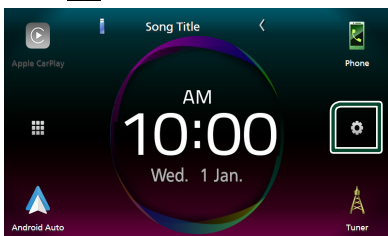
- Popup menu appears.

2 Touch .



- HOME screen appears.

3 Touch .



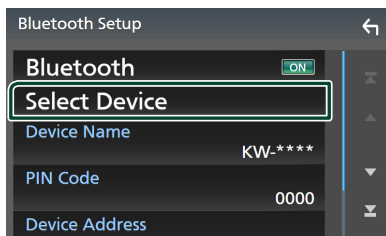
- SETUP screen appears.

4 Touch **Bluetooth**.

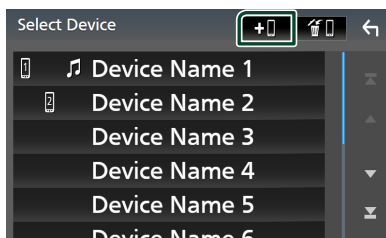


- Bluetooth Setup screen appears.

5 Touch **Select Device** on the Bluetooth Setup screen.



6 Touch on the Select Device screen.



- Bluetooth pairing waiting dialog appears.

NOTE

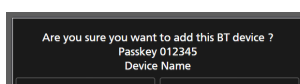
- You can also register an iPhone on the Apple CarPlay Device List screen. **(P.21)**
- When neither Apple CarPlay, Android Auto, nor a Bluetooth Hands-Free phone is connected, pressing and holding the **FNC** button displays Bluetooth pairing waiting dialog.

7 Search for the unit (“KW-M960BW”) from your smartphone/cell-phone.

Complete steps 7 to 10 within 30 seconds.

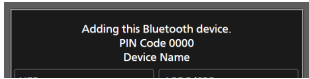
8 Operate your smartphone/cell-phone according to the displayed messages.

- **Confirm the request both on the smartphone/cell-phone.**

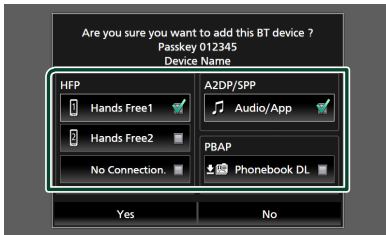


● Input the PIN Code in your smartphone/cell-phone.

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



9 Select the function you want to use.



■ HFP Hands Free1 / Hands Free2 / No Connection.

Select the hands-free number to connect.

■ A2DP/SPP Audio/App

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

■ PBAP Phonebook DL

Select if you want to transfer your phonebook data.

NOTE

- To select **Phonebook DL**, first select **Hands Free1** or **Hands Free2** for HFP.

10 Touch Yes.

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

NOTE

- When registering the iPhone that is available for Apple CarPlay wirelessly, a confirmation message appears.
 - **Yes**: Displays the Apple CarPlay screen for wireless connection.
 - **No**: Apple CarPlay is not connected. When using Apple CarPlay, see **Select an Apple CarPlay device (P.21)**.

Bluetooth Setup

NOTE

- The Bluetooth Setup is disabled while using Apple CarPlay.

1 Press the **FNC** button.

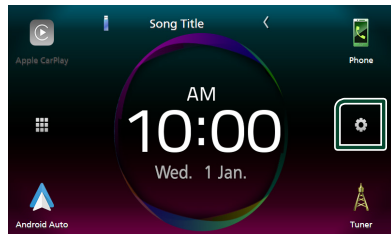
➤ Popup menu appears.

2 Touch .



➤ HOME screen appears.

3 Touch .



➤ SETUP screen appears.

4 Touch **Bluetooth**.



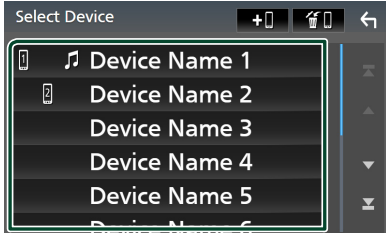
➤ Bluetooth Setup screen appears.

See the following section for each setting.

- Connect the Bluetooth device (**P.44**)
- Change the device name (**P.45**)
- Change the PIN Code (**P.45**)

■ Connect the Bluetooth device

- 1 Touch **Select Device** on the Bluetooth Setup screen.
- 2 Touch the name of the device you want to connect.

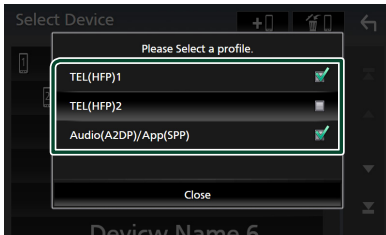


➤ Profile select screen appears.

NOTE

- If the icon is lighted, it means that the unit will use that device.
- You cannot select an Android smartphone connected as an Android Auto device.

3 Set each profile as follows.



■ TEL (HFP) 1 , TEL (HFP) 2


Select when the device is connected with the unit as hands-free phone 1 or 2.

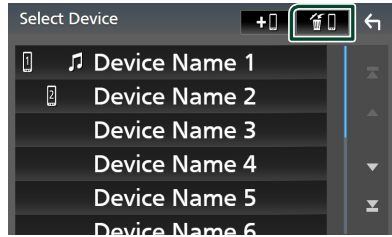
■ Audio (A2DP)/App (SPP)

Select to interwork with an application installed in a smartphone or to use as an audio player.

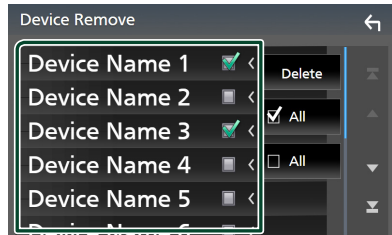
4 Touch **Close**.

To delete the registered Bluetooth device

- 1 Touch  on the Select Device screen.



2 Touch the device name to check.



■ All

Selects all Bluetooth devices.

■ All

Clears all check marks.

NOTE

- You cannot select an Android smartphone connected as an Android Auto device.

3 Touch **Delete**.

➤ Confirmation message appears.

4 Touch **Yes**.

➤ All the selected device(s) is deleted.

NOTE

- If the device compatible with wireless Apple CarPlay is deleted, the same device is deleted from the Apple CarPlay device list screen.

Change the device name

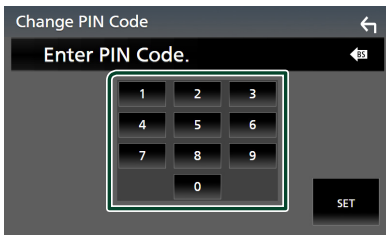
- 1 Touch **Device Name** on the Bluetooth Setup screen.
 - Change Device Name screen appears.
- 2 Touch and hold **BS**.
- 3 Input the device name.



- 4 Touch **Enter**.

Change the PIN Code

- 1 Touch **PIN Code** on the Bluetooth Setup screen.
 - Change PIN Code screen appears.
- 2 Touch and hold **BS**.
- 3 Input the PIN Code.



- 4 Touch **SET**.

Playing the Bluetooth Audio Device

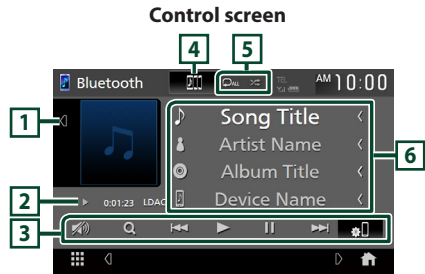
Most functions can be controlled from the source control screen.

To select Bluetooth source, touch **BT Audio** icon on the source selection screen. (P.14)

NOTE

- The Bluetooth audio source is disabled while using Apple CarPlay.
- The Bluetooth audio source is disabled when the device set as "Audio/App" is using Android Auto.

Bluetooth basic operation



1 Artwork/VU meter

- Displays/hides artwork area.
- When touched, switches the artwork to the VU meter.

2 Play mode indicator/Playing time

▶, || : Current play mode indicator

Meanings of individual icons are as follows:

▶ (play), ▶▶ (fast forward), ◀◀ (fast backward), || (pause), ■ (stop).

LDAC: Indicates that an LDAC-compatible device is connected.

3 Operation keys *

- 🔍 : Searches for a file. See **File search (P.47)**.
- ◀◀ ▶▶ : Searches for the previous/next content.
Touch and hold to fast forward or fast backward.
- ▶ : Plays.
- || : Pauses.
- ⚙️ : Displays the Bluetooth Setup screen.
- 🔊 : Touch to attenuate/restore the sound.

4 JVC Streaming DJ

Bluetooth audio devices can be switched easily to play music. See **JVC Streaming DJ (P.46)**.

5 / *

- : Repeats the current track/folder. Each time you touch the key, repeat modes are switched in the following sequence: File repeat (), Folder repeat (), All songs repeat (), Repeat off ()
- : Randomly plays all tracks in the current folder. Each time you touch the key, random modes are switched in the following sequence: Folder random (), All random (), Random off ()

6 Information display *

- Displays the name of track information.
- Connected device name.
- Change the text size of the information smaller when the "Small Audio Text" is set to "ON" in the User Interface screen. **(P.54)**

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

NOTE

- The operation keys, indications and information displayed on the screen differ depending on the connected device.
- If the operation keys do not appear, operate from the player.
- Depending on your cell-phone or audio player, sound 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.
- It is recommended that you change the playback quality from "priority on sound quality" to "priority on stable connection" in the settings of your LDAC-compatible device so that the intermittent sound problem is less likely to occur.

JVC Streaming DJ

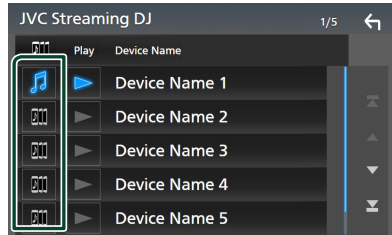
Up to 5 Bluetooth audio device can be connected and switched easily to play music.

1 Touch

➤ A list of registered devices is displayed.

2 Touch of device name you want to connect.

- Touching displays the Bluetooth device connection setup screen. **(P.44)**
- Touching on the left of the connected device () disconnects this device.



- : Device used normally.
- : Device used for JVC Streaming DJ.

3 Touch (white) on the left of the name of the device to be played.

(white) changes to (Blue) and starts playback.



- (Gray) : Not connected.
- (White) : Connected.
- (Blue) : During playback.

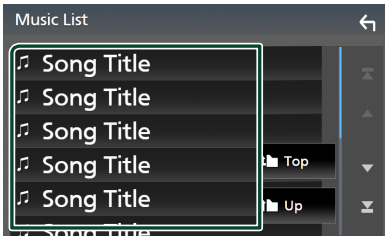
4 Touch

NOTE

- If a connected Bluetooth audio device is operated to play music, connections are switched.
- When a Bluetooth source is switched to another one, its settings are deleted and the connection is restored to the connection before source switching.
- You cannot select an Android smartphone connected as an Android Auto device.

