# JVC

## KW-M730BT

## MONITOR WITH RECEIVER

JVCKENWOOD Corporation

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



## Contents

## **Before Use**

Precautions4	
How to read this manual4	

4

5

17

## **Basic Operations**

Functions of the Buttons on the Front Pan	iel 5
Turning on the Unit	6
Initial Settings	6
Adjusting the volume	8
Touch screen operations	9
HOME screen descriptions	9
Source selection screen descriptions	10
Source control screen descriptions	12
Popup menu	13
List screen	13

USB	14
Connecting a USB device	

connecting a 05b device	
USB Basic Operation	14
Search Operation	16

## iPod/iPhone

Preparation17	7
iPod/iPhone Basic Operation18	3
Search Operation19	)

## APPS—Android Auto™/ Apple CarPlay

Apple CarPlay Operation	20
Android Auto <sup>™</sup> Operation	22
Spotify Operation	23

20

25

29

## Tuner

Tuner Basic Operation	25
Memory Operation	26
Selecting Operation	26
Traffic Information	27
Tuner Setup	27

## Bluetooth Control

Information for using Bluetooth® devices	29
Register from the Bluetooth unit	30
Bluetooth Setup	31
Playing Bluetooth Audio Device	33
Using Hands-Free Unit	35
Hands-Free Setup	39

## Other External Components 40

View Camera40
External audio/video players—AV-IN41

## Setting Up 42

Monitor Screen Setup	42
System Setup	42
User Interface Setup	43
Special Setup	44
Display Setup	45
AV Setup	46

## Controlling Audio

Speaker/ X'over setup	47
Controlling General Audio	50
Equalizer Control	50
Volume Offset	51
Zone Control	52
Sound Effect	52
Listening Position/ DTA	53

47

55

63

64

## Remote control

Functions of the Remote control Buttons ......55

Connection/Installation	57
Before Installation	57
Installing the unit	59

## Troubleshooting

Problems and Solutions	63
Error Messages	63

## Appendix

Playable Media and Files	64
Specifications	65
About this Unit	67

## **Before Use**

## Precautions

## A 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 metal tools) inside the unit.
- Do not watch or fix your eyes on the unit's display when you are driving for any extended period.
- If you experience problems during installation, consult your 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 language to display menus, audio file tags, etc. See **User Interface Setup** (P.43).
- The Radio Data System or Radio Broadcast Data System feature won't work where the service is not supported by any broadcasting station.
- The unit may not function properly if the connectors between the unit and front panel are dirty. Detach the front panel and clean the connector with a cotton swab gently, being careful not to damage the connector.

## Protecting the monitor

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

## 🔳 Cleaning the unit

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

## NOTE

thereafter

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

## 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

## How to read this manual

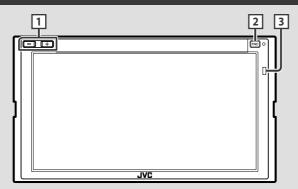
 The screens and panels shown in this manual are examples used to provide clear explanations of the operations.

For this reason, they may be different from the actual screens or panels used, or some display patterns may be different.

 Indication language: English indications are used for the purpose of explanation. You can select the indication language from the SETUP menu. See User Interface Setup (P.43).

## **Basic Operations**

## Functions of the Buttons on the Front Panel



## NOTE

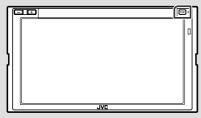
• The panels shown in this guide are examples used to provide clear explanations of the operations. For this reason, they may be different from the actual panels.

Number	Name	Motion
1	–, + (Volume)	<ul> <li>Adjusts volume.</li> <li>The volume will go up until 15 when you keep pressing +.</li> </ul>
2	FNC	<ul> <li>Displays the popup menu screen.</li> <li>Pressing for 1 second displays the Voice Recognition screen (P.36).</li> <li>When the power off, turns the power on.</li> </ul>
3	Remote Sensor	Receives the remote control signal.

## **Turning on the Unit**

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

## 1 Press the FNC button.



> The unit is turned on.

#### NOTE

 If it is your first time turning the unit on after installation, it will be necessary to perform Initial setup (P.6).

#### • To turn off the unit:

#### 1 Press the FNC button.

> Popup menu appears.

2 Touch 💼.



► HOME screen appears.

3 Touch III.

## 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.
- Touch Language Select.
- Select the desired language.
- ④ Touch 🖌 .

For detailed operation, see **User Interface Setup (P.43)**.

#### Clock

Sets the synchronization of the clock and adjusts it.

For detailed operation, see **Calendar/clock** settings (P.8).

#### Display

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

- 1) Touch **Display**.
- 2 Touch Viewing Angle.
- ③ Select an angle
- ④ Touch 🖌 .

For detailed operation, see **Display Setup** (**P.45**).

#### Camera

Set the parameters for the camera.

#### 1) Touch Camera.

② Set each item and touch 5.

For detailed operation, see *Camera Setup* (*P.40*).

#### DEMO

Set the demonstration mode. Default is "ON". ① Touch **DEMO** and set ON or OFF.

2 Touch Finish.

Initial SET-UP	
Language	T
Clock	
Display	
Display	
Camera	
DEMO	×

### NOTE

• These settings can be set from the SETUP menu. See **Setting Up (P.42)**.

## **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 released. Note the Security Code can be set as 4 to 8-digit number of your choice.

1 Press the **FNC** button.

> Popup menu appears.



► HOME screen appears.



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-digit number 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 screen returns to step 6 (for the first code entry).
- If you have disconnected the Receiver from 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, then repeat step 6 and 7.

#### To clear the security code:

1 Touch Security Code Cancellation on the Security screen.

## Calendar/clock settings



Popup menu appears.

## 2 Touch 💼.



- ► HOME screen appears.
- 3 Touch 🚺.



## 4 Touch User Interface.



➤ User Interface screen appears.

## 5 Set each item as follows.

Scroll the page to show the item.



## Clock

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

Manual: Sets the clock manually.

## Time Zone

Select the time zone.

## Clock Adjust

If you select **Manual** for Clock, adjust the date and time manually. **(P.43)** 

## Adjusting the volume

To 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 setting menu screen or to change the page, etc.

#### • 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 the list screen

by flicking the screen up/ down.

#### Swipe

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

<b>S</b>

## **Monitor Touch Control:**

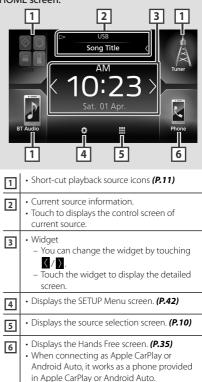
You can also control playback by moving your finger on the touch panel as follows (for some sources, the gesture control is not available).

- Sliding the finger towards up/down: Functions same as pressing **1** / **1** (Media). Tuner Preset broadcast stations are switched.
- Sliding the finger towards left/right: Functions same as pressing I ◄ / ►►I.
- Moving your finger clockwise or counterclockwise: increases/decreases the volume.



## **HOME screen descriptions**

Most functions can be performed from the HOME screen.



## **Display the HOME**

## 1 Press the FNC button.



Popup menu appears.

## 2 Touch

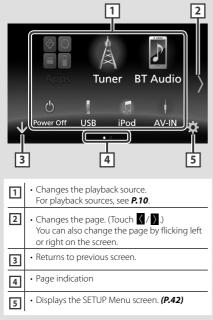


➤ HOME screen appears.

#### **Basic Operations**

## Source selection screen descriptions

You can display all playback sources and options on the source selection screen.



