JVC

KD-X230 / KD-X130

DIGITAL MEDIA RECEIVER
INSTRUCTION MANUAL

ตัวรับสื่อดิจิตอล
คู่มือการใช้งาน

JVCKENWOOD Corporation

Made for
iPod iPhone

WORKS WITH
PANDORA

CONTENTS

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 Warning and Caution in this manual.
• Please keep the manual in a safe and accessible place for future reference.

⚠ Warning
Do not operate any function that takes your attention away from safe driving.

⚠ Caution
Volume setting:
• Adjust the volume so that you can hear sounds outside the car to prevent accidents.
• Lower the volume before playing digital sources to avoid damaging the speakers by the sudden increase of the output level.
General:
• Avoid using the external device if it might hinder safe driving.
• Make sure all important data has been backed up. We shall bear no responsibility for any loss of recorded data.
• Never put or leave any metallic objects (such as coins or metal tools) inside the unit to prevent a short circuit.
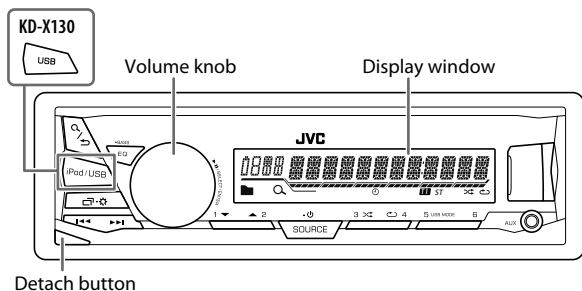**Remote control (RM-RK52):**
• Do not leave the remote control in hot places such as on the dashboard.
• The Lithium battery is in danger of explosion if replaced incorrectly. Replace it only with the same or equivalent type.
• The battery pack or batteries shall not be exposed to excessive heat such as sunshine, fire or the like.
• Keep the battery out of reach of children and in its original packaging when not in used. Dispose of used batteries promptly. If swallowed, contact a physician immediately.

How to read this manual
• Operations are explained mainly using buttons on the faceplate of KD-X230.
• English indications are used for the purpose of explanation. You can select the display language from the menu. (➡ 4)
• **[XX]** indicates the selected items.
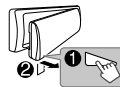• (➡ **XX**) indicates references are available on the stated page.

BASICS

Faceplate

KD-X130

Volume knob   Display window

JVC

Detach button
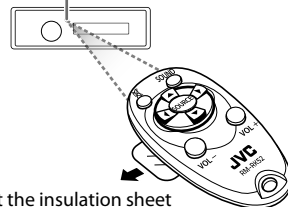
Attach

Detach

How to reset

Your preset adjustments will be erased except stored radio stations.

Remote control (RM-RK52)

Remote sensor (Do not expose to bright sunlight.)

Pull out the insulation sheet when using for the first time.

How to replace the battery

CR2025

To	On the faceplate	On the remote control
Turn on the power	Press **SOURCE-⏻**. • Press and hold to turn off the power.	(Not available)
Adjust the volume	Turn the volume knob.	Press **VOL +** or **VOL –**.
	Press the volume knob to mute the sound or pause playback. • Press again to cancel.	Press 🔇 to mute the sound or pause playback. • Press again to cancel.
Select a source	• Press **SOURCE-⏻** repeatedly. • Press **SOURCE-⏻**, then turn the volume knob within 2 seconds.	Press **SOURCE** repeatedly.
Change the display information	Press ⬜·✿ repeatedly. (➜ **13)**	(Not available)

GETTING STARTED

Default: **XX**
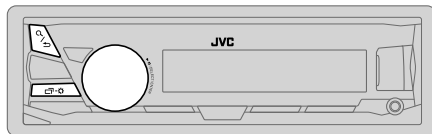
1 Cancel the demonstration

When you turn on the power (or after you reset the unit), the display shows:
"CANCEL DEMO" ➜ "PRESS" ➜ "VOLUME KNOB"

1 **Press the volume knob.**
   [**YES**] is selected for the initial setup.
2 **Press the volume knob again.**
   "DEMO OFF" appears.

2 Set the clock

1 **Press and hold ⊡ · ☼.**
2 **Turn the volume knob to select [CLOCK], then press the knob.**
3 **Turn the volume knob to select [CLOCK SET], then press the knob.**
4 **Turn the volume knob to make the settings, then press the knob.**
   Day ➜ Hour ➜ Minute
5 **Turn the volume knob to select [24H/ 12H], then press the knob.**
6 **Turn the volume knob to select [12 HOUR] or [24 HOUR], then press the knob.**
7 **Press ⊡ · ☼ to exit.**

To return to the previous setting item, press ⊲ / ⊅.