File search

- 1 Touch **Q**.
- 2 Touch the desired file or folder.



When you touch a folder its contents are displayed.

- 3 Touch the desired item in the content list.
 - Playback starts.

NOTE

- For operations in the list screen, see **List screen (P.17)**.



Using the Hands-Free Unit

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

NOTE

- While Apple CarPlay or Android Auto is connected, the Bluetooth Hands-Free function and two Bluetooth devices connections cannot be used. Only the Apple CarPlay or Android Auto Hands-Free function can be used.

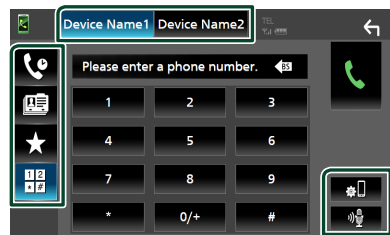
Make a call





- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
- 4 Touch **Phone**. (P.14)
 - Hands Free screen appears.

NOTE

- If your cell-phone supports PBAP, you can display the phonebook and call lists onto the touch panel screen when the cell-phone is connected.
 - Phonebook: up to 1000 entries
 - Up to 50 entries including dialed calls, received calls, and missed calls

5 Select a dialing method.



- : Call using call records
- : Call using the phonebook
- : Call using the preset number
- : Call by entering a phone number

Bluetooth Control

● Select the cell-phone to use

When you connect two cell-phones

- 1) Touch **Device Name1** **Device Name2** to select the phone you want to use.

● Bluetooth Setup

- 1) Touch .
Bluetooth Setup screen appears.


● Voice Recognition

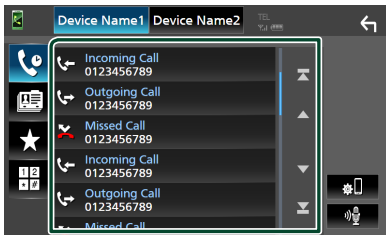
- 1) Touch . (P.49)

NOTE


- Status icons such as battery and antenna icons may differ from those displayed on the cell-phone.
- Setting the cell-phone in the private mode can disable the hands-free function.

Call using call records

- 1 Touch .
- 2 Select the phone number from the list.



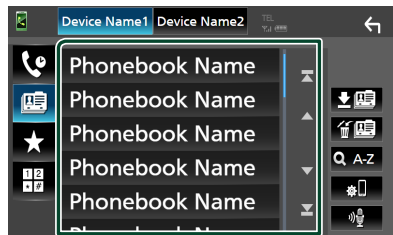
Call using the phonebook

- 1 Touch .
- 2 Touch **Q A-Z**.
- 3 Select the initial.

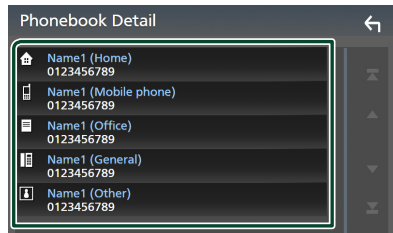


- Characters with no corresponding name will not appear.
- A first character with an accent character such as "ü" can be searched for with a non-accent character "u". A character with an accent character in a sentence cannot be searched for.

- 4 Select the person you want to call from the list.



- 5 Select the phone number from the list.

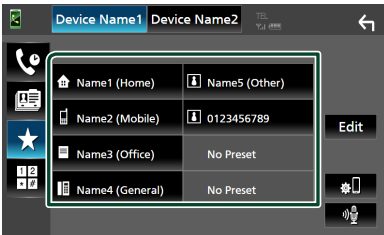


NOTE


- You can sort the phone numbers in the list by last name or first name. For details, see **Hands-Free Setup (P.52)**.

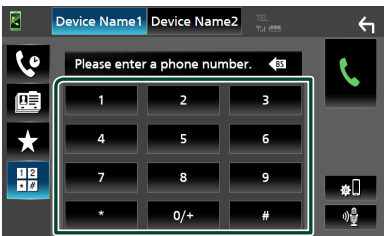
Call using the preset number

- 1 Touch .
- 2 Touch the name or phone number.



Call by entering a phone number

- 1 Touch .
- 2 Enter a phone number with number keys.



- 3 Touch .

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 **FNC** button for 1 second.



➤ Voice Recognition screen appears.



- 2 Start speaking.

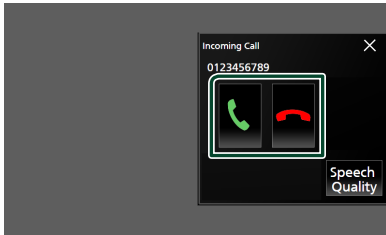
NOTE

- You can use the voice recognition function by touching  on the Hands Free screen.
- You can use the voice recognition function for the connected cell-phone if you selected **Hands Free1** or **Hands Free2** for HFP when registered.

Bluetooth Control

Receive a call

- 1 Touch  to answer a phone call or  to reject an incoming call.



NOTE

- When shifting the gear to the reverse (R) position and monitoring the picture from the rear view camera, this screen does not appear even if a call comes in.

To end call

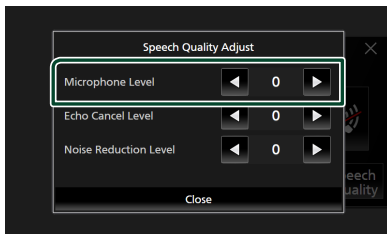
- 1 While talking, touch .

Operations during a call



● Adjust the volume of your voice

- 1) Touch **Speech Quality**.
- 2) Touch ◀ or ▶ for **Microphone Level**.




● Adjust the receiver volume

Press the - or + button.





● Mute your voice

Touch  to mute or not to mute your voice.


● Output the dial tone


Touch **DTMF** to display the tone input screen. You can send tones by touching desired keys on the screen.


● Switching between speaking voice output destinations

Touching  /  each time switches speaking voice output destinations between the cell-phone and the speaker.



● Call-waiting

When you receive a new call while talking on the phone, you can answer the newly received call by touching . The current call is put on hold.

Each time you touch , the caller will change to the other one.

When you touch , the current call will end to be switched to the call waiting on hold.

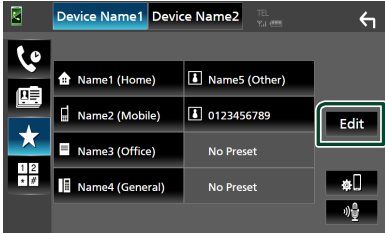
● To close the Hands-Free popup screen

Touch  to close the Hands-Free popup screen. To display it again, touch  after pressing the **FNC** button.

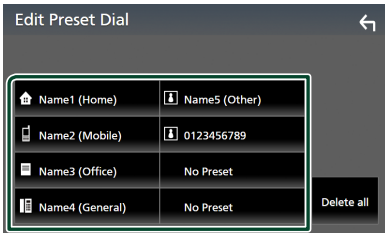
Phone number preset

You can register frequently used phone numbers in this unit.

- 1 Touch .
- 2 Touch **Edit**.



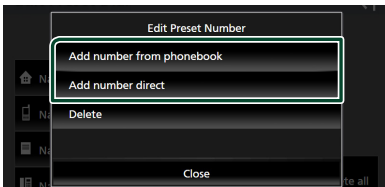
- 3 Select where to preset.



Delete all

To delete all preset numbers, touch **Delete all** and then touch **OK** on the confirmation screen.

- 4 Select how to preset.



Add number from phonebook

Select the number to preset from the phonebook. See **Call using the phonebook (P.48)**.

Add number direct

Enter the telephone number directly and touch **SET**. See **Call by entering a phone number (P.49)**.

Delete

To delete a preset number, touch **Delete** and then touch **OK** on the confirmation screen.

Phonebook transfer

You can transfer phonebook data from your Bluetooth smartphone using PBAP.

- 1 Touch .
- 2 Touch .




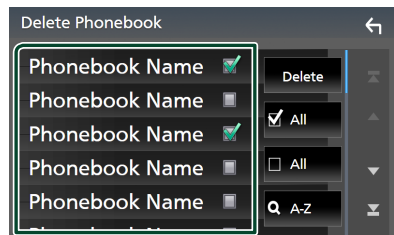
> Phonebook data transfer starts.

NOTE

- If the Phonebook contains more than 1000 entries, Phonebook data cannot be transferred.
- If no Phonebook has been downloaded, touching **Download Phonebook Now** will start downloading the Phonebook.

Phonebook deletion

- 1 Touch .
- 2 Touch the name to check.



All

Checks all boxes.

All

Clears all check marks.

- 3 Touch **Delete**.
 - > Confirmation message appears.
- 4 Touch **OK**.

Hands-Free Setup

You can make various settings for the Hands-Free function.

1 Press the FNC button.

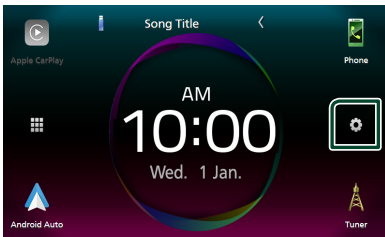
➤ Popup menu appears.

2 Touch .



➤ HOME screen appears.

3 Touch .



➤ SETUP screen appears.

4 Touch Bluetooth.

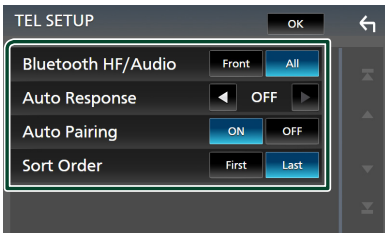


➤ Bluetooth Setup screen appears.

5 Touch TEL SETUP.

➤ TEL SETUP screen appears.

6 Set each function as follows.



Bluetooth HF/Audio

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

Front: Outputs sound from the front speakers.

All (Default): Outputs sound from all speakers.

Auto Response*

Set the automatic response time to pick-up an incoming call.

OFF (Default): Turns off the Automatic response function.

1 / 5 / 10 / 15 / 20 / 25 / 30: Sets the ringing 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): Turns on the Apple Auto Pairing function.

OFF: Turns off the Apple Auto Pairing function.

Sort Order

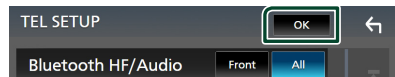
Set how to sort the data in the cell-phone phonebook.

First: Sorts data by the first name.

Last (Default): Sorts data by the last name.

* Either the auto response time set on this unit or the time set on the cell-phone, whichever is shorter takes effect.

7 Touch OK.

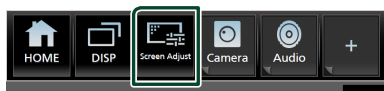


Setup

Monitor Screen Setup

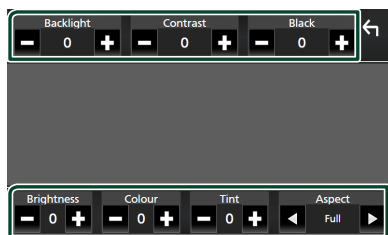
You can adjust the image quality of video, menu screen, etc.