## Select the playback source

## 1 Touch 🎹

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

Android Auto Apple CarPlay	Switches to the Android Auto/ Apple CarPlay screen from the connected iPod touch/iPhone/Android device.*1 ( <b>P.20</b> )
) Tuner	Switches to the Radio broadcast. (P.25)
D Audio	Plays a Bluetooth audio player. (P.29)
<b>1</b> iPod	• Plays an iPod/iPhone. <b>(P.17)</b>
USB	Plays files on a USB device. (P.14)
Spotify	Switches to the Spotify. (P.23)
AV-IN	Switches to an external component connected to the AV-IN input terminal. (P.41)
③ Audio	Displays the Audio screen. (P.47)
AV Off	Turns off the AV source. (P.11)
U Power Off	• Turn off the unit. <b>(P.6)</b>

\*1 When iPhone compatible with CarPlay is connected, Apple CarPlay is displayed. When an Android device compatible with Android Auto is connected, Android Auto is displayed.

## To select the playback source on the HOME screen



The 3 items displayed on the source selection screen as the large icons are shown on the HOME screen.

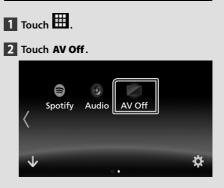
You can change items displayed on this area by customizing the source selection screen. **(P.11)** 

## To select the playback source on the source control screen



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

## Put the unit in standby



## Customize Short-cut buttons on HOME screen

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



- 2 Touch and hold the icon which you want to move to go into the customizing mode.
- 3 Drag it where you want to move.



#### **Basic Operations**

## Source control screen descriptions

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

#### Indicators



#### Short-cut buttons

## 

Connected Bluetooth device information.

• Example: Lights up when quick charging battery of the connected iPod/ iPhone/ Smartphone.

## 2 All sources icon

Displays all sources.

## 3 Secondary screen

- **1**/**1**: The Secondary screen changes 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 on.
- MUTE: The mute function is active.
- LOUD: The loudness control function is on.
- Short-cut buttons: The source changes to the one you have set as a short-cut. For the shortcut setting, refer to Customize Short-cut buttons on HOME screen (P.11).

## 4 📞

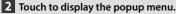
Touch to display the Hands Free screen. **(P.35)** When connecting as Apple CarPlay or Android Auto, it works as a phone provided in Apple CarPlay or Android Auto.

## Popup menu

#### 1 Press the **FNC** button.



Popup menu appears.





The contents of the menu are as follows.

НОМЕ	• Displays the HOME screen. <b>(P.9)</b>
DISP	<ul> <li>Switches the screen. The screen switched to depends on the DISP Key setting in the User Interface screen. (P.43).</li> <li>Touch and hold to turns the screen off.</li> </ul>
Phone	<ul> <li>Display the Hands Free screen. (P.35)</li> <li>When connecting as Apple CarPlay or Android Auto, it works as a phone provided in Apple CarPlay or Android Auto.</li> </ul>
Camera	• Displays the view camera. <b>(P.40)</b>
Screen Adjust	<ul> <li>Displays the Screen Adjustment screen.</li> <li>(P.42)</li> </ul>
Equalizer	<ul> <li>Displays the Graphic Equalizer screen.</li> <li>(P.50)</li> </ul>
$\checkmark$	Close the popup menu.
Apps Apps Tuner BT Audio	<ul> <li>Short-cut buttons: The source changes to the one you have set as a short-cut. For the short-cut setting, refer to Customize Short-cut buttons on HOME screen (P.11).</li> </ul>
د	<ul> <li>Touch to display the Hands Free screen. (P.35)</li> <li>When connecting as Apple CarPlay or Android Auto, it works as a phone provided in Apple CarPlay or Android Auto.</li> </ul>

## List screen

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



Displays list type selection window.

2 7 日

Displays music/movie file list.

3 K Text scroll

Scrolls the displayed text.

4 Play etc.

Keys with various functions are displayed here.

- Play : Plays all tracks in the folder containing the current track.
- • A-z : Jump to the letter you entered (alphabet search).
- 🖿 Top 🖆 Up : Moves to the upper hierarchy.

5 A / Y / A / Page scroll You can change the page to display more items by pressing A / Y.

• **I** / **I** : Displays the top or bottom page.

## 6 Return

Returns to previous screen.

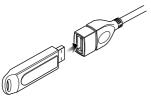
#### NOTE

• Buttons which cannot be activated from the list screen are not displayed.

## USB

## **Connecting a USB device**

1 Connect the USB device with the USB cable. (P.62)



## 2 Press the FNC button.

- Popup menu appears.
- 3 Touch 💼.
  - ► HOME screen appears.
- 4 Touch III.
- 5 Touch USB. (P.10)

## Disconnect the USB device

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

## 🔳 Usable USB device

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

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

## About file system

The file system should be the one of the following.

### 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**



## **Content list panel**



## 1 🖓 / 🌾

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

File repeat ( ♥ ), Folder repeat ( ♥ ), Repeat all ( ♥ )

- Randomly plays all tracks in current folder. Each time you touch the key, random mode switches in the following sequence;
   File random ( Image), Random off ( Image)
- When a high-resolution source is played, its format information is displayed.

## 2 Track information

Displays the information of the current file. Only a file name and a folder name are displayed if there is no tag information.

## **3** Function bar

- **Q** : Searches track/file. For details on search operation, see *Search Operation (P.16)*.
- I >>> : Searches the previous/next track/ file.

Touch and hold to fast forward or fast backward. (It will be cancelled automatically after about 50 seconds.)

- ►II : Plays or pauses.
- 💋 : Touch to attenuates/restores the sound.

## 4 Function panel

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

• 🕒 🕩 : Searches previous/next folder.

### · USB DEVICE CHANGE

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

## 5 Content list

Touch on the right side of the screen to display the Content list. Touch again to close the list.

#### 6 Indicator Items

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

#### 7 Artwork/ Play mode indicator/ Playing time

The jacket of the currently playing file is displayed.

- ►, ►►, etc.: Current play mode indicator The meanings of each icon are as follows;
  - ► (play), ►► (fast forward),

◄◄ (fast backward), ■ (pause).

## 8 Content list panel

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

#### Video screen



### 9 Searching file area (Video file only)

Touch to search 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 the list type.



### NOTE

• For operations in the list screen, see *List screen* (*P.13*).

## Category search

You can search a file by selecting category.

- **1** Touch Category List.
- 2 Select whether you search by audio files 7 or video files .
- **3** Touch the desired category.



 The list corresponding to your selection appears.

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

## 🔳 Link search

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

- 1 Touch Link Search.
- **2** Touch the desired tag type. You can select from artist, album and genre.



- ➤ The list corresponding to your selection appears.
- **3** Touch desired item from the content list.

## 🔳 Folder search

You can search 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 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 6s Plus
- iPhone 6s
- iPhone 6 Plus
- iPhone 6
- iPhone 5s
- iPhone 5c
- iPhone 5
- iPod touch (6th generation)
- iPod touch (5th generation)

### NOTE

- By connecting your iPod/iPhone to this unit with an optional accessory iPod connection cable KS-U62, you can supply power to your iPod/iPhone as well as charge it while playing music. However, the power of this unit must be on.
- If you start playback after connecting the iPod, the music that has been played by the iPod is played first.