3 Set the basic settings

1 **Press and hold ⊡ · ☼.**
2 **Turn the volume knob to select an item (see the following table), then press the knob.**
3 **Repeat step 2 until the desired item is selected or activated.**
4 **Press ⊡ · ☼ to exit.**

To return to the previous setting item, press ⊲ / ⊅.

SETTINGS	
BEEP	**ON**: Activates the keypress tone. ; **OFF**: Deactivates.
SRC SELECT	
AM*	**ON**: Enables AM in source selection. ; **OFF**: Disables.
PANDORA*	(For **KD-X230**) **ON**: Enables PANDORA in source selection. ; **OFF**: Disables.
SW1*	**ON**: Enables SW1 in source selection. ; **OFF**: Disables.
SW2*	**ON**: Enables SW2 in source selection. ; **OFF**: Disables.
AUX*	**BT ADAPTER**: Selects when the KS-BTA100 Bluetooth adapter is connected to the AUX jack. (➜ **6**) ; **ON**: Enables AUX in source selection. ; **OFF**: Disables.
F/W UPDATE	
SYSTEM	
F/W xxxx	**YES**: Starts upgrading the firmware. ; **NO**: Cancels (upgrading is not activated). For details on how to update the firmware, see: <http://www.jvc.net/cs/car/>.
CLOCK	
CLOCK SYNC	**AUTO**: The clock time is automatically set using the Clock Time (CT) data in FM Radio Data System signal. ; **OFF**: Cancels.
CLOCK DISP	**ON**: The clock time is shown on the display even when the unit is turned off. ; **OFF**: Cancels.
ENGLISH	Select the display language for menu and music information if applicable. By default, **ENGLISH** is selected.
ESPANOL	

* Not displayed when the corresponding source is selected.

RADIO
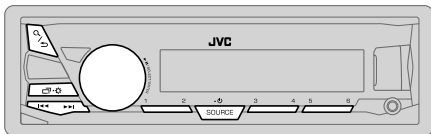
"ST" lights up when receiving an FM stereo broadcast with sufficient signal strength.

Search for a station

1. Press **SOURCE-⏻** repeatedly to select FM, AM, SW1 or SW2.
2. Press |◀◀ / ▶▶| (or press ◀ / ▶ on RM-RK52) to search for a station automatically.
   (or)
   Press and hold |◀◀ / ▶▶| (or press and hold ◀ / ▶ on RM-RK52) until "M" flashes, then press repeatedly to search for a station manually.

Settings in memory

You can store up to 18 stations for FM and 6 stations for AM/SW1/SW2.

� Store a station

While listening to a station....
Press and hold one of the number buttons (1 to 6).
   (or)
1. Press and hold the volume knob until "PRESET MODE" flashes.
2. Turn the volume knob to select a preset number, then press the knob.
   The preset number flashes and "MEMORY" appears.

▶ Select a stored station

Press one of the number buttons (1 to 6).
   (or)
1. Press 🔍/↩.
2. Turn the volume knob to select a preset number, then press the knob to confirm.

Other settings

1. Press and hold ⌐·☼.
2. Turn the volume knob to select [TUNER], then press the knob.
3. Turn the volume knob to select an item (see the following table), then press the knob.
4. Repeat step 3 until the desired item is selected/ activated or follow the instructions stated on the selected item.
5. Press ⌐·☼ to exit.

To return to the previous setting item, press 🔍/↩.

Default: **XX**

RADIO TIMER	Turns on the radio at a specific time regardless of the current source. **1 ONCE/ DAILY/ WEEKLY/ OFF**: Select how often the timer will be turned on. **2 FM/ AM/ SW1/ SW2**: Select the FM, AM, SW1 or SW2 band. **3 01** to **18** (for FM)/ **01** to **06** (for AM/SW1/SW2): Select the preset station. **4** Set the activation day*1 and time. "⊙" lights up when complete. Radio Timer will not activate for the following cases. • The unit is turned off. • [**OFF**] is selected for [**AM/SW1/SW2**] in [**SRC SELECT**] after Radio Timer for AM/SW1/SW2 is selected. (➡ **4**)
SSM	**SSM 01 – 06** / **SSM 07 – 12** / **SSM 13 – 18**: Automatically presets up to 18 stations for FM. "SSM" stops flashing when the first 6 stations are stored. Select **SSM 07 – 12** / **SSM 13 – 18** to store the following 12 stations.

*1 Selectable only when [**ONCE**] or [**WEEKLY**] is selected in step **1**.

