JVC

KW-V820BT

MONITOR WITH DVD RECEIVER
INSTRUCTION MANUAL

JVC KENWOOD Corporation

B5A-1051-00 d (KN)

CONTENTS

How to read this manual:
- The displays 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 displays or panels.
- This manual mainly explains operations using the buttons on the monitor panel and touch panel. For operations using the remote controller (RM-RK258), see page 65.
- **< >** indicates the various screens/menus/settings that appear on the touch panel.
- **[ ]** indicates the buttons/selectable items on the touch panel.
- **Indication language:** English indications are used for the purpose of explanation. You can select the indication language from the **<SETUP>** menu. (Page 63)
- Updated information (the latest Instruction Manual, system updates, new functions, etc.) is available from <http://www.jvc.net/cs/car/>.

BEFORE USE

IMPORTANT

To ensure proper use, please read through this manual before using this product. It is especially important that you read and observe WARNINGS and CAUTIONS in this manual. Please keep the manual in a safe and accessible place for future reference.

⚠ **WARNINGS: (To prevent accidents and damage)**
- DO NOT install any unit or wire any cable in a location where;
  - it may obstruct the steering wheel and gearshift lever operations.
  - it may obstruct the operation of safety devices such as air bags.
  - it may obstruct visibility.
- DO NOT operate the unit while driving.
  If you need to operate the unit while driving, be sure to look around carefully.
- The driver must not watch the monitor while driving.

BEFORE USE

⚠ CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. In compliance with Federal Regulations, the following are reproductions of labels on, or inside the product relating to laser product safety.

JVC KENWOOD Corporation
2967-3, ISHIKAWA-MACHI, HACHIOJI-SHI, TOKYO, JAPAN

THIS PRODUCT COMPLIES WITH DHHS RULES 21CFR SUBCHAPTER J IN EFFECT AT DATE OF MANUFACTURE.

Location : Top plate

FCC WARNING

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

FCC NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment may cause harmful interference to radio communications, if it is not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IC (Industry Canada) Notice

This device complies with Industry Canada license-exempt RSS standard(s).
Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
The term "IC: " before the certification/registration number only signifies that the Industry Canada technical specification were met.

CAUTION

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment has very low levels of RF energy that it deemed to comply without maximum permissible exposure evaluation (MPE). But it is desirable that it should be installed and operated keeping the radiator at least 20 cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles). Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

- Contains Transmitter Module
  FCC ID : ZWY8811X
- Contains Transmitter Module
  IC: 12033A-8811X

⚠ Cautions on the monitor:

- The monitor built into this unit has been produced with high precision, but it may have some ineffective dots. This is inevitable and is not considered defective.
- Do not expose the monitor to direct sunlight.
- Do not operate the touch panel using a ball-point pen or similar tool with a sharp tip.
  Touch the buttons on the touch panel with your finger directly (if you are wearing a glove, take it off).
- When the temperature is very cold or very hot...
  – Chemical changes occur inside, causing malfunction.
  – Pictures may not appear clearly or may move slowly. Pictures may not be synchronized with the sound or picture quality may decline in such environments.

For safety...

- Do not raise the volume level too much, as this will make driving dangerous by blocking outside sounds, and may cause hearing loss.
- Stop the car before performing any complicated operations.

Temperature inside the car...

If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.

INITIAL SETTINGS

Initial setup

When you power on the unit for the first time, the initial setting screen appears.
- You can also change the settings on the **<SETUP>** screen. (Page 62)

1 Perform the initial settings.
Touch the desired item to configure the setting.
- You can scroll the screen by touching **[▲]/[▼]** to show more items.
- If another setting screen is displayed, set the item, then touch **[ ]** to return to previous screen.
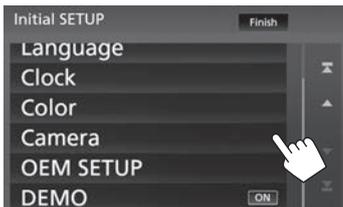
|	
[Language]	Select the text language used for on-screen information. (Page 63) • Touch **[Language Select]**, then select the desired language.
[Clock]	Adjust the clock. (See the right column.)
[Color]	Select the color of the buttons on the monitor panel. (Page 59) • Touch **[Panel Color Coordinate]**, then select the desired color.
[Camera]	Configure settings for the connected rear view camera. (Page 37)
[OEM SETUP]	Configure settings for the connected ADS adapter. (Page 63)
[DEMO]	Activate (**[ON]**) or deactivate (**[OFF]**) the display demonstration. (Page 64)

2 Finish the procedure.
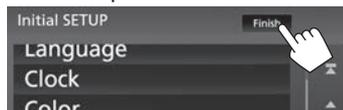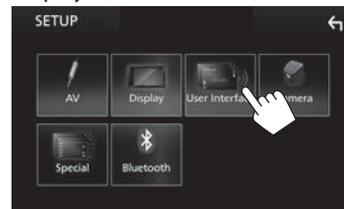
The Home screen is displayed.

Clock settings

1 Display the Home screen.
On the monitor panel:

2 Display the **<SETUP>** screen.

3 Display the **<User Interface>** screen.

4 Select the method to set the clock.
- Scroll the page to show the item.

[GPS-SYNC]	Synchronizes the clock time with the GPS.
[Manual]	Sets the clock manually. (Page 5)

- To close the window, touch **[Close]**.

5 Select the appropriate time zone for **[Time Zone]**.

- To return to the Home screen, press HOME on the monitor panel, or touch **[ ]** to return to the previous screen.
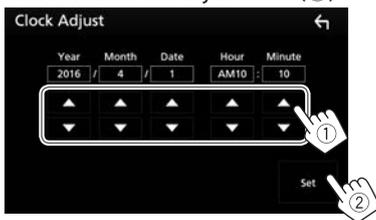
INITIAL SETTINGS

To adjust the clock manually (when selecting [Manual] on the <Clock> window)

1 Display the **<Clock Adjust>** screen.
On the **<User Interface>** screen (Page 4):
- Scroll the page to show the item.

2 Set the calendar and the clock time (①), then confirm the adjustment (②).
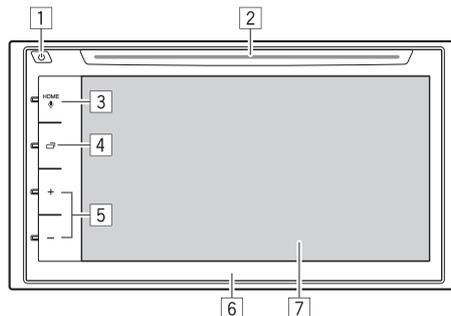

BASICS

Component names and functions

> ⚠ **Caution on the volume setting:**
> Digital devices produce very little noise compared with other sources. Lower the volume before playing these digital sources to avoid damaging the speakers by sudden increase of the output level.

1 ⏻ (Power) button
- Turns on the power. (Press) (Page 6)
- Turns off the power. (Hold) (Page 6)
- Displays the pop-up short-cut menu. (Press) (Page 11)

2 Loading slot

3 HOME/🎤 (Voice) button
- Displays the Home screen. (Press) (Page 7)
- Activates the voice control function. (Hold)
  – When a Bluetooth mobile phone is connected: Activates the voice dialing. (Page 47)
  – When iPod/iPhone compatible with Apple CarPlay is connected: Activates Siri. (Page 22)

4 ⬜ (Display) button
- Switches the screen. (Press)
  – The screen switched to depends on the **[DISP Key]** setting in the **<User Interface>** screen (Page 63).
- Turns off the screen. (Hold) (Page 6)
- Turns on the screen. (Press) (Page 6)

5 Volume +/− button
Adjusts the audio volume. (Page 6)

6 Monitor panel

7 Screen (touch panel)
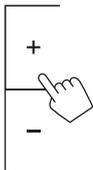
Common operations

❏ Turning on the power

❏ Turning off the power

(Hold)

❏ Adjusting the volume
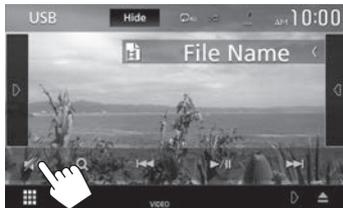
To adjust the volume (00 to 40)

+

−

Press + to increase, and press − to decrease.
• Holding + increases the volume continuously to level 15.

To attenuate the sound
On the source control screen:

USB   Hide   10:00
File Name

To restore the sound: Touch [🔇].

❏ Turning off the screen
On the monitor panel:

(Hold)
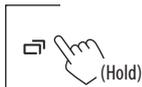
To turn on the screen: Press ⬛, or touch the display.

❏ Turning on/off the AV source

You can activate the AV function by selecting a source on the Home screen.

Apple CarPlay   Tuner
10:25
BT Audio   Phone

To select a source not displayed on the Home screen: Touch [⊞] to display the source/option selection screen. (Page 10)

To turn off the AV source
On the Home screen:

Apple CarPlay   Tuner
10:25
BT Audio   Phone

SiriusXM   Audio   AV Off   Info
Radar Detector   Gauges   Climate   Parking Assist
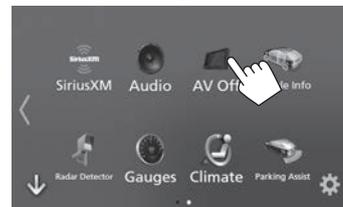
• Touch [〉] to change the page.

6

Common screen operations

❏ Touch screen operations

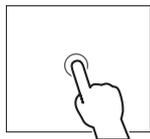To perform operations on the screen, you need to touch, touch and hold, flick or swipe to select an item, display setting menu screen or to change the page, etc.
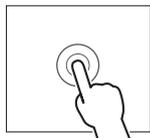
Touch
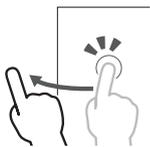Touch the screen gently to select an item on the screen.

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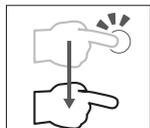Touch the screen and keep your finger in place until the display changes or a message is displayed.

Flick
Slide your finger to the left or right on the screen to change the page.

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

❏ Home screen descriptions

You can select playback sources, display setting screens, or display information on the Home screen.
• To display the Home screen, press HOME on the monitor panel.

Common operating buttons:
1 Changes the playback source. (Page 10)
2 ▶ button: Displays the source control screen currently played back. (Page 8)
3 ▦ button: Displays the source/option selection screen. (Page 10)
4 ⚙ button: Displays the **<SETUP>** screen. (Page 62)
5 ⏏ (Eject) button:
   Ejects the disc. (Press) (Page 12)
   Forcibly ejects the disc. (Hold) (Page 12)
6 Displays the phone control screen. (Page 45)
   When connecting as Apple CarPlay, it works as a phone provided in Apple CarPlay.

Gesture control on the source control screen:
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 [➕]/[➖] .
• **Sliding the finger towards left/right:** Functions same as pressing [◄◄]/[►►].
• **Moving your finger clockwise or counter-clockwise:** increases/decreases the volume.
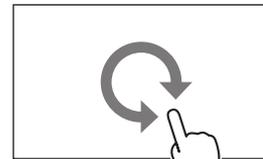
❏ Source/option selection screen descriptions

You can display all playback sources and options on the source/option selection screen.
• You can customize the source/option selection screen. (Page 11)

Common operation buttons and indications:
1 Changes the playback source or displays a setting/information screen.
  • For playback sources and setting screens, see page 10.
  • For information and sources from the connected ADS adapter, see page 39.
2 Changes the page. (Touch [⟨] or [⟩].)
  • You can also change the page by flicking left or right on the screen.
3 Displays the Home screen. (Page 7)
4 Page indication
5 Displays the **<SETUP>** screen. (Page 9)

❏ Source control screen descriptions

You can perform source playback operations on the source control screen.
• The operation buttons and information displayed vary depending on the selected source.

Common operation buttons and indications:
1 Current source or media
2 Connected Bluetooth device information (Page 40)
3 Battery charge indication: Lights up when quick charging battery of the connected iPod/ iPhone/ Smartphone.
4 Displays the other operation button window.*
5 Displays the source/option selection screen. (See the left column.)

6 Short-cut source selection buttons/the indicators for the current source
  • Each time you touch [⟨] or [⟩], the items shown in this area change.
    – The indicators for the current source

    – The short-cut source selection buttons (Page 11)

    • Touching one of the buttons displays the selected source.
7 Ejects the disc. (Page 12)

* Does not appear when there are no other operation buttons other than those currently shown on the source control screen.

❏ **<SETUP> screen descriptions**

You can change the detailed settings. (Page 62)

1 2

2

3

Common operation buttons and indications:
1 Selects the menu category.
2 Returns to the previous screen.
3 Changes the page.
  [▲]/[▼]: Scrolls the page.
  • You can also scroll the page by swiping on the touch panel.
  [⤒]/[⤓]: Displays the top or bottom page.

❏ **List screen descriptions**

During audio/video source playback, you can select the desired item easily from the list.

1 2 3 15

4 5 6

Common operation buttons and indications:
• Available buttons on the screen and operations differ depending on the type of file/media being played back.
1 Displays list type selection window.
2 Selects the file type ([♫]: audio/[▯]: video).
3 Returns to the previous screen.
4 Scrolls the text if not all of the text is shown.
5 Searches for a folder/track.
  [▶ Play]: Plays all tracks in the folder containing the current track.
  [A–Z]: Enters the initial search mode.
  [Top]: Returns to the top layer.
  [Up]: Returns to the upper layer.
6 Changes the page.
  [▲]/[▼]: Scrolls the page.
  • You can also scroll the page by swiping on the touch panel.
  [⤒]/[⤓]: Displays the top or bottom page.

❏ **Playback operations during video playback**

1 2 3
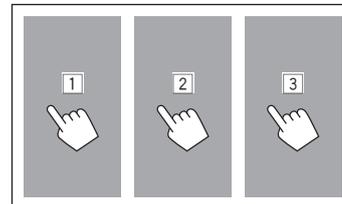
1 Selects a previous chapter/track/item.
2 Displays the source control screen while playing a video.
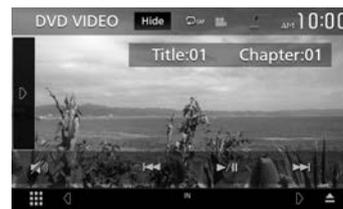
  • The operation buttons disappear when **[Hide]** is touched or when no operation is done for about 5 seconds.
3 Selects a next chapter/track/item.

Selecting the playback source/option

1 Display the source/option selection screen.
On the Home screen:

- You can also display the source/option selection screen by touching [▦] on the source control screen.

2 Select a source/option.

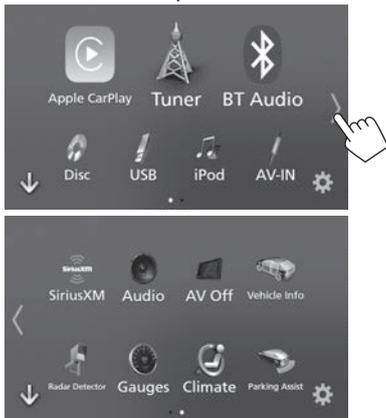- To display more items, touch [❬]/[❭] or flick to change the page.

10

[Apple CarPlay]
Switches to the Apple CarPlay screen from the connected iPod touch/iPhone. (Pages 22)
[Tuner] Switches to the radio broadcast. (Page 24)
[BT Audio] Plays a Bluetooth audio player. (Page 40)
[DISC] Plays a disc. (Page 12)
[USB] Plays files on a USB device. (Page 16)
[iPod] Plays an iPod/iPhone. (Page 19)
[AV-IN] Switches to an external component connected to the iPod/AV-IN input terminal. (Page 38)
[SiriusXM] Switches to the SiriusXM® satellite radio broadcast. (Page 26)
[Audio] Displays the sound adjustment screen. (Page 53)
[AV OFF] Turns off the AV source. (Page 6)
[⚙] Displays the **<SETUP>** menu screen. (Page 62)

- For sources and information displayed when an ADS adapter is connected, see page 39.

Selecting the playback source on the Home screen

- The 3 items displayed on the source/option selection screen as the large icons and **[Phone]** are shown on the Home screen.
- You can change items displayed on this area by customizing the source/option selection screen. (Page 11)

Selecting the playback source on the source control screen

Display source selection buttons by touching [◁]/[▷] on the source control screen (Page 8), then select a playback source.

- The 3 items except for **[Phone]** displayed on the source/option selection screen as the large icons are shown as the short-cut selection buttons.
- You can change items displayed as the short-cut source selection buttons by customizing the source/option selection screen. (See the right column.)

❏ **Customizing the source/option selection screen**

You can arrange the items to display on the source/option selection screen.

Touch and hold the item you want to move until boxes appear around the icons, then drag it to the position you want to move it to.

(Hold)
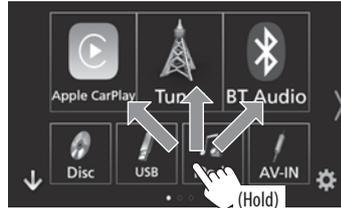
Using the pop-up short-cut menu

While displaying the source control screen, you can jump to another screen from the pop-up short-cut menu.

1 Display the pop-up short-cut menu.

2 Select an item to jump to.

[🏠] Displays the Home screen. (Page 7)
[📞] Displays the phone control screen. (Page 45)
[🎙] Activates the voice dialing. (Page 47)
[📊] Displays the **<Graphic Equalizer>** screen. (Page 54)
[🖼] Displays the picture adjustment screen. (Page 58)
[📷] Displays the picture from the connected rear view camera. (Page 38)

To close the pop-up menu: Touch the screen anywhere other than the pop-up short-cut menu, or press ⏻ on the monitor panel.

DISCS

Playing a disc

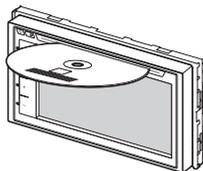- If a disc does not have a disc menu, all tracks on it will be played repeatedly until you change the source or eject the disc.
- For playable disc types/file types, see page 74.

❏ Inserting a disc

Insert a disc with the label side facing up.

The source changes to **"DISC"** and playback starts.
- The IN indicator lights up while a disc is inserted.

- If "⊘" appears on the screen, the unit cannot accept the operation you have tried to do.
  – In some cases, without showing "⊘," operations will not be accepted.
- When playing back a multi-channel encoded disc, the multi-channel signals are downmixed to stereo.

❏ Ejecting a disc

On the source control screen:
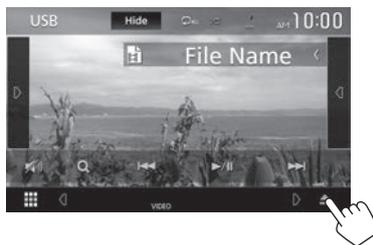
On the Home screen:

When removing a disc, pull it horizontally.
- You can eject a disc when playing another AV source.
- If the ejected disc is not removed within 15 seconds, the disc is automatically inserted again into the loading slot to protect it from dust.

To eject a disc forcibly

Touch and hold **[⏏]** on the source control screen or the Home screen. A confirmation message appears. Touch **[Yes]**.

Playback operations

When the operation buttons are not displayed on the screen, touch the area shown on the illustration.
- To change settings for video playback, see page 58.
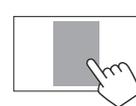
❏ Indications and buttons on the source control screen

For video playback

Playback information
- The information displayed on the screen differs depending on the type of disc/file being played back.
- ① Media type
- ② Playback mode (Page 15)
- ③ Current playback item information (title no./chapter no./folder no./file no./track no.)
- ④ IN indicator: A disc is inserted.

DISCS

Operation buttons

- Available buttons on the screen and operations differ depending on the type of disc/file being played back.