## 🔳 Connect iPod/iPhone

## Wired connection

#### Preparation

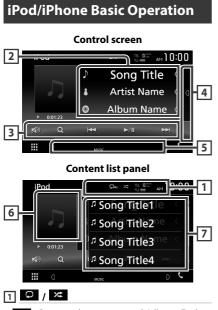
- Connect an iPod/iPhone with the KS-U62 (optional accessory) while CarPlay is not connected.
- With a CarPlay-capable iPhone, turn off CarPlay by operating the iPhone at functional setup before connecting iPhone. For details of the setup method, contact the manufacturer of the terminal.
- Plug the iPod/iPhone into the gray USB terminal with the KS-U62 (optional accessory).
- Only one iPod/iPhone can be connected.
- 1 Connect the iPod/iPhone using KS-U62. (*P.62*)
- 2 Press the FNC button.
  - > Popup menu appears.
- 3 Touch 💼.
  - HOME screen appears.
- 4 Touch 🎹
- 5 Touch iPod . (P.10)
- 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 the Bluetooth device and do the profile setting of the connection beforehand. See *Register from the Bluetooth unit (P.30)* and *Connect the Bluetooth unit (P.32)*.
- Connect an iPhone on Bluetooth while CarPlay and an iPod/iPhone are not connected on USB.



• O : Repeats the current track/album. Each time you touch the key, repeat mode switches in the following sequence;

Song repeat ( 🔎 ), All songs repeat ( 🖓 🗛 )

 Randomly plays all tracks in current album. Each time you touch the key, random mode switches in the following sequence;
 Song random (
 ), Album random (
 ), Random off (

## 2 Track information

- Displays the information of the current file.
- Touch to display the category list screen. See *Category search (P.19)*.

## **3** Function bar

- Q : Searches track/file. For details on search operation, see *Search Operation (P.19)*.
- I <> I <> Searches the previous/next track/ file. Touch and hold to fast forward or fast backward. (It will be cancelled automatically after about 50 seconds.)
- ►II : Plays or pauses.
- 💋 : Touch to attenuates/restores the sound.

## 4 Content list

Touch on the right side of the screen to display the Content list. Touch again to close the list.

## 5 Indicator Items

• MUSIC: Identifies the music file.

## 6 Artwork/ Play mode indicator/ Playing time

The jacket of the currently playing file is displayed.

- ►, ►►, etc.: Current play mode indicator The meanings of each icon are as follows;
- ► (play), ►► (fast forward),
- ◄< (fast backward), Ⅱ (pause).</li>

## 7 Content list panel

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

## **Search Operation**

You can search music files by the following operations.

- 1 Touch Q.
- **2** Touch  $\checkmark$ .



**3** Select the list type.



#### NOTE

• For operations in the list screen, see *List screen* (*P.13*).

## Category search

You can search a file by selecting category.

- **1** Touch **Category List**.
- 2 Touch the desired category.



 The list corresponding to your selection appears.

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

## 🔳 Link search

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

- 1 Touch Link Search.
- 2 Touch the desired tag type. You can select from artist, album, genre and composer.



- The list corresponding to your selection appears.
- **3** Touch desired item from the content list.

## APPS—Android Auto™/Apple CarPlay

## **Apple CarPlay Operation**

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

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

## Compatible iPhone devices

You can use CarPlay with the following iPhone models.

- iPhone 6s Plus
- iPhone 6s
- iPhone 6 Plus
- iPhone 6
- iPhone 5s
- iPhone 5c
- iPhone 5

## Preparation

1 Connect iPhone using KS-U62 via USB (Black) terminal. (*P.62*)

When iPhone compatible with CarPlay is connected to the USB (Black) terminal, the Bluetooth smartphone currently connected is disconnected.

2 Unlock your iPhone.

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

You can use the Apps of the connected iPhone.

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

To enter CarPlay mode, touch **Apple CarPlay** icon in the source selection screen. (*P.10*)



## 1 0

- Displays the home screen of CarPlay.
- Touch and hold to activates Siri.

## 2 Application buttons

Starts the application.

#### 3 HOME

Exits the CarPlay screen and displays the Home screen.

## To exit the 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 Apps in the User Interface screen. (P.43)
- If sound is output using Apple CarPlay when the Apple CarPlay screen is displayed, the source is switched to Apple CarPlay.

## Android Auto<sup>™</sup> Operation

Android Auto enables you to use functions of your Android device convenient for driving. You can easily access route guidance, make calls, listen to music, and access convenient functions on the Android device while driving. For details about Android Auto, visit **https://** www.android.com/auto/ and https://support. google.com/androidauto.

### **Compatible Android devices**

You can use Android Auto with Android devices of Android version 5.0 (Lollipop) or later.

#### NOTE

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

## Preparation

## 1 Connect an Android device via USB terminal. (*P.62*)

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

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

2 Unlock your Android device.

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

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

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

To enter Android Auto mode, touch **Android Auto** icon in the source selection screen. (P.10)



## 1 Application/information buttons

Starts the application or displays information.

## To exit the Android Auto screen

- Press the FNC button.Popup menu appears.
- 2 Touch <a>min</a>.► 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 **Apps** in the **User Interface** screen. (P.43)
- If sound is output using Android Auto when the Android Auto screen is displayed, the source is switched to Android Auto.

## **Spotify Operation**

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

To enter Spotify source, touch **Spotify** icon in the source selection screen. (*P.10*)

#### Preparation

- Install the latest version of the Spotify application "Spotify" on your iPhone or Android.
   iPhone: Search for "Spotify" in the Apple App Store to find and install the most current version.
   Android: Search for "Spotify" in Google play to find and install the most current version.
- iPhones are connected on either USB or Bluetooth.
- Android devices are connected on Bluetooth.
- To connect a smartphone via Bluetooth, register it as the Bluetooth device and do the App (SPP) profile setting of the connection beforehand. See Register from the Bluetooth unit (P.30) and Connect the Bluetooth unit (P.32).



## 1 Artwork/ Playing time

- The picture data is displayed if available from current content.
- For confirmation of play time.

#### 2 Function bar

- 🔳 : Displays the Menu screen
- (O) : New radio station that relates to the artist of the currently playing song is selected and playback starts.
- K , K : Skips the current song.
- D , D : Plays or pauses the content of the current station.
- Eaves currently playing song to My Music.
- 💋 : Touch to attenuates/restores the sound.

## **3** Content information

Displays the information of the current content being played.

- 4 🕂 / 🖆 / 🖓 / 😕
- IT : Thumbs down to the current contents and skip to the next contents.
- Content: Registers the current contents as favorite content.
- 🖸 : Repeats the current song.
- Randomly plays all song in current playlist.

## Selecting a track

## 1 Touch 📃 .

- Menu screen appears.
- **2** Select the list type, then select a desired item.



#### Selects the category and station

Touch the category and station name in the list.

## 🔳 🚺 Тор

Returns to the first hierarchy of the list.

## 🔳 🚺 Up

Returns to the previous list.

### About Spotify®

#### iPhone or iPod touch

 Install the latest version of the Spotify application on your iPhone or iPod touch. (Search for "Spotify" in the Apple App Store to find and install the most recent version.)

#### Android™

Visit Google play and search for "Spotify" to install.

#### Note

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

## **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.10)



## 1 Information display

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

P#: Preset number

## 2 AUTO1 / AUTO2 / MANUAL

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 FM AM

Switches the band.

## 4 Preset key

Recalls the memorized station.

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

## 5 Function bar

- Idd Interpret The State of Stat
- **SSM** : Presets stations automatically. For details, see *Auto memory (P.26)*.
- isplays the TUNER SETUP screen. For details, see *Tuner Setup (P.27)*.
- 💋 : 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.26)**.

## 7 MONO (FM only)

Select the Monaural reception.

## 8 TI (FM only)

Sets the traffic information mode on. For details, see **Traffic Information (P.27)**.

## 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.

### 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 Broadcast 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.

## **Tuner Setup**

You can set tuner related parameters.

## 1 Touch 🅸 🖗 .



► Radio SETUP screen appears.