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch **Screen Adjust.**



➤ Screen Adjustment screen appears.

- 3 Adjust each setting as follows.



■ Backlight / Contrast / Black / Brightness / Colour / Tint

Adjust each setting.

■ Aspect

Select a screen mode.

Full: Changes the aspect ratio of video and displays video fully on the screen.

Normal: Displays video at the ratio of 4:3.


Auto:

Displays video fully (vertically or horizontally) with no ratio change.

NOTE

- Settings to adjust vary depending on the current source.

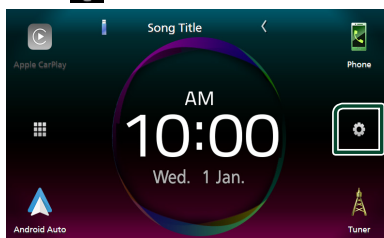
System Setup

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .



➤ HOME screen appears.

- 3 Touch .



See the following section for each setting.

- Set up AV (**P.59**)
- Set up display (**P.57**)
- Set up the user interface (**P.54**)
- Set up camera (**P.37**)
- Set up special (**P.57**)
- Set up Bluetooth (**P.43**)
- Set up security (**P.9**)
- Set up navigation (**P.40**)

User Interface Setup

You can setup user interface parameters.

1 Press the **FNC** button.

- Pop up menu appears.

2 Touch .

- HOME screen appears.

3 Touch .

- SETUP screen appears.

4 Touch **User Interface**.



- User Interface screen appears.

5 Set each parameter as follows.

■ **Small Audio Text**

Determine whether to change the text size for the source control screen smaller.

"ON" (Default)/"OFF"

■ **Steering Remote Controller**

Sets the desired function in the steering remote controller. See **Learning function of steering remote (P.54)**.

■ **Beep**

Turn the key touch tone on or off.

Default is "ON".

■ **Widget SETUP**

Set up the widget displayed on the HOME screen. (P.19)

■ **Gesture Touch Control Effect**

Determine whether to show the trace of finger under gesture touch control. (P.11)

"ON" (Default)/"OFF"

■ **Customize Favorite Key**

Select the function which you wish to set for **Favorite** icon. (P.55)

■ **Customize FNC Menu**

Select the function which you wish to set for the function key1 to 3. (P.56)

■ **Language select**

Select a language.

■ **Touch Panel Adjust**

Adjust the sensing position of the touch panel. (P.56)

■ **Time Format**

Select the time display format.

"12-Hour" (Default)/"24-Hour"

■ **Clock**

GPS-SYNC (Default): Synchronizes the clock time with the GPS.

Manual: Set the clock manually.


■ **Time Zone**

Select the time zone.

■ **Clock Adjust**

If you select **Manual** for Clock, adjust the date and time manually. (P.56)

■ **DISP Key**

Select the source screen displayed when  in the popup menu screen is touched.

OFF: Displays the control screen of the current source.

Mirroring (Default): Switches to the App screen from the connected iPhone/Android smartphone or to the Apple CarPlay screen from the connected iPhone when the key is touched. (P.20)

NAV: Switches to the navigation screen from the connected navigation unit by touching the key. (P.39)

Learning function of steering remote

This function is available only when your vehicle is equipped with the electrical steering remote controller.

If your steering remote controller is not compliant, learning may not be completed and error message may appear.

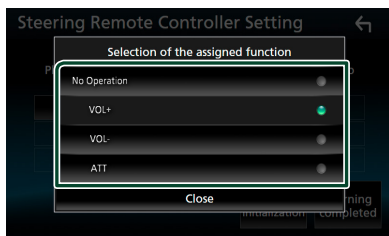
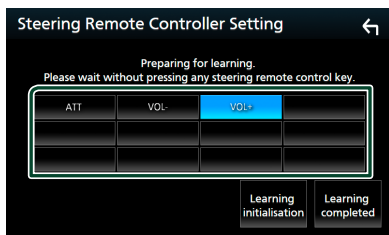
1 Touch **Steering Remote Controller** in the **User Interface** screen.

- Steering Remote Controller Setting screen appears.

2 Press and hold the steering remote controller button

NOTE

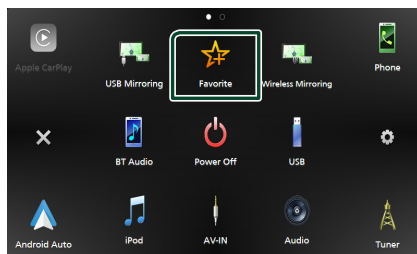
- You can have the unit learned all buttons at a time. In that case, press all the buttons one at a time and after pressing all of them, touch **Learning completed** in Steering Remote Controller Setting screen. However, new functions cannot be learned after this operation.

3 Touch the function you want to set.**4 Repeat steps 2 and 3 as necessary.****5 Touch Learning completed.****NOTE**

- When changing the function already learned, press and hold the button you want to change in step 2 and then touch to select the changed function from the function list.
- Confirm the contents of the settable function on the function list. You cannot edit the function list.
- To initialize the contents, touch **Learning initialisation of Steering Remote Controller** in User Interface screen. After you touch **Initialise**, a confirmation message appears. Follow the message and complete the operation.

Customize Favorite key

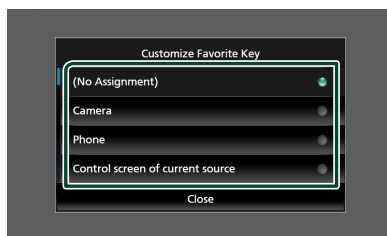
You can jump to your favorite function easily from **Favorite** icon.

**NOTE**

- Favorite** icon may be disabled on some screens depending on the registered function. When this icon is invalid, start the desired function by normal procedure.

To register a favorite function

- 1 Touch Customize Favorite Key on the User Interface screen.**
 - Customize Favorite Key screen appears.
- 2 Select a favorite function.**

**3 Touch Close.****NOTE**

- You can also change the assignment when you touch and hold **Favorite** icon on the HOME screen.
- If it is your first time to touch **Favorite** icon after installation, Customize Favorite Key screen will appear.

Setup

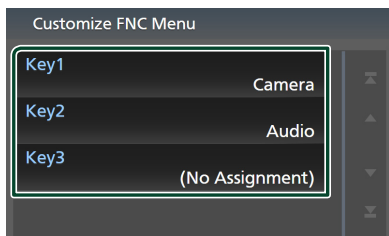
Customize popup menu functions

You can register a function for each of the function key1 to 3.



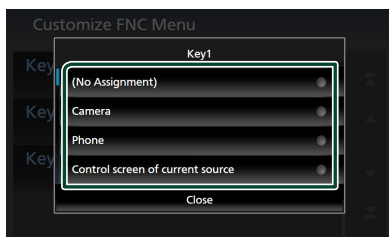
To register a function

- 1 Touch **Customize FNC Menu** on the User Interface screen.
 - Customize FNC Menu screen appears.
- 2 Select the function key you want to customize.



➤ The function list screen appears.

- 3 Select a function.




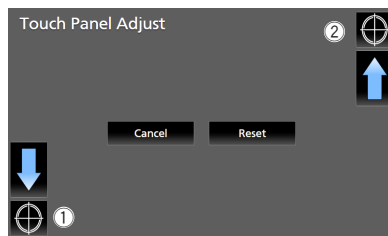
- 4 Touch **Close**.

NOTE

- You can change the assignment when you touch and hold the desired function key.

Touch panel adjustment

- 1 Touch **Touch Panel Adjust** on the User Interface screen.
 - Touch Panel Adjust screen appears.
- 2 Follow the instruction on the screen and long touch the center of each .

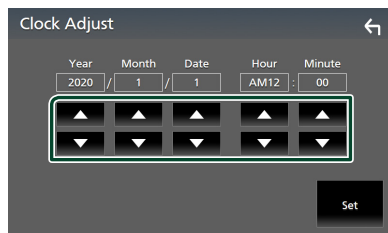


NOTE

- To cancel the touch panel adjustment, touch **Cancel**.
- To reset it to the default, touch **Reset**.

Adjust the date and time manually

- 1 Touch **Clock** on the User Interface screen.
- 2 Select **Manual**.
- 3 Touch **Time Zone** on the User Interface screen.
- 4 Select the time zone.
- 5 Touch **Clock Adjust** on the User Interface screen.
- 6 Adjust the date, then adjust the time.



- 7 Touch **Set**.

Special Setup

You can setup special parameters.

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **Special**.



➤ Special screen appears.

- 5 Set each parameter as follows.

■ DEMO

Select the demonstration mode. Default is "ON".

■ Operation Guide Display

Determine whether to show the touch screen operation guide screen every time before HOME screen is displayed.

Default is "ON".

■ Software Information

Confirm the software version of this unit. (P.57)

■ Open Source Licenses

Display the open source licenses.

■ Initialise

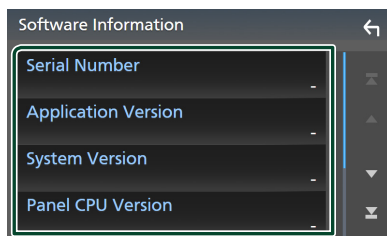
Touch **Initialise** and then touch **Yes** to set all the settings to the initial default settings.

- Audio SETUP Memory is not initialized.

Software Information

You can confirm the software version of this unit.



- 1 Touch **Software Information** in the Special screen.
- 2 Confirm the software version.



NOTE

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

Display Setup

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **Display**.



➤ Display screen appears.

- 5 Set each parameter as follows.

■ Dimmer

Select the dimmer mode.

OFF: Does not dim the display.

ON: Dims the display.

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

Setup

■ OSD Clock

Select if you want to display the clock while the screen is off, or while watching video files (USB), etc.

"ON" (Default) / "OFF"

■ Wallpaper Customize

You can change the wallpaper image or color. (P.58)

■ Viewing Angle

If it is hard to see the image on the screen evenly, adjust the viewing angle. The smaller the (negative) value, the more whitish the image on the screen looks.

"0" (Default) / "-1" / "-2" / "-3"

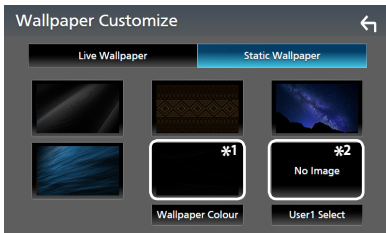
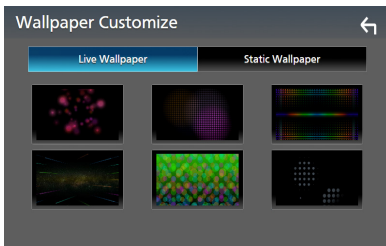
■ Screen transition effect

Select whether to use the screen transition effect when the source control screen is switched to the Home screen.