RADIO

Default: **XX**

|	
LOCAL SEEK	**ON**: Searches only AM/SW1/SW2 stations with good reception. ; **OFF**: Cancels. • Settings made are applicable only to the selected source/station. Once you change the source/station, you need to make the settings again.
IF BAND	**AUTO**: Increases the tuner selectivity to reduce interference noises from adjacent FM stations. (Stereo effect may be lost.) ; **WIDE**: Subjects to interference noises from adjacent FM stations, but sound quality will not be degraded and the stereo effect will remain.
MONO	**ON**: Improves the FM reception, but the stereo effect will be lost. ; **OFF**: Cancels.
NEWS-STBY*2	**ON**: The unit will temporarily switch to News Programme if available. ; **OFF**: Cancels.
REGIONAL*2	**ON**: Switches to another station only in the specific region using the "AF" control. ; **OFF**: Cancels.
AF SET*2	**ON**: Automatically searches for another station broadcasting the same program in the same Radio Data System network with better reception when the current reception is poor. ; **OFF**: Cancels.
TI SET*2	**ON**: Allows the unit to temporarily switch to Traffic Information if available ("TI" lights up). ; **OFF**: Cancels.
PTY SEARCH*2	Select a PTY code (see below). If there is a station broadcasting a program of the same PTY code as you have selected, that station is tuned in.

PTY code: NEWS, **AFFAIRS**, **INFO**, **SPORT**, **EDUCATE**, **DRAMA**, **CULTURE**, **SCIENCE**, **VARIED**, **POP M** (music), **ROCK M** (music), **EASY M** (music), **LIGHT M** (music), **CLASSICS**, **OTHER M** (music), **WEATHER**, **FINANCE**, **CHILDREN**, **SOCIAL**, **RELIGION**, **PHONE IN**, **TRAVEL**, **LEISURE**, **JAZZ**, **COUNTRY**, **NATION M** (music), **OLDIES**, **FOLK M** (music), **DOCUMENT**

*2 Only for FM source.

AUX

Use a portable audio player

1 Connect a portable audio player (commercially available).

3.5 mm stereo mini plug with "L" shaped connector (commercially available)

Auxiliary input jack   Portable audio player
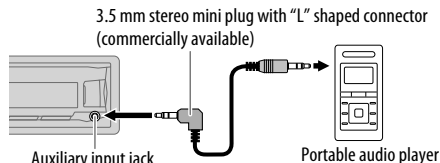
2 Select [ON] for [AUX] in [SRC SELECT]. (➜ 4)
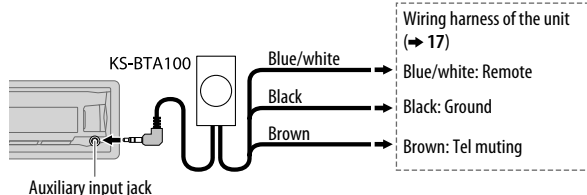**3 Press SOURCE-⏻ repeatedly to select AUX.**
4 Turn on the portable audio player and start playback.

> Use a 3-core plug head stereo mini plug for optimum audio output.

Use a Bluetooth® device

1 Connect the Bluetooth adapter, KS-BTA100 (separately purchased).

KS-BTA100

Blue/white
Black
Brown

Auxiliary input jack

Wiring harness of the unit (➜ 17)
Blue/white: Remote
Black: Ground
Brown: Tel muting

2 Register (pair) the Bluetooth device with KS-BTA100.
3 Select [BT ADAPTER] for [AUX] in [SRC SELECT]. (➜ 4)
4 Press SOURCE-⏻ repeatedly to select BT AUDIO.
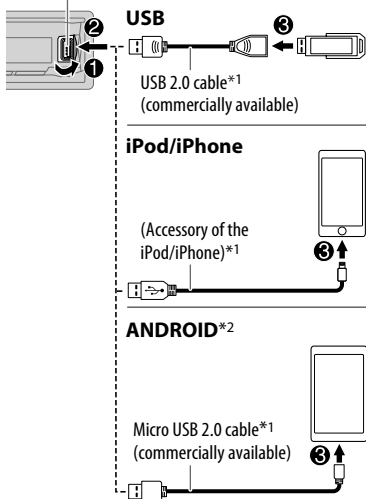**5 Start using the Bluetooth device.**

For details, refer to the instruction manual of KS-BTA100.
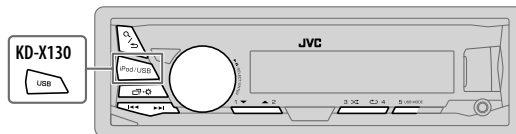
USB / iPod / ANDROID

Start playback

The source changes automatically and playback starts.