[Hide]	Hides the indicators and buttons.
[ ]	Displays the other operation button window. • To hide the window, touch **[ ]**.
[ ]	Selects Repeat playback mode. (Page 15)
[ ]	Selects Random playback mode. (Page 15)
[ ]	Attenuate the sound. (Page 6) • To restore the sound, touch **[ ]**.
[ ]	Displays the folder/track list. (Page 14)
[ ] [ ]	• Selects a chapter/track. (Touch) • Reverse/forward search. (Hold)
[ ]	Starts/pauses playback.
[ ] [ ]	Reverse/forward search during playback.
[ ] [ ]	Plays in slow-motion.
[ ]	Stops playback.
[SETUP]	Changes the settings for disc playback on the **<DVD SETUP>** screen. (Page 16)
[MENU CTRL]	Displays the video menu screen. (Page 15)
[ ] [ ]	Selects a folder.
[PBC]	Activates or deactivates the VCD PBC (Playback Control) function. (Page 14)
[Audio]	Change the audio output channel. (VCD only)

- To display all available operation buttons, touch **[ ]** to display the other operation button window.

For audio playback

Playback information

- The information displayed on the screen differs depending on the type of disc/file being played back.
1. Media type
2. Playback mode (Page 15)
3. Track/file information
   - Touching **[<]** scrolls the text if not all of the text is shown.
4. Jacket picture (Shown while playing if the file has tag data that includes the jacket picture)
5. File type
6. IN indicator

Operation buttons

- Available buttons on the screen and operations differ depending on the type of disc/file being played back.

[ ]	Displays the other operation button window. • To hide the window, touch **[ ]**.
[ ]	Displays the track list of the folder containing the current track. (Page 14) • To hide the list, touch **[ ]**.
[ ]	Selects Repeat playback mode. (Page 15)
[ ]	Selects Random playback mode. (Page 15)
[ ]	Attenuate the sound. (Page 6) • To restore the sound, touch **[ ]**.
[ ]	Displays the folder/track list. (Page 14)
[ ] [ ]	Selects a track.
[ ]	Starts/pauses playback.
[ ] [ ]	Selects a folder.

- To display all available operation buttons, touch **[ ]** to display the other operation button window.

❏ Selecting a folder/track on the list

To search all folders/tracks in a disc

1 Display the folder/track list.
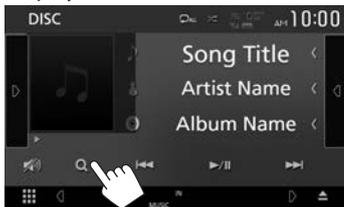
2 Select an item.
• Proceed until you select the desired track.
• For details about the list operation, see page 9.

To search in the folder containing the current track
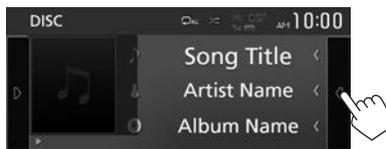
• Scroll the page to show more items.
• To hide the list, touch **[ ]**.

❏ Activating PBC (Playback Control) function (for VCD only)

While playing a VCD with PBC...
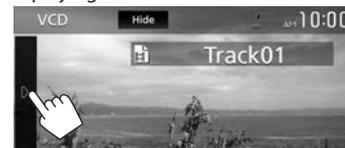
• The PBC indicator lights up.
• To select a track directly while PBC is activated, operate from the remote controller. (Page 65)

To deactivate PBC: Touch **[PBC]**. (The PBC indicator turns off.)

❏ Video menu operations (except for VCD)

You can display the video menu screen during video playback.

• The operation buttons disappear when **[Hide]** is touched or when no operation is done for about 5 seconds.

1 Display the video menu screen.

2

• Available buttons on the screen and operations differ depending on the type of disc/file being played back.

[TOP]	Displays the top menu.
[MENU]	Displays the disc menu.
[Return]	Displays the previous screen.
[Enter]	Confirms the selection.
[Highlight]	Switches to the direct disc menu mode. Touch the target item to select.

  • The menu screen disappears when no operation is done for 5 seconds.

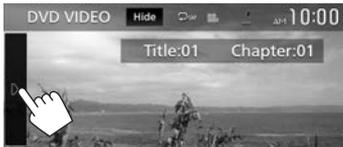|	
[↩]	Returns to the playback screen.
[Angle]	Selects the view angle.
[Subtitle]	Selects the subtitle type.
[Audio]	Selects the audio type.
[▲] [▼] [◀] [▶]	Selects an item.

❏ Selecting playback mode

[⟳]	Selects Repeat playback mode.
[⤨]	Selects Random playback mode.

• Available playback modes differ depending on the type of disc/file being played back.
• Each time you touch the button, the playback mode changes. (The current playback mode is shown as the button.)
  – Available items differ depending on the type of disc/file being played back.

⟳ CAP	Repeats current chapter.
⟳ TIT	Repeats current title.
⟳ 0	Repeats current track.
⟳ ◼	Repeats all tracks of the current folder.
⟳ ALL	Repeats all tracks in the disc.
⤨ ◼	Randomly plays all tracks of the current folder, then tracks of the next folders.
⤨ ALL	Randomly plays all tracks.

• To cancel random mode, touch the button repeatedly until it is grayed out.

Settings for DVD playback

1

2
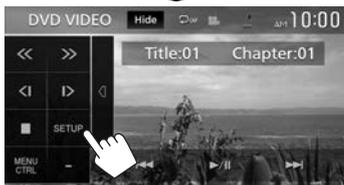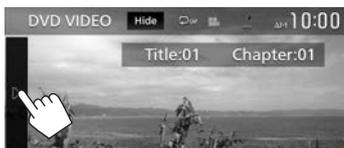
- Scroll the page to show more items.

- Available items shown on the **<DVD SETUP>** screen differ depending on the type of disc/file being played back.

❏ Setting items

[Menu Language]	Select the initial disc menu language. (Initial: **English**) (Page 76)
[Subtitle Language]	Select the initial subtitle language or turn subtitles off (**Off**). (Initial: **English**) (Page 76)
[Audio Language]	Select the initial audio language. (Initial: **Original**) (Page 76)
[Dynamic Range Control]	You can change the dynamic range while playing using Dolby Digital software. • **Wide**: Select this to enjoy a powerful sound at a low volume level with its full dynamic range. • **Normal**: Select this to reduce the dynamic range a little. • **Dialog** (Initial): Select this to reproduce movie dialog more clearly.
[Screen Ratio]	Select the monitor type to watch a wide screen picture on the external monitor. **16:9** (Initial) **4:3 LB** **4:3 PS**

USB

Connecting a USB device

You can connect a USB mass storage class device such as a USB memory, Digital Audio Player, etc. to the unit.
- For details about connecting USB devices, see page 70.
- You cannot connect a computer or portable HDD to the USB input terminal.
- For playable file types and notes on using USB devices, see page 75.

1 Connect the USB device to the unit with an USB cable.
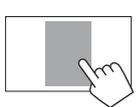
2 Select **"USB"** as the source. (Page 10)

❏ To disconnect the USB device

1 Select a source other than **"USB"**. (Page 10)

2 Detach the USB device.

16

Playback operations

When the operation buttons are not displayed on the screen, touch the area shown on the illustration.
- To change settings for video playback, see page 58.

❏ **Indications and buttons on the source control screen**

For audio playback

For video playback

Playback information
- The information displayed on the screen differs depending on the type of file being played back.
1 Playback mode (See below.)
2 Track/file information
   - Touching **[<]** scrolls the text if not all of the text is shown.
3 Jacket picture (Shown while playing if the file has tag data that includes the jacket picture)
4 File type

Operation buttons
- Available buttons on the screen and operations differ depending on the type of file being played back.

[Hide]	Hides the indicators and buttons.
[▷]	Displays the other operation button window. • To hide the window, touch **[◁]**.
[◁]	Displays the track list of the folder containing the current track. • To hide the list, touch **[▷]**.
[↻]	Selects Repeat playback mode. • ↻❶: Repeats the current track/file. • ↻■: Repeats all tracks/files in the current folder or specified category. • ↻ALL: Repeats all tracks/files in the USB device.
[⤨]	Randomly plays all tracks in current folder.* (⤨■ indicator lights up.)
[🔇]	Attenuate the sound. (Page 6) • To restore the sound, touch **[🔇]**.
[Q]	Displays the list. (Page 18)
[|◀◀] [▶▶|]	• Selects a track. (Touch) • Reverse/forward search. (Hold)
[▶II]	Starts/pauses playback.
[➕] [➖]	Selects a folder.
[USB DEVICE CHANGE]	Switches to another USB device when two USB devices are connected.

- To display all available operation buttons, touch **[▷]** to display the other operation button window.

* To cancel random mode, touch the button repeatedly until it is grayed out.

❏ Selecting a track in a list

To search all folders/tracks in a USB device

1 Display the list.
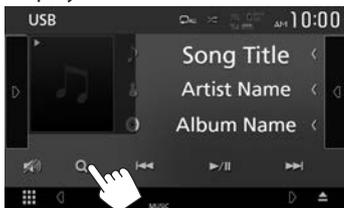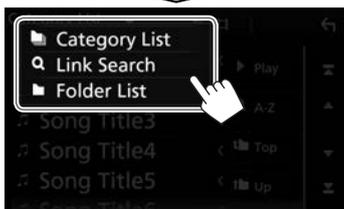
2 Select the list type.

3 Select the desired track.
- Proceed until you select the desired track.
- For details about the list operation, see page 9.

From <Category List>:
① Select the file type.
② Select a category, then the item in the selected category.

From <Link Search>:
① Select the file type.
② Select the tag type to display a list of content that contains the same tag as the track/file currently being played, then select the item.

From <Folder List>:
Select the folder, then the item in the selected folder.

To search in the folder containing the current track
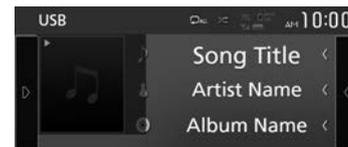
- Scroll the page to show more items.
- To hide the list, touch **[ ]**.

iPod/iPhone

Preparation

❏ Connecting iPod/iPhone

- For details about connecting iPod/iPhone, see page 70.
- For playable iPod/iPhone types, see page 75.

Connect your iPod/iPhone according to your purpose or the type of iPod/iPhone.

Wired connection
- **To listen to music:**
  – For Lightning connector models: Use USB Audio cable for iPod/iPhone—KS-U62 (optional accessory).
  – For 30-pin connector models: Use 30-pin to USB cable (accessory of iPod/iPhone).
- **To watch video and listen to music:**
  – For Lightning connector models: You cannot watch the video.

Bluetooth connection
Pair the iPod/iPhone through Bluetooth. (Page 40)
- You cannot watch video with a Bluetooth connection.

❏ Selecting the connection method

1 Display the **<SETUP>** screen.
On the Home screen:

- You can also display the **<SETUP>** screen by touching [⚙] on the source/option selection screen. (Page 8)

2 Display the **<AV>** screen.

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

4 Display the **<APP/iPod SETUP>** screen.

5 Select the connection method of iPod/iPhone for **<APP Connection select>**.

| [iPhone USB] | Select this when iPod/iPhone is connected using 30-pin to USB cable (accessory of iPod/iPhone) or KS-U62 (optional accessory). |
| [iPhone Bluetooth] | Select this when iPod/iPhone is connected via Bluetooth. |

6 Finish the procedure.

Playback operations

When the operation buttons are not displayed on the screen, touch the area shown on the illustration.
• To change settings for video playback, see page 58.
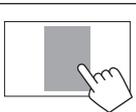
❏ **Indications and buttons on the source control screen**

Playback information
1 Playback mode (See the right column.)
2 Song information
• Touching **[<]** scrolls the text if not all of the text is shown.
3 Artwork (Shown if the track contains artwork)
4 File type

Operation buttons
• Available buttons on the screen and operations differ depending on the type of file being played back.

[◁]	Displays the track list of the category containing the current track. • To hide the list, touch **[▷]**.
[↻]	Selects Repeat playback mode. • ↻❶: Functions the same as Repeat One. • ↻ALL: Functions the same as Repeat All.
[✕]	Selects random playback mode.* • ✕♪: Functions the same as Shuffle Songs. • ✕▣: Functions the same as Shuffle Albums.
[◀]	Attenuate the sound. (Page 6) • To restore the sound, touch **[◀]**.
[Q]	Displays the list. (Page 21)
[◀◀] [▶▶]	• Selects a track. (Touch) • Reverse/forward search. (Hold)
[▶ ❚❚]	Starts/pauses playback.

* To cancel random mode, touch the button repeatedly until it is grayed out.

iPod/iPhone

❏ Selecting an audio track from the list
To search all tracks in iPod/iPhone

1 Display the list.

2 Select the list type.

3 Select the desired track.
- Proceed until you select the desired track.
- For details about the list operation, see page 9.

From <Category List>:
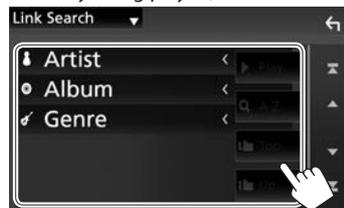Select a category, then the item in the selected category.
- Available categories differ depending on the type of your iPod/iPhone.
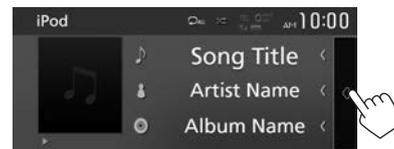
From <Link Search>:
Select the tag type to display a list of content that contains the same tag as the track/file currently being played, then select the item.

To search in the folder containing the current track

- Scroll the page to show more items.
- To hide the list, touch [ ].

APPS—Apple CarPlay

You can use an App of the connected iPod touch/iPhone/Android on this unit.
- You can use an App on the following sources:
  – When iPhone compatible with CarPlay is connected: **"Apple CarPlay"** (see below)

Using Apps of iPhone—Apple CarPlay

❏ About CarPlay

CarPlay is a smarter, safer way to use your iPhone in the car. CarPlay takes the things you want to do with iPhone while driving and displays them on the screen of the unit. 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 5
- iPhone 5c
- iPhone 5s
- iPhone 6
- iPhone 6 Plus
- iPhone 6s
- iPhone 6s Plus

Although the service area is expanding, CarPlay service is NOT available in some markets.
Please check the latest information concerning availability in your region from the below website.
http://www.apple.com/ios/featureavailability/#applecarplay-applecarplay

❏ Preparation

To use the navigation function of the maps App, connect a GPS antenna. (Page 72)

1 Configure the settings to use Apple CarPlay on the **<AV>** screen.
On the Home screen:
- You can also display the **<SETUP>** screen by touching **[⚙]** on the source/option selection screen. (Page 8)

| [Automotive Mirroring] | Select **[ON]** to use Apple CarPlay. |
| [CarPlay Sidebar] | Select the position of the control bar (left or right) shown on the touch panel. |

2 Connect iPhone using KS-U62 (optional accessory). (Page 70)
- When iPhone compatible with CarPlay is connected to the USB input terminal, the Bluetooth mobile phone currently connected is disconnected.
- Unlock your iPhone.

3 Select **"Apple CarPlay"** as the source. (Page 10)
- **[Apple CarPlay]** is displayed on the Home screen or the source/option selection screen only when a compatible iPhone is connected.

❏ Using Siri

You can activate Siri while the CarPlay screen is displayed.

On the home screen of CarPlay:

1 Touch and hold **[◎]** to activate Siri.
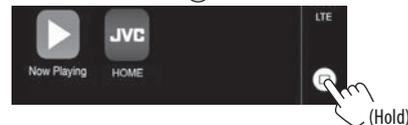
(Hold)

2 Talk to Siri.

- You can also activate Siri by pressing and holding HOME/🎤 on the monitor panel.
  – To deactivate, press HOME/🎤 on the monitor panel.

❏ **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 depending on the connected device.

[1] Application buttons
  Starts the application.
[2] **[HOME]** button
  Exits the CarPlay screen and displays the Home screen.
[3] **[⬡]** button
  • On the App screen: Displays the home screen of CarPlay. (Touch)
  • On the home screen of CarPlay: Activates Siri. (Hold) (Page 22)

To exit the CarPlay screen: Press HOME on the monitor panel.

❏ **Switching to the Apple CarPlay screen while listening to another source**

• This operation is available when **[DISP Key]** is set to **[Apps]** in the **<User Interface>** screen. (Page 63)

To return to the source control screen: Press the same button again.

Tuner

Listening to the radio

❏ Indications and buttons on the source control screen

Radio reception information

1 Preset no.
2 Seek mode (See the right column.)
3 Text information
   • Touching **[<]** scrolls the text if not all of the text is shown.
   • Touching **[⟳]** switches the information as follows:
      – Frequency/PS name/Radio Text/title and artist
      – Frequency/PTY genre/Radio Text plus
4 Preset list (Page 25)
5 TI indicator (Page 26)
6 ST/MONO indicator: Lights up when receiving an FM stereo broadcast with sufficient signal strength.
7 RDS indicator: Lights up when receiving an RBDS station.

Operation buttons

[AUTO1]/ [AUTO2]/ [MANUAL]	Changes the seek mode. Each time you touch the button, the seek mode changes as follows: • **AUTO1**: Auto search • **AUTO2**: Tunes in stations in the memory one after another. • **MANUAL**: Manual search
[▷]	Displays the other operation button window. • To hide the window, touch **[◁]**.
[◁]	Displays the preset list. • To hide the list, touch **[▷]**.
[AM]	Selects the AM band.
[FM]	Selects the FM band.
[🔇]	Attenuate the sound. (Page 6) • To restore the sound, touch **[🔇]**.
[I◄◄] [►►I]	Searches for a station. • The search method differs according to the selected seek mode. (See above.)
[TI]*	Activates/deactivates TI standby reception mode. (Page 26)
[SSM]*	Presets stations automatically. (See the right column.)
[PTY]*	Enters PTY search mode. (Page 25)
[MONO]	Activates/deactivates monaural mode for better FM reception. (Stereo effect will be lost.) • The MONO indicator lights up while monaural mode is activated.

• To display all available operation buttons, touch **[▷]** to display the other operation button window.
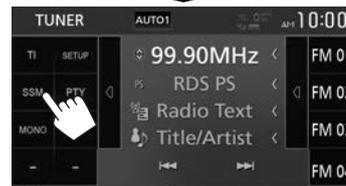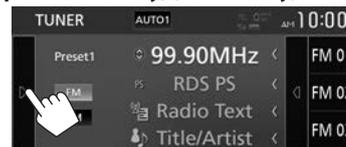
*   Appears only when FM is selected as the band.

Presetting stations

❏ Storing stations in the memory

You can preset 15 stations for FM and 5 stations for AM.

Automatic presetting—SSM (Strong-station Sequential Memory) (For FM only)

The confirmation message appears. Touch **[Yes]**. The local stations with the strongest signals are found and stored automatically.

Manual presetting

1 Tune in to a station you want to preset.
(Page 24)

2 Display the preset list.

3 Select a preset number to store.

(Hold)
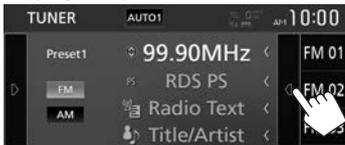
The station selected in step **1** is stored.
• Scroll the page to show more items.
• To hide the list, touch **[ ]**.

❏ **Selecting a preset station from the list**
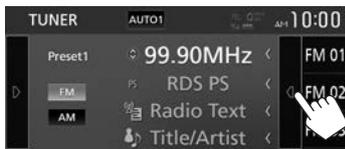
• Scroll the page to show more items.
• To hide the list, touch **[ ]**.

FM RBDS features

❏ **Searching for FM RBDS programs—PTY Search**

You can search for your favorite programs being broadcast by selecting the PTY code.