"ON" (Default) / "OFF"

Change the wallpaper image

- 1 Touch **Wallpaper Customize** on the Display screen.
- 2 Select an image from live or static wallpapers.

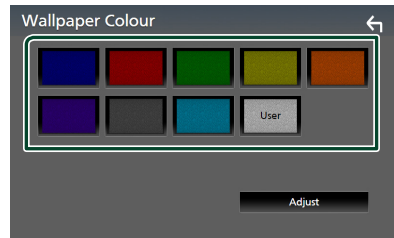


*1 Select a wallpaper color in advance.

*2 Select an original image in advance.

To select wallpaper color

- 1 Touch **Wallpaper Colour** on the Wallpaper Customize screen.
- 2 Select a wallpaper color.

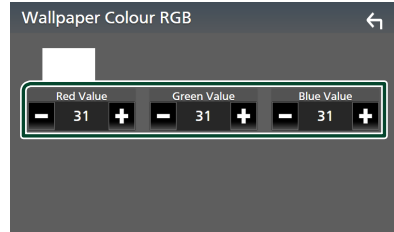


- 3 Touch .

To register an original color

You can register your original color.

- 1 Touch **User** on the Wallpaper Colour screen.
- 2 Touch **Adjust**.
- 3 Use - and + to adjust each color value.

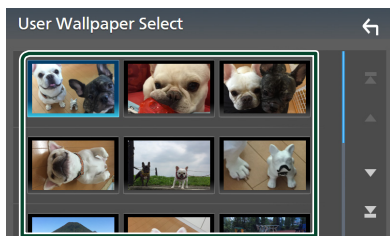


- 4 Touch .

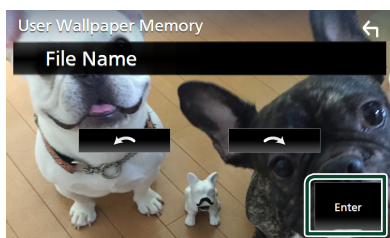
To register an original image

You can load an image from the connected USB device and set it as the wallpaper image. Before starting this procedure, it is necessary to connect the device which has the image to load.

- 1 Touch **User1 Select** on the Wallpaper Customize screen.
- 2 Select the image to load.





- 3 Touch **Enter**.





- The selected image is loaded and the display returns to the Wallpaper Customize screen.

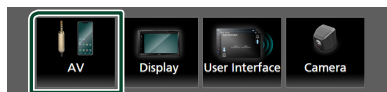
NOTE

- Touching  rotates the image counter-clockwise.
- Touching  rotates the image clockwise.
- Picture files: JPEG (.jpg, .jpeg), PNG (.png), BMP (.bmp)

AV Setup

You can set AV parameters.

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **AV**.



- AV screen appears.

- 5 Set each parameter as follows.

■ Android Auto Device Select

Select the device to be used in the Android Auto mode. **(P.60)**

■ Apple CarPlay Device List

Select the device to be used in the Apple CarPlay mode. **(P.21)**

■ Speech Quality Adjust

You can adjust the speech quality.

Microphone Level: Adjust the volume of your voice.
Default is "0".

Echo Cancel Level: Adjust the level of echo cancellation.
Default is "0".

Noise Reduction Level: Reduce the noise generated in the surrounding environment without changing the microphone volume. Use this function when the voice of caller is not clear.
Default is "0".

Setup

■ TV Tuner Control*

Sets when connecting the TV tuner to AV INPUT.

ON: Set to ON when connecting the 3rd party TV tuner. AV-IN 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-OUT

You can select an AV source to be output from the AV OUTPUT port.

OFF, AV-IN, USB, or iPod

- You cannot select AV-IN if the AV-IN input terminal is used for camera.
- You cannot select iPod if it is connected via Bluetooth.
- If you select USB, iPod, Tuner or Bluetooth audio as the main source, you cannot select USB or iPod as the AV output source.
- If you select Wireless Mirroring, Apple CarPlay or Android Auto as the main source, you cannot select USB or iPod as the AV output source.

■ Driving Position

Select the driving position (left or right).

"Left"/"Right" (Default)

■ Wi-Fi SETUP

You can change the device name and display the device address, password. See **Change the device name (P.25)**.

■ Reset Android Auto Wireless Connection

You can change the password for wireless Android Auto.

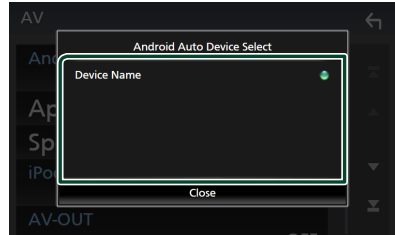
The system of the unit is rebooted after selecting **YES**.

* This can be selected when the AV-IN is set to **NONE** on the Camera Assignment Setting screen.

■ Select an Android smartphone



1 Touch **Android Auto Device Select** on the AV screen.

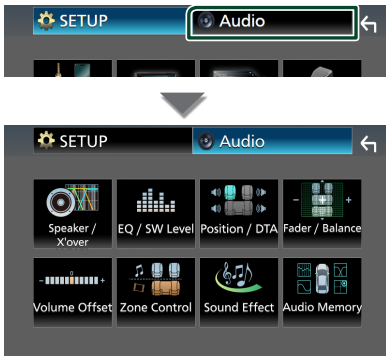
2 Select an Android smartphone.



Controlling Audio

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

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **Audio**.





See the following section for each setting.

- Set up Speaker / X'over (P.62)
- Controlling EQ / SW Level (P.64)
- Set Position / DTA (P.68)
- Controlling Fader / Balance (P.64)
- Set Volume Offset (P.65)
- Performing Zone Control (P.66)
- Set Sound Effect (P.67)
- Use Audio Memory (P.70)

3-way speaker system setup

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

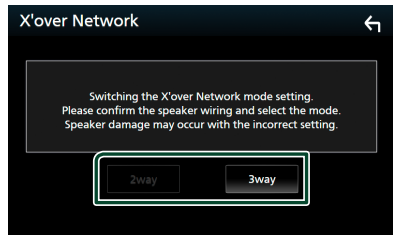
- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.

- 3 Touch .
 - Source selection screen appears.
- 4 Touch **AV Off**.
- 5 Press the **FNC** (①) button and the **-** (②) button for 1 second at the same time.



- Speaker system select screen appears.

- 6 Select the crossover network mode.



- A confirmation screen appears.

- 7 Touch **Yes**.

NOTE

- When the 3-way speaker system is selected, the following functions are disabled.
 - Front focus of Listening Position / DTA
 - Fader for Controlling General Audio
 - Zone Control
 - Selection of the speakers to output sound from the cell-phone of Bluetooth HF/Audio
 - Beep for User Interface Setup
- Connecting 3-way speakers with the 2-way mode selected can break the speakers.
- When the dual zone is selected and audio source other than "OFF" is selected as Rear Source, the speaker system cannot be switched.

Speaker / X'over setup

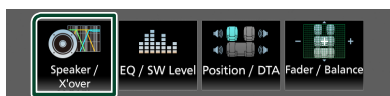
1 Press the **FNC** button.
 > Popup menu appears.

2 Touch .
 > HOME screen appears.

3 Touch .
 > SETUP screen appears.

4 Touch **Audio**.
 > Audio screen appears.

5 Touch **Speaker / X'over**.



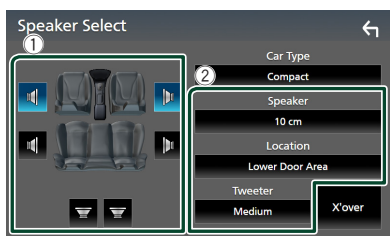
6 Select a car type.

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

When you select your car type, the Delay Time Alignment is activated automatically (for timing adjustment of sound output for each channel) to have the highest surround effects.



7 Touch the speaker (①) you wish to adjust and set each parameter (②) as follows.



■ Speaker

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

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

■ Location (Only for Front, Rear)

Select the speaker position you have installed.

■ Tweeter (Only for Front)

You can set up the tweeter when you are selecting front speakers.

None, Small, Medium, Large

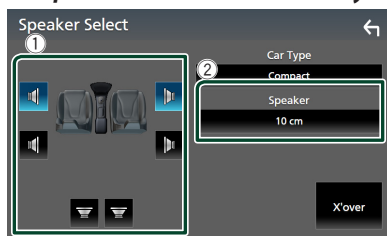
■ X'over

Display the speaker crossover setup screen.

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

For details, see **Crossover network setup (P.62)**.

When Speaker network is set to 3-way:



NOTE

- For how to switch to the 3-way speaker system, see **3-way speaker system setup (P.61)**. Connecting 3-way speakers with the 2-way mode selected can break the speakers.
- Select "None" if you have no speakers.

Crossover network setup

You can set the crossover frequency of speakers.

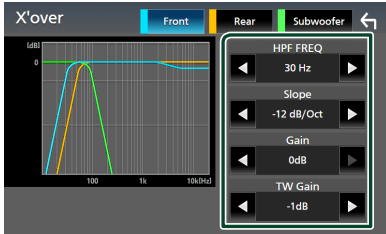
1 Touch **X'over**.



2 Touch the speaker to set up.



3 Set each parameter as follows.



■ HPF FREQ

High Pass Filter adjustment. (When Front or Rear is selected on the Speaker Select screen)

■ LPF FREQ

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

■ Slope *1

Set a crossover slope.

■ Gain

Adjust the gain of the front speaker, rear speaker, or subwoofer.

■ TW Gain *2

Adjust the tweeter level. (When Front is selected on the Speaker Select screen)

■ Phase Inversion *3

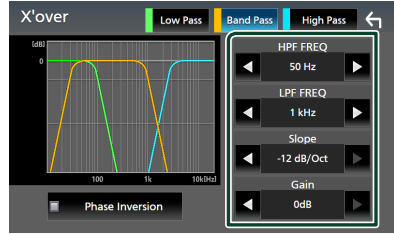
Set the phase of subwoofer output.
Check **Phase Inversion** to shift the phase 180 degrees. (When Subwoofer is selected on the Speaker Select screen)

*1 Only when "LPF FREQ"/"HPF FREQ" is set to a mode other than "Through" in **X'over**.

*2 Only when "Tweeter" is set to "Small", "Medium", "Large" in **Speaker Setup**.

*3 Only when "Subwoofer" is set to a mode other than "None" in **Speaker Setup**.

When Speaker network is set to 3-way:



■ FREQ (High Pass)

High Pass Filter adjustment.

■ HPF FREQ, LPF FREQ (Band Pass)

Band Pass Filter adjustment. (When Mid Range Speaker is selected on the Speaker Select screen)

■ FREQ (Low Pass)

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

■ Slope *1 *2

Set a crossover slope.

■ Gain

Set the gain of each speaker.

■ Phase Inversion

Set the phase of tweeter, mid range, and woofer output.

Check **Phase Inversion** to shift the phase 180 degrees.