USB input terminal

USB

USB 2.0 cable*1
(commercially available)

iPod/iPhone

(Accessory of the iPod/iPhone)*1

ANDROID*2

Micro USB 2.0 cable*1
(commercially available)

Selectable source:
KD-X230:
CD/ USB/ USB-IPOD/ ANDROID
KD-X130:
CD/ USB/ ANDROID

KD-X130
USB

To directly select USB/ USB-IPOD/ ANDROID source, press **iPod** / **USB** or **USB**.

To	On the faceplate	On the remote control
Reverse / Fast-forward*3	**Press and hold I◀◀ / ▶▶I.**	**Press and hold ◀/▶.**
Select a file	**Press I◀◀ / ▶▶I.**	**Press ◀/▶.**
Select a folder*4	**Press 2 ▲ / 1 ▼.**	**Press ▲/▼.**
Repeat play*5	**Press 4 ⊂⊃ repeatedly.** **TRACK RPT/ FOLDER RPT/ ALL RPT** : MP3/WMA/WAV/FLAC file **ONE RPT/ ALL RPT/ RPT OFF** : iPod or ANDROID	
Random play*5	**Press 3 ⋈ repeatedly.** **FOLDER RND/ ALL RND/ RND OFF** : MP3/WMA/WAV/FLAC file **SONG RND/ ALL RND/ RND OFF** : iPod or ANDROID	

*1 Do not leave the cable inside the car when not using.
*2 When connecting an Android device, "Press [VIEW] to install JVC MUSIC PLAY APP" is shown. Follow the instructions to install the application. You can also install the latest version of JVC MUSIC PLAY application on your Android device before connecting. (➔ **12**)
*3 For ANDROID: Applicable only when [**AUTO MODE**] is selected. (➔ **8**)
*4 Only for MP3/WMA/WAV/FLAC files. This does not work for iPod/ ANDROID.
*5 For iPod/ ANDROID: Applicable only when [**HEAD MODE**]/ [**AUTO MODE**] is selected. (➔ **8**)

Select control mode

While in USB-IPOD source, press 5 USB MODE repeatedly.
HEAD MODE: Control iPod from this unit.
IPHONE MODE: Control iPod using the iPod itself. However, you can still play/
pause or file skip from this unit.

While in ANDROID source, press 5 USB MODE repeatedly.
AUTO MODE: Control Android device from this unit via JVC MUSIC PLAY
application installed in the Android device.
AUDIO MODE: Control Android device using the Android device itself via
other media player applications installed in the Android device.
However, you can still play/pause or file skip from this unit.

## Select music drive

Press 5 USB MODE repeatedly.

Stored songs in the following drive will be played back.
• Selected internal or external memory of a smartphone (Mass Storage Class).
• Selected drive of a multiple drives device.

Change the playback speed of the Audiobook

(For KD-X230)
While listening to the iPod and [**HEAD MODE**] is selected....
1 **Press and hold ⊡·✪.**
2 **Turn the volume knob to select [IPOD], then press the knob.**
3 **Press the volume knob to select [AUDIOBOOKS].**
4 **Turn the volume knob to select an item, then press the knob.**
   0.5× SPEED / 1× SPEED / 2× SPEED: Select the desired playback speed of the
   Audiobooks sound file in your iPod/iPhone.
   (Default: Depends on your iPod/iPhone setting.)
5 **Press ⊡·✪ to exit.**

To return to the previous setting item, press Q / ⬑.

Select a file from a folder/list

1 **Press Q / ⬑.**
2 **Turn the volume knob to select a folder/list, then press the knob.**
3 **Turn the volume knob to select a file, then press the knob.**

> **Quick Search**
> If you have many files, you can search through them quickly.
> **Turn the volume knob quickly to browse through the list quickly.**
> – Not applicable for iPod.
>
> **Alphabet search (applicable only for iPod):**
> You can search for a file according to the first character.
> **Press 2 ▲ / 1 ▼ or turn the volume knob quickly to select the desired character (A to Z/ 0 to 9/ OTHERS).**
> – Select "OTHERS" if the first character is other than A to Z, 0 to 9.

• To return to the previous setting item, press Q / ⬑.
• To cancel, press and hold Q / ⬑.
• For iPod, applicable only when [**HEAD MODE**] is selected.
• For ANDROID, applicable only when [**AUTO MODE**] is selected.

Pandora® (for KD-X230)

Preparation:
Install the latest version of the Pandora application on your device (iPhone/ iPod touch), then create an account and log in to Pandora.
• Select [**ON**] for [**PANDORA**] in [**SRC SELECT**]. (➔ 4)

Start listening

1 **Open the Pandora application on your device.**
2 **Connect your device to the USB input terminal.**

USB input terminal

(Accessory of the iPod/iPhone)*1
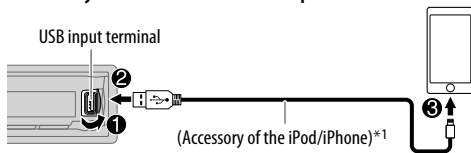
The source changes to PANDORA and broadcast starts.