1 Display the **<PTY Search>** screen.
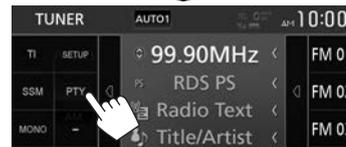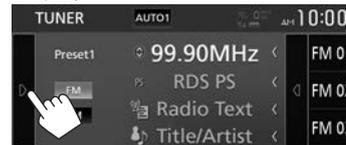
2 Select a PTY code (①), then start searching (②).

• Scroll the page to show more items.
PTY Search starts.
If there is a station broadcasting a program of the same PTY code as you have selected, that station is tuned in.

Tuner

❏ Activating/deactivating TI Standby Reception

You can receive traffic information even while listening to another source by activating TI Standby Reception.
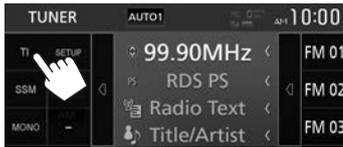
The unit is in standby to switch to Traffic Information (TI) if available.

- The TI indicator lights up in the following cases:
  - Lights in white: Receives the Traffic Information.
  - Lights in orange: On standby for traffic information reception.
- If the TI indicator is lit in orange, tune into another station providing RBDS signals.
- When traffic information is received, the screen switches to the Traffic Information screen automatically.

To deactivate TI Standby Reception: Touch **[TI]**. (The TI indicator turns off.)

- The volume adjustment for Traffic Information is automatically memorized. The next time the unit switches to Traffic Information, the volume is set to the previous level.

SiriusXM® Satellite Radio

Only SiriusXM® brings you more of what you love to listen to, all in one place. Get over 140 channels, including commercial-free music plus the best sports, news, talk, comedy and entertainment. Welcome to the world of satellite radio. A SiriusXM Vehicle Tuner and Subscription are required. For more information, visit www.siriusxm.com.

Activating subscription

1. Check your Radio ID.
   The SiriusXM Satellite Radio ID is required for activation and can be found by tuning to Channel 0 as well as on the label found on the SiriusXM Connect tuner and its packaging.
   - The Radio ID does not include the letters I, O, S or F.

2. Activate the SiriusXM Connect Vehicle Tuner using one of the two methods below:
   - For users in the U.S.A:
     - Online:
       Visit www.siriusxm.com/activatenow
     - Phone: Call SiriusXM Listener Care at 1-866-635-2349
   - For users in Canada:
     - Online:
       Visit www.siriusxm.ca/activatexm
     - Phone: Call XM customer Care at 1-877-438-9677

3. When a confirmation message is displayed, touch **[Return]**.

Listening to the SiriusXM® Satellite Radio

❏ Indications and buttons on the source control screen

Live mode screen

SiriusXM® Satellite Radio reception information

1 Channel Logo/Album art
2 Seek mode (Page 27)
3 Signal strength indicator
4 SiriusXM® Satellite Radio indicators
- Mix: Lights up when TuneMix™ is activated. (Page 31)
- Scan: Lights up when TuneScan™ is activated. (Page 30)
- 🏃: Lights up when SportsFlash™ is activated or when receiving SportsFlash information. (Page 32)
- 🌧: Indicates the status of weather and traffic information reception. (Page 31)

SiriusXM® Satellite Radio

5 Text information
- Touching **[<]** scrolls the text if not all of the text is shown.
- Touching **[ ]** switches the information as follows:
  - Channel name/artist name/song title/ content information
  - Channel name/category name/channel description/similar channels

6 Preset list (Page 28)

Operation buttons

[SEEK1]/ **[SEEK2]**	Changes the seek mode. • **SEEK1**: Skip to another available channel. • **SEEK2**: Skip to another preset channel.
[ ]	Displays the other operation button window. • To hide the window, touch **[ ]**.
[ ]	Displays the preset list. • To hide the list, touch **[ ]**.
[ ]	Attenuate the sound. (Page 6) • To restore the sound, touch **[ ]**.
[ ]	Displays the category/channel search screen. (Page 28)
[ ]	Starts/pauses the content replay. (Page 29)
[CH▼] [CH▲]	Selects the channel.
[Direct Channel]	Displays the direct channel search screen. (See the far right column.)
[SETUP]	Changes the settings for SiriusXM Satellite Radio reception on the **<SiriusXM SETUP>** screen. (Pages 30 – 36)

[Band]	Selects the band (SXM1 – SXM4).
[Replay]/ **[Live]**	Switches between replay mode screen (Page 29) and live mode screen (Page 26).
[Traffic & **Weather]**	Switches to the latest traffic and weather report. (Page 31)
[Tune Scan]	Starts TuneScan™. (Page 30)
[Tune Mix]	Presets channels automatically with your favorites. (Page 31)
[Sports Flash]	Activates SportsFlash™. (Page 32)

- To display all available operation buttons, touch **[ ]** to display the other operation button window.

Selecting a channel

❏ Select a channel by specifying a channel number—Direct Channel

You can search for a station by entering the desired channel number.

1 Display the **<Direct Channel>** screen.
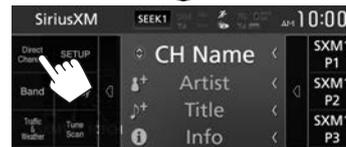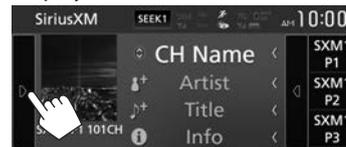
2 Enter the channel number (①), then start searching (②).

- Touch **[ ]** to delete the last entry.

SiriusXM® Satellite Radio

❏ Selecting a channel on the category/ channel list

You can obtain information on channels or select a category and then a channel.

1 Display the **<Category List>** screen.

2 Select a category (①), and then select a channel (②).

- Scroll the page to show more items.
- Touching **[All-Channels]** on the **<Category List>** displays all the channels.
- To switch the sequence of the list (between channel name/artist name/song title/category name/content information), touch **[Info Change]**.

Presetting channels

❏ Storing channels in the memory

You can preset 6 channels for each band.

1 Tune in to a channel you want to preset. (Page 27)

2 Display the preset list.
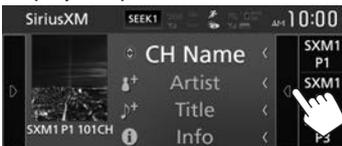
3 Select a preset number to store.

The channel selected in step **1** is stored.
- Scroll the page to show more items.
- To hide the list, touch **[ ]**.

❏ Selecting a preset channel

1 Display the preset list.
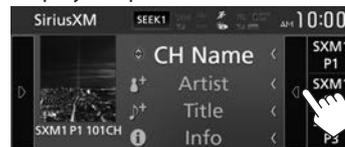
2 Select a preset channel.

- Scroll the page to show more items.
- To hide the list, touch **[ ]**.

28
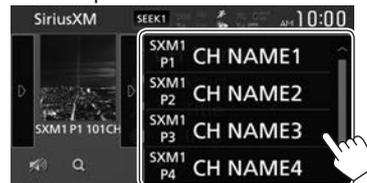
SiriusXM® Satellite Radio

Replay

You can pause, rewind and replay content from the currently tuned channel.
- The SiriusXM Connect Vehicle Tuner continually buffers up to 60 minutes of audio.
- If you change to another channel during playback, the Replay buffer content will be lost.

❏ Indications on the Replay mode screen

1 Replay time bar
   Shows the remaining capacity (gray) and the amount of buffered content (blue). If the Replay buffer is full, the entire bar becomes blue.
   - Updated every second.
2 Time code
   Shows you the point in the Replay buffer you are listening to.
   - Example: −5:00
     - You are listening to audio that is 5 minutes behind the current broadcast.
   - Updated every second.

❏ Replaying content

1 Display the Replay mode screen.
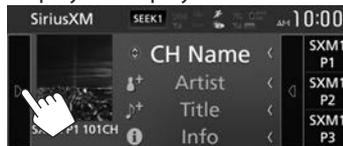
2 Perform the replay operations.

- To start/pause the playback, touch **[▶ Ⅱ]**.
- To skip the current track/segment, touch **[◄◄]/[►►]**.
  - Touching **[◄◄]** within 2 seconds of the beginning of the current track/segment returns to the previous track.
  - Touching **[◄◄]** after 2 seconds or more of the track have been replayed returns to the beginning of the current track/segment.
- To rewind/fast forward, touch and hold **[◄◄]/[►►]**.

Replaying content from a list of recorded data on a program basis—Instant Replay list

1 Display the **<Instant Replay List>** screen.

2 Select the desired program.
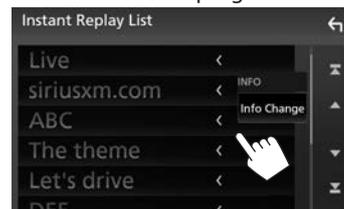
- Scroll the page to show more items.
- To switch the sequence of the list (between artist name/song title/category name/content information), touch **[Info Change]**.

**To return to the live mode screen:**
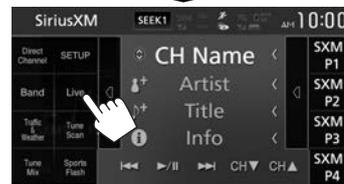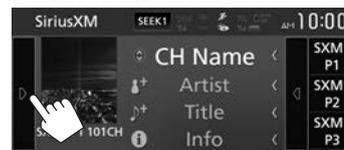
SmartFavorites

User stored channels (P1 to P6) of current band are recognized as SmartFavorites channels. SiriusXM Connect Vehicle Tuner automatically buffers their broadcast content in the background. When you select a SmartFavorites channel, you can rewind and replay up to 30 minutes of any of the missed news, talk, sports or music content.

• SmartFavorites is available only when you connect an SXV200 or later SiriusXM Connect Vehicle Tuner.
• If you change to another band, the buffered content is cleared and new channels in the current band will start buffering.

TuneStart™

When you select a SmartFavorites channel, you can listen to the current song from the beginning.

Activating TuneStart™

1 Display the **<SiriusXM SETUP>** screen.
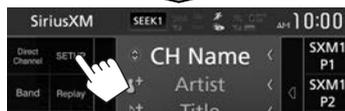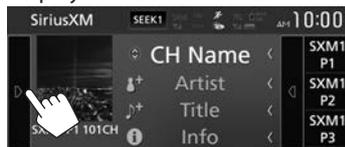
2
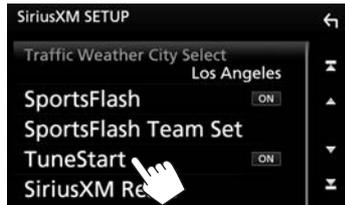
To deactivate TuneStart: Touch **[TuneStart]** to select **[OFF]**.

TuneScan

When you activate TuneScan™, you will hear 6 seconds of the songs, which have not been listened to, from each of the music channel presets on the current Band and the currently tuned channel.
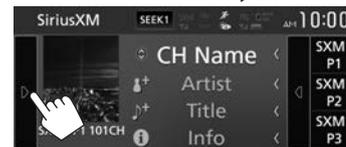
The unit starts scanning. (The Scan indicator lights up.)
• To select the previous/next content, touch **[⏮◀◀]** or **[▶▶⏭]**.
• To play the currently scanned content, touch **[Tune Scan]**.
• To exit scanning and return to the live position, touch and hold **[Tune Scan]**.

TuneMix™

TuneMix™ plays a unique blend of songs from your preset music channels from the current SiriusXM preset band, allowing you to build a custom channel from as few as 2 to as many as 6 music channels. You can even skip songs you do not want to hear.
• TuneMix™ is available only when you connect an SXV300 or later SiriusXM Connect Vehicle Tuner.

Activating TuneMix™

• The Mix indicator lights up.

To deactivate TuneStart: Touch **[Tune Mix]**. (The Mix indicator turns off.)

Receiving the latest traffic and weather report—Traffic & Weather Now™

Traffic & Weather Now™ allows you to access the latest report whenever you want to hear it.

❏ **Registering a city for receiving Traffic & Weather broadcasts**

1 Display the **<SiriusXM SETUP>** screen.

2 Display the **<Traffic Weather City Select>** window.

3 Select the city for which you want receive SiriusXM Traffic & Weather broadcasts.

❏ **Receiving Traffic & Weather broadcasts**
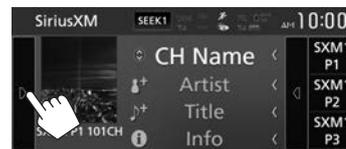
The latest traffic and weather report starts from the beginning.

• The 🚗 indicator color indicates the status of the traffic and weather report reception as follows:
  When SXV300 is connected:
  – Lights in white: Played already.
  – Lights in green: New information available.
  – Lights in purple: Playing.
  – Turned off: There is no information.
  When SXV200/SXV100 is connected:
  – Lights in white: On standby for Traffic and weather report reception.
  – Lights in purple: Playing.
  – Turned off: Traffic and weather report reception is deactivated.

SiriusXM® Satellite Radio

Receiving big play information of your favorite team—SportsFlash™

SportsFlash™ will notify you when a big play happens during a game with one of your favorite sports teams. Choose to tune in and hear the play unfold as though it was live. Continue listening to the game, or you can return to your previous channel.
• SportsFlash™ is available only when you connect an SXV300 or later SiriusXM Connect Vehicle Tuner.

❏ Selecting teams to receive SportsFlash alert

You can register up to 50 teams for SportsFlash. You can receive the information up to 5 games.

1 Display the **<SiriusXM SETUP>** screen.
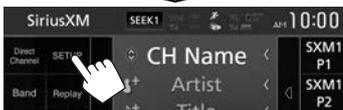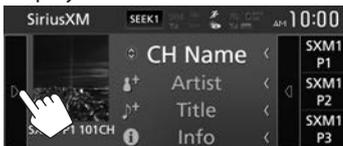
2 Display the **<SportsFlash League Select>** screen.
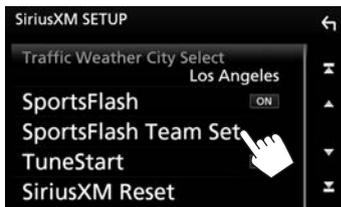
3 Select a league.

• Scroll the page to show more items.

4 Select **[ON]** for teams you want to receive SportsFlash alert for.

• Scroll the page to show more items.
• Select **[OFF]** for the team you want to deactivate SportsFlash alert for.
Repeat steps **3** and **4** if you want to set the SportsFlash alert for other leagues.

• The 🏃 indicator lights up in the following cases:
 – Lights up in white: While the SportsFlash alert is in standby.
 – Lights up in purple: When receiving SportsFlash information.
 – Turned off: SportsFlash alert is not activated.

To deactivate the SportsFlash alert for all selected leagues: Touch **[Disable All]** in the **<SportsFlash League Select>** screen.
• When a confirmation message appears, touch **[Yes]**.

❏ Switching to the game information
When a big play happens during one of the games, an alert screen appears.
Touch **[Jump]** to receive the game information.
• To cancel the currently received alert, touch **[Ignore]**.
 – You will receive future alerts for the game.
• To cancel the alert for this game, touch **[Cancel]**.

SiriusXM® Satellite Radio

Receiving alerts for desired content— Content Alert

The unit informs you when receiving the content you are interested in such as music and information about a sports team.

❏ Activating content alert

1 Display the **<SiriusXM SETUP>** screen.
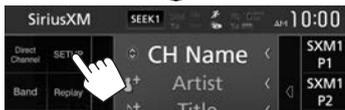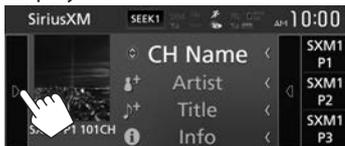
2 Select **[ON]** to activate the content alert.

To deactivate the content alert: Touch **[Content Alerts]** to select **[OFF]** .

❏ Selecting the content for the content alert

1 Display the **<SiriusXM SETUP>** screen. (See the left column.)

2 Display **<Alert Contents Select>** screen.
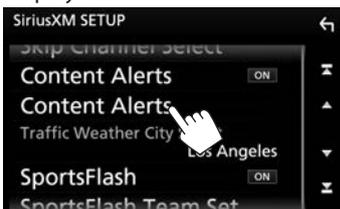
3 Select the desired category.
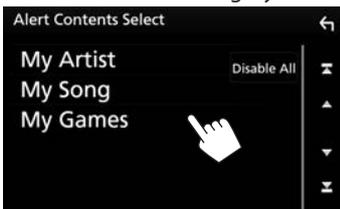
4 Select **[ON]** for contents you want to receive alerts for.
Example: when selecting an artist

- Scroll the page to show more items.
- Select **[OFF]** for the contents you want to deactivate the content alert for.
- For artist/songs: you can delete currently selected content from the list by touching **[Delete]**.
- For sports teams: you can select up to 30 teams.
Repeat steps **3** and **4** if you want to set the content alert for other categories.

To deactivate the all selected contents: Touch **[Disable All]** in the **<Alert Contents Select>** screen.
- When a confirmation message appears, touch **[Yes]**.

SiriusXM® Satellite Radio

❏ Switching to registered content

When receiving the contents registered for content alerts, an alert appears on the screen.
Touch **[Jump]**, then select the item to jump to on the **<Alert Contents List>** screen.

• To cancel the content alerts, touch **[Ignore]**.
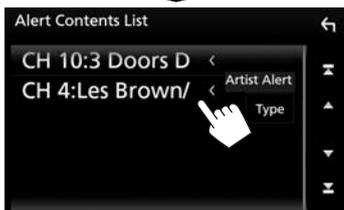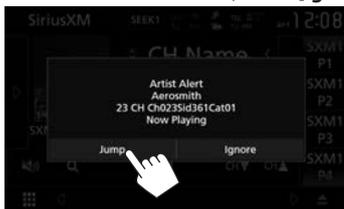
• Scroll the page to show more items.
• To switch the sequence of the list (between Artist Alert, Song Alert, and Game Alert™), touch **[Type]**.

Setting reception restrictions

❏ Setting the parental control

You can limit access to SiriusXM channels, such as those with mature content.

Setting/changing the parental code

• The initial setting is "0000."
• Changing the code does not change the **[Parental Control]**/**[Parental Lock Channel Selection]** settings.

1 Display the **<SiriusXM SETUP>** screen.
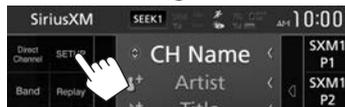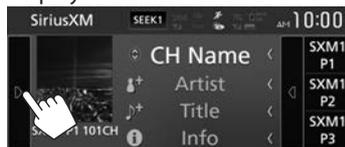
2 Display the **<Parental Code Set>** screen.

3 Enter the four-digit code (①), and then confirm (②).
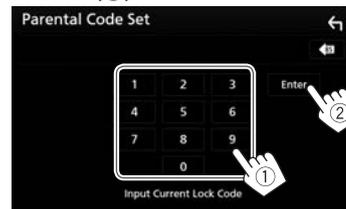
• Touch **[ ]** to delete the last entry.

4 Enter a new four-digit code (①), and then confirm (②).
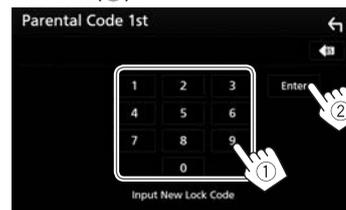
• Touch **[ ]** to delete the last entry.

5 Repeat step **4** to confirm the new code.

SiriusXM® Satellite Radio

Activating/deactivating the parental control
You can set the parental control feature to lock any SiriusXM channel(s) or automatically lock all channels classified as "mature" by SiriusXM®.

1 Display the **<SiriusXM SETUP>** screen. (Page 34)

2 Select a parental control mode.

[OFF]	Deactivates the parental mature and user lock.
[Mature]	Locks channels classified as "mature" only.
[User]	Locks only the selected channels. (See the right column.)