*1 Only when "LPF FREQ"/"HPF FREQ" (Band Pass) is set to a mode other than "Through" in **X'over**.

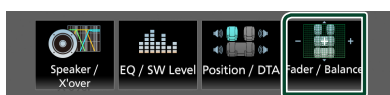
*2 Only when "FREQ" (Low Pass) is set to a mode other than "Through" in **X'over**.

NOTE

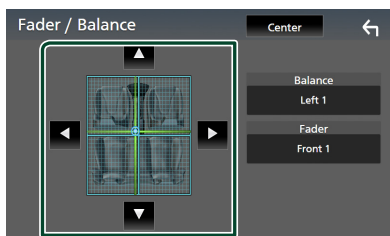
- For how to switch to the 3-way speaker system, see **3-way speaker system setup (P.61)**. Connecting 3-way speakers with the 2-way mode selected can break the speakers.

Controlling General Audio

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **Audio**.
 - Audio screen appears.
- 5 Touch **Fader / Balance**.



- 6 Set each parameter 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.

■ Center



Clear the adjustment.

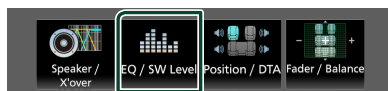
NOTE

- When the 3-way speaker system is selected, "Fader" adjustment is disabled.

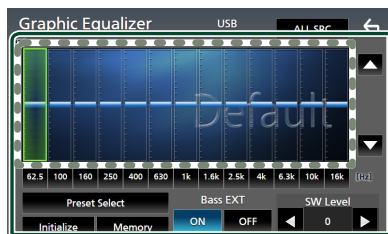
Equalizer Control

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

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **Audio**.
 - Audio screen appears.
- 5 Touch **EQ / SW Level**.



- 6 Touch the screen and set the Graphic Equalizer as desired.



■ Gain level (area in dotted frame)

Adjust the gain level by touching each frequency bar.

You can select a frequency bar and adjust its level by ▲, ▼.

■ Preset Select

Display the screen for selecting the preset equalizer curve. (P.65)

■ Memory

Saves the adjusted equalizer curve as "User1" to "User4". (P.65)

■ Initialize

Initialize (flatten) the current EQ curve.

■ ALL SRC

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

■ Bass EXT (Bass Extend Settings)

When turned on, the frequencies lower than 62.5 Hz is set to the same gain level (62.5 Hz).

■ SW Level

Adjust the subwoofer volume. This setting is not available when Subwoofer is set to "None". See *Speaker / X'over setup (P.62)*.

■ Recall the EQ curve

- 1 Touch **Preset Select**.
- 2 Select an EQ curve.

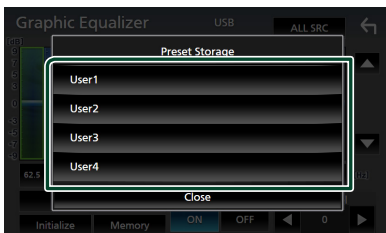


NOTE

- **iPod** is available for the iPod and Apple CarPlay sources and it is connected via USB.
- **iPod** is also available for the Apple CarPlay source that is connected wirelessly.

■ Save the EQ curve

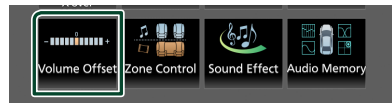
- 1 Adjust the EQ curve.
- 2 Touch **Memory**.
- 3 Select where to save.



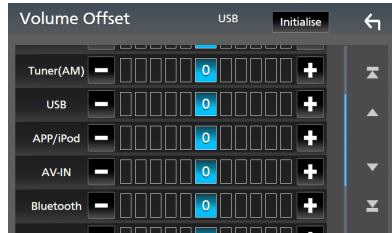
Volume Offset

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

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **Audio**.
 - Audio screen appears.
- 5 Touch **Volume Offset**.



- 6 Touch **+ or -** to adjust the level.



■ Initialise



Returns to the initial settings.

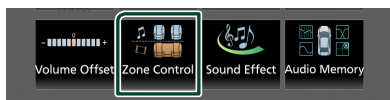
NOTE

- If you have increased the volume first, then reduce the volume using "Volume Offset". Switching the current source to another source suddenly may output extremely loud sound.

Zone Control

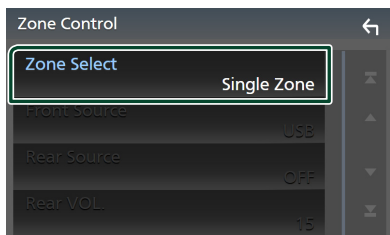
You can select different sources for front and rear positions in the vehicle.

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **Audio**.
 - Audio screen appears.
- 5 Touch **Zone Control**.

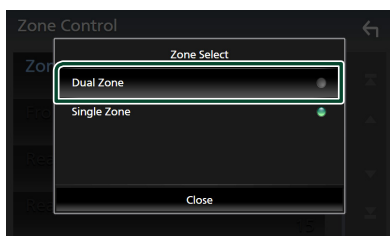


➤ Zone Control screen appears.

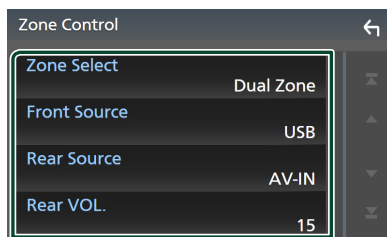
- 6 Touch **Zone Select**.



- 7 Touch **Dual Zone**.



- 8 Set each source as follows.



■ Zone Select

Touch **Single Zone** to turn off the dual zone function.

■ Front Source, Rear Source

Select an audio source for each.

Rear Source;
"AV-IN"/"iPod"/"USB"/"OFF"

■ Rear VOL.



Adjust the rear source volume.

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.67)
 - Equalizer Control/Sound Effect/Listening Position (P.64, 67, 68)
 - Speaker Setup (P.62)
 - High-resolution Sound Source File Playback
- You cannot select AV-IN if the AV-IN input terminal is used for camera.
- You cannot select iPod if it is connected via Bluetooth.
- If you select USB, iPod, Tuner or Bluetooth audio as the Front Source, you cannot select USB or iPod as the Rear Source.
- If you select Wireless Mirroring, Apple CarPlay or Android Auto as the Front Source, you cannot select USB or iPod as the Rear Source.
- When the dual zone is selected and audio source other than "OFF" is selected as Rear Source, the speaker system cannot be switched.

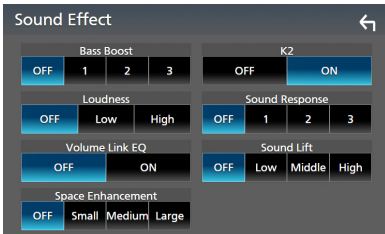
Sound Effect

You can set sound effects.

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **Audio**.
 - Audio screen appears.
- 5 Touch **Sound Effect**.



- 6 Set each parameter as follows.



■ Bass Boost

Set the amount of bass boost
"OFF"/"1"/"2"/"3".

■ Loudness

Set the amount of boost of low and high tones.
"OFF", "Low", "High"

■ Volume Link EQ

Reduce the driving noise by boosting specific frequencies in the audio signal.
"OFF", "ON"

■ Space Enhancement

Select the feeling of sound space enhancement.
"OFF"/"Small"/"Medium"/"Large".
This setting is not available for the Tuner source.

■ K2

Turn ON/OFF the K2 function.
Technology to extrapolate and supplement with proprietary algorithm, the high-frequency range that is cut off when encoding.

■ Sound Response

Virtually make the sound more realistic using the Digital Signal Processor (DSP) system.
Select the level from "OFF"/"1"/"2"/"3".



■ Sound Lift

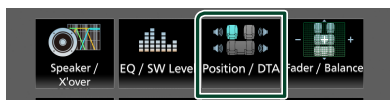
You can adjust the height of speakers virtually to suit your listening position.
"OFF"/"Low"/"Middle"/"High".

Listening Position / DTA

Listening Position / DTA allows you to improve the sound field depending on the position of the seat you sit.

Listening Position / DTA allows you to set "Listening Position" and "Front Focus". You cannot set both at the same time.

- 1 Press the **FNC** button.
 - Popup menu appears.
- 2 Touch .
 - HOME screen appears.
- 3 Touch .
 - SETUP screen appears.
- 4 Touch **Audio**.
 - Audio screen appears.
- 5 Touch **Position / DTA**.

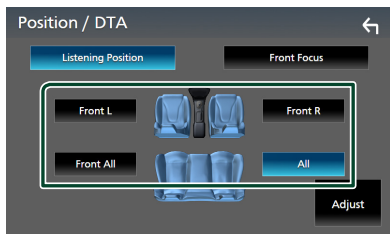


- Set up Listening Position (P.68)
- Set up Front Focus (P.69)

Listening Position

Adjust the sound delay time so that the sounds from different speakers arrive at the listener sitting on the selected seat at the same time.

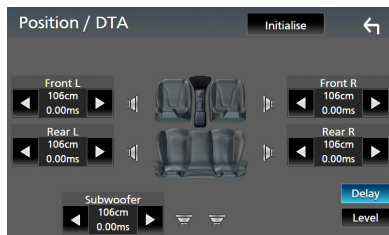
- 1 Touch **Listening Position** on the Position / DTA screen.
- 2 Select a listening position from **Front R** (Right front), **Front L** (Left front), **Front All** (All front), and **All**.



Position DTA control

You can fine-adjust your listening position.

- 1 Touch **Adjust**.
- 2 Touch **Delay**.
- 3 Touch **◀** or **▶** to adjust the delay time of the selected speaker.



- 4 Touch **Level**.
- 5 Touch **◀** or **▶** to adjust the sound level of the selected speaker.



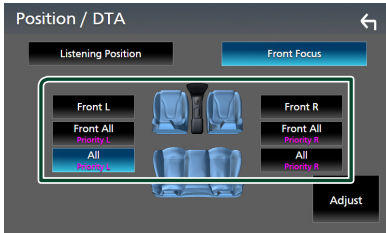
NOTE

- To initialize the Delay and Level settings, touch **Initialize** and **YES** on the confirmation screen.

Front Focus

You can focus the imaginary sound image on the front of the selected seat.

- 1 Touch **Front Focus** in the Position / DTA screen.
- 2 Select a front focus position.
For **Front All** and **All**, select Priority L or R depending on which side you want to put the imaginary sound image.

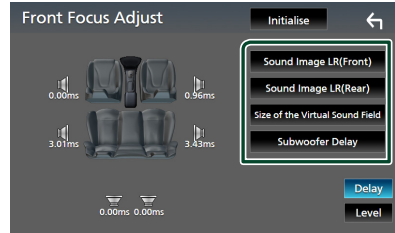


NOTE

- When the 3-way speaker system is selected, front focus feature is disabled.

Front Focus fine adjustment

- 1 Touch **Adjust**.
- 2 Touch **Delay**.
- 3 Set each parameter as follows.