## 2 Set each item as follows.

#### NEWS

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

#### AF

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

#### Regional

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

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

## Language Select

Selects a display language for the PTY function.

#### Aerial Control

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

#### Tuner

### Area Setting

The tuner channel interval changes depending on the area you use this unit.

Australia (Default): Select this when using in Australia countries. FM/AM intervals are set to 50 kHz/9 kHz.

**US**: Select this when using in North/ Central/South America. FM/AM intervals are set to 200 kHz/10 kHz.

Europe : Select this when using in any other areas. FM/AM intervals are set to 50 kHz/9 kHz.

## **Bluetooth Control**

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

## Information for using Bluetooth® devices

## 🚯 Bluetooth°

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

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

## NOTE

- While driving, do not perform complicated operations such as dialing numbers, using the phone book, etc. When you perform these operations, stop your car in a safe place.
- Some Bluetooth devices may not connect 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.
- For some Bluetooth devices, the device is disconnected when the unit is turned off.

## About the cell-phone and Bluetooth audio player

This unit conforms to the following Bluetooth specifications:

#### Version

Bluetooth Ver. 3.0

## Profile

Cell-phone: HFP (V1.6) (Hands Free Profile) SPP (Serial Port Profile) PBAP (Phonebook Access Profile)

#### Audio player:

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

#### Sound codec

SBC, AAC

#### NOTE

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

#### **Bluetooth Control**

## Register from the Bluetooth unit

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

#### You can register up to 10 Bluetooth units.

#### NOTE

- Up to 10 Bluetooth units can be registered. If an attempt is made to register the 11th Bluetooth unit, the Bluetooth unit 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.

Follow the step 1, 2 and 3 for registration.

## Step 1: Registration from the Bluetooth device

- 1 Search the unit ("KW-M\*\*\*\*") from your smartphone/cell-phone.
- 2 Input the PIN code in your smartphone/ cell-phone.

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



- SSP (Secure Simple Pairing of Bluetooth 2.1 or later)
- 1 Search the unit ("KW-M\*\*\*\*") from your smartphone/cell-phone.
- **2** Confirm the request both on the smartphone/cell-phone and the unit.



#### Step 2: Connection settings

- When the HFP profile is supported, Hands Free 1 or 2 is automatically selected for connection, proceeding to the next step.
- When the A2DP or SPP profile is supported, the cell-phone or audio player is automatically connected, proceeding to the next step.

If cell-phones and/or audio players have already been connected, a selection screen appears.

 Select the hands-free number to connect.
 A name of a smartphone is displayed when it has hands-free connection with the unit.



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

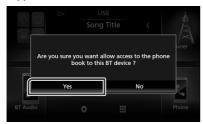
This message appears if the device supports BT audio (A2DP) or smartphone link (SPP).



## Step 3: Phonebook transfer

 Select if you want to transfer your phonebook data.

This message appears if the device supports PBAP.



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

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

## **Bluetooth Setup**

### 1 Press the FNC button.

- > Popup menu appears.
- **2** Touch 💼.



- ➤ HOME screen appears.
- 3 Touch



➤ SETUP Menu screen appears.

#### 4 Touch Bluetooth.



- Bluetooth SETUP screen appears. See the following section for each setting.
- Connect the Bluetooth unit (P.32)
- Change the PIN code (P.33)
- Change the device name (P.33)



1 Touch Select Device in the Bluetooth SETUP screen.



**2** Touch the device name you want to connect.



> Profile select screen appears.

#### NOTE

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

## **3** Set each profile as follows.



#### TEL (HFP) 1, TEL (HFP) 2

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

#### Audio (A2DP)/App (SPP)

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

## 4 Touch Close.

#### NOTE

 If a device has been paired, the Bluetooth unit cannot be connected from the paired device.

## To delete the registered Bluetooth unit

#### 1 Touch Delete.



**2** Touch the device name to check.



## 🗖 Ali

Select all Bluetooth unit.

Erases all check marks.

#### 3 Touch Delete.

➤ Confirmation message appears.

4 Touch Yes.

## Change the PIN code

- **1** Touch **PIN Code** in the Bluetooth SETUP screen.
  - ► PIN Code Set screen appears.
- 2 Input the PIN code.



3 Touch SET.

## Change the device name

1 Touch **Device Name** in the Bluetooth SETUP screen.

> Change Device Name screen appears.

#### 2 Input the device name.



**3** Touch Enter.

## Playing Bluetooth Audio Device

Most function can be controlled from the source control screen.

To enter Bluetooth source, touch **BT Audio** icon in the source selection screen. (*P.10*)

## Bluetooth basic operation

#### Control screen



## 1 Device name/ 오 / 😕

Connected device name.

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

## 2 Information display \*

Displays the name of the track information.

#### 3 Function bar \*

- Q : Searches file. See *File search (P.34)*.
- I ◄ ►►I: Searches the previous/next content. Touch and hold to fast forward or fast backward. (It will be cancelled automatically after about 50 seconds.)
- ►: Plays.
- ∎: Pauses.
- 💋 : Touch to attenuates/restores the sound.

## 4 Function panel

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

• BT DEVICE CHANGE : Selects the device to connect via Bluetooth audio (A2DP) or APP (SPP). See Connect the Bluetooth audio (P.34).

### 5 Play mode indicator/ Playing time

▶, II: Current play mode indicator
 The meanings of each icon are as follows;
 ▶ (play), ▶ (fast forward), ◄◄ (fast backward),
 II (pause), ■ (stop).

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

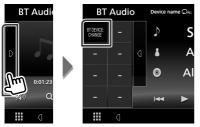
#### NOTE

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

## Connect the Bluetooth audio

Selects the device to connect via Bluetooth audio (A2DP) or APP (SPP).

#### 1 Touch on the left side of the screen. Touch **BT DEVICE CHANGE**.



2 Touch the device name you want to connect.



## 3 Touch Close.

## 🔳 File search

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



When you touch a folder its contents are displayed.

3 Touch desired item from the content list.➤ Playback starts.

#### NOTE

• For operations in the list screen, see *List screen* (*P.13*).

## **Using Hands-Free Unit**

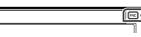
## You can use telephone function by connecting the Bluetooth telephone to this unit.

#### NOTE

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

## 🔳 Make a call

#### **1** Press the **FNC** button.



> Popup menu appears.

### 2 Touch 📞



#### ➤ Hands Free screen appears.

#### NOTE

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

## **3** Select a dialing method.



- Call using call records
- 💷 : Call using the phonebook
- Call using the preset number
- 🗄 : Call by entering a phone number
- 🔮 : Voice Recognition (P.36)

### • 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.

## NOTE

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

## Call using call records



**2** Select the phone number from the list.



## Call by entering a phone number

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



3 Touch

## Call using the preset number

- 1 Touch 🗙 .
- **2** Touch the Name or phone number.



## Call using the phonebook

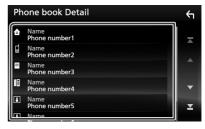
- 1 Touch 🛄
- 2 Touch Q A-Z
- **3** Select the initial.



- Characters with no corresponding name will not appear.
- During search, a non-accent character such as "u" is searched for instead of an accent character such as "ü".
- **4** Select the person you want to call from the list.



**5** Select the phone number from the list.



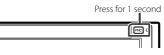
#### NOTE

 You can set the list to arrange in the order of last name or first name. For details, see Hands-Free Setup (P.39).

## 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 voice recognition function by touching of on the Hands Free screen.

## Receive a call

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



#### NOTE

• While monitoring the view camera, this screen does not appear even if a call comes in. To display this screen, press the **TEL** button or return the shift knob of car to the driver position.