3 Enter the parental code to confirm your choice.

Selecting the channels to lock—Parental Lock Channel Selection
This parental control option allows you to pick the channels to be locked by the parental control feature.
• When **[Parental Control]** is set to **[Mature]** or **[OFF]**, you cannot change the **[Parental Lock Channel Selection]** setting.

1 Display the **<SiriusXM SETUP>** screen. (Page 34)

2

3 Enter the parental code.
The **<Parental Lock Category Select>** screen is displayed.

4 Select the desired category.

• Scroll the page to show more items.

5 Select **[ON]** for channels you want to activate parental lock for.

• Scroll the page to show more items.
• Select **[OFF]** for the channels you want to deactivate the parental lock for.
• To switch the sequence of the list (between channel name/artist name/song title/category name/content information), touch **[Info Change]**.
Repeat steps **4** and **5** if you want to set the lock on multiple channels.

To deactivate the parental lock for all locked channels: Touch **[Disable All]** in the **<Parental Lock Category Select>** screen, then enter the parental code number.
• When a confirmation message appears, touch **[Yes]**.

❏ Skipping unwanted channels

If you do not want to receive some channels, you can skip them.

Activating the channel skipping

1 Display the **<SiriusXM SETUP>** screen. (Page 34)

2 Display the **<Skip Category Select>** screen.

3 Select the desired category.

- Scroll the page to show more items.
- Touching **[All-Channels]** displays all the channels.

4 Select **[ON]** for channels you want to skip.

- Scroll the page to show more items.
- Select **[OFF]** for the channels you do not want to skip.
- To switch the sequence of the list (between channel name/artist name/song title/category name/content information), touch **[Info Change]**.

Repeat steps **3** and **4** if you want to select channels to skip from other categories.

To clear the channel skipping for all skipped channels: Touch **[Disable All]** in the **<Skip Category Select>** screen.

- When a confirmation message appears, touch **[Yes]**.

❏ Resetting the SiriusXM Satellite Radio settings

You can reset the SiriusXM Satellite Radio settings you set up and restore the default settings.

1 Display the **<SiriusXM SETUP>** screen. (Page 34)

2

A confirmation message appears. Touch **[Yes]**.

OTHER EXTERNAL COMPONENTS

Using a rear view camera

- To connect a rear view camera, see page 71.
- To use a rear view camera, a REVERSE lead connection is required. (Page 69)

❏ Settings for the rear view camera

1 Display the **<SETUP>** screen.
On the Home screen:
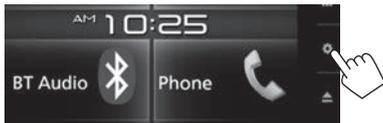
- You can also display the **<SETUP>** screen by touching **[⚙]** on the source/option selection screen. (Page 8)

2 Display the **<Camera>** screen.

3 Configure the camera settings.
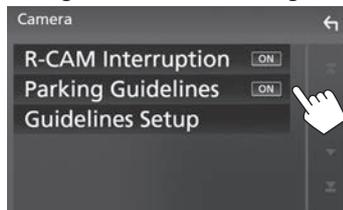
Setting items

[R-CAM Interruption]	• **ON** (Initial): 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]	• **ON** (Initial): Displays the parking guidelines to enable easier parking when you shift the gear to the reverse (R) position. • **OFF**: Hides the parking guidelines.
[Guidelines Setup]*	Adjusts the parking guidelines according to the size of the car, parking space and so on. (See the right column.)

*   Selectable only when **[Parking Guidelines]** is set to **[ON]**.

Adjusting the parking guidelines
- 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 **[Guidelines Setup]** on the **<Camera>** screen. (See the far left column.)
The guidelines settings screen is displayed.

2 Touch one of the 🔲 marks to adjust (①), then adjust the position of the selected 🔲 mark (②).
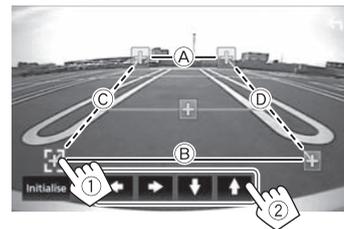
Make sure that Ⓐ and Ⓑ are horizontally parallel, and that Ⓒ and Ⓓ are the same length.
- Touch **[Initialize]** and after touch **[Yes]** to set all the 🔲 marks to the initial default position.

❏ Displaying the picture from the rear view camera

The rear view screen is displayed when you shift the gear to the reverse (R) position.
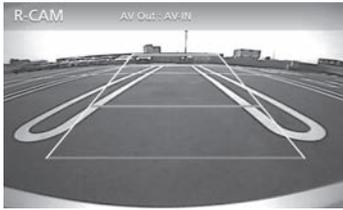
• To erase the operation buttons, touch the screen. Touching the screen again displays the operation buttons.

To display the picture from the rear view camera manually

1 Display the pop-up short-cut menu.

2

To exit the rear view screen

Using external audio/video players—AV-IN

When the operation buttons are not displayed on the screen, touch the area shown on the illustration.
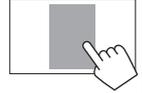
• To change settings for video playback, see page 58.

❏ Starting playback

1 Connect an external component to the iPod/AV-IN input terminal. (Page 71)

2 Select **"AV-IN"** as the source. (Page 10)

3 Turn on the connected component and start playing the source.

Using ADS adapter features

By connecting the ADS adapter (commercially available) to the iDatalink terminal (Page71), this unit can access the satellite radio source provided for the vehicle and vehicle information can be displayed on this unit.

Preparation:
Configure the settings on the **<OEM SETUP>** screens beforehand. (Page 63)

❏ Selecting ADS adapter features

1 Display the source/option selection screen.
On the Home screen:

• You can also display the source/option selection screen by touching [▦] on the source control screen.

2 Select ADS adapter features on the source/ option selection screen.
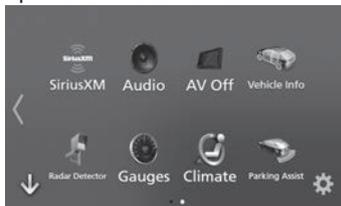
• To display more items, touch [〈]/[〉] or flick to change the page.

Example: when **"Vehicle Info"** is selected
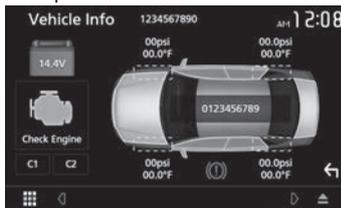
❏ Available items with ADS adapter

[Vehicle Info]	Displays information about the tire pressure.
[Satellite Radio]	Displays the control screen of the satellite radio source provided for the vehicle.
[Media Player]	Displays the control screen of the media player source provided for the vehicle.
[TEL]	Displays the control screen of the mobile phone provided for the vehicle.
[BT Streaming]	Displays the control screen of the Bluetooth audio player source provided for the vehicle.
[Reader Detector]	Displays information about the instruments such as the speedometer.
[Gauges]	Displays the gauges of the vehicle.
[Climate]	Displays information about the air conditioner of the vehicle.
[Parking Assist]	Displays the guides for parking the vehicle.

BLUETOOTH

Information for using Bluetooth® devices

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.

Notes
• 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 mobile phones compatible with Phone Book Access Profile (PBAP)
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
• Dialed calls, received calls, and missed calls: up to 50 entries in total

Connecting Bluetooth devices

❏ Activating/deactivating the Bluetooth function

When you use the Bluetooth device, activate the Bluetooth function on the unit.

1 Display the **<SETUP>** screen.
On the Home screen:

• You can also display the **<SETUP>** screen by touching [⚙] on the source/option selection screen. (Page 8)

2 Display the **<Bluetooth Setup>** screen.

3 Activate (**[ON]**) or deactivate (**[OFF]**) the Bluetooth function.

❏ Registering and connecting a new Bluetooth device

When you connect a Bluetooth device to the unit for the first time, pair the unit and the device. Pairing allows Bluetooth devices to communicate with each other.
• You cannot register the Bluetooth device when you are using the following sources: **"Bluetooth"**, **"iPod"**, or **"Apple CarPlay"**. If you want to register the Bluetooth device while using one of the above mentioned sources, send the connection request from the Bluetooth device and register it.
• The pairing method differs depending on the Bluetooth version of the device.
  – For devices with Bluetooth 2.1: You can pair the device and the unit using SSP (Secure Simple Pairing) which only requires confirmation.
  – For devices with Bluetooth 2.0: You need to enter a PIN code both on the device and unit for pairing.
• You can register up to 10 devices in total.
• Two Bluetooth devices can be connected at a time.
• To use the Bluetooth function, you need to turn on the Bluetooth function of the device.
• When a Bluetooth mobile phone is connected, the signal strength and battery level are displayed when the information is acquired from the device.

BLUETOOTH

Auto pairing

When **<Auto Pairing>** is set to **[ON]**, iOS devices (such as iPhone) are automatically paired when connected via USB. (Page 49)

Pairing a Bluetooth device from the target device

1   Search for the unit (**"KW-V820BT"**) from your Bluetooth device and operate the device to register.

   For a Bluetooth device compatible with SSP (Bluetooth 2.1):
   Confirm the request both on the device and the unit.
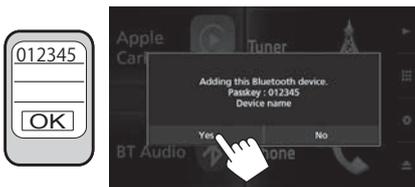
   • Touch **[No]** to reject the request.

For a Bluetooth device compatible with Bluetooth 2.0:
Select the unit (**"KW-V820BT"**) on your Bluetooth device.
• If a PIN code is required, enter the PIN code shown on the screen (initial: "0000").
   – To change PIN code, see page 43.

2   Determine usage as a mobile phone.
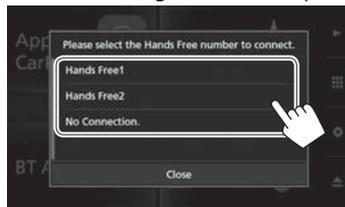
   • To use the Bluetooth device as a mobile phone, select the hands free number (**[Hands Free1]** or **[Hands Free2]**) to connect the device for.
   • When you do not want to use the Bluetooth device as a mobile phone, select **[No Connection.]**.
   • To close the window, touch **[Close]**.

3   When your Bluetooth device is compatible with A2DP or SPP: Determine usage as an audio player or a device with Apps installed.

   • To use the device as an audio player, touch **[Yes]**.
   • When you do not want to use the Bluetooth device as an audio player, touch **[No]**.

4   When your Bluetooth device is compatible with PBAP: Select whether to transfer the phonebook of your Bluetooth device to the unit or not.
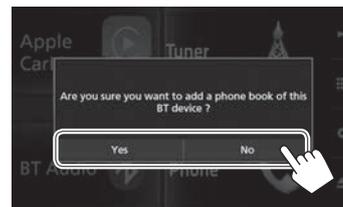
   • To transfer the phone book from your Bluetooth device, touch **[Yes]**.
   • When you do not want to transfer the phone book, touch **[No]**.

❏ **Connecting/disconnecting a paired Bluetooth device**

Two devices can be connected simultaneously.

1 Display the **<SETUP>** screen.
On the Home screen:

- You can also display the **<SETUP>** screen by touching **[ ]** on the source/option selection screen. (Page 8)

2 Display the **<Bluetooth Setup>** screen.

3 Display the **<Select Device>** screen.

4 Select the device you want to connect/disconnect.

- Scroll the page to show more items.
- The icons beside the paired device indicate the following:
  – 🕻/🕻: Connected as a mobile phone.
  – ♫: Connected as an audio player.

5 Select the usage of the device.
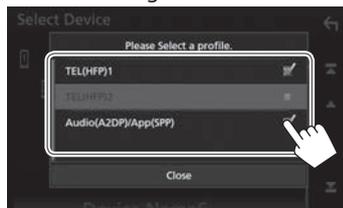
Each time you touch the selection, the usage is selected ("✔" appears) or deselected ("✔" disappears). Select to connect and deselect to disconnect the device.
- **[TEL (HFP)1]**/**[TEL (HFP)2]**: Mobile phone
- **[Audio (A2DP)/App (SPP)]**: Audio player/device with Apps installed

- To close the window, touch **[Close]**.

❏ **Deleting a paired Bluetooth device**

1 Display the **<Select Device>** screen. (See the far left column.)

2 Display the **<Device Remove>** screen.

3 Select a device to delete (①), then touch **[Delete]** (②).

- Touch **[✔ All]** to select all devices.
- Touch **[All]** to deselect all selected devices.
- Scroll the page to show more items.

A confirmation message appears. Touch **[Yes]**.

❏ Changing the PIN code

1 Display the **<Bluetooth Setup>** screen. (Page 42)

2 Display the PIN code input screen.
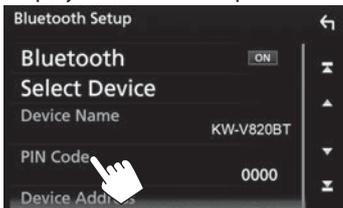
3 Enter the PIN code (①), then confirm the entry (②).
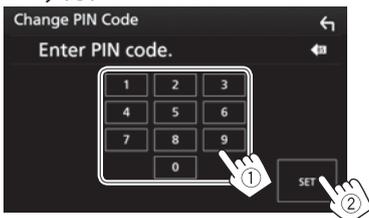
• Touch **[BS]** to delete the last entry.

❏ Change the device name of the unit displayed on the paired device

1 Display the **<Bluetooth Setup>** screen. (Page 42)

2 Display the device name entry screen.

3 Enter the device name (①), then confirm the entry (②).

• Touch **[BS]** to delete the last entry.
• Touch **[◀]/[▶]** to move the entry position.

Using a Bluetooth mobile phone

❏ Receiving a call

When a call comes in...

• Call information is displayed if acquired.
• The call incoming screen is not displayed while the camera screen is displayed. To display the call incoming screen, shift the gear to the drive position.

To reject a call
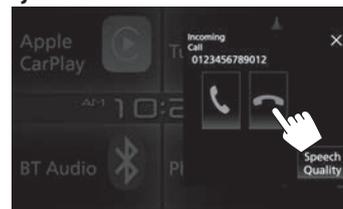
When <Auto Response> is set to [ON] (Page 49)
The unit answers incoming calls automatically.

❏ **Ending a call**

While talking...

❏ **Adjusting the volume during a call/ echo cancel level/noise reduction volume**

1 Display the **<Speech Quality>** window.
While talking...

2
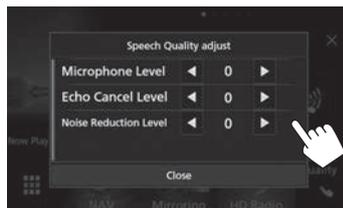
<Microphone Level>	Adjusts the microphone volume level.
	• **−10** to **+10** (initial: **0**).
<Echo Cancel Level>*	Adjusts the echo volume.
	• **−5** to **+5** (initial: **0**).
<Noise Reduction Level>*	Adjusts the noise reduction volume.
	• **−5** to **+5** (initial: **0**).

• To close the window, touch **[Close]**.

* You can also adjust these items on the **<TEL SETUP>** screen. (Page 49)

❏ **Switching between handsfree mode and phone mode**

While talking...
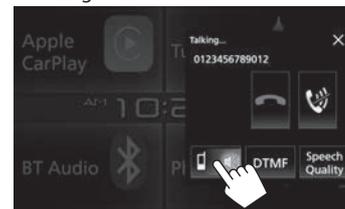
Each time you touch the button, the talking method is switched (: handsfree mode / : phone mode).

❏ Switching between two connected devices

When two devices are connected, you can change the device to use.
While using a Bluetooth mobile phone, select the device you want to use.

1 Display the phone control screen.
On the Home screen:
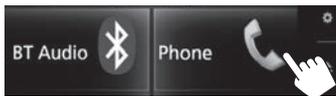
- You can also display the phone control screen by selecting [ ] on the pop-up short-cut menu. (Page 11)

2 Select the device to use.

The active device is highlighted.

❏ Muting the volume of the microphone

While talking...

To restore the volume, touch [ ].

❏ Sending dial tone during a call

You can send dial tone during a call using the DTMF (Dual Tone Multi Frequency) function.

1 Display the tone input window.
While talking...

2 Input the tone to send.

- To close the window, touch **[Close]**.

❏ Making a call

1 Display the phone control screen.
On the Home screen:

- You can also display the phone control screen by selecting [ ] on the pop-up short-cut menu. (Page 11)

2 Select a method to make a call.

[ ] From the call history*
[ ] From the phone book*
[★] From the preset list
   - To preset, see page 47.
[ ] Direct number entry
[ ] Voice dialing

- You can display the **<Bluetooth Setup>** screen by touching [ ].

* When the mobile phone is not compatible with Phone Book Access Profile (PBAP), the phone book is not displayed.

From the call history (missed calls/ received calls/ dialed calls)

Display the call history list (①), then select the target to make a call (②).

- Scroll the page to show more items.

From the phonebook

- To transfer phonebook from the connected Bluetooth mobile phone compatible with PBAP, see page 48.

1 Display the phonebook (①), then display the keyboard to search by initial (②).

2 Select the initial to sort the list in the alphabetical order.

- If the initial character is a number, touch **[1]** and then select the number.
- Touch **[◀BS]** to delete the last entry.
- Touch **[✕]** to hide the keyboard.

3 Select a contact to call.

- Scroll the page to show more items.

4 Select the phone number from the list to make a call.
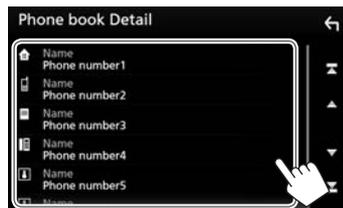
- Scroll the page to show more items.

- You can select a first name or last name to use when sorting the list in alphabetical order on the **<TEL SETUP>** screen. (Page 49)

From the preset list

Display the preset list (①), then select the target to make a call (②).

Direct number entry

Display the direct number entry screen (①), enter the number (②), then make a call (③).

Voice dialing
• Available only when the connected mobile phone has a voice recognition system.

1 Activate voice dialing.

• You can also activate voice dialing by touching [🎤] on the pop-up short-cut menu. (Page 11) or holding HOME/🎤 on the monitor panel.

2 Say the name of the person you want to call.

• If the voice command is not recognized, touch [**Restart**], then say the name again.

To cancel voice dialing: Touch [**Stop**].

❏ Presetting phone numbers

You can preset up to 10 phone numbers.

1 Display the preset list. (Page 45)

2

3 Select a position to store into.

4 Select a method to add a phone number to preset list, then register the number to the preset list.
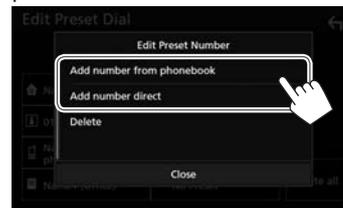
[**Add number from phonebook**]	Select a phone number from the phonebook (Page 46).
[**Add number direct**]	Enter a phone number on the direct number entry screen, then touch [**Set**] to add to the preset list.

• To close the window, touch [**Close**].

• To display the preset list, touch [★] on the phone control screen.

To delete a phone number from the preset list:
Select the phone number to delete on the **<Edit Preset Dial>** screen, then touch [**Delete**] on the **<Edit Preset Number>** window.

To delete all phone numbers from the preset list:
Touch [**Delete all**] on the **<Edit Preset Dial>** screen.

❏ Editing phonebook

To transfer the phonebook

If the connected Bluetooth mobile phone is compatible with Phone Book Access Profile (PBAP), you can transfer the phonebook of the mobile phone to the unit.