Sound Image LR (Front)

Focus the sound image on the front of front seats.

Sound Image LR (Rear)

Focus the sound image on the front of rear seats.

Size of the Virtual Sound Field

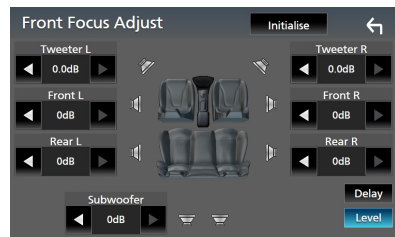
Adjust the size of sound image to meet your taste. If the sound image is shifted from the front, move it back by **Sound Image LR (Front)** or **Sound Image LR (Rear)**.

Subwoofer Delay

Adjust the delay time of subwoofer sound.

- 4 Touch **Level**.

- 5 Touch ◀ or ▶ to adjust the sound level of the selected speaker.





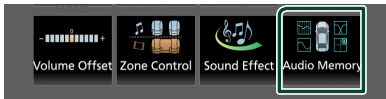
NOTE

- To initialize the Delay and Level settings, touch **Initialise** and **YES** on the confirmation screen.

Audio Setup memory

Audio Control settings can be memorized. The memorized settings can be recalled at any time.

- 1 Press the FNC button.**
 - Popup menu appears.
- 2 Touch .**
 - HOME screen appears.
- 3 Touch .**
 - SETUP screen appears.
- 4 Touch **Audio**.**
 - Audio screen appears.
- 5 Touch **Audio Memory**.**



■ **SETUP Memory**

Lock or unlock the Audio SETUP Memory/ Recall/Clear.

■ **Audio SETUP Memory**

Memorize the current audio settings.

- Fader / Balance, Speaker / X'over, Equalizer (User Preset, SW Level), Position / DTA, Sound Effect (**P.61**)

■ **Audio SETUP Recall**

Recall the memorized audio setting.

■ **Audio SETUP Clear**

Clear the Audio SETUP Memory and the currently memorized audio settings.

Remote control

This unit can be operated using the remote control.

▲ WARNING

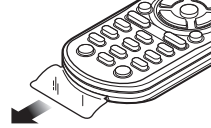
- Do not ingest the battery, Chemical Burn Hazard
The remote control supplied with this product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children.
If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

▲ CAUTION

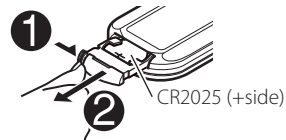
- Put the remote control in a place where it will not move during braking or other operations. A dangerous situation could result, if the remote control falls down and gets wedged under the pedals while driving.
- Do not leave the battery near fire or under direct sunlight. A fire, explosion or excessive 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.
- Danger of explosion if Lithium battery is incorrectly replaced. Replace only with the same or equivalent type.

■ Removing the battery sheet

Pull the battery sheet out from the remote controller to activate the battery.

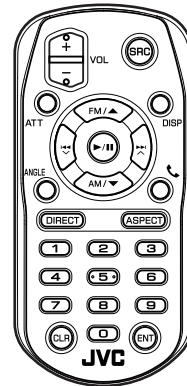



■ Changing the battery of the remote controller



- Use a commercially available button battery (CR2025).
- Insert the battery with the + and – poles aligned properly.
 - If the effectiveness of the remote controller decreases, replace the battery.

Functions of the Remote control Buttons



Key Name	Function
SRC	Switches to the source to be played. In hands-free mode, hangs up the phone.
VOL + -	Adjusts the volume.
ATT	Lowers the volume when pressed once. Restores the previous volume when pressed twice.
DISP	Switches the screen between the current source and the App screen from the connected iPhone/Android.
FM/▲ AM/▼	Selects the folder to be played. For the tuner source, selects FM/AM band to be received.
⏮ ◃ ⏭ ◂	Selects the track or file to be played. For the tuner source, switches to broadcast stations received by the unit.
ANGLE	Not used.
	When a call comes in, answers the call.
DIRECT	Switches to the direct search mode. For details on the direct search mode, see Direct search mode (P.72) .
ASPECT	Changes the aspect ratio. <ul style="list-style-type: none"> To confirm the current aspect ratio setting, operate on the touch panel. (P.53)
Numeric Keypad	<ul style="list-style-type: none"> Allows you to enter the number to search in the direct search mode. For details on the direct search mode, see Direct search mode (P.72). For the tuner source, allows you to enter the preset number. <ul style="list-style-type: none"> If the preset number is single digit, press the number.
CLR	Deletes a character while in direct search mode.
ENT	Not used.

Direct search mode

Using the remote control, you can jump directly to the desired station by entering the frequency value.

- 1 Press the **SRC** button several times until the desired content appears.
- 2 Press the **DIRECT** button.
- 3 Enter the frequency value of the station you want to listen using the numeric keypad.
- 4 Press the **◀◀** or **▶▶** button.
 - ▶ The station corresponding to the number you entered is received.

Connection/Installation

This section is for the professional installer. For safety's sake, leave wiring and mounting to professionals. Consult the car audio dealer.

Before Installation

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

▲ WARNINGS

- If you connect the ignition wire (red) and the battery wire (yellow) to the car chassis (ground), you may cause a short circuit, that in turn may start a fire. Always connect those wires to the power source running through the fuse box.
- Do not cut out the fuse from the ignition wire (red) and the battery wire (yellow). The power supply must be connected to the wires via the fuse.

▲ CAUTION

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

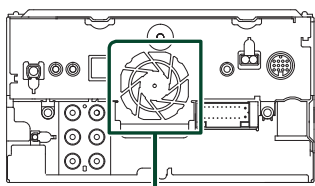
NOTE

- Mounting and wiring this product requires skills and experience. For best safety, leave the mounting and wiring work to professionals.
- Make sure to ground the unit to a negative 12V DC power supply.
- Do not install the unit in a spot exposed to direct sunlight or excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.
- Do not use your own screws. Use only the screws provided. If you use the wrong screws, you could damage the unit.
- If the power is not turned ON ("There is an error in the speaker wiring. Please check the connections." is displayed), the speaker wire may have a short-circuit or touched the chassis of the vehicle and the protection function may have been activated. Therefore, the speaker

wire should be checked.

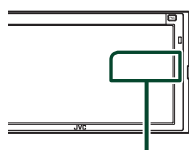
- If your car's ignition does not have an ACC position, connect the ignition wires to a power source that can be turned on and off with the ignition key. If you connect the ignition wire to a power source with a constant voltage supply, such as with battery wires, the battery may be drained.
- If the console has a lid, make sure to install the unit so that the front panel will not hit the lid when closing and opening.
- If the fuse blows, first make sure the wires aren't touching to cause a short circuit, then replace the old fuse with one with the same rating.
- Insulate unconnected wires with vinyl tape or other similar material. To prevent a short circuit, do not remove the caps on the ends of the unconnected wires or the terminals.
- Connect the speaker wires correctly to the terminals to which they correspond. The unit may be damaged or fail to work if you share the ⊖ wires or ground them to any metal part in the car.
- When only two speakers are being connected to the system, connect the connectors either to both the front output terminals or to both the rear output terminals (do not mix front and rear). For example, if you connect the ⊕ connector of the left speaker to a front output terminal, do not connect the ⊖ connector to a rear output terminal.
- After the unit is installed, check whether the brake lamps, blinkers, wipers, etc. on the car are working properly.
- Mount the unit so that the mounting angle is 30° or less.
- This unit has the cooling fan to decrease the internal temperature. Do not mount the unit in a place where the cooling fan of the unit is blocked. Blocking these openings will inhibit the cooling of the internal temperature and result in malfunction.

Connection/Installation









Cooling fan

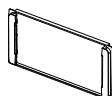
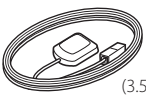


- Do not press hard on the panel surface when installing the unit to the vehicle. Otherwise scars, damage, or failure may result.
- Reception may drop if there are metal objects near the Bluetooth antenna.



Bluetooth antenna unit

Supplied accessories for installation

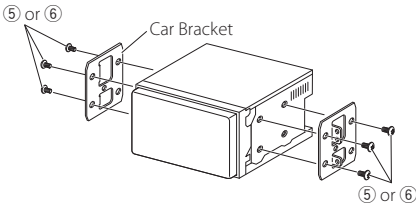
①		x1
②	 (Black 1 m)	x1
③	 (Gray 1 m)	x1
④	 (3 m)	x1
⑤	 (M5 x 8 mm)	x6
⑥	 (M5 x 8 mm)	x6

⑦		x1
⑧	 (3.5 m)	x1
⑨		x1
⑩		x1

Installation procedure

- 1) To prevent a short circuit, remove the key from the ignition and disconnect the \ominus terminal of the battery.
- 2) Make the proper input and output wire connections for each unit.
- 3) Connect the speaker wires of the wiring harness.
- 4) Connect the wiring harness wires in the following order; ground, battery, ignition.
- 5) Connect the wiring harness connector to the unit.
- 6) Install the unit in your car.
- 7) Reconnect the \ominus terminal of the battery.
- 8) Perform the Initial Setup.
See **Initial SETUP (P.8)**.

Installing the unit



NOTE

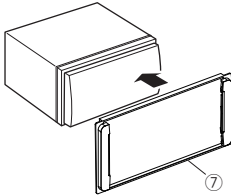
- Make sure that the unit is installed securely in place. If the unit is unstable, it may malfunction (eg, the sound may skip).

NOTE

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

Trim plate

- 1) Attach accessory ⑦ to the unit.