#### To end call

1 While talking, touch 🕋



#### • Adjust the volume of your voice

ø

- 1) Touch Speech Quality.
- 2) Touch ◀ or ► of Microphone Level.



#### • Adjust the receiver volume

Press the - or + button.



#### Mute your voice

Touch with 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 the speaking voice output

Touching **Constant** (and the switches the speaking voice output between cell-phone and speaker.

#### Call-waiting

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

Each time you touch  $\mathbb{N}$ , the caller will change. When you touch  $\mathbb{N}$ , the current call will end and switch to the call in hold.

#### $\bullet$ $\times$

Speech

Quality

DTM

The Hands-Free popup screen is closed. To display it again, touch

## Phone number preset

You can register frequently used phone numbers to this unit.



#### 2 Touch Edit.

	Device name1 Devi	ce name2	ς
60			
	🟦 Name1 (Home)	Name5	
	0123456789012	Name6	Edit
X	Hame3 (Mobile phone)	🖬 Name7	
* #	Name4 (Office)	🔓 Name8	<b>\$</b> 0
'n			

#### **3** Select where to preset.

Edit Preset Dial		4
Ame1 (Home)	Name5	
0123456789012	No Preset	
Name3 (Mobile phone)	No Preset	
Name4 (Office)	No Preset	Delete all

#### 4 Select how to preset.



#### Add number from phonebook:

Select the number to preset by referring to "Call using the phonebook". See **Call using** 

## the phonebook (P.36).

#### Add number direct:

Enter the telephone number directly and touch **SET**. See *Call by entering a phone number (P.35)*.

#### NOTE

• To delete the preset number, touch **Delete** and then touch **Yes** on the confirmation screen.

## 🔳 Phonebook transfer

You can transfer the phonebook in your Bluetooth smartphone via PBAP.



#### 2 Touch ±



> The phonebook data transmission starts.

## Phonebook deletion

- 1 Touch f 🕮 .
- **2** Touch the name to check.

Delete Phonebook			Υ
Name1		🗹 All	Ā
Name2			
Name3	<b>X</b>		
Name4		Delete	-
Name5		Q A-Z	T
Nama			

#### 🔳 🗹 Ali

Checks all boxes.

Frases all check marks.

#### **3** Touch **Delete**.

➤ Confirmation message appears.

#### 4 Touch Yes.

## Hands-Free Setup

You can perform various setup about handsfree function.

#### **1** Press the **FNC** button.

> Popup menu appears.

## 2 Touch



- ► HOME screen appears.
- 3 Touch



SETUP Menu screen appears.

#### 4 Touch Bluetooth.



➤ Bluetooth SETUP screen appears.

#### 5 Touch TEL SETUP.

➤ TEL SETUP screen appears.

#### 6 Set each item as follows.



#### Bluetooth HF/Audio

Select the speakers to output the sound from cell-phone (such as phone call voice and ringing tone) and Bluetooth audio player. Front: Outputs from the front speakers. All (Default): Outputs from all speakers.

#### Auto Response\*

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

- **OFF** (Default): Automatic response is not available.
- 1/ 5/ 10/ 15/ 20/ 25/ 30: Set calling ring time (second).

#### Auto Pairing

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

- **ON** (Default): Uses Apple Auto Pairing function.
- **OFF**: Not uses Apple Auto Pairing function.

#### Sort Order

Sets how to arrange the cell-phone phonebook.

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

#### Echo Cancel Level

Adjusts the level of echo cancellation. Default is "0".

#### Noise Reduction Level

Reduces the noises generated by surrounding environment without changing the microphone volume. Use this setting when the voice of caller is not clear. Default is "0".

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

#### 7 Touch OK.



## **Other External Components**

## View Camera

#### NOTE

- To connect a camera, see P.61.
- To use a rear view camera, a REVERSE lead connection is required. (P.60)
- If **R-CAM Interruption** is set to on, the camera screen is displayed when you shift the gear to the reverse (R) position.

## Display the camera screen

#### 1 Press the FNC button.

> Popup menu appears.

#### 2 Touch Camera.



➤ View camera screen appears.

#### **3** Adjust each item as follows.



#### 1 Camera off

Touch to exit the camera screen.

## 🔳 Camera Setup

- Press the FNC button.Popup menu appears.
- 2 Touch 💼.
  - ► HOME screen appears.
- 3 Touch .> SETUP Menu screen appears.

#### 4 Touch Camera.



> Camera screen appears.

#### **5** Set each item as follows.

#### R-CAM 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.

#### 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**, adjust the parking guidelines. See **To adjust** *the parking guidelines (P.41)*.

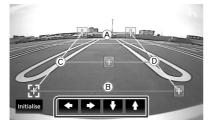
#### To adjust the parking guidelines

#### NOTE

- Install the rear view camera in the appropriate position according to the instructions supplied with the rear view camera.
- When adjusting the parking guidelines, make sure to use the parking brake to prevent the car from moving.
- **1** Touch **ON** of **Parking Guidelines** in the Camera screen. (*P.40*)
- 2 Touch Guidelines SETUP in the Camera screen.
- **3** Adjust the parking guidelines by selecting the mark.



**4** Adjusting the position of the selected mark.



Make sure that B and B are horizontally parallel, and that C and D are the same length.

#### NOTE

• Touch Initialize and after touch Yes to set all the marks to the initial default position.

## External audio/video players-AV-IN

- 1 Connect an external component to the AV-IN input terminal. (P.61)
- 2 Press the FNC button.▶ Popup menu appears.
- 3 Touch <a>1</a>.► HOME screen appears.
- 4 Touch III.
- 5 Select AV-IN as the source. (P.10)
- **6** Turn on the connected component and start playing the source.

# Setting Up

## **Monitor Screen Setup**

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

#### 1 Press the FNC button.

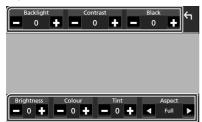
➤ Popup menu appears.

#### 2 Touch Screen Adjust.



> Screen Control screen appears.

#### **3** Adjust each item as follows.



#### Backlight / Contrast / Black / Brightness / Color / Tint

Adjusts each item.

#### Aspect

Select screen mode.

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

Normal: Displays with 4:3 ratio.

#### Auto:

Displays video fully on vertical or horizontal with no ratio change.

#### NOTE

• Adjusting items are different depending on the current source.

## System Setup

#### NOTE

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

#### 1 Press the FNC button.

> Popup menu appears.

**2** Touch 💼.



► HOME screen appears.





See the following section for each setting.

- Set up AV (P.46)
- Set up display (P.45)
- Set up the user interface (P.43)
- Set up camera (P.40)
- Set up special (P.44)
- Set up Bluetooth (P.31)
- Set up security (P.7)

## **User Interface Setup**

You can setup user interface parameters.

#### **1** Press the **FNC** button.

- > Popup menu appears.
- **2** Touch **1**.

► HOME screen appears.

- 3 Touch 💽.
  - SETUP screen appears.
- 4 Touch User Interface.



➤ User Interface screen appears.

**5** Set each item as follows.

#### Steering Remote Controller

Sets the desired function in the steering remote controller. See *Learning function of steering remote (P.44)*.

#### Beep

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

#### Language Select

Selects a language.

#### Touch Panel Adjust

Adjust the sensing position of touch panel. (P.43)

#### Clock

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

Manual: Sets the clock manually

#### Time Zone

Select the time zone.

#### Clock Adjust

If you select **Manual** for Clock, adjust the date and time manually. **(P.43)** 

#### DISP Key

Select the source screen displayed when on the popup menu screen is pressed.