To	On the faceplate	On the remote control
Playback / pause	Press the volume knob.	Press 🔀.
Skip a track	Press ►►I.	Press ▶.
Thumbs up or thumbs down*2	Press 2 ▲ / 1 ▼.	Press ▲ / ▼.

*1 Do not leave the cable inside the car when not using.

*2 If thumbs down is selected, the current track is skipped.

Create and save a new station

1 **Press Q / ⤺.**
2 **Turn the volume knob to select [NEW STATION], then press the knob.**
3 **Turn the volume knob to select [FROM TRACK] or [FROM ARTIST], then press the knob.**
   A new station is created based on the current song or artist.
4 **Press and hold number button 3, 4, 5 or 6 to store.**

To select a stored station, press number button **3**, **4**, **5** or **6**.

Search for a registered station

1 **Press Q / ⤺.**
2 **Turn the volume knob to select an item, then press the knob.**
   [**BY DATE**]: According to the registered date.
   [**A-Z**]:   Alphabetical order.
3 **Turn the volume knob to select the desired station, then press the knob.**

To cancel, press and hold Q / ⤺.

Bookmark current song information

Press and hold the volume knob.
"BOOKMARKED" appears and the information is stored to your device.
The bookmark is available on your Pandora account but not on this unit.

AUDIO SETTINGS

Default: **XX**

Select a preset equalizer

Press EQ-BASS repeatedly.
(or)
Press EQ-BASS, then turn the volume knob within 5 seconds.

Preset equalizer: **FLAT** (default), **HARD ROCK**, **HIP HOP**, **JAZZ**, **POP**, **R&B**, **TALK**, **USER**, **VOCAL BOOST**, **BASS BOOST**, **CLASSICAL**, **DANCE**
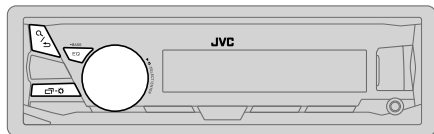
Store your own sound settings

1. **Press and hold EQ-BASS to enter EASY EQ setting.**
2. **Turn the volume knob to select an item, then press the knob.**
   Refer to [**EASY EQ**] for setting and the result is stored to [**USER**].

- To return to the previous setting item, press $\mathsf{Q}/\mathbf{\Rightarrow}$.
- To exit, press **EQ-BASS**.

Other settings

1. **Press and hold ⌐·✿.**
2. **Turn the volume knob to select an item (see the following table), then press the knob.**
3. **Repeat step 2 until the desired item is selected/activated or follow the instructions stated on the selected item.**
4. **Press ⌐·✿ to exit.**

To return to the previous setting item, press $\mathsf{Q}/\mathbf{\Rightarrow}$.

EQ SETTING	
EQ PRESET	Select a preset equalizer suitable to the music genre. (Select [**USER**] to use the settings made in [**EASY EQ**].) **FLAT** (Default) / **HARD ROCK** / **HIP HOP** / **JAZZ** / **POP** / **R&B** / **TALK** / **USER** / **VOCAL BOOST** / **BASS BOOST** / **CLASSICAL** / **DANCE**
EASY EQ	Adjust your own sound settings. The settings are stored to [**USER**]. **SUB.W SP**[*1][*2]: **00** to **+06** (Default: **03** **SUB.W**[*1][*3]: **−08** to **+08** **00** **BASS LVL**: **−06** to **+06** **00** **MID LVL**: **−06** to **+06** **00** **TRE LVL**: **−06** to **+06** **00**)

PRO EQ	1 **BASS** / **MIDDLE** / **TREBLE**: Select a sound tone.
	 2 Adjust the sound elements of the selected sound tone.
	
	 BASS Frequency: **60/ 80/ 100/ 200 HZ** (Default: **80 HZ**
	      Level: **−06** to **+06** **00**
	      Q: **Q1.0/ Q1.25/ Q1.5/ Q2.0** **Q1.0**)
	 MIDDLE Frequency: **0.5/ 1.0/ 1.5/ 2.5 KHZ** (Default: **1.0 KHZ**
	      Level: **−06** to **+06** **00**
	      Q: **Q0.75/ Q1.0/ Q1.25** **Q1.25**)
	 TREBLE Frequency: **10.0/ 12.5/ 15.0/ 17.5 KHZ** (Default: **10.0 KHZ**
	      Level: **−06** to **+06** **00**
	      Q: **Q FIX** **Q FIX**)

AUDIO	
BASS BOOST	**+01 — +05** (**+01**): Selects your preferred bass boost level. ; **OFF**: Cancels.
LOUD	**01** / **02**: Boosts low or high frequencies to produce a well-balanced sound at low volume. ; **OFF**: Cancels.