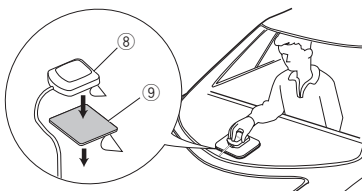


GPS antenna

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

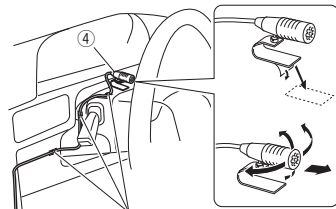
To mount the GPS antenna inside your vehicle:

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



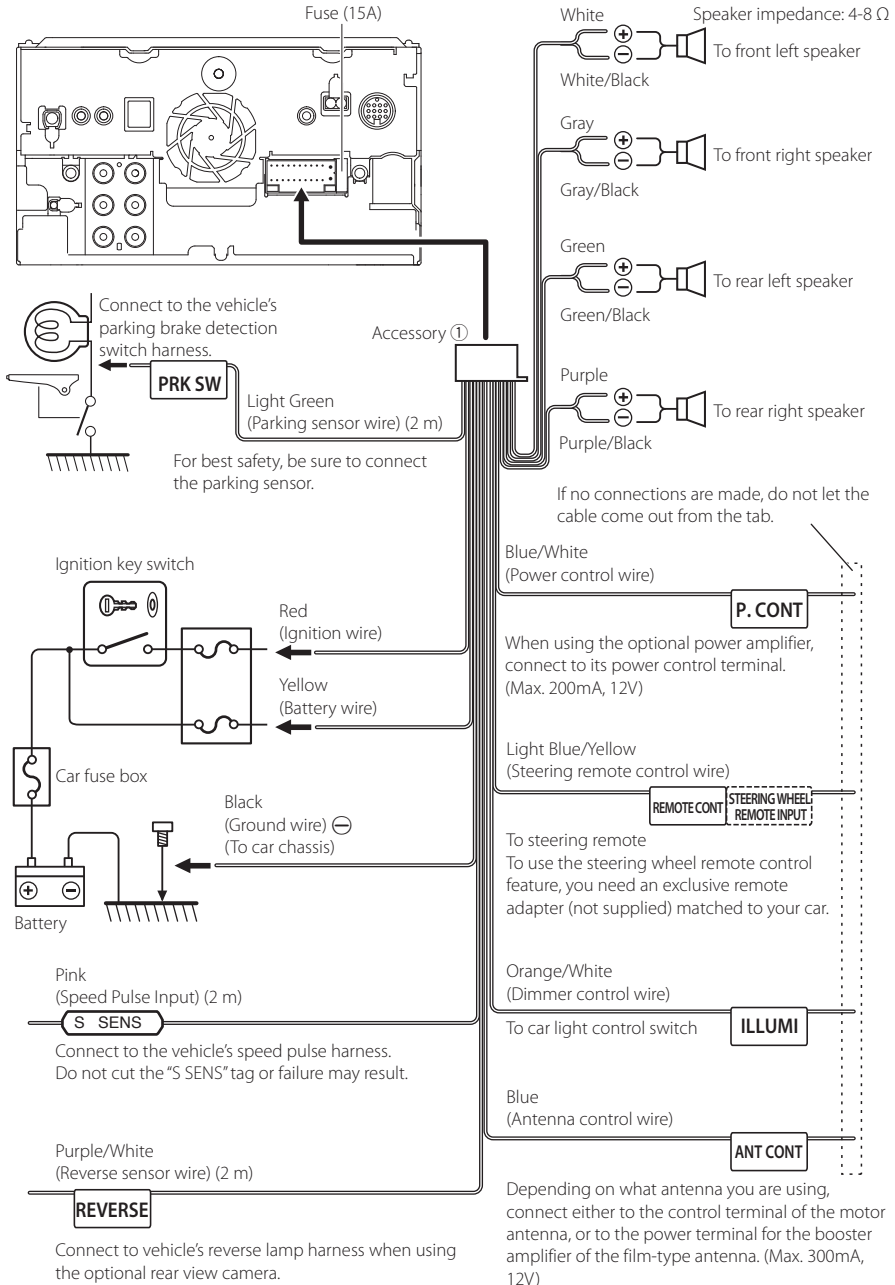
Microphone unit

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

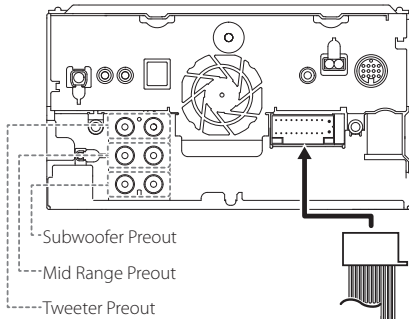


Fix a cable with a commercial item of tape.

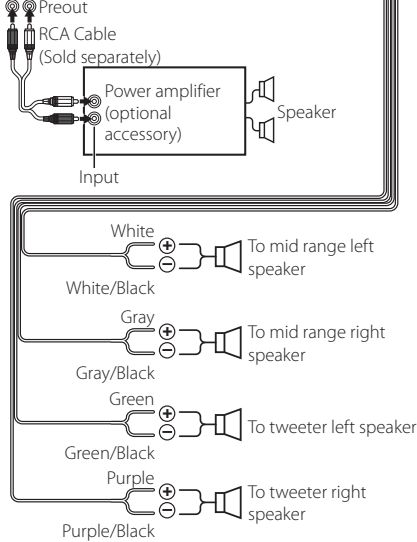
Connecting wires to terminals



3-way speaker system setup



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

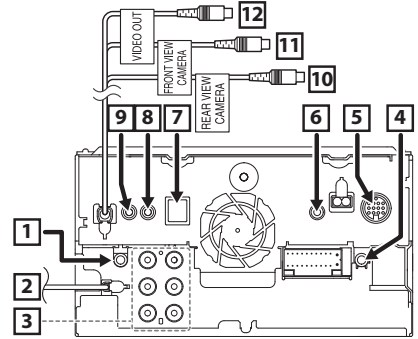



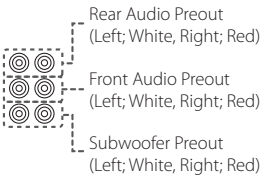

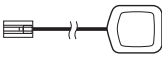
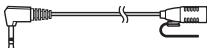
Speaker impedance: 4-8 Ω

NOTE

- For speaker system setup, see **3-way speaker system setup (P.61)**.
- For speaker setup and crossover setup, see **Speaker / X'over setup (P.62)**.
- For how to connect speaker wires to terminals other than speaker terminals and Preout terminals, see **Connecting the system and external components (P.77)** and **Connecting wires to terminals (P.76)**.

Connecting the system and external components



- 1 AV Audio output (ø3.5 mini jack)
- 2 FM/AM antenna input

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

- 4 TV tuner remote output
- 5 External navigation interface
- 6 This jack accepts either AV-IN (1; Left audio, 2; Right audio, 3; Ground, 4; VIDEO) or Side (Left or Right) view camera input. *1
 For more information, see **To set up the camera assignment settings (P.38)**.

- 7 Accessory (8): GPS Antenna
 Use the supplied GPS antenna. Using the GPS antenna other than the supplied one may cause a drop in positioning accuracy.

- 8 Accessory (4): Bluetooth Microphone


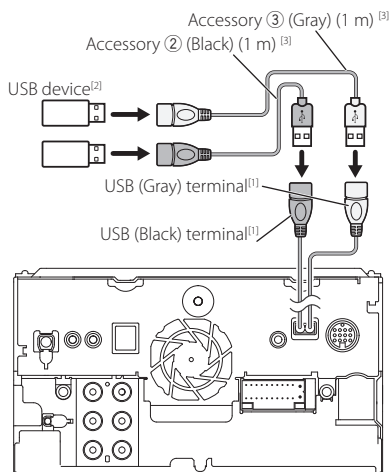
Connection/Installation

9	Accessory ⑩: Steering remote harness Connect to vehicle's steering remote harness. Contact your JVC dealer for details.
10	Rear view camera input (Yellow)
11	Front view camera input (Yellow) *2 For more information, see To set up the camera assignment settings (P.38) .
12	VIDEO Output (Yellow)

*1 Front view camera can also be connected to **6**.

*2 Side (Left or Right) view camera can also be connected to **11**.

Connecting a USB device



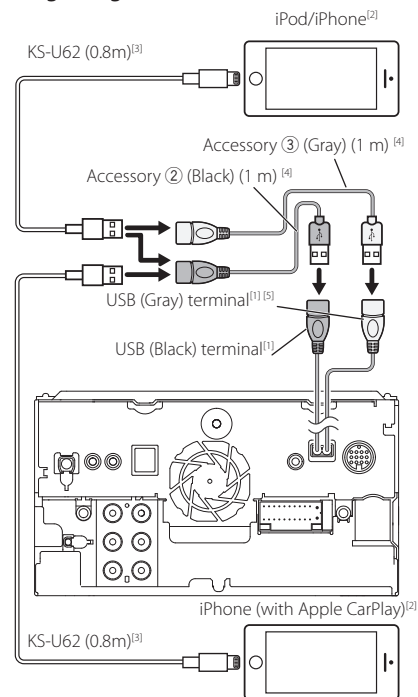
^[1] USB maximum power supply current :
DC 5 V \pm 1.5 A

^[2] Sold separately

^[3] See **Securing the USB extension cable (P.79)**.

Connecting an iPod/iPhone

● Lightning connector



^[1] USB maximum power supply current :
DC 5 V \pm 1.5 A

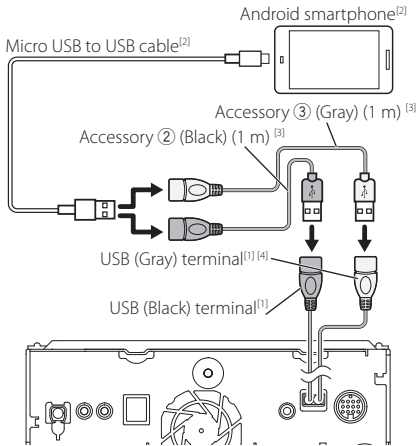
^[2] Sold separately

^[3] Optional accessory

^[4] See **Securing the USB extension cable (P.79)**.

^[5] USB (Gray) terminal does not support USB Mirroring.

Connecting an Android smartphone



^[1] USB maximum power supply current :
DC 5 V $\overline{\text{---}}$ 1.5 A

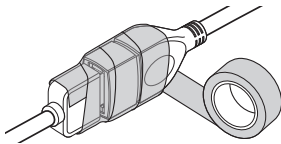
^[2] Sold separately

^[3] See **Securing the USB extension cable (P.79)**.

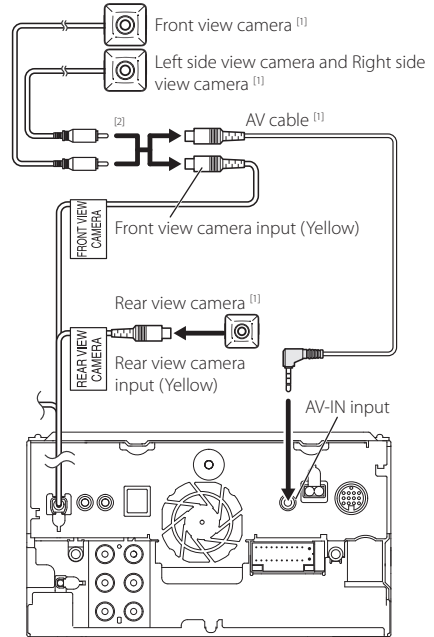
^[4] USB (Gray) terminal does not support USB Mirroring.

Securing the USB extension cable

Secure the USB extension cable with insulating tape or the like so that its connectors are not disconnected.



Connecting the camera



^[1] Sold separately

^[2] Up to 2 cameras of Front view camera, Left side view camera and Right side view camera can be connected. For more information, see **Camera Assignment Settings (P.37)**.

Troubleshooting

Problems and Solutions

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

NOTE

- 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

- **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 / X'over setup (P.62)*.

The dual zone function is enabled.

- Set the dual zone function to off. See *Zone Control (P.66)*.

- **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.66)*.

- **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.66)*.

About audio operations

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 *Connecting the system and external components (P.77)*.

Cannot select a folder.