Apps: Switches to the App screen from the connected iPod touch/iPhone/Android device or Apple CarPlay screen from the connected iPhone by pressing the button. (P.20) **OFF** (Default): Displays the control screen of current source.

# Adjust the date and time manually.

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



5 Touch Set.

## 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 to the initial status, touch Reset.

# 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

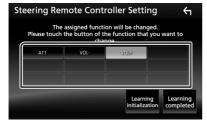
#### NOTE

 You can have the unit learned all buttons at a time. In that case, press the all 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 initialization of Steering Remote Controller in User Interface screen. After you touch Initialize, a confirmation message appears. Follow the message and complete the operation.

## **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 item as follows.

#### DEMO

Set the demonstration mode. Default is "ON".

#### SETUP Memory

Locks or unlocks the Audio SETUP Memory/ Recall/Clear.

#### Audio SETUP Memory

Memorizes the current audio setting.

 Fader/ Balance, Speaker / X'over, Equalizer (User Preset, SW Level), Position/DTA, Sound Effect (P.47)

#### Audio SETUP Recall

Recalls the memorized audio setting.

#### Audio SETUP Clear

Clears the AUDIO SETUP Memory and the currently memorized audio setting.

#### Software Information

Check the software version of this unit. **(P.45)** 

#### Open Source Licenses

Displays the open source licenses.

#### Initialize

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

• Audio SETUP Memory is not initialized.

## Software Information

Check the software version of this unit.

1 Touch Software Information in the Special screen.

#### **2** Confirm the software version.

Software Information		
Serial Number -	x	
Application Version	•	
System Version -	•	
Panel CPU 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 <a>min</a>.≻ HOME screen appears.
- **3** Touch **.** . > SETUP screen appears.
- 4 Touch Display.



> Display screen appears.

#### **5** Set each item as follows.

#### Dimmer

Select dimmer mode.

**OFF**: The display and buttons do not dim.

**ON**: The display and buttons dim.

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

#### OSD Clock

Select if you want to display the clock while watching video, etc.

"ON" (Default)/ "OFF"

#### Background

Changing background image. (P.46)

#### Viewing Angle

If it is hard to see the image on the screen, adjust the viewing angle. The smaller the (negative) value, the more whitish the image on the screen looks. "0" (Default)/ "-1"/ "-2"/ "-3"

- Change background image
- **1** Touch **Background** in the Display screen.
- 2 Select an image.



\*1 Select an original image in advance.

#### To register original image

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

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

- **1** Touch **User1 Select** or **User2 Select** in the Background screen.
- **2** Select the image to load.



#### 3 Touch Enter.



 The selected image is loaded and the display returns to the Background screen.

#### NOTE

- Touching 🖸 rotates counter clockwise.
- Touching rotates 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 item as follows.

#### 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 iPod if it is connected via Bluetooth.

If you select USB, iPod, Spotify, Bluetooth audio, Apple CarPlay or Android Auto as the main source, you cannot select USB or iPod as the AV output source.

#### CarPlay Sidebar

Select the position of the control bar (left or right) shown on the touch panel.

"Left"/ "Right" (Default)

# **Controlling Audio**

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

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



- ➤ HOME screen appears.
- **3** Touch **.**



Source selection screen appears.

#### 4 Touch Audio.



See the following section for each setting.

- Set up speaker/ X'over (P.47)
- Controlling equalizer (P.50)
- Set listening position/ DTA (P.53)
- Controlling general audio (Fader / Balance) (**P.50**)
- Set volume offset (P.51)
- Performing zone control (P.52)
- Set sound effect (P.52)

## Speaker/ X'over setup

- 1 Press the FNC button.
  - > Popup menu appears.
- 2 Touch 💼.
  - ► HOME screen appears.
- **3** Touch **III**.

> Source selection screen appears.

- 4 Touch Audio.
  - ➤ Audio screen appears.
- 5 Touch Speaker/X'over.



#### **6** Select a car type.

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

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



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



#### **Controlling Audio**

#### Speaker

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

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

#### Location (Only for Front, Rear)

Select the speaker position you have fixed.

#### Tweeter (Only for Front)

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

#### X'over

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

## For details, see **Crossover network setup** (P.48)

#### 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.49)**. 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 a crossover frequency of speakers.

#### 1 Touch X'over.



#### 2 Touch the speaker to set.



#### **3** Set each item as follows.



#### HPF FREQ

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

#### LPF FREQ

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

#### Slope\*1

Sets a crossover slope.

#### Gain

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

#### TW (Tweeter) Gain \*2

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

#### Phase Inversion\*<sup>3</sup>

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

- \*1 Only when "LPF FREQ"/"HPF FREQ" is set to a mode other than "Through" in **X'over**.
- \*<sup>2</sup> Only when "Tweeter" is set to "Small", "Medium", "Large" in **Speaker Setup**.
- \*<sup>3</sup> 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. (When tweeter is selected on Speaker Select screen)

#### HPF FREQ, LPF FREQ (Band Pass)

Band Pass Filter adjustment. (When mid range speaker is selected on Speaker Select screen)

#### FREQ (Low Pass)

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

#### Slope\*1

Sets a crossover slope.

#### Gain

Sets gain of each speaker.

#### Phase Inversion\*3

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

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

#### NOTE

 For how to switch to the 3-way speaker system, see **3 way speaker system setup (P.49)**.
 Connecting 3-way speakers with the 2-way mode selected can break the speakers.

#### 3 way speaker system setup

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

#### 1 Press the FNC button.

> Popup menu appears.

#### **2** Touch 🛅.

► HOME screen appears.

**3** Touch **III**.

➤ Source selection screen appears.

- 4 Touch AV Off.
- **5** Press the **FNC** button and the button for 1 second at the same time.

	0

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.
  - Zone Control
  - Fader of Controlling General Audio
  - Front focus of Listening Position/ DTA
  - Select the speakers to output the sound from cell-phone of Blutooth HF/Audio
  - Beep of User Interface Setup
- 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 **1**.
  - ➤ HOME screen appears.
- 3 Touch 🎹.
  - ➤ Source selection screen appears.

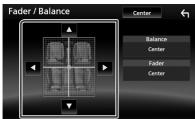
#### 4 Touch Audio.

➤ Audio screen appears.

#### 5 Touch Fader / Balance.



### **6** Set each item as follows.



#### Fader / Balance

Adjust the volume balance around the touched area.

 $\blacktriangleleft$  and  $\blacktriangleright$  adjust the right and left volume balance.

 $\blacktriangle$  and  $\blacktriangledown$  adjust the front and rear volume balance.

#### Center

Clear the adjustment.

## **Equalizer Control**

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

1 Press the FNC button.

➤ Popup menu appears.

- 2 Touch <a>Touch</a>▶ HOME screen appears.
- **3** Touch **III**.
  - ➤ Source selection screen appears.
- 4 Touch Audio.
  - Audio screen appears.
- 5 Touch Equalizer.



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



#### Gain level (dotted frame area)

Adjust the gain level by touching the each frequency bar.

You can select frequency bar and adjust its level by  $\blacktriangle$ ,  $\blacktriangledown$ .

#### Preset Select

Displays the screen to recall the preset equalizer curve.

#### Memory

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

Initialize

The current EQ curve returns to flat.

#### ALL SRC

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

#### Bass EXT (Bass Extend Settings)

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

#### SW Level

Adjusts the subwoofer volume. This setting is not available when subwoofer is set to "None". See **Speaker/X'over setup (P.47)**.

Recall the EQ curve

1 Touch Preset Select.

#### 2 Select EQ curve.



#### NOTE

• iPod is available only during iPod source.

## Save the EQ curve

- 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 抗.
  - ➤ HOME screen appears.

#### **3** Touch **.**

> Source selection screen appears.