[*1] Displayed only when [**SUB.W**] is set to [**ON**]. (➔ 11)
[*2] Displayed only when [**SPK/PRE OUT**] is set to [**SUB.W/SUB.W**]. (➔ 11)
[*3] Displayed only when [**SPK/PRE OUT**] is set to [**REAR/SUB.W**] or [**SUB.W/SUB.W**]. (➔ 11)

AUDIO SETTINGS

SUB.W LEVEL*4	SPK-OUT*5	**00** to **+06** (<u>+**03**</u>): Adjusts the output level of the subwoofer connected via speaker lead. (➜ **17**)
	PRE-OUT*6	**−08** to **+08** (<u>**00**</u>): Adjusts the output level of the subwoofer connected to the lineout terminals (REAR/SW) through an external amplifier. (➜ **17**)
SUB.W*6		<u>**ON**</u> / **OFF**: Turns on or off the subwoofer output.
SUB.W LPF*4		**THROUGH**: All signals are sent to the subwoofer. ; **LOW 55HZ** / **MID 85HZ** / **HIGH 120HZ**: Audio signals with frequencies lower than 55 Hz/ 85 Hz/ 120 Hz are sent to the subwoofer.
SUB.W PHASE*4		**REVERSE** (180°)/ <u>**NORMAL**</u> (0°): Selects the phase of the subwoofer output to be in line with the speaker output for optimum performance. (Selectable only if a setting other than [**THROUGH**] is selected for [**SUB.W LPF**].)
FADER		**R06** — **F06** (<u>**00**</u>): Adjusts the front and rear speaker output balance.
BALANCE*7		**L06** — **R06** (<u>**00**</u>): Adjusts the left and right speaker output balance.
VOL ADJUST		**−15** — **+06** (<u>**00**</u>): Preset the initial volume level of each source (compared to the FM volume level). Before adjustment, select the source you want to adjust. ("VOL ADJ FIX" appears if FM is selected.)
AMP GAIN		**LOW POWER**: Limits the maximum volume level to 25. (Select if the maximum power of each speaker is less than 50 W to prevent damaging the speakers.) ; <u>**HIGH POWER**</u>: The maximum volume level is 35.
D.T.EXP (Digital Track Expander)		<u>**ON**</u>: Creates realistic sound by compensating the high-frequency components and restoring the rise-time of the waveform that are lost in audio data compression. ; **OFF**: Cancels.
TEL MUTING*8		**ON**: Mutes the sounds while using the cellular phone (not connected through KS-BTA100). ; <u>**OFF**</u>: Cancels.
SPK/PRE OUT		Depending on the speaker connection method, select the appropriate setting to get the desired output. (➜ **Speaker output settings**)

*4 Displayed only when [**SUB.W**] is set to [**ON**].
*5 Displayed only when [**SPK/PRE OUT**] is set to [**SUB.W/SUB.W**].
*6 Displayed only when [**SPK/PRE OUT**] is set to [**REAR/SUB.W**] or [**SUB.W/SUB.W**].
*7 This adjustment will not affect the subwoofer output.
*8 Does not work if [**BT ADAPTER**] is selected for [**AUX**] in [**SRC SELECT**]. (➜ **4**)

Speaker output settings

Select the output setting for the speakers [**SPK/PRE OUT**], base on the speaker connection method.

▭ Connection via lineout terminals

For connections through an external amplifier. (➜ **17**)

Setting on [**SPK/PRE OUT**]	Audio signal through lineout terminal
	REAR/SW
REAR/REAR	Rear speakers output
REAR/SUB.W	Subwoofer output
SUB.W/SUB.W	Subwoofer output

▭ Connection via speaker leads

For connections without using an external amplifier. However, with this settings you can also enjoy the subwoofer output. (➜ **17**)

Setting on [**SPK/PRE OUT**]	Audio signal through rear speaker lead	
	L (left)	R (right)
REAR/REAR	Rear speakers output	Rear speakers output
REAR/SUB.W	Rear speakers output	Rear speakers output
SUB.W/SUB.W	Subwoofer output	(Mute)

If [**SUB.W/SUB.W**] is selected:
– [**HIGH 120HZ**] is selected in [**SUB.W LPF**] and [**THROUGH**] is not available.
– [**R01**] is selected in [**FADER**] and selectable range is [**R06**] to [**00**].