The random play function is enabled.

- Turn off the random function.

The sound skips when an audio file is being played.

The recording condition is bad.

- Record the file again.

No sound while using Mirroring for JVC application.

- Make sure the smartphone and the unit is connected via Bluetooth and connected over A2DP/SPP. **(P.26)**
 - Raise the volume on your smartphone.
- Some application does not support Mirroring for JVC application playback. (Apple Music App does not support playback using Mirroring for JVC application.)
- Try another music application.

No sound while using "iPod" source or "Bluetooth" source.

- Make sure you stop broadcast on iPhone's screen recording function after you disconnect from mirroring operations.

Cannot operate Mirroring for JVC application with touch panel operation.

Available functions may differ from the ones operated on the smartphone.

Depending on the connected smartphone, some functions do not work on this unit.

Depending on the operating system (OS) of the connected smartphone, some functions do not work on this unit.

- Change the smartphone to compatible device. See *USB Mirroring Operation (P.26)*.

The unit does not respond when you try to perform a operation during USB mirroring.

- Unplug the smartphone from the USB (Black) terminal, then reattach the smartphone again.

Others

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.

There is an error in the speaker wiring. Please check the connections.

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 turn the power off and on again.

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.

Error 07–67

The unit is not operating correctly due to some reason or other.

- Turn the power off and on again. If the “Error 07–67” message does not disappear, contact your nearest JVC dealer.

No Device (USB device)

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.

Disconnected (iPod, Bluetooth audio player)

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.82)** and try another USB device.

The USB device which contains no playable audio file is selected.

- Switch USB devices. See **USB DEVICE CHANGE (P.29)**.

USB device over current status detected.

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.

 **Apple CarPlay**

The GPS antenna must be connected to use Apple CarPlay wirelessly. Please verify the proper connections or plug in by USB to use Apple CarPlay.

The GPS antenna is not connected when the Apple CarPlay is started by connecting wirelessly or when the iPhone compatible with wireless Apple CarPlay is registered in **Apple CarPlay Device List**.

- Check the connection of the GPS antenna or plug in over USB to use Apple CarPlay.

The speed sensor and the GPS antenna must be connected to use Apple CarPlay wirelessly. Please verify the proper connections or plug in by USB to use Apple CarPlay.

The speed pulse is not detected and the GPS antenna is not connected when the Apple CarPlay is started by connecting wirelessly or when the iPhone compatible with wireless Apple CarPlay is registered in **Apple CarPlay Device List**.

- Check the connection of the speed pulse and the GPS antenna or plug in over USB to use Apple CarPlay.

Appendix

Playable Media and Files

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

About files

The following audio and video files are supported.

■ Playable Audio files

	Format	Bit rate	Sampling frequency	Bit count
AAC-LC (.m4a)	MPEG-2/MPEG-4 AAC LC HE-AAC(V1,V2)	8 – 320kbps, VBR	16 – 48 kHz	16 bit
MP3 (.mp3)	MPEG-1/MPEG-2 Audio Layer 3	8 – 320kbps, VBR	16 – 48 kHz	16 bit
WMA (.wma)	Windows Media Audio Standard L3 profile (Version 7,8,9)	8 – 320kbps	16 – 48 kHz	16 bit
Linear PCM (WAVE) (.wav)	RIFF waveform Audio Format	–	16 – 192 kHz	16 bit/24 bit
FLAC (.flac)	flac	–	16 – 192 kHz	16 bit/24 bit
Vorbis (.ogg)	vorbis	VBR	16 – 48 kHz	16 bit

- WMA and AAC files with DRM cannot be played.
- Although the audio files complies with the standards listed above, they may not be played depending on the types or conditions of media or device.
- This unit supports playback of High-Resolution Audio files.
It is recommended that a car audio system should be configured with all High-Resolution Audio compatible products from player to speaker to enjoy its high quality sound.

■ Acceptable Video files

	Profile	Max. Picture size	Max. bit rate	Audio format
MPEG-1 (.mpg, .mpeg)	–	352 × 240, 352 × 288	1.5 Mbps	MPEG Audio Layer 2
MPEG-2 (.mpg, .mpeg)	MP@ML	720 × 480, 720 × 576	8 Mbps	MPEG Audio Layer 2
H.264/MPEG-4 AVC (.mp4, .m4v, .avi, .flv, .f4v)	Baseline Profile, Main Profile	1920 × 1080 (30 fps)	8 Mbps	MP3, AAC
MPEG-4 (.mp4, .avi)	Advanced Simple Profile	1920 × 1080 (30 fps)	8 Mbps	MP3, AAC
WMV (.wmv)	Main Profile	1920 × 1080 (30 fps)	8 Mbps	WMA
MKV (.mkv)	Video format follows H.264/MPEG-4 AVC, MPEG-4, WMV			MP3, AAC, WMA, Vorbis, FLAC

- This unit can only play back files which are smaller than 4 GB.

■ Limitation on structure of file and folder

	USB device
Maximum number of folder layers	8
Maximum number of files (per folder)	999
Maximum number of folders (per folder)	9999
Maximum number of folders (per device)	Unlimited

- You can enter a folder name and file name with 255 or fewer single-byte characters.
- Files in the folder whose folder name begins with a dot (.) cannot be played.

Specifications

■ Monitor section

Picture Size

- : 6.75 inches (diagonal) wide
- : 151.8 mm (W) × 79.68 mm (H)

Display System

- : TN LCD panel

Drive System

- : TFT active matrix system

Number of Pixels

- : 1,152,000 (800H × 480V × RGB)

Effective Pixels

- : 99.99%

Pixel Arrangement

- : RGB striped arrangement

Back Lighting

- : LED

■ USB interface section

USB Standard

- : USB 2.0 High Speed

File System

- : FAT16, FAT32, exFAT, NTFS

Maximum Power Supply Current

- : DC 5 V  1.5 A × 2

D/A Converter

- : 24 bit/32 bit

Audio Decoder

- : MP3 / WMA / AAC / WAV / FLAC / Vorbis

Video Decoder

- : MPEG-1 / MPEG-2 / MPEG-4 / WMV / H.264 / MKV

Frequency Response

- 192 kHz : 20 – 88,000 Hz
- 96 kHz : 20 – 44,000 Hz
- 48 kHz : 20 – 22,000 Hz
- 44.1 kHz : 20 – 20,000 Hz

Total Harmonic Distortion

- : 0.010% (1 kHz)

S/N Ratio (dB)

- : 98.5 dB

Dynamic Range

- : 89 dB

■ Wireless Mirroring section

Mode

- : Sink

Copyright protection

- : HDCP2.2

Touch Control

- : UIBC

■ Wi-Fi section

IEEE Standard

- : 802.11 a/b/g/n/ac

Frequency Range

- : Dual Band (2.4GHz/5GHz)

Channels

- : Auto(1-11ch)/Auto(149,153,157,161ch)

Transfer rates (MAX)

- : 11a: 54 Mbps / 11b: 11 Mbps /
- : 11g: 54 Mbps / 11n: 300 Mbps /
- : 11ac: 867 Mbps

Output Power

2.4 GHz/SISO

- : 11b: 14 dBm ± 2 dB / 11g: 13 dBm ± 2 dB /
- : 11n (20MHz): 12 dBm ± 2 dB

5 GHz/SISO

- : 11a: 9 dBm ± 2 dB /
- : 11n (20 MHz)/11ac (20 MHz): 9 dBm ± 2 dB /
- : 11n (40 MHz)/11ac (40 MHz): 8 dBm ± 2 dB /
- : 11ac (80 MHz): 8 dBm ± 2 dB

5 GHz/MIMO

- : 11n (20 MHz)/11ac (20 MHz): 11 dBm ± 2 dB /
- : 11n (40 MHz)/11ac (40 MHz): 11 dBm ± 2 dB /
- : 11ac (80 MHz): 11 dBm ± 2 dB

■ Bluetooth section

Technology

- : Bluetooth Ver.5.0

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

- : LDAC/SBC/AAC

Profile (Multi Profile support)

- HFP (V1.7) (Hands Free Profile)
- SPP (Serial Port Profile)
- A2DP (Advanced Audio Distribution Profile)
- AVRCP (V1.6) (Audio/Video Remote Control Profile)
- PBAP (Phonebook Access Profile)

Appendix

■ FM tuner section

Frequency Range (step)

: 87.5 MHz – 108.0 MHz (50 kHz)

Usable Sensitivity (S/N : 30 dB)

: 9.3 dBf (0.8 μ V/75 Ω)

Quieting Sensitivity (S/N : 46 dB)

: 15.2 dBf (1.6 μ V/75 Ω)

Frequency Response

: 30 Hz – 15 kHz

S/N Ratio (dB)

: 65 dB (MONO)

Selectivity (\pm 400 kHz)

: Over 80 dB

Stereo Separation

: 45 dB (1 kHz)

■ AM tuner section

Frequency Range (step)

: 531 kHz – 1611 kHz (9 kHz)

Usable Sensitivity

: 28 dB μ (25 μ V)

■ Video section

Color System of External Video Input

: NTSC/PAL

External Video Input Level (RCA jacks)

: 1 Vp-p/75 Ω

External Video Input Level (mini jack)

: 1 Vp-p/75 Ω

External Audio Max Input Level (mini jack)

: 2 V/25 k Ω

Video Output Level (RCA jacks)

: 1 Vp-p/75 Ω

Audio Output Level (mini jack)

: 0.9 V/10 k Ω

■ Audio section

Maximum Power (Front & Rear)

: 50 W \times 4

Typical Power Output (Front & Rear)

Full Bandwidth Power (at less than 1% THD)

: 22 W \times 4

Output frequency band

: 20 – 88,000 Hz

Preout Level (V)

: 5 V/10 k Ω

Preout Impedance

: \leq 300 Ω

Speaker Impedance

: 4 – 8 Ω

Graphics equalizer

Band: 13 Band

Frequency (BAND1 – 13)

: 62.5/100/160/250/400/630/1k/1.6k/2.5k/4k/6.3k/
10k/16k Hz

Gain

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

2-way X'Over

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.

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

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.

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

3-way X'Over

High pass filter

Frequency: 250/300/1k/1.6k/2.5k/4k/5k/6.3k/8k/
10k/12.5k Hz

Slope: -12/-18/-24 dB/Oct.

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

Band pass filter

Frequency: Through, 50/60/70/80/90/100/120/150/
180/220/250/300 Hz

250/300/1k/1.6k/2.5k/4k/5k/6.3k/8k Hz,

Through

Slope: -12/-18/-24 dB/Oct.

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

Low pass filter

Frequency: 30/40/50/60/70/80/90/100/120/150 Hz,
Through

Slope: -12/-18/-24 dB/Oct.

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

■ General

Operating Voltage
: 12 V DC car battery

Current Consumption
: 15 A

Installation Dimensions (W × H × D)
: 178 × 100 × 155 mm

Weight
: 1.7 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.

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