#### 4 Touch Audio.

> Audio screen appears.

#### 5 Touch Volume Offset.



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



#### Initialize

Returns to the initial settings.

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

#### **Controlling Audio**

## **Zone Control**

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

#### **1** Press the **FNC** button.

- > Popup menu appears.
- **2** Touch **1**.
  - HOME screen appears.

### 3 Touch 🗰.

Source selection screen appears.

#### 4 Touch Audio.

➤ Audio screen appears.

#### 5 Touch Zone Control.



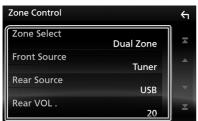
Zone Control screen appears.

#### 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 the audio source for each.

#### Rear VOL.

Adjusts 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.52)
  - Equalizer Control/ Sound Effect/ Listening Position (P.50, 52, 53)
  - Speaker Setup (P.47)
  - High-resolution Sound Source File Playback
- You cannot select iPod if it is connected via Bluetooth.
- If you select USB, iPod, Bluetooth audio, Apple CarPlay or Android Auto as the Front Source, you cannot select USB or iPod as the Rear Source.

## **Sound Effect**

#### You can set sound effects.

#### **1** Press the **FNC** button.

- Popup menu appears.
- 2 Touch 1.> HOME screen appears.
- 3 Touch III.
  - ► Source selection screen appears.
- 4 Touch Audio.
  - Audio screen appears.

#### 5 Touch Sound Effect.



#### **6** Set each item as follows.



#### Bass Boost

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

#### Loudness

Sets the amounts of boost of low and high tones.

"OFF", "Low", "High"

#### Volume Link EQ

Reduces the driving noise by raising the bandwidth. "OFF". "ON"

#### Space Enhancement

Select the feeling of sound space enhancement. "OFF"/ "Small"/ "Medium"/ "Large".

#### K2

Turns ON/OFF the K2 function.

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

#### Sound Response

Virtually makes 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 🎹

Source selection screen appears.

- 4 Touch Audio.
  - ➤ Audio screen appears.

#### 5 Touch Position/DTA.



- Set up Listening Position (P.53)
- Set up Front Focus (P.54)

## Listening Position

Adjust the sound delay time as nearer speakers to the selected seat have more delay time, so that the sound from each speaker arrive a listener at the same time.

- 1 Touch Listening Position in the Position/ DTA screen.
- 2 Select 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.



#### **Controlling Audio**

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



#### NOTE

• To return to the initial setting of Delay and Level, touch **Initialize** and **YES** in the confirmation screen.

## Front Focus

This is the function to focus the imaginary sound image in 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.



## Front Focus fine adjustment

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



#### Sound Image LR (Front)

Adjust the sound image to focus on in front of front seats.

#### Sound Image LR (Rear)

Adjust the sound image to focus on in 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, adjust it by **Sound Image LR (Front)** or **Sound Image LR (Rear)**.

Subwoofer Delay

- Adjust the delay time of subwoofer.
- 4 Touch Level.
- **5** Touch **◄** or **▶** to adjust the sound level of the selected speaker.



#### NOTE

• To return to the initial setting of Delay and Level, touch **Initialize** and **YES** in the confirmation screen.

## **Remote control**

This unit can be operated using the remote control.

For KW-M730BT the remote control is the optional accessory (RM-RK258).

## A 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.

## A 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



#### Remote control

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 by pressing the key once. Restores the previous volume by pressing the key twice.	
DISP	Switches the screen between the current source and the App screen from the connected iPod touch/ iPhone/Android.	
FM/▲ AM/▼	Selects the folder to be played. During tuner source, select FM/ AM band to be received.	
	Selects the track or file to be played.	
ANGLE	Not used.	
<u>ر</u>	When a call comes in, answers the call.	
DIRECT	Switches to the direct search mode. For details on the direct search mode, see <b>Direct search mode (P.56)</b> .	
ASPECT	Changes the aspect ratio. • To check the current aspect ratio setting, operate on the touch panel. (P.42)	
Numeric Keypad	Specifies the number to search in direct search. For details on the direct search mode, see <b>Direct search mode (P.56)</b> .	
CLR	Clears the number.	
ENT	Performs the selected function.	

## Direct search mode

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

#### NOTE

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

## **1** Press the **SRC** button several times until the desired content appears.

The available contents are different depending on the source.

### Tuner

Frequency value

- 2 Enter the number of the content you want to play using the numeric keypad.
- **3** Press the I**◄◄** or ►►I button.
  - > The content you entered is played.

# **Connection/Installation**

## **Before Installation**

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

## A 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.

## **A** CAUTION

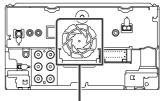
 Install this unit in the console of your vehicle.
 Do not touch the metal part of this unit during and shortly after the use of the unit. Metal part such as the heat sink and enclosure become hot.

## 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.

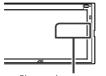
- If the console has a lid, make sure to install the unit so that the front panel will not hit the lid when closing and opening.
- If the fuse blows, first make sure the wires aren't touching to cause a short circuit, then replace the old fuse with one with the same rating.
- Insulate unconnected wires 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.



Cooling fan

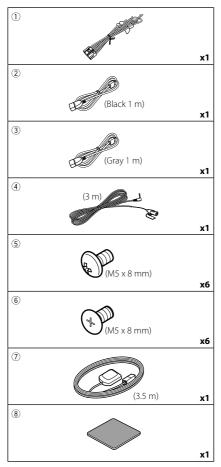
#### **Connection/Installation**

- 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

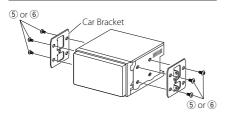




## Installation procedure

- To prevent a short circuit, remove the key from the ignition and disconnect the ⊖ 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  $\bigcirc$  terminal of the battery.
- 8) Perform the Initial Setup. See *Initial setup (P.6)*.

## Installing the unit



#### NOTE

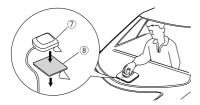
• Make sure that the unit is installed securely in place. If the unit is unstable, it may malfunction (eg, the sound may skip).

## 🔳 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 (8)).
- Press the metal plate (accessory <sup>®</sup>) down firmly on your dashboard or other mounting surface. You can bend the metal plate (accessory <sup>®</sup>) to conform to a curved surface, if necessary.
- Remove the separator of the GPS antenna (accessory ⑦), and stick the antenna to the metal plate (accessory ⑧).

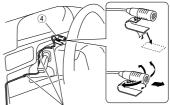


#### NOTE

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

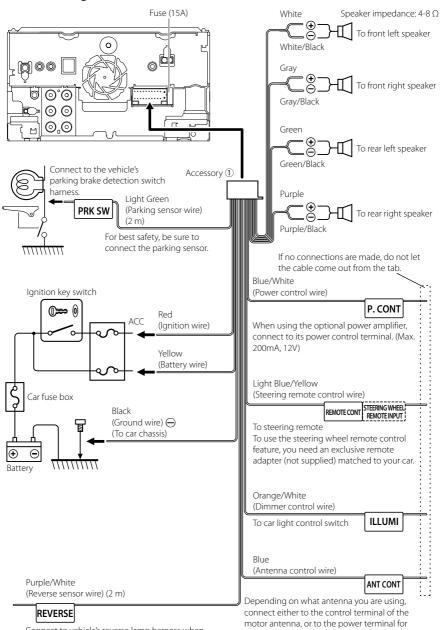
## 🔳 Microphone unit

- 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.
- 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.