DISPLAY SETTINGS

1 **Press and hold ⊡·✿.**
2 **Turn the volume knob to select an item (see the following table), then press the knob.**
3 **Repeat step 2 until the desired item is selected/activated or follow the instructions stated on the selected item.**
4 **Press ⊡·✿ to exit.**

To return to the previous setting item, press ٩/⤺.

Default: **XX**

DISPLAY	

DIMMER	Dim the display and buttons illumination.
	OFF: Dimmer is turned off.
	ON: Dimmer is turned on. Brightness changes to [**NIGHT**] setting.
	(➔ [**BRIGHTNESS**])
	DIMMER TIME: Set the dimmer on and off time.
	  1 Turn the volume knob to adjust the [**ON**] time, then press the knob.
	  2 Turn the volume knob to adjust the [**OFF**] time, then press the knob.
	    (Default: [**ON**]: 18:00 or 6:00 PM
	           [**OFF**]:6:00 or 6:00 AM)
	AUTO: Dimmer turns on and off automatically when you turn off or on the car headlights.*1

BRIGHTNESS	Set the button, display and USB input terminal brightness for day and night separately.
	  1 **DAY** / **NIGHT**: Select day or night.
	  2 Select a zone.
	  3 Set the brightness level (**00** to **31**). (Default: **DAY**: **31** ; **NIGHT**: **15**)

SCROLL*2	**ONCE**: Scrolls the display information once. ; **AUTO**: Repeats scrolling at 5-second intervals. ; **OFF**: Cancels.

*1 The illumination control wire connection is required. (➔ **17**)
*2 Some characters or symbols will not be shown correctly (or will be blanked).

REFERENCES

■ Maintenance
Cleaning the unit
Wipe off dirt on the faceplate with a dry silicone or soft cloth.

Cleaning the connector
Detach the faceplate and clean the connector gently with a cotton swab, being careful not to damage the connector.

Connector (on the reverse side of the faceplate)

■ More information
Visit also the following website <http://www.jvc.net/cs/car/> for:
– Latest firmware updates and latest compatible item list
– Android™ application JVC MUSIC PLAY
– Any other latest information

Playable files
• Playable audio file: MP3 (.mp3), WMA (.wma), WAV (.wav), FLAC (.flac)
• Playable USB device file system: FAT12, FAT16, FAT32
Even when audio files comply with the standards listed above, playback may be impossible depending on the types or conditions of media or device.

About USB devices
• This unit can play MP3/WMA/WAV/FLAC files stored on a USB mass storage class device.
• You cannot connect a USB device via a USB hub.
• Connecting a cable whose total length is longer than 5 m may result in abnormal playback.
• The maximum number of characters for:
  - Folder names: 64 characters
  - File names: 64 characters
  - MP3 Tag: 64 characters
  - WMA Tag: 64 characters
  - WAV Tag: 64 characters
  - FLAC Tag: 64 characters
• This unit can recognize a total of 15 000 files, 500 folders (999 files per folder including folder without unsupported files), and of 8 hierarchies.
• This unit cannot recognize a USB device whose rating is other than 5 V and exceeds 1 A.

REFERENCES

About iPod/iPhone

Made for
- iPod touch (2nd, 3rd, 4th, and 5th generation)
- iPod classic
- iPod nano (3rd, 4th, 5th, 6th, and 7th generation)
- iPhone 3G, 3GS, 4, 4S, 5, 5S, 5C, 6, 6 Plus
- It is not possible to browse video files on the "Videos" menu in **[HEAD MODE]**.
- The song order displayed on the selection menu of this unit may differ from that of the iPod/iPhone.
- Depending on the version of the operating system of the iPod/iPhone, some functions may not operate on this unit.

About Android device

- This unit supports Android OS 4.1 and above.
- Some Android devices (with OS 4.1 and above) may not fully support Android Open Accessory (AOA) 2.0.
- If the Android device supports both mass storage class device and AOA 2.0, this unit always playback via AOA 2.0 as priority.

About Pandora

- 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, please contact Pandora at pandora-support@pandora.com.

Change the display information

Each time you press ⬚ • ✿, the display information changes.
- If the information is unavailable or not recorded, "NO TEXT", "NO NAME", or other information (eg. station name) appears.