1   Display the phone book (①), then display the **<Edit Phonebook>** window (②). On the phone control screen:

2   Start transferring the phonebook.
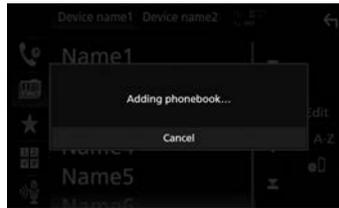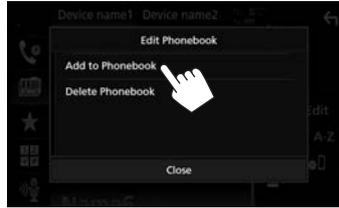
- To close the **<Edit Phonebook>** window, touch **[Close]**.
- To cancel the transferring the phonebook, touch **[Cancel]**.

To delete contact from the phonebook

1   Display the **<Edit Phonebook>** window. (See the far left column.)

2   Display the **<Delete Phonebook>** screen.

- To close the window, touch **[Close]**.

3   Select contacts to delete (①), then delete them (②).

- "✔" appears beside the selected bookmarks.
- Touch **[✔ All]** to select all bookmarks.
- Touch **[☐ All]** to deselect all selected bookmarks.
- Touch **[🔍 A–Z]** to search the contact by initial.
- Scroll the page to show more items.

Settings for Bluetooth mobile phone

You can change various settings for using Bluetooth mobile phones on the **<TEL SETUP>** screen.

1 Display the **<Bluetooth Setup>** screen. (Page 42)

2 Display the **<TEL SETUP>** screen.

Bluetooth Setup	↩
Device Name	KW-V820BT
PIN Code	0000
Device Address	00:11:22:33:44:55
TEL SETUP	
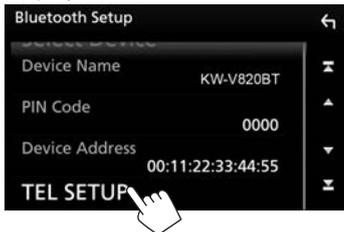
- Scroll the page to show more items.
- You can also display the **<Bluetooth Setup>** screen by touching [ ] on the phone control screen. (Page 45)
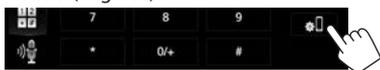
3 Configure the Bluetooth settings (①), then confirm the adjustments (②).

TEL SETUP	OK	↩
Bluetooth HF/Audio	Front	All
Auto Response	◀ OFF ▶	
Auto Pairing	ON	OFF
Sort Order	First	Last
Echo Cancel Level	◀ 0 ▶	

- Scroll the page to show more items.

❏ Setting items

<Bluetooth HF/Audio>	Select the speakers used for Bluetooth (both phone and audio player). • **Front**: Front speakers only. • **All** (Initial): All speakers.
<Auto Response>	• **1** – **30** (in 5 second steps): The unit answers the incoming calls automatically. Set the calling ring time (seconds). • **OFF** (Initial): The unit does not answer the calls automatically. Answer the calls manually.
<Auto Pairing>	• **ON** (Initial): Establishes pairing automatically with the connected iOS device (such as iPhone) even if the Bluetooth function is deactivated on the device. (Auto pairing may not work for some devices depending on the iOS version.) • **OFF**: Cancels.
<Sort Order>	Select a first name or last name to use when sorting the list in alphabetical order. • **First**: Sorts the list in the order of first name. • **Last** (Initial): Sorts the list in the order of last name.
<Echo Cancel Level>	Adjusts the echo volume. • **−5** to **+5** (initial: **0**).
<Noise Reduction Level>	Adjusts the noise reduction volume. • **−5** to **+5** (initial: **0**).

Using the Bluetooth audio player

- To connect a new device, see page 40.
- To connect/disconnect a paired device, see page 42.

❏ Indications and buttons on the source control screen

- The operation buttons, indications and information displayed on the screen differ depending on the connected device.

Playback information
- The information displayed on the screen differs depending on the connected device.
1 Connected device name
2 Playback mode (Page 50)
3 Signal strength and battery level (only when the information is acquired from the device)
4 Tag data (current track title/artist name/album title)*
  - Touching **[<]** scrolls the text if not all of the text is shown.
5 Artwork (Shown if the track contains artwork)

* Available only for devices compatible with AVRCP 1.3.

Operation buttons

- Available buttons on the screen and operations differ depending on the connected device.

[▷] Displays the other operation button window.
- To hide the window, touch [◁].

[⟳] Selects Repeat playback mode.
- ⟳0: Repeats the current track/file.
- ⟳▪: Repeats all tracks/files in the current folder.
- ⟳ALL: Repeats the all tracks/files in the device.

[⤨]*1 Selects Random playback mode.
- ⤨▪: Randomly plays all tracks in current folder.
- ⤨ALL: Randomly plays all tracks in current album.

[🔇] Attenuate the sound. (Page 6)
- To restore the sound, touch [🔇].

[🔍]*2 Displays the folder/track list. (See the right column.)

[◄◄] [►►] • Selects a track. (Touch)
- Reverse/forward search.*3 (Hold)

[►] Starts playback.

[❚❚] Pauses playback.

[BT DEVICE CHANGE] Switches the Bluetooth audio player.

- To display all available operation buttons, touch [▷] to display the other operation button window.

*1 To cancel random mode, touch the button repeatedly until it is grayed out.
*2 Available only for devices compatible with AVRCP 1.5.
*3 Available only for devices compatible with AVRCP 1.3.

❏ **Selecting a track from the list**

1 Display the music list screen.

2 Select the folder, then the item in the selected folder.
- For details about the list operation, see page 9.

❏ **Switching the Bluetooth audio player**

1 Display the Bluetooth device selection window.
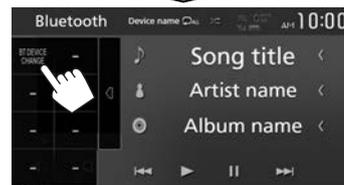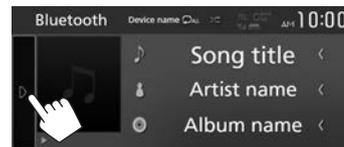
Available Bluetooth audio player devices are listed.

2 Select the desired device.

- To close the window, touch [Close].
The selected device is connected.

SETTINGS

Settings for using applications of iPod/iPhone/Android

Before using applications of iPod/iPhone/Android, select the device to use and connection method.

Preparation:
Connect iPod touch/iPhone/Android device.
- **For Android:** Connect the Android device via Bluetooth.
  – For Bluetooth connection, see page 40.
- **For iPod touch/iPhone:** Connect iPod touch/iPhone with a cable, via Bluetooth, or both with a cable and via Bluetooth. (Page 19)

1 Display the **<SETUP>** screen.
On the Home screen:

- You can also display the **<SETUP>** screen by touching **[⚙]** on the source/option selection screen. (Page 8)

2 Display the **<AV>** screen.

3 Set **[Automotive Mirroring]** to **[OFF]**.
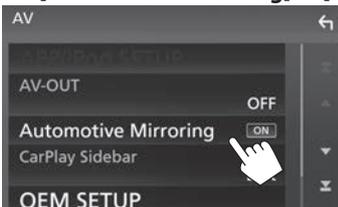
4 Display the **<APP/iPod SETUP>** screen.

5 Select the device and connection method for **<APP Connection select>**.

<table>
<tr><td><Android Bluetooth></td><td>Select this to use Apps with an Android device connected via Bluetooth.</td></tr>
<tr><td><iPhone Bluetooth></td><td>Select this to use Apps with iPod/iPhone connected via Bluetooth.</td></tr>
<tr><td><iPhone USB></td><td>Select this to use Apps with iPod/iPhone connected using KS-U62 (optional accessory) or 30-pin to USB cable (accessory of iPod/iPhone).</td></tr>
</table>

6 Finish the procedure.

Selecting different sources for the front and rear monitors—Zone Control

You can select different sources for both this unit and an external monitor connected to the VIDEO OUT and AV-OUT AUDIO terminals. (Page 71)

1 Display the source/option selection screen.
On the Home screen:
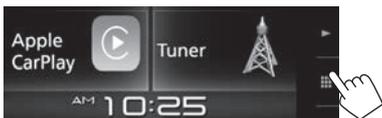
• You can also display the source/option selection screen by touching [⊞] on the source control screen.

2 Display the **<Audio>** screen.

3 Display the **<Zone Control>** screen.

4 Select the source for front and rear, and adjust the volume for the rear source.

[Zone Select]	Selects whether different sources are selected for the front and rear monitors.
	• **Dual Zone**: Selects different sources. (The DUAL indicator lights up.)
	• **Single Zone**: Selects the same source.
[Front Source]*	Selects the source for the front monitor.
[Rear Source]*	Selects the source for the rear monitor.
[Rear VOL.]*	Adjusts the volume for the rear source.

• When the rear speaker sound is switched, the audio source that is output at the AV-OUT AUDIO terminal is also switched to the same source.

• When **[Zone Control]** is set to **[Dual Zone]**, the following operations/performances are not available.
  – Output from the subwoofer
  – Adjustment on the **<Graphic Equalizer>** screen (Page 54)
  – Adjustment on the **<Sound Effect>** screen (Page 58)
  – Settings on the **<Speaker Select>** screen (Page 53)
  – Settings on the **<Position/DTA>** screen (Page 55)
• You cannot select iPod if it is connected via Bluetooth.
• If you select USB, iPod, Disc, Bluetooth audio or Apple CarPlay as the Front Source, you cannot select USB or iPod as the Rear Source.

* Selectable only when **[Zone Select]** is set to **[Dual Zone]**.

Sound adjustment—Audio

You can adjust the various audio settings on the **<Audio>** screen.

- You cannot change the **<Audio>** settings screen in the following situations:
  – When the AV source is turned off (Page 6)
  – When the Bluetooth phone is used (making or receiving a call, during a call, or while voice dialing)

❏ Setting the car type/speakers/crossover frequency

1 Display the source/option selection screen.
On the Home screen:

- You can also display the source/option selection screen by touching [▦] on the source control screen.

2 Display the **<Audio>** screen.

3 Display the **<Speaker Select>** screen.
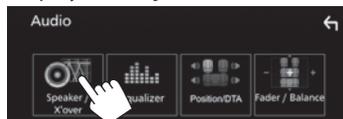
4 Select a car type.

A selection window appears for car type. Select an item, then touch **[Close]** to close the window.

5 Select a speaker (front speakers, rear speakers, or subwoofer) to set (①), then location and speaker/tweeter size of the selected speaker (②).
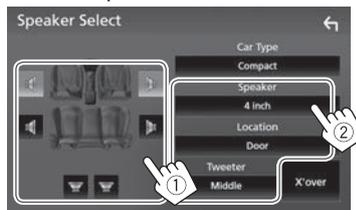
A selection window appears for location and speaker/tweeter setting. Select an item, then touch **[Close]** to close the window.
- Repeat steps ① and ② to set all speakers.
- When a speaker is not connected, select **[None]**.
- When setting the front speakers, also select the speaker size for **<Tweeter>**.

6 Display the **<X'over>** screen (①), select the speaker type (②), then adjust the crossover frequency of the selected speaker (③).
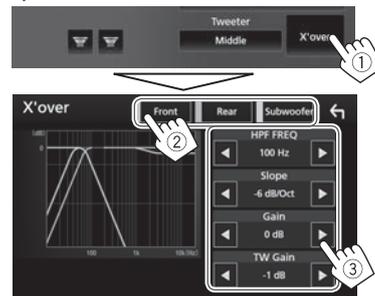
<HPF FREQ>	Adjusts the crossover frequency for the front or rear speakers (high pass filter).*[1]
<LPF FREQ>	Adjusts the crossover for the subwoofer (low pass filter).*[2]
<Slope>	Adjusts the crossover slope.*[3]
<Gain>	Adjusts the output volume of the selected speaker.
<TW Gain>	Adjusts the output volume of the tweeter.*[4] *[5]
<Phase Inversion>	Selects the phase for the subwoofer.*[2]

*[1] Appears only when the front or rear speakers are selected.
*[2] Appears only when the subwoofer is selected.
*[3] Not adjustable when **<HPF FREQ>** or **<LPF FREQ>** is set to **<Through>**.
*[4] Appears only when the front speakers are selected.
*[5] Adjustable only when **<Tweeter>** is set to **<Small>**, **<Middle>**, or **<Large>** on the **<Speaker Select>** screen.

❏ Using the sound equalization

• The adjustment is memorized for each source until you adjust the sound again. If the source is a disc, the adjustment is stored for each of the following categories.
  – DVD-Video
  – CD/VCD/Audio files/Video files (Page 73)
• You cannot adjust the sound when the AV source is turned off.

Selecting a preset sound mode

1 Display the **<Audio>** screen. (Page 53)

2 Display the **<Graphic Equalizer>** screen.

  • You can also display the phone control screen by selecting **[ ]** on the pop-up short-cut menu. (Page 11)

3 Display the preset sound modes (①), then select a sound mode (②).

  • Touch **[✕]** to hide the preset sound modes.

Storing your own adjustments—Adjusting the sound precisely

1 Display the **<Graphic Equalizer>** screen. (See the left column.)

2 Select a band and adjust the level of the selected band.
  • You can adjust the level by dragging the slider or using **[▲]/[▼]**.
  • Repeat this step to adjust the level of other bands.

3 Activate (**[ON]**) or deactivate (**[OFF]**) the bass (**<Bass EXT>**) (①), and then adjust the subwoofer level (**<SW Level>**)* (②).

  • Touch **[◀]/[▶]** to adjust **<SW Level>**.
  • When **<Bass Ext>** is set to **[ON]**, a frequency lower than 62.5 Hz is set to the same gain level as 62.5 Hz.

4 Store the adjustment.

A user selection window appears. Select from **[User 1]** to **[User 4]** to store your adjustment, then touch **[Close]** to close the window.

• To apply the adjusted equalizer to all playback source, touch **[ALL SRC]** on the **<Graphic Equalizer>** screen, then touch **[OK]** to confirm.
• To make the current EQ curve flat, touch **[Initialize]**.

* Not adjustable when **<None>** is selected for subwoofer on the **<Speaker Select>** screen. (Page 53)

❏ Setting the crossover network mode

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

1 Turn off the AV source. (Page 6)

2 Press ⏻ while holding volume + on the monitor panel to display the **<X'over Network>** screen.

3 Select the crossover network mode.

[2 way] Select this when connecting speakers in a 2-way system (front/rear).
[3 way] Select this when connecting speakers in a 3-way system (tweeter/mid range/woofer).

A confirmation message appears. Press **[Yes]**.

SETTINGS

❏ Setting the listening position

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

1 Display the **<Audio>** screen. (Page 53)
2 Display the **<Position/DTA>** screen.

3 Touch **[Listening Position]** (①), then select the listening position (**[Front L]**, **[Front R]**, **[Front All]**, or **[All]**) (②).
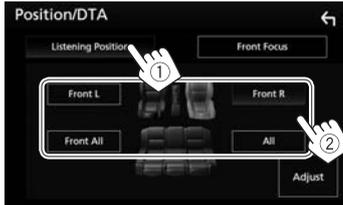
Adjusting the Digital Time Alignment (DTA)

Make fine adjustments to the delay time of the speaker output to create a more suitable environment for your vehicle.

1 Display the **<Position/DTA>** screen. (See the left column.)
2 Display the DTA adjustment screen.

3 Touch **[Delay]** (①), then adjust the Digital Time Alignment (DTA) value for each speaker (②).
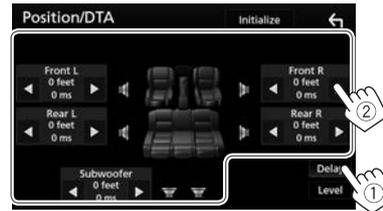
• Touch **[◀]/[▶]** to adjust the value.
• To return to the initial setting of Delay and Level, touch **[Initialize]** and **[YES]** in the confirmation screen.

4 Touch **[Level]** (①), then adjust the output volume for each speaker (②).
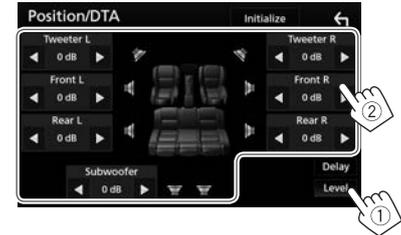
• Touch **[◀]/[▶]** to adjust the level.
• To return to the initial setting of Delay and Level, touch **[Initialize]** and **[YES]** in the confirmation screen.

SETTINGS

❏ Localizing the sound image—Front Focus

You can localize the sound image in front of the selected seat.

1 Display the **<Position/DTA>** screen. (Page 55)

2 Touch **[Front Focus]** (①), then select the listening position to set as the front position (②).
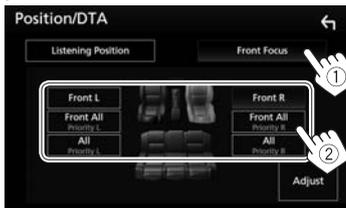
- When you are sitting on the **[Front All]** (front seats) or **[All]** (front and rear seats) position, select left (**"Priority L"**) or right (**"Priority R"**) to specify the position to localize the sound image.

3 Display the **<Front Focus Adjust>** screen.

4 Touch **[Delay]** (①), then adjust the sound image precisely (②).
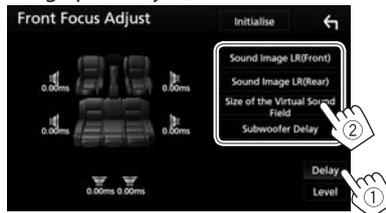
[Sound Image LR (Front)]	Adjusts the sound image to set on the front position.
[Sound Image LR (Rear)]	Adjusts the sound image to set on the rear position.
[Size of the Virtual Sound Field]	Adjusts the virtual sound field to the desired field size.
	• If the sound image moves out of the front position, adjust **[Sound Image LR (Front)]**/**[Sound Image LR (Rear)]**.
[Subwoofer Delay]	Adjusts the time alignment of the subwoofer.

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

5 Touch **[Level]** (①), then adjust the output volume for each speaker (②).
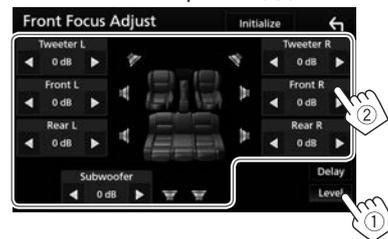
- Touch **[◄]**/**[►]** to adjust the level.
- To return to the initial setting of Delay and Level, touch **[Initialize]** and **[YES]** in the confirmation screen.

SETTINGS

❏ Adjusting the volume balance

1 Display the **<Audio>** screen. (Page 53)

2 Display the **<Fader/Balance>** screen.
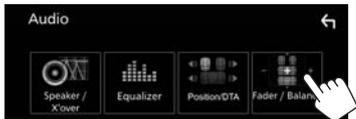
3 Adjust the volume balance.
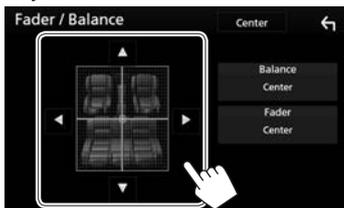
- Touch **[▲]/[▼]** to adjust the front and rear speaker output balance.
- Touch **[◀]/[▶]** to adjust the left and right speaker output balance.
- You can also make adjustments by dragging the cursor.
- To clear the adjustment, touch **[Center]**.

❏ Adjusting the volume output according to different sources

You can adjust and store the auto-adjustment volume level for each source. The volume level will automatically increase or decrease when you change the source.

1 Display the **<Audio>** screen. (Page 53)

2 Display the **<Volume Offset>** screen.

3 Adjust the volume output level for each source.

- Scroll the page to show more items.
- To initialize the setting value, touch **[Initialize]**.