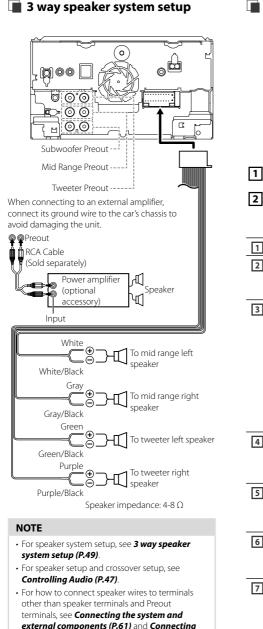
Fix a cable with a commercial item of tape.

Connecting wires to terminals



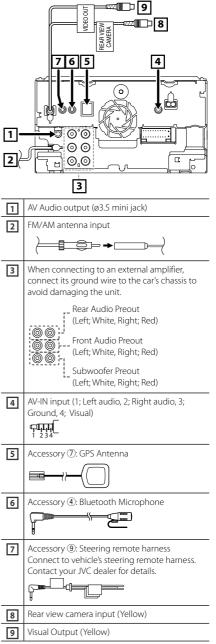
using the optional rear view camera.

connect either to the control terminal of the motor antenna, or to the power terminal for the booster amplifier of the film-type antenna. (Max. 300mA, 12V)

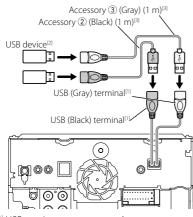


wires to terminals (P.60).

# Connecting the system and external components

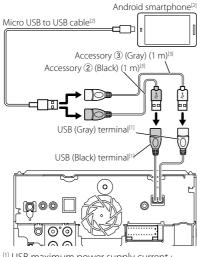


## Connecting a USB device



- <sup>[1]</sup> USB maximum power supply current : DC 5 V === 1.5 A
- <sup>[2]</sup> Sold separately
- <sup>[3]</sup> See Securing the USB extension cable (P.62).

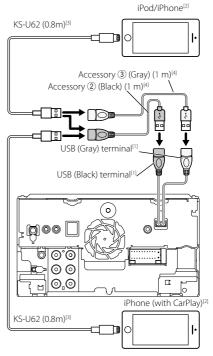
# Connecting an Android smartphone



- <sup>(1)</sup> USB maximum power supply current : DC 5 V === 1.5 A
- <sup>[2]</sup> Sold separately
- <sup>(3)</sup> See Securing the USB extension cable (P.62).

## Connecting an iPod/iPhone

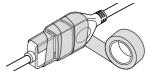
#### Lightning connector



- <sup>(1)</sup> USB maximum power supply current : DC 5 V === 1.5 A
- <sup>[2]</sup> Sold separately
- <sup>[3]</sup> Optional accessory
- <sup>[4]</sup> See Securing the USB extension cable (P.62).

## Securing the USB extension cable

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



## 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.47).

The dual zone function is enabled.

 Set the dual zone function to off. See Zone Control (P.52).

• 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.52).
- · 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.52).

## 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.61).

#### Cannot select a folder.

The random play function is enabled.

> Turn off the random function.

## 🔳 Other

#### 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.

## here 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.

#### 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, see 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.64) and try another USB device.

#### 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.

# Appendix

## **Playable Media and Files**

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

## About files

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

#### Playable Audio files

	Format	Bit rate	Sampling frequency	Bit count
AAC-LC (.m4a)	MPEG2/4 AAC LC HE-AAC(V1,V2)	8 – 320kbps, VBR	16 – 48 kHz	16 bit
MP3 (.mp3)	MPEG 1/2 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/ 24 bit
FLAC (.flac)	flac	-	16 – 192 kHz	16/ 24 bit
Vorbis (.ogg)	vorbis	VBR	16 – 48 kHz	16 bit
DSD (.dsf, .dff)	DSF DSDIFF	-	2.8 MHz, 5.6 MHz, 11.2 MHz	1 bit

#### NOTE

- WMA and AAC of which is covered with DRM cannot be played.
- DSD sound is converted to PCM sound before playback.
- The EmChinks tag of DSDIFF is not supported.
- Although the audio files are complied with the standards listed above, the play may be impossible depending on the types or conditions of media or device.

#### Acceptable Video files

	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	МРЗ, ААС
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
Video Format follows H 264/MPE(a=4 AV/ MPE(a=4 W/MV		MP3, AAC, WMA, Vorbis, FLAC		

### ■ Limitation of structure for the file and the 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)	-

#### NOTE

- · 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 x 480V x 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 : FAT 16/ 32, exFAT, NTFS

Maximum Power Supply Current : DC 5 V ... 1.5 A × 2

D/A Converter : 24/ 32 bit

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

Video Decoder : MPEG1/ MPEG2/ MPEG4/ 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

: 0.0001 % (1 kHz)

**S/N Ratio (dB)** : 98.5 dB

Dynamic Range

: 89 dB

#### Bluetooth section

#### Technology

: Bluetooth Ver.3.0

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

: SBC/ AAC

#### Profile (Multi Profile support)

- · HFP (V1.6) (Hands Free Profile)
- SPP (Serial Port Profile)
- A2DP (Advanced Audio Distribution Profile)
- AVRCP (V1.5) (Audio/Video Remote Control Profile)
- PBAP (Phonebook Access Profile)

#### 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 μV/ 75 Ω)

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

Frequency Response

S/N Ratio (dB)

: 75 dB (MONO)

Selectivity (± 400 kHz) : Over 80 dB

Stereo Separation : 45 dB (1 kHz)

#### AM tuner section

Frequency Range (step) : 531 kHz – 1611 kHz (9 kHz)

Usable Sensitivity : 28 dBµ

#### Appendix

#### Video section

Color System of External Video Input : NTSC/PAL

External Video Input Level (RCA jacks) : 1 Vp-p/ 75  $\Omega$ 

External Video Input Level (mini jack) : 1 Vp-p/ 75  $\Omega$ 

External Audio Max Input Level (mini jack)  $: 2 \text{ V}/25 \text{ k}\Omega$ 

Video Output Level (RCA jacks) :  $1 \text{ Vp-p}/75 \Omega$ 

Audio Output Level (mini jack) : 1.2 V/ 10 k $\Omega$ 

#### Audio section

Maximum Power (Front & Rear) :  $50 \text{ W} \times 4$ 

Full Bandwidth Power (Front & Rear) : 22 W  $\times$  4 (4 $\Omega$ , 14.4V, at less than 1%THD)

Output frequency band : 20 – 88,000 Hz

Preout Level (V) : 4 V/ 10 kΩ

Preout Impedance :  $\leq 600 \Omega$ 

Speaker Impedance  $: 4 - 8 \Omega$ 

#### DSP section

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 Q: 1.35/ 1.5/ 2.0

#### Gain

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

#### 2Way 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. 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.

3Way X'Over High pass filter Frequency: 1k/ 1.6k/ 2.5k/ 4k/ 5k/ 6.3k/ 8k/ 10k/ 12.5k Hz Slope: -6/-12 dB/Oct. Gain: -8/ -7/ -6/ -5/ -4/ -3/ -2/ -1/ 0 dB Band pass filter Frequency: Through, 30/ 40/ 50/ 60/ 70/ 80/ 90/ 100/ 120/150/180/220/250 Hz 1k/ 1.6k/ 2.5k/ 4k/ 5k/ 6.3k/ 8k/ 10k/ 12.5k Hz, Through Slope: -6/-12 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 dB/Oct.

#### General

Operating Voltage : 14.4 V (10.5 – 16 V allowable) Maximum Current Consumption : 15 A Installation Dimensions (W × H × D) : 178 × 100 × 155 mm

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

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

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.

#### Specifications subject to change without notice.

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#### Appendix

#### libvorbis

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libogg

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