FM or AM	Frequency ←→ Day/Clock
	(For FM Radio Data System stations only) Station name (PS) ➡ Frequency ➡ Program type (PTY) ➡ Radio text+ ➡ Day/Clock ➡ (back to the beginning)
USB	**(For MP3/WMA/WAV/FLAC files)** Playing time ➡ Day/Clock ➡ Album title/Artist ➡ Track title ➡ Folder/file name ➡ (back to the beginning)
USB-IPOD or **ANDROID**	Playing time ➡ Day/Clock ➡ Album title/Artist ➡ Track title ➡ (back to the beginning)
PANDORA	Station name ➡ Shared/Radio ➡ Album title ➡ Artist ➡ Track title ➡ Playing time ➡ Day/Clock ➡ (back to the beginning)
AUX	AUX ←→ Day/Clock
BT AUDIO	BT AUDIO ←→ Day/Clock

TROUBLESHOOTING

Symptom	Remedy
General	
Sound cannot be heard.	• Adjust the volume to the optimum level. • Check the cords and connections.
"MISWIRING CHECK WIRING THEN PWR ON" appears.	Turn the power off, then check to be sure the terminals of the speaker wires are insulated properly. Turn the power on again.
"PROTECTING SEND SERVICE" appears.	Send the unit to the nearest service center.
Source cannot be selected.	Check the [**SRC SELECT**] setting. (➜ **4**)
Radio	
• Radio reception is poor. • Static noise while listening to the radio.	Connect the antenna firmly.
USB / iPod	
Playback order is not as intended.	The playback order is determined by the file name.
Elapsed playing time is not correct.	This depends on the recording process earlier.
"NOT SUPPORT" appears and file skips.	Check whether the file is a playable format. (➜ **12**)
"READING" keeps flashing.	• Do not use too many hierarchical levels and folders. • Reattach the USB device.
"CANNOT PLAY" flashes and/or connected device cannot be detected.	• Check whether the connected device is compatible with this unit and ensure the files are in supported formats. (➜ **12**) • Reattach the device.
The iPod/iPhone does not turn on or does not work.	• Check the connection between this unit and iPod/iPhone. • Detach and reset the iPod/iPhone using hard reset.
Correct characters are not displayed.	• This unit can only display uppercase letters, numbers, and a limited number of symbols. • Depending on the display language you have selected (➜ **4**), some characters may not be displayed correctly.

Symptom	Remedy
ANDROID	
• Sound cannot be heard during playback. • Sound output only from the Android device.	• Reconnect the Android device. • If in [**AUDIO MODE**], launch any media player application on the Android device and start playback. • If in [**AUDIO MODE**], relaunch the current media player application or use another media player application. • Restart the Android device. • If this does not solve the problem, the connected Android device is unable to route the audio signal to unit. (➜ **13**)
Cannot playback at [**AUTO MODE**].	• Make sure JVC MUSIC PLAY APP is installed on the Android device. (➜ **7**) • Reconnect the Android device and select the appropriate control mode. (➜ **8**) • If this does not solve the problem, the connected Android device does not support [**AUTO MODE**]. (➜ **13**)
"NO DEVICE" or "READING" keeps flashing.	• Switch off the developer options on the Android device. • Reconnect the Android device. • If this does not solve the problem, the connected Android device does not support [**AUTO MODE**]. (➜ **13**)
Playback is intermittent or sound skips.	Turn off the power saving mode on the Android device.
"CANNOT PLAY"	• Make sure Android device contains playable audio files. • Reconnect the Android device. • Restart the Android device.
Pandora	
"ADD ERROR"	New station creation is unsuccessful.
"CHK DEVICE"	Check the Pandora application on your device.
"NO SKIPS"	The skip limit has been reached.
"NO STATIONS"	No stations are found.

TROUBLESHOOTING

	Symptom	Remedy
Pandora	"STATION LMT"	The number of registered stations has reached its limit. Retry after deleting unnecessary stations from your device.
	"UPGRADE APP"	Make sure you have installed the latest version of the Pandora application on your device.
	"CONNECT ERR"	Communication is unstable.
	"RATING ERR"	Registration of thumbs up/thumbs down has failed due to insufficient network connectivity.
	"THUMBS N/A"	Registration of thumbs up/thumbs down is not allowed.
	"LICENSE ERR"	You try to access from a country which Pandora is not deliverable.

If you still have troubles, reset the unit. (➡ **3**)

- Microsoft and Windows Media are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- "Made for iPod," and "Made for iPhone" mean that an electronic accessory has been designed to connect specifically to iPod, or iPhone, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod or iPhone may affect wireless performance.
- iPhone, iPod, iPod classic, iPod nano, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.
- Lightning is a trademark of Apple Inc.
- Pandora, the Pandora logo, and the Pandora trade dress are trademarks or registered trademarks of Pandora Media, Inc., used with permission.
- Android is trademark of Google Inc.

⚠ Warning
- The unit can only be used with a 12 V DC power supply, negative ground.
- Disconnect the battery's negative terminal before wiring and mounting.
- Do not connect Battery wire (yellow) and Ignition wire (red) to the car chassis or Ground wire (black) to prevent a short circuit.
- Insulate unconnected wires with vinyl tape to prevent a short circuit.
- Be sure to ground this unit to the car's chassis again after installation.