- 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.

❏ Adjusting the sound effect

1 Display the **<Audio>** screen. (Page 53)

2 Display the **<Sound Effect>** screen.
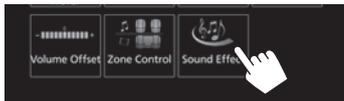
3 Adjust each item.

<Bass Boost>	Selects the bass boost level. • **OFF** (Initial)/**1**/**2**/**3**
<Loudness>	Adjusts loudness. (The LOUD indicator lights up when the loudness is adjusted.) • **OFF** (Initial)/**Low/High**
<Volume Link EQ>	Reduces the driving noise by raising the bandwidth. • **OFF** (Initial)/**ON**
<Space Enhancement>[*1]	Virtually enhances the sound space using the Digital Signal Processor (DSP) system. Select the enhance level. • **OFF** (Initial)/**Small**/**Medium**/**Large**
<K2>[*2]	Restores the sound lost due to audio compression to a realistic sound. • **OFF**/**ON** (Initial)
<Sound Response>	Virtually makes the sound more realistic using the Digital Signal Processor (DSP) system. Select the sound level. • **OFF** (Initial)/**1**/**2**/**3**
<Sound Lift>	You can move the center of the sound to the lower or higher point. Select the height. • **OFF** (Initial)/**Low/Middle/High**

[*1] You cannot change the setting when **"Tuner"** is selected as the source.

[*2] This function works only when "**DISC"/"USB"/"iPod"** is selected as the source.

Adjustment for video playback

1 Display the pop-up short-cut menu.

2 Display the picture adjustment screen.

3 Adjust the picture.

<Backlight>	Adjusts the brightness of the backlight. (−4 to +4)
<Contrast>	Adjusts the contrast. (−4 to +4)
<Black>	Adjusts the blackness. (−4 to +4)
<Brightness>	Adjusts the brightness. (−4 to +4)
<Color>	Adjusts the color. (−4 to +4)
<Tint>	Adjusts the tint. (−4 to +4)
<Aspect>	Selects the aspect ratio.

- **Full**: Displays the picture fully. The aspect ratio is changed if necessary.
- **Normal**: Display the picture in the aspect ratio of 4:3.
- **Auto**: Displays the picture by selecting the appropriate aspect ratio automatically. (DISC)
  Displays the picture fully in the original aspect ratio. (USB)

- Adjustable items are different depending on the current source.
- The image quality can be set for each source. Backlight and Black are common to all sources.

Changing the display design

❏ Customizing the panel color

1 Display the **<SETUP>** screen.
On the Home screen:

- You can also display the **<SETUP>** screen by touching **[ ]** on the source/option selection screen. (Page 8)

2 Display the **<Display>** screen.

3 Display the **<Panel Color Coordinate>** screen.
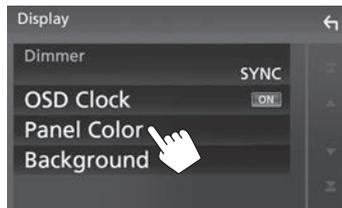
4 Select a panel color.
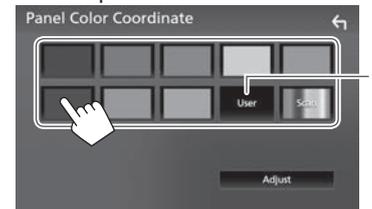
- Selecting **[Scan]** changes the illumination color gradually.

* Store your own color adjustment beforehand. (See below.)

Making your own color adjustment

1 Display **<Panel Color Coordinate>** screen. (See the left column.)

2

3 Adjust the color.

The adjustment is stored in **[User]**.

❏ Customizing the background

1 Display the **<Display>** screen. (Page 59)

2 Display the **<Background>** screen.

3 Select a background.

* Store your own scene beforehand. (See the right column.)

❏ Storing your favorite image for the background

You can set your favorite image stored on the connected USB device.
- Use a JPEG file with a resolution of 800 x 480 pixels.
- The color of the captured image may look different from that of the actual scene.

1 Connect the USB device on which the image is stored. (Page 70)

2 Display the **<Background>** screen. (See the left column.)

3 Select **[User1 Select]** or **[User2 Select]** to store the image for.

4 Select the folder, then the file for the background image in the selected folder.

- Scroll the page to show more items.

5 Rotate the image if necessary (①), then confirm the selection (②).
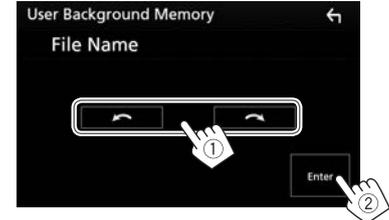
A confirmation message appears. Touch **[OK]** to store the new image. (The existing image is replaced with the new one.)

Customizing the system settings

❏ Memorizing/recalling the settings

• You can memorize the settings changed in the **<Audio>** screen and recall the memorized settings any time.
• The memorized settings are kept even when the unit is reset.
• You cannot perform the operation when **[SETUP Memory]** is set to **[Lock]**. Unlock the setting beforehand.

1 Display the **<SETUP>** screen.
On the Home screen:

  • You can also display the **<SETUP>** screen by touching **[⚙]** on the source/option selection screen. (Page 8)

2 Display the **<Special>** screen.

3 Select an option.

[Audio SETUP Memory]	Memorizes the current audio setting.
[Audio SETUP Recall]	Recalls the memorized audio setting.
[Audio SETUP Clear]	Clears the AUDIO SETUP Memory and the currently memorized audio setting.

A confirmation message appears. Touch **[Yes]**.

❏ Locking the settings

You can lock the settings for **<Audio>** to prevent them from being changed.

1 Display the **<Special>** screen. (See the far left column.)

2 Select **[Lock]** to lock the settings.
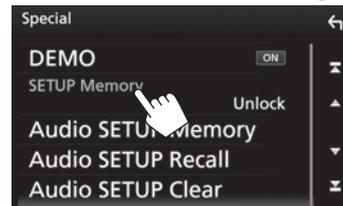
To unlock the setting: Touch **[SETUP Memory]** to select **[Unlock]**.

❏ Adjusting the touch position

You can adjust the touch position on the touch panel if the position touched and the operation performed do not match.

1 Display the **<SETUP>** screen.
On the Home screen:

- You can also display the **<SETUP>** screen by touching **[⚙]** on the source/option selection screen. (Page 8)

2 Display the **<User Interface>** screen.

3 Display the **<Touch Panel Adjust>** screen.

4 Touch the center of the marks at the lower left and at the upper right as instructed.
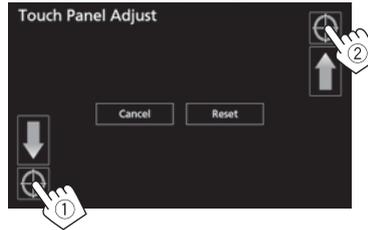
- To reset the touch position, press **[Reset]**.
- To cancel the current operation, press **[Cancel]**.

Setting menu items—SETUP

❏ Displaying the <SETUP> menu screen
On the Home screen:
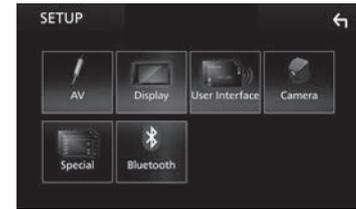
- You can also display the **<SETUP>** screen by touching **[⚙]** on the source/option selection screen. (Page 8)

SETTINGS

❏ <AV> setting screen

[APP/iPod SETUP]
- **APP Connection select**: Select the device and connection method. (Page 51)
- **iPod Connection**: Select the connection method of iPod/iPhone. (Page 19)

[AV-OUT]
You can determine the use of the external component connected to the VIDEO OUT/ AV-OUT AUDIO terminal.
- **OFF** (Initial)/**AV-IN/DISC/USB/iPod**

[Automotive Mirroring]
Select the usage of the iPhone compatible with CarPlay. (Page 22)
- **ON** (Initial)/ **OFF**

[CarPlay Sidebar]
Select the position of the control bar (left or right) shown on the touch panel.
- **Left**/**Right** (Initial)

[OEM SETUP]
Confirm the information about/change the settings for using the ADS adapter.

❏ <Display> setting screen

[Dimmer]
- **ON**: Activates dimmer.
- **OFF**: Cancels.
- **SYNC** (Initial): Dims the screen and button illumination when you turn on the headlights.
  – The ILLUMI lead connection is required. (Page 69)

[Panel Color]
Change the panel color. (Page 59)

[Background]
Change the background design. (Page 60)

❏ <User Interface> setting screen

[Beep]
- **ON** (Initial): Activates the key-touch tone.
- **OFF**: Cancels.

[Parking Assist Display]
When an ADS adapter is connected to the iDatalink terminal (Page 71), you can display information about obstacles around the car.
- **ON**: Always displays information.
- **Dyn.** (Initial): Displays information when the sensor detects obstacles.
- **OFF**: Cancels.

[Parking Assist Position]
Select where information about obstacles is displayed on the screen.
- **Left**/**Right** (Initial)

[Language Select]
Select the text language used for on-screen information.
American English (en) (Initial)/**British English (en)/ Nederlands (nl)/Français (fr)/Deutsch (de)/ Italiano (it)/Español (es)/(ar)** العربية**/Português (pt)/ Русский (ru)/**ภาษาไทย **(th)/Türkçe (tr)/** 简体中文 **(zh)/**繁體中文 **(zh)/(fa)** فارسی**/(he)** עברית**/ Bahasa Melayu (ms)/Bahasa Indonesia (id)**

[Touch Panel Adjust]
Adjust the touch positions of the buttons on the screen. (Page 62)

[Clock]
Select the method to set the clock. (Page 4)

[Time Zone]*1
Select the time zone to synchronize the clock with the GPS. (Page 4)

[Clock Adjust]*2
Adjust the clock manually. (Page 5)

[DISP Key]
Select the source screen displayed when ▢ on the monitor panel is pressed.
- **Apps**: Switches to the Apple CarPlay screen from the connected iPhone by pressing the button. (Page 22)
- **OFF** (Initial): Displays the control screen of current source.

---

*1 Available when **[Clock]** is set to **[GPS-SYNC]**.

*2 Available when **[Clock]** is set to **[Manual]**.

❏ **<Camera> setting screen**

[R-CAM Interruption]
- **ON** (Initial): 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]
- **ON** (Initial): Displays the parking guidelines to enable easier parking when you shift the gear to the reverse (R) position.
- **OFF**: Hides the parking guidelines.

[Guidelines Setup]
Adjust the parking guidelines. (Page 37)

❏ **<Special> setting screen**

[DEMO]
- **ON** (Initial): Activates the demonstration on the screen.
- **OFF**: Cancels.

[SETUP Memory]
Locks or unlocks the Audio SETUP Memory/Recall/ Clear. (Page 61)

[Audio SETUP Memory]
Memorizes the current audio setting. (Page 61)

[Audio SETUP Recall]
Recalls the memorized audio setting. (Page 61)

[Audio SETUP Clear]
Clears the AUDIO SETUP Memory and the currently memorized audio setting. (Page 61)

[Software Information]
Display the version information of the software. You can update the software.

[Open Source Licenses]
Show 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.

❏ **<Bluetooth> setting screen**

[Bluetooth]
- **ON** (Initial): Activates the Bluetooth function of the unit.
- **OFF**: Cancels.

[Select Device]
Connect or disconnect the paired device. (Page 42)

[Device Name]
Display/change the device name to be shown on the Bluetooth device. (Page 43)

[PIN Code]
Change the PIN code of the unit. (Page 43)

[Device Address]
Display the device address of the unit.

[TEL SETUP]
Configure the setting for using a Bluetooth mobile phone. (Page 49)

REMOTE CONTROLLER
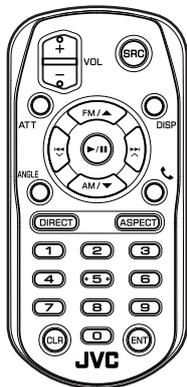
Preparation

❏ Removing the battery sheet

Pull the battery sheet out from the remote controller to activate the battery.
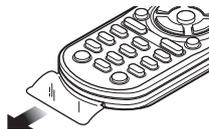
❏ Changing the battery of the remote controller

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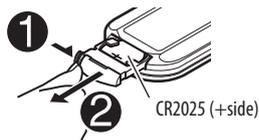
- Use a commercially available button battery (CR2025).
- Insert the battery with the + and – poles aligned properly.
  - If the effectiveness of the remote controller decreases, replace the battery.

⚠ **Caution:**
- Keep the battery out of reach of children and in original package until ready to use. Dispose of used batteries promptly. If swallowed contact physician immediately.
- Do not leave the battery near fire or under direct sunlight. A fire, explosion or excessive heat generation may result.
- Do not set the remote control in hot places such as on the dashboard.
- Danger of explosion if Lithium battery is incorrectly replaced. Replace only with the same or equivalent type.

Before using the remote controller:
- Aim the remote controller directly at the remote sensor on the unit.
- DO NOT expose the remote sensor to bright light (direct sunlight or artificial lighting).

CALIFORNIA, USA ONLY
This product contains a CR Coin Cell Lithium Battery which contains Perchlorate Material — special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate

REMOTE CONTROLLER

Operations using the remote controller (RM-RK258)

❏ Basic button functions

ATT	Attenuates/restores the sound.
DISP	Switches the screen between the current source and the App screen from the connected iPod touch/iPhone/Android.
FM/▲ / AM/▼	• Selects the band. • Selects a title/item/folder.
⏮ ⏭ ⌄ / ⌃	• Tuner: – Searches for stations automatically. – Searches for stations manually. (Hold) • SiriusXM Satellite Radio: – Selects a channel. – Selects a channel rapidly. (Hold) • Selects a track.
VOL +/ VOL −	Adjusts the volume level.
SRC	Selects the source.
▶/❚❚	Starts/pauses playback.
📞	Answers incoming calls.
0 – 9	Enters a number. (See the far right column.)

ANGLE	Not used for this unit.
ASPECT	Changes the aspect ratio. • To check the current aspect ratio setting, operate on the touch panel. (Page 58)
ENT	Confirms selection.
DIRECT	Enters direct search mode. (See the right column.)
CLR	Erases the misentry.

❏ Searching for an item directly

Tuner frequency
1 Press DIRECT to enter the search mode.
2 Press number buttons to enter a frequency.
 • To erase a misentry, press CLR (clear).
3 Press ⏮/⏭ to confirm the entry.

• To exit the search mode, press DIRECT.

Chapter/title/track on the disc
1 Press DIRECT to enter the search mode.
 • Each time you press DIRECT, the item to search for changes.
2 Press a number button to select a desired item.
 • To erase a misentry, press CLR (clear).
3 Press ENT to confirm the entry.

• To exit the search mode, press DIRECT.

❏ Disc operations

Using the VCD menu
1 Press DIRECT to enter the search mode.
2 Press a number button to select the item you want to play.
3 Press d to confirm the entry.

• To exit the search mode, press DIRECT.

CONNECTION/INSTALLATION

Before installing the unit

⚠ WARNING

- 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.

⚠ Precautions on installation and connection

- 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 12 V DC power supply.
- Do not install the unit in a location 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 have 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 fuse blows, first make sure the wires are not 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 both connectors either to the front output terminals or to 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.
- Do not press hard on the panel surface when installing the unit in the vehicle. Otherwise scratches, damage, or failure may result.

- This unit has a 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 prevent the cooling of the internal temperature and result in malfunction.

Cooling fan
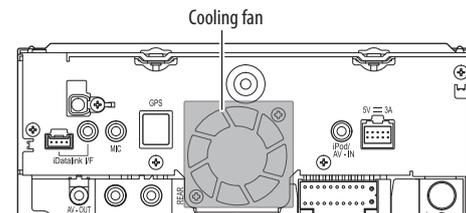
⚠ CAUTION

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

❏ Supplied accessories for installation

① Wiring harness × 1
② Flat head screws (M5 × 7 mm) × 6
③ Round head screws (M5 × 6 mm) × 6
④ USB extension cable (1.0 m) × 1
⑤ GPS antenna (3.5 m) × 1
⑥ Metal plate × 1
⑦ Microphone (3 m) × 1

❏ Installation procedure

1 To prevent a short circuit, remove the key from the ignition and disconnect 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.
   • Make sure that the unit is installed securely in place. If the unit is unstable, it may malfunction (e.g., the sound may skip).

7 Reconnect the ⊖ battery.

8 Configure **<Initial SETUP>**. (Page 4)

Installing the unit

❏ Installing the unit using the mounting bracket removed from the car

② or ③   Car Bracket

② or ③
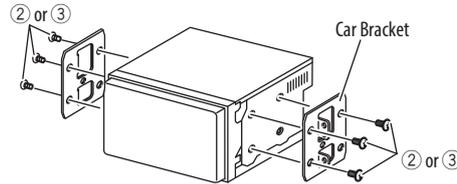
• Select the appropriate type of screw for the mounting bracket: flat head (②) or round head (③).

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Connection

❏ Connecting wires to terminals

Page 71 — VIDEO OUT

REAR VIEW CAMERA

Connect GPS antenna (⑤). (Page 72)

Page 71   Page 71

If no connections are made, do not let the cable come out from the tab.

GPS

Page 71
iDatalink I/F   MIC

Page 71
AV OUT AUDIO   REAR   FRONT   SW   R   L

5V ⎓ 3A
iPod AV - IN

Connect the USB extension cable (④). (Page 70)

POWER   FUSE15

EXT I/F

Connect SiriusXM Connect Vehicle Tuner (commercially available). (Page 71)

Connect the antenna cord to the antenna terminal.

15 A fuse

①

To front speaker (left)	⊕ White	
	⊖ White with black stripe	
To front speaker (right)	⊕ Gray	
	⊖ Gray with black stripe	
To rear speaker (left)	⊕ Green	
	⊖ Green with black stripe	
To rear speaker (right)	⊕ Purple	
	⊖ Purple with black stripe	

Light blue with yellow stripe (Steering remote control wire)

REMOTE CONT
STEERING WHEEL REMOTE INPUT

To use the steering wheel remote control feature, an exclusive remote adapter (not supplied) matching your car is required.

Blue (Antenna control wire)   ANT CONT

Depending on what antenna you are using, 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. 300 mA, 12 V)

Blue with white stripe (Power control wire)   P.CONT

When using the optional power amplifier, connect to its power control terminal.

Orange with white stripe (Dimmer control wire)   ILLUMI

To car light control switch

Purple with white stripe (Reverse sensor wire)   REVERSE

Connect to the vehicle's reverse lamp harness when using the optional rear view camera.

Ignition key switch

(ACC)   Red (Ignition wire)

(BATT)   Yellow (Battery wire)

Fuse box

To car chassis
(GND)   Black (Ground wire)

Battery

Light green (Parking sensor wire)   PRK SW

Connect to the vehicle's parking brake detection switch harness.
• For best safety, be sure to connect the parking sensor.

❏ Connecting the USB extension cable

Connect the USB extension cable (④) to connect a USB device/iPod/iPhone.

USB device

iPod/iPhone

④

1.0 m
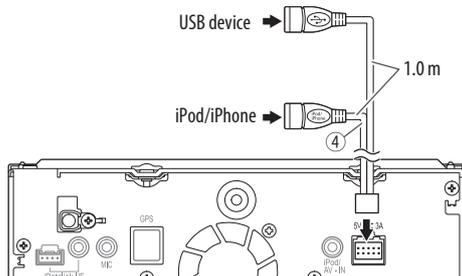
❏ Connecting a USB device

- Connect the USB extension cable (④) beforehand. (See above.)
- You can connect two USB devices to the ⤵ and iPod/iPhone terminals.

USB device
(commercially available)

1.0 m

④
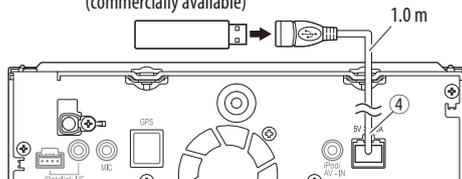
❏ Connecting an iPod/iPhone

- Connect the USB extension cable (④) beforehand. (See the left column.)

iPod/iPhone (30-pin connector models)
(commercially available)

30-pin to USB cable (accessory of iPod/iPhone)

1.0 m

④
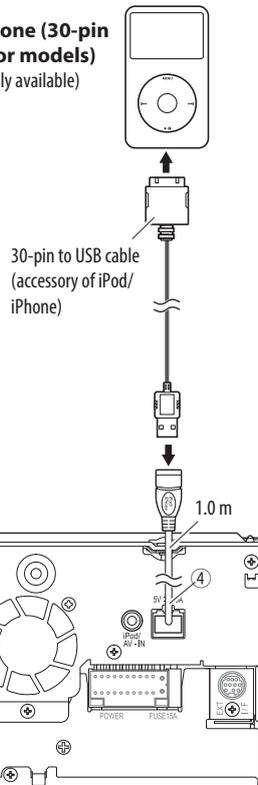
iPod/iPhone (Lightning connector models) (commercially available)

KS-U62 (optional accessory) (0.8 m)

1.0 m

④
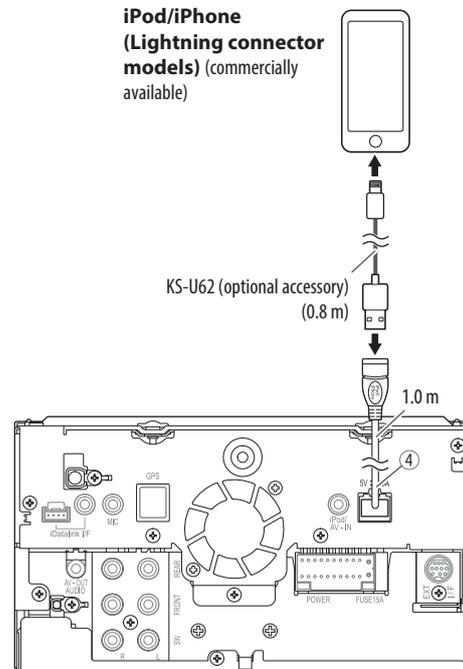
❏ Connecting external components
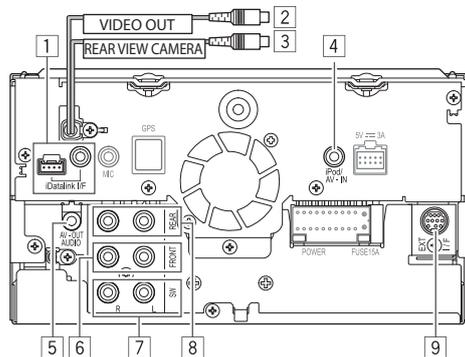
1. iDatalink input for connecting ADS adapter (commercially available)
2. Video output (Yellow)
3. Rear view camera input (Yellow)
4. Audio Video input (AV-IN)
5. AV-OUT/Audio output (ø3.5 mini jack)
   Resistance-free stereo type mini plug
6. Front preout*
   • Audio left output (White)
   • Audio right output (Red)
7. Subwoofer preout (monaural output)*
   • Subwoofer left output (White)
   • Subwoofer right output (Red)
8. Rear preout*
   • Audio left output (White)
   • Audio right output (Red)
9. Expansion port for connecting SiriusXM Connect Vehicle Tuner (commercially available)

* When connecting an external amplifier, connect its ground wire to the chassis of the car; otherwise the unit may be damaged.

Connecting external amplifiers for 3 way speakers system

Tweeter preout
Mid range preout
Woofer preout
Speaker
INPUT L R
RCA cable (not supplied)
R L
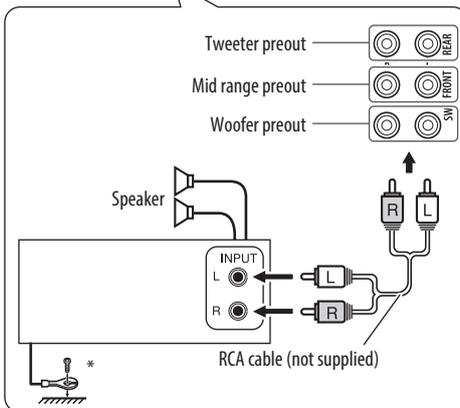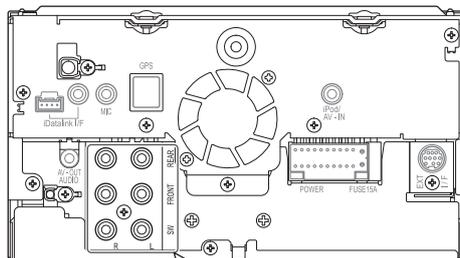
* When connecting to an external amplifier, connect its ground wire to the car's chassis.

❏ Connecting microphone for Bluetooth

Connect the microphone (⑦) to the MIC terminal.
• To install the microphone, peel off the adhesive tape, fix it on the installation position, then adjust the direction of the microphone to face the driver. After installing, fix the microphone cable to the car with clamps (commercially available).
  – Clean the installation surface beforehand.
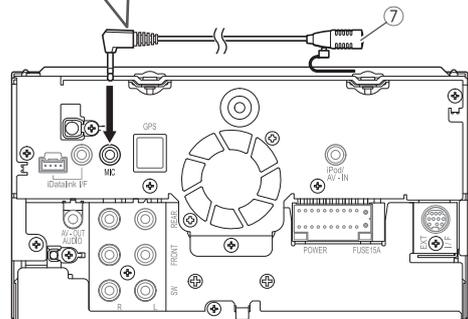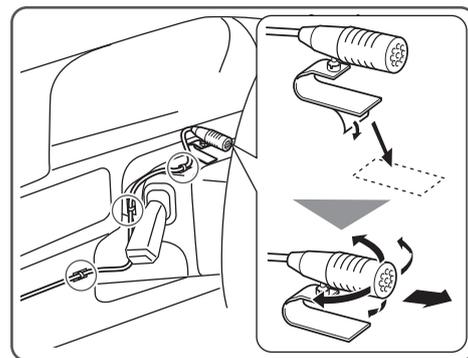
❏ Connecting the GPS antenna

Connect the GPS antenna (⑤) to the GPS terminal.

• To install the GPS antenna, fix the metal plate (⑥) firmly on the dashboard, then place the GPS antenna (⑤) on the metal plate (⑥).
  – Clean the dashboard or other surface beforehand.
  – Install the GPS antenna (⑤) inside of the car, as horizontally as possible to allow easy reception of the GPS satellite signals.
  – You can bend the metal plate (⑥) to conform to a curved surface, if necessary.
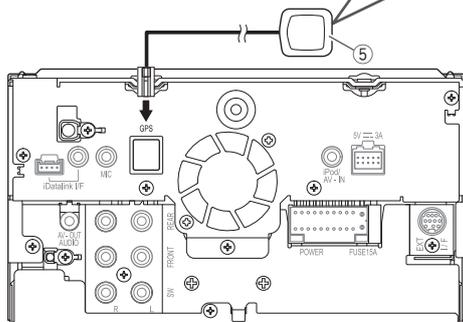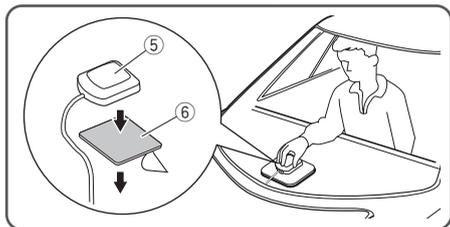
• Depending on the type of car, reception of the GPS satellite signals might not be possible with an internal installation.
• Install this GPS antenna in an area away from any antennas that are used with CB radios or satellite televisions.
• The GPS antenna should be installed at a position at least 30 cm (12 inches) from mobile phone or other transmitting antennas.
• The above types of communication may interfere with signals from the GPS satellite.
• Painting the GPS antenna with (metallic) paint may cause reduced performance.

REFERENCES

Maintenance

❏ Caution on cleaning the unit

Do not use any solvent (for example, thinner, benzine, etc.), detergent, or insecticide. This may damage the monitor or the unit.

Recommended cleaning method:
Gently wipe the panel with a soft, dry cloth.

❏ Moisture condensation

Moisture may condense on the lens inside the unit in the following cases:
• After starting the heater in the car.
• If it becomes very humid inside the car.
Should this occur, the unit may malfunction. In this case, eject the disc and leave the unit turned on for a few hours until the moisture evaporates.

❏ How to handle discs

• When removing a disc from its case, press down the center holder of the case and lift the disc out, holding it by the edges.

– Always hold the disc by the edges. Do not touch its recording surface.
• When storing a disc in its case, gently insert the disc around the center holder (with the printed surface facing up).
– Make sure to store discs in their cases after use.

❏ To keep discs clean

Dirty discs may not play correctly.
If a disc does become dirty, wipe it with a soft cloth in a straight line from the center to the edge.

• Do not use any solvents (for example, conventional record cleaner, spray, thinner, benzine, etc.) to clean discs.

❏ To play new discs

New discs may have some rough spots around the inner and outer edges. If such a disc is used, this unit may reject the disc.

• To remove these rough spots, rub the edges with a pencil or ball-point pen, etc.

More information

❏ File playback

Playing MPEG1/MPEG2 files
• This unit can play back MPEG1/MPEG2 files with the extension code <.mpg> or <.mpeg>.
• The stream format should conform to MPEG system/program stream.
The file format should be MP@ML (Main Profile at Main Level)/SP@ML (Simple Profile at Main Level)/MP@LL (Main Profile at Low Level).
• Audio streams should conform to MPEG1 Audio Layer-2 or Dolby Digital.

Playing MPEG4/H.264/WMV/MKV files
• This unit can play back files with the extension code <.mp4>, <.m4v>, <.avi>, <.wmv> or <.mkv>.
• This unit can only play back files which are less than 2 GB.
• The stream format should conform to MPEG system/program stream.

Playing MP3/WMA/WAV/AAC-LC/FLAC/Vorbis files

• This unit can play back files with the extension code <.mp3>, <.wma>, <.wav>, <.m4a>, <.flac> or <.ogg> (regardless of the letter case—upper/lower).
• This unit can play back files that meet the conditions below:
  – Bit rate:
    MP3: 8 kbps – 320 kbps
    WMA: 48 kbps – 192 kbps
    AAC: For discs: 16 kbps – 320 kbps
         For USB: 32 kbps – 320 kbps
  – Sampling frequency:
    MP3:   8 kHz – 48 kHz
    WMA: For discs: 32 kHz – 48 kHz
                 For USB: 8 kHz – 48 kHz
    WAV: 32 kHz/44.1 kHz/48 kHz
    AAC: 16 kHz – 48 kHz
    FLAC/Vorbis: 8 kHz – 48 kHz

• This unit can show ID3 Tag Version 1.0/1.1/2.2/2.3/2.4 (for MP3).
• This unit can also show WMA/AAC/FLAC/Vorbis Comment Tag.
• This unit can play back files recorded in VBR (variable bit rate).
• Files recorded in VBR have a discrepancy in elapsed time indication.
• This unit cannot play back the following files:
  – MP3 files encoded with MP3i and MP3 PRO format.
  – MP3 files encoded with Layer 1/2.
  – WMA files encoded with lossless, professional, and voice format.
  – WMA files which are not based upon Windows Media® Audio.
  – WMA/AAC files copy-protected with DRM.
  – AAC files encoded using any other application than iTunes.
  – AAC files copy-protected with FairPlay (except those stored on an iPod).
  – Files which have data such as AIFF, ATRAC3, etc.
• This unit can display jacket pictures that meet the conditions below:
  – Picture size: 32 x 32 to 1 232 x 672 (PNG: 800 x 480) resolution
  – Data size: less than 650 KB.
  – File type: JPEG/PNG/BMP

❏ **Disc playback**

Playable disc types

Disc type	Recording format, file type, etc.
DVD • DTS sound cannot be reproduced or emitted from this unit.	DVD Video*[1]
DVD Recordable/ Rewritable (DVD-R/-RW*[2], **+R/+RW***[3]**)** • DVD Video: UDF bridge • Audio/video files: ISO 9660 level 1, level 2, Romeo, Joliet	• DVD Video • MPEG1/MPEG2/ MPEG4/H.264/ WMV/MKV • MP3/WMA/AAC/ FLAC/Vorbis
Dual Disc	DVD side
CD/VCD	• VCD (Video CD) • Audio CD
CD Recordable/Rewritable (CD-R/-RW) • ISO 9660 level 1, level 2, Romeo, Joliet	• VCD (Video CD) • CD-DA • MP3/WMA/AAC/ FLAC/Vorbis

*[1] DVD Region code: 1
If you insert a DVD Video disc of an incorrect Region Code, "Region Code Error" appears on the screen.

*[2] DVD-R recorded in multi-border format are also playable (except for dual layer discs). DVD-RW dual layer discs are not playable.

*[3] It is possible to play back finalized +R/+RW (Video format only) discs. "DVD" is selected as the disc type when a +R/+RW disc is loaded. +RW double layer discs are not playable.

REFERENCES

Unplayable discs
- Unplayable disc types and formats are as follows:
  – DVD-Audio/DVD-ROM/DVD-VR discs
  – DivX/DVD+VR/DVD-RAM/JPEG/PNG/BMP recorded on DVD-R/RW or +R/+RW
  – SVCD (Super Video CD), CD Text (CD-DA), CD-ROM, CD-I (CD-I Ready), DTS-CD
  – MPEG1/MPEG2/MPEG4/WMV/MKV recorded on CD-R/RW
- Discs that are not round.
- Discs with coloring on the recording surface or discs that are dirty.
- Recordable/Rewritable discs that have not been finalized.
- 3 inch discs. Attempting to insert these discs using an adapter may cause a malfunction.

DualDisc playback
The Non-DVD side of a "DualDisc" does not comply with the "Compact Disc Digital Audio" standard. Therefore, the use of the Non-DVD side of a DualDisc on this product cannot be recommended.

Playing Recordable/Rewritable discs
- This unit can recognize a total of 64 770 files and 254 folders (a maximum of 255 files per folder).
- Use only "finalized" discs.
- This unit can play back multi-session discs; however, unclosed sessions will be skipped while playing.
- Some discs or files may not be played back due to their characteristics or recording conditions.

❏ About data stored in the connected USB device/iPod/iPhone
- We bear no responsibility for any loss of data in iPod/iPhone and USB mass storage class devices while using this unit.

❏ USB playback
Playable files on a USB device
- This unit can play the following types of files stored in a USB mass storage class device.
  – MPEG1/MPEG2/MPEG4/MP3/WMA/WAV/AAC/FLAC/H.264/WMV/MKV
- This unit can recognize a maximum of 9 999 files and a maximum of 9 999 folders in a folder.
- Make sure all important data has been backed up to avoid losing the data.

Notes on using a USB device:
- This unit may not play back files in a USB device properly when using a USB extension cable.
- USB devices equipped with special functions such as data security functions cannot be used with the unit.
- Do not use a USB device with 2 or more partitions.
- Depending on the shape of the USB devices and connection ports, some USB devices may not be attached properly or the connection might be loose.
- This unit may not recognize a memory card inserted into a USB card reader.
- When connecting with a USB cable, use a USB 2.0 cable.
- The maximum number of characters (when the characters are 1 byte):
  – Folder names: 128 characters
  – File names: 128 characters
- Avoid using the USB device if it might affect driving safety.
- Do not pull out and connect the USB device repeatedly while "Reading" is shown on the screen.

- Electrostatic shock at connecting a USB device may cause abnormal playback of the device. In this case, disconnect the USB device then reset this unit and the USB device.
- Operation and power supply may not work as intended for some USB devices.
- Do not leave a USB device in the car, or expose to direct sunlight or high temperatures to prevent deformation or damage to the device.

❏ Notes on playing iPod/iPhone
- iPod/iPhone that can be connected to this unit: Made for
  – iPod touch (6th Generation)
  – iPod touch (5th Generation)
  – iPhone 6s Plus
  – iPhone 6s
  – iPhone 6 Plus
  – iPhone 6
  – iPhone 5s
  – iPhone 5c
  – iPhone 5
  – iPhone 4s

- For some iPod/iPhone models, the performance may be abnormal or unstable during operation. In this case, disconnect the iPod/iPhone device, then check its condition.
  If the performance is not improved or slow, reset your iPod/iPhone.
- When you turn on this unit, the iPod/iPhone is charged through the unit.
- The text information may not be displayed correctly.

❏ Language codes (for DVD language selection)

AA	Afar	GL	Galician	MI	Maori	SO	Somali
AB	Abkhazian	GN	Guarani	MK	Macedonian	SQ	Albanian
AF	Afrikaans	GU	Gujarati	ML	Malayalam	SR	Serbian
AM	Ameharic	HA	Hausa	MN	Mongolian	SS	Siswati
AR	Arabic	HI	Hindi	MO	Moldavian	ST	Sesotho
AS	Assamese	HR	Croatian	MR	Marathi	SU	Sundanese
AY	Aymara	HU	Hungarian	MS	Malay (MAY)	SW	Swahili
AZ	Azerbaijani	HY	Armenian	MT	Maltese	TA	Tamil
BA	Bashkir	IA	Interlingua	MY	Burmese	TE	Telugu
BE	Byelorussian	IE	Interlingue	NA	Nauru	TG	Tajik
BG	Bulgarian	IK	Inupiak	NE	Nepali	TH	Thai
BH	Bihari	IN	Indonesian	NO	Norwegian	TI	Tigrinya
BI	Bislama	IS	Icelandic	OC	Occitan	TK	Turkmen
BN	Bengali, Bangla	IW	Hebrew	OM	(Afan) Oromo	TL	Tagalog
BO	Tibetan	JA	Japanese	OR	Oriya	TN	Setswana
BR	Breton	JI	Yiddish	PA	Panjabi	TO	Tonga
CA	Catalan	JW	Javanese	PL	Polish	TR	Turkish
CO	Corsican	KA	Georgian	PS	Pashto, Pushto	TS	Tsonga
CS	Czech	KK	Kazakh	QU	Quechua	TT	Tatar
CY	Welsh	KL	Greenlandic	RM	Rhaeto-Romance	TW	Twi
DZ	Bhutani	KM	Cambodian	RN	Kirundi	UK	Ukrainian
EL	Greek	KN	Kannada	RO	Rumanian	UR	Urdu
EO	Esperanto	KO	Korean (KOR)	RW	Kinyarwanda	UZ	Uzbek
ET	Estonian	KS	Kashmiri	SA	Sanskrit	VI	Vietnamese
EU	Basque	KU	Kurdish	SD	Sindhi	VO	Volapuk
FA	Persian	KY	Kirghiz	SG	Sangho	WO	Wolof
FI	Finnish	LA	Latin	SH	Serbo-Croatian	XH	Xhosa
FJ	Fiji	LN	Lingala	SI	Singhalese	YO	Yoruba
FO	Faroese	LO	Laothian	SK	Slovak	ZU	Zulu
FY	Frisian	LT	Lithuanian	SL	Slovenian		
GA	Irish	LV	Latvian, Lettish	SM	Samoan		
GD	Scots Gaelic	MG	Malagasy	SN	Shona		

Error message list

If an error occurs while using the unit, a message appears. Take appropriate action according to the following message/remedy/cause list.

"No Signal"/"No Video Signal":
- Start playback on the external component connected to the AV-IN/iPod input terminal.
- Check the cords and connections.
- Signal input is too weak.

"There is an error in the speaker wiring. Please check the connections.":
- A speaker cord has shorted or it has come into contact with the car chassis. Wire or insulate the speaker cord as appropriate. (Page 69)

"Parking off":
- No playback picture is shown when the parking brake is not engaged.

"Unsupported Device":
- The USB power voltage is abnormal.
- Turn off and turn on the unit.
- Connect another USB device.

"Cannot play this file.":
- Check whether the file is compatible with this unit. (Page 73)

"Connect failed.":
- The device is paired but the connection has failed. Connect the paired device. (Page 42)

"Please Wait...":
- The unit is preparing to use the Bluetooth function. If the message does not disappear, turn off and turn on the unit, then connect the device again.

"Voice Recognition is not available.":
- The connected mobile phone does not have a voice recognition system.

"No Contents":
- No phone book data is contained in the connected Bluetooth phone.

"SXM No Signal":
- Make sure the SiriusXM Satellite Radio antenna is mounted outside the vehicle. Move the vehicle to an area with a clear view of the sky.

"SXM Check Antenna":
- Check the SiriusXM Satellite Radio antenna connection, and make sure the antenna is firmly attached to the tuner.
- Check whether the SiriusXM Satellite Radio antenna cable is bent or broken. If it is damaged, replace the whole antenna unit.

"Check Tuner":
- Make sure the SiriusXM Connect Vehicle Tuner is connected to the unit.

"SXM Chan Unavailable" (appears on the screen for about 2 seconds, then returns to the previous channel)**:**
- The selected channel is no longer available. Select another channel or continue listening to the previous channel.

"SXM Ch Unsubscribed" (appears on the screen for about 2 seconds, then returns to the previous channel)**:**
- The selected channel is not part of your current subscription plan. Call 1-866-635-2349 to subscribe.

"Subscription Updated – Press Enter to Continue":
- Your subscription has been updated. Touch the appropriate button to continue.

REFERENCES

"Channel Locked"
- The selected channel has been locked by the parental controls. Enter the unlock code when you are asked. (Page 35)

"Incorrect Lock Code"
- The selected channel is a mature or parental lock channel, and locked by the parental lock or user lock code. Enter the correct lock code.

Troubleshooting

What appears to be trouble is not always serious. Check the following points before calling a service center.
- For operations with the external components, refer also to the instructions supplied with the adapters used for the connections (as well as the instructions supplied with the external components).

❏ General

No sound comes out of the speakers.
- Adjust the volume to the optimum level.
- Check the cords and connections.

No picture is displayed on the screen.
- Turn on the screen. (Page 6)

The remote controller does not work.
- Replace the battery.

❏ Discs

Recordable/Rewritable discs cannot be played back.
- Insert a finalized disc.
- Finalize the discs with the component which you used for recording.

Tracks on the Recordable/Rewritable discs cannot be skipped.
- Insert a finalized disc.
- Finalize the discs with the component which you used for recording.

Playback does not start.
- The format of files is not supported by the unit.

No picture appears on the external monitor.
- Connect the video cord correctly.
- Select the correct input on the external monitor.
- Select the appropriate setting for **[AV-OUT]**. (Page 63)

MPEG1/MPEG2/MPEG4/WMV/H.264/MKV/MP3/WMA/AAC/WAV/FLAC/Vorbis discs cannot be played back.
- Record the tracks using a compatible application on the appropriate discs. (Page 74)
- Add appropriate extension codes to the file names.

Tracks on the Recordable/Rewritable discs are not played back as you have intended them to play.
- Playback order may differ from the one played back using other players.

❏ USB

"Reading" does not disappear from the screen.
- Turn the power off and on again.

While playing a track, sound is sometimes interrupted.
- The tracks are not properly copied into the USB device. Copy the tracks again, and try again.

Tracks are not played back as you have intended them to play.
- Playback order may differ from the one played back using other players.

❏ iPod/iPhone

No sound comes out of the speakers.
- Disconnect the iPod/iPhone, then connect it again.
- Select another source, then reselect **"iPod"**.

The iPod/iPhone does not turn on or does not work.
- Check the connecting cable and its connection.
- Update the firmware version.
- Charge the battery.
- Reset the iPod/iPhone.

Sound is distorted.
- Deactivate the equalizer either on this unit or the iPod/iPhone.

A lot of noise is generated.
- Turn off (uncheck) "VoiceOver" on the iPod/iPhone. For details, visit <http://www.apple.com>.

No operations are available when playing back a track containing artwork.
- Operate the unit after the artwork has loaded.

REFERENCES

The iPod/iPhone not compatible with CarPlay cannot be connected via Bluetooth.
• Select **[ON]** for **[Automotive Mirroring]** on the **<AV>** menu screen. (Page 22)

Videos cannot be played.
• Check the connection.
  – For iPod/iPhone Lightning model: You cannot watch video.
  Other cables cannot be used.

No sound of videos comes out.
• Check the connection.
  – For iPod/iPhone Lightning model: You cannot watch video.
  Other cables cannot be used.

❏ Tuner
SSM automatic presetting does not work.
• Store stations manually. (Page 25)

Static noise while listening to the radio.
• Connect the antenna firmly.

❏ AV-IN
No picture appears on the screen.
• Turn on the video component if it is not on.
• Connect the video component correctly.

❏ Apple CarPlay
Desired source ("Apple CarPlay") is not displayed on the Home screen.
• Check whether the connected device is compatible with CarPlay.
• When iPhone compatible with CarPlay is connected, check the **[Automotive Mirroring]** setting. (Page 22)

Navigation does not work for "Apple CarPlay".
• Connect the GPS antenna firmly. (Page 72)

❏ Bluetooth
Phone sound quality is poor.
• Reduce the distance between the unit and the Bluetooth mobile phone.
• Move the car to a place where you can get a better signal reception.

The sound is interrupted or skipped while using a Bluetooth audio player.
• Reduce the distance between the unit and the Bluetooth audio player.
• Disconnect the device connected for Bluetooth phone.
• Turn off, then turn on the unit.
  (When the sound is not yet restored) connect the player again.

The connected audio player cannot be controlled.
• Check whether the connected audio player supports AVRCP (Audio/Video Remote Control Profile).

The Bluetooth device does not detect the unit.
• Search from the Bluetooth device again.

The unit does not pair with the Bluetooth device.
• For devices compatible with Bluetooth 2.1: Register the device using a PIN code. (Page 41)
• For devices compatible with Bluetooth 2.0: Enter the same PIN code for both the unit and target device. If the PIN code of the device is not indicated in its instructions, try "0000" or "1234."
• Turn off, then turn on the Bluetooth device.

Echo or noise occurs.
• Adjust the microphone unit position.
• Adjust the echo volume or noise reduction volume. (Page 44)

The unit does not respond when you try to copy the phone book to the unit.
• You may have tried to copy the same entries (as stored) to the unit.

Specifications

❏ Monitor section

Picture Size (W × H)

    6.2 inches (diagonal) wide

    137.5 mm × 77.2 mm

    (5-7/16" × 3-1/16")

Display System	Transparent TN LCD panel
Drive System	TFT active matrix system
Number of Pixels	1 152 000 (800H × 480V × RGB)
Effective Pixels	99.99 %

Pixel Arrangement

    RGB striped arrangement

Back Lighting	LED

❏ DVD player section

D/A Converter	24 bit
Audio Decoder	Linear PCM/Dolby Digital/MP3/ WMA/AAC/WAV/FLAC/Vorbis
Video Decoder	MPEG1/MPEG2/MPEG4/ WMV/H.264/MKV
Wow & Flutter	Below Measurable Limit

Frequency Response

  96 kHz Sampling: 20 Hz to 22 000 Hz

  48 kHz Sampling: 20 Hz to 22 000 Hz

  44.1 kHz Sampling: 20 Hz to 20 000 Hz

Total Harmonic Distortion

    0.010 % (1 kHz)

Signal to Noise Ratio

    94 dB (DVD-Video 96 kHz)

Dynamic Range	91 dB (DVD-Video 96 kHz)
Disc Format	DVD-Video/VIDEO-CD/CD-DA/DVD-R/DVD-RW/DVD+R/DVD+RW

Sampling Frequency

    44.1 kHz/48 kHz/96 kHz

Quantifying Bit Number

    16/20/24 bit

❏ USB interface section

USB Standard	USB 2.0 Full Speed/High Speed × 2

Compatible Devices

    Mass storage class

File System	FAT 16/32

Maximum Power Supply Current

    DC 5 V $==$ 1.5 A

D/A Converter	Front/Rear 32 bit Subwoofer 24 bit
Audio Decoder	MP3/WMA/AAC (AAC-LC .m4a files)/WAV/FLAC/Vorbis
Video Decoder	MPEG1/MPEG2/MPEG4 (SP)/ WMV/H.264/MKV (SD Video Level)

❏ Bluetooth section

Technology	Bluetooth V3.0
Frequency	2.402 GHz to 2.480 GHz
Output Power	+4 dBm (MAX), 0 dBm (AVE), Power Class 2

Maximum Communication Range

    Line of sight approx. 10 m

    (32.8 ft)

Audio Codec	SBC/AAC
Profile	HFP (Hands Free Profile) 1.6 A2DP (Advanced Audio Distribution Profile) 1.3 AVRCP (Audio/Video Remote Control Profile) 1.5 GAP (Generic Access Profile) PBAP (Phone Book Access Profile) 1.2 SDP (Service Discovery Profile) SPP (Serial Port Profile) 1.2 HID (Human Interface Device Profile)

REFERENCES

❏ FM tuner section

Frequency Range (200 kHz)
87.9 MHz to 107.9 MHz

Usable Sensitivity (S/N: 30 dB Dev 22.5 kHz)
7.2 dBf (0.63 μV/75 Ω)

Quieting Sensitivity (S/N: 46 dB Dev 22.5 kHz)
15.2 dBf (1.58 μV/75 Ω)

Frequency Response (±3.0 dB)
30 Hz to 15 kHz

Signal to Noise Ratio
68 dB (MONO)

Selectivity (±400 kHz)
≥ 80 dB

Stereo Separation 40 dB (1 kHz)

❏ AM tuner section

Frequency Range (10 kHz)
530 kHz to 1 700 kHz

Usable Sensitivity 29 dBμ

❏ Video section

Color System of External Video Input
NTSC/PAL

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

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

Audio Output Level (mini jack)
1.2 V/10 kΩ

❏ Audio section

Maximum Power Output
50 W × 4

Full Bandwidth Power (Front & Rear)
22 W× 4
(4Ω, 14.4 V, at less than 1% THD)

Preout Level   4 V/10 kΩ

Preout Impedance
≤ 600 Ω

Speaker Impedance
4 Ω to 8 Ω

Equalizer   13 Band

Band
  Frequency (Hz) 62.5/100/160/250/400/630/1k/
1.6k/2.5k/4k/6.3k/10k/16k
  Level   −09 to +09 (−9 dB to +9 dB)

HPF (High Pass Filter):
  Frequency (Hz) Through/30/40/50/60/70/80/90/
100/120/150/180/220/250
  Slope   −6/−12/−18/−24 dB/Oct.
  Gain   −8/−7/−6/−5/−4/−3/−2/−1/0 dB

LPF (Low Pass Filter):
  Frequency (Hz) 30/40/50/60/70/80/90/
100/120/150/180/220/250/
Through
  Slope   −6/−12/−18/−24 dB/Oct.
  Gain   −8/−7/−6/−5/−4/−3/−2/−1/0 dB

❏ General

Operating Voltage
14.4 V (10.5 V to 16 V allowable)

Maximum Current Consumption
15 A

Installation Dimensions (W × H × D)
178 mm × 100 mm × 155 mm
(7-1/16" × 3-15/16" × 6-1/8")

Operational Temperature Range
−10℃ to +60℃

Weight   2.0 kg (4.43 lbs)

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JVC

0516EHHMDWJEIN

Spotify

With Spotify, your music is everywhere. Working out, partying or relaxing, the right music is always at your fingertips. There are millions of songs on Spotify—from old favorites to the latest hits. Just choose the music you love, or let Spotify surprise you.

You can stream Spotify from connected iPod touch/iPhone or Android devices.
• Install the latest version of the Spotify application on your iPod touch/iPhone/Android and create an account.

Preparation

1 Connect the device.
   • **For Android:** Pair the Android device through Bluetooth.
   • **For iPod touch/iPhone:** Connect iPod touch/iPhone.
2 Select the device to use and connection method on the **<APP Connection select>** of the **<APP/iPod SETUP>** screen. (Page 51)
3 Select **"Spotify"** as the source. (Page 10)
   The Spotify application is started.

Playback operations

You can operate Spotify using the remote controller. Only playing, pausing, and skipping are available.

❏ Indications and buttons on the source control screen
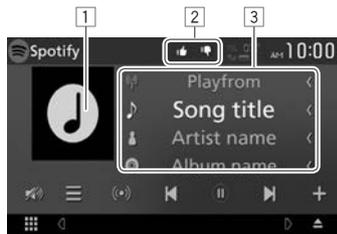
Playback information
1 Picture data
2 Thumbs up/ down or Playback mode (see below.)
3 Track information
   • Touching the text scrolls if not all of the text is shown.

Operation buttons

[≡]	Displays the list selection screen.
[(•)]	Creates new station.
[◄◄] [►►]	Selects a track.
[►]*	Starts playback.
[❚❚]*	Pauses playback.
[╋]	Saves the current track/artist to **<Your Music>**.
[👎]	Thumbs down to the current track and skips to the next track.
[👍]	Registers the current track as a favorite.
[⟳]	Activates/deactivates the repeat playback mode.
[⤬]	Activates/deactivates the shuffle playback mode.
[🔇]	Attenuate the sound. (Page 6) • To restore the sound, touch **[🔇]**.

* During playback, [❚❚] is displayed, and when playback is paused, [►] is displayed.

❏ Creating your station (Start Radio)

1
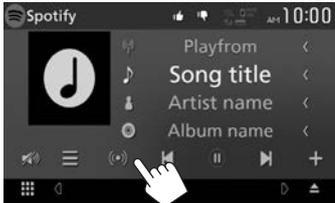
2 Enter a track/artist/playlist, then select the desired track.
The playback of your station starts with the selected track.

• You can personalize your station using thumb up ([👍]) or thumb down ([👎]).

❏ Selecting a track

1 Display the list selection screen.

2 Select the list type (**<Your Music>**/**<Browse>**/**<Radio>**) (①), then select a desired item (②).

• Press [ ] to return to the top layer.
• Press [ ] to return to the upper layer.

Requirements for 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.)

• Connect iPod touch/iPhone to this unit with a cable or via Bluetooth.
  – When connecting with a cable: Use KS-U62 (optional accessory) or USB 2.0 cable (accessory of the iPod/iPhone).

Android™
• Visit Google Play™ and search for "Spotify" to install.
• Bluetooth must be built in and the following profiles must be supported.
  – SPP (Serial Port Profile)
  – A2DP (Advanced Audio Distribution Profile)

NOTE
• Ensure you are logged in to your smartphone application. If you do not have a 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 using LTE, 3G, EDGE, or WiFi.
• Spotify and Spotify logos are trademarks of the Spotify Group.

Pandora®

You can stream Pandora from iPod touch/iPhone, Android or BlackBerry devices.
• Install the latest version of the Pandora application on your iPod touch/iPhone/Android/BlackBerry.

Preparation

1 Connect the device.
  • **For Android/BlackBerry:** Pair the Android/BlackBerry device through Bluetooth.
  • **For iPod touch/iPhone:** Connect iPod touch/iPhone.
2 Select the device to use and connection method on the **<APP Connection select>** of the **<APP/iPod SETUP>** screen. (Page 51)
3 Select **"PANDORA"** as the source. (Page 10)
  The Pandora application is started.

Playback operations

You can operate Pandora using the remote controller. Only playing, pausing, and skipping are available.

❏ Indications and buttons on the source control screen
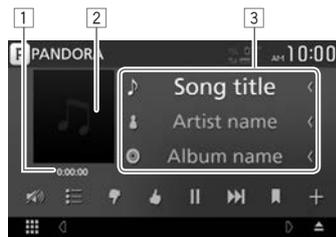
Playback information
1 Playing time
2 Picture data
3 Track information
 • Touching the text scrolls it if not all of the text is shown.

Operation buttons

[≡]	Displays the list selection screen.
[👎]	Thumbs down to the current track and skips to the next track.
[👍]	Registers the current track as a favorite.
[▶]*	Starts playback.
[❚❚]*	Pauses playback.
[▶▶❙]	Skips the current track. • Not available when the Pandora skip reaches its limit.
[🔖]	Bookmarks the current track.
[➕]	Creates a new station.
[🔇]	Attenuate the sound. (Page 6) • To restore the sound, touch [🔇].

* During playback, [❚❚] is displayed, and when playback is paused, [▶] is displayed.

Pandora®

❏ Selecting a station from the list

1 Display the station list screen.
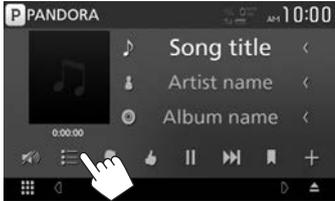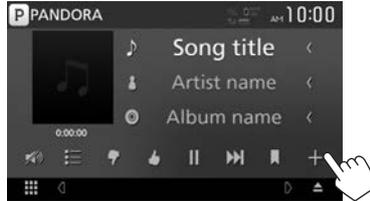

2 Select a station from the list.

|	
[🔀 **Shuffle**]	Plays all the songs in the registered stations randomly.
[🗓 **By Recent**]	Sorts the list in reverse chronological order.
[👤 **By Name**]	Sorts the list in alphabetical order.

- Scroll the page to show more items.
- The 🔀 indicator appears on the left of the item when Shuffle is activated. (All songs on the registered stations are played randomly.)
- The 👥 indicator appears on the left of the item when the station is shared.

❏ Creates a new station

1 Display the station list screen.

2 Select the type.
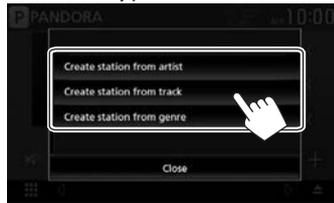
[**Create station from artist**]	Creates a new station based on an artist being played.
[**Create station from track**]	Creates a new station based on a song being played.
[**Create station from genre**]	Displays the genre list screen. (see below.)

Genre list screen

1

2 Select a genre, then a station.

- Scroll the page to show more items.
- The selected station is added to the Station List.

Pandora®

Requirements for Pandora®

iPhone or iPod touch
- Install the latest version of the Pandora application on your iPhone or iPod touch. (Search for "Pandora" in the Apple App Store to find and install the most recent version.)
- Connect iPod touch/iPhone to this unit with a cable or via Bluetooth.
  - When connecting with a cable: Use KS-U62 (optional accessory) or a USB 2.0 cable (accessory of the iPod/iPhone).

Android™
- Visit Google play and search for "Pandora" to install.
- Bluetooth must be built in and the following profiles must be supported.
  - SPP (Serial Port Profile)
  - A2DP (Advanced Audio Distribution Profile)

BlackBerry®
- Visit www.pandora.com from the built in browser to download the Pandora application.
- Bluetooth must be built in and the following profiles must be supported.
  - SPP (Serial Port Profile)
  - A2DP (Advanced Audio Distribution Profile)

NOTE
- Ensure you are logged in to your smartphone application. If you do not have a Pandora account, you can create one for free from your smartphone or at www.pandora.com.
- Pandora is only available in certain countries. Please visit http://www.pandora.com/legal for more information.
- Because Pandora 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 Pandora cannot be operated from this unit.
- For issues using the application, contact Pandora at pandora-support@pandora.com.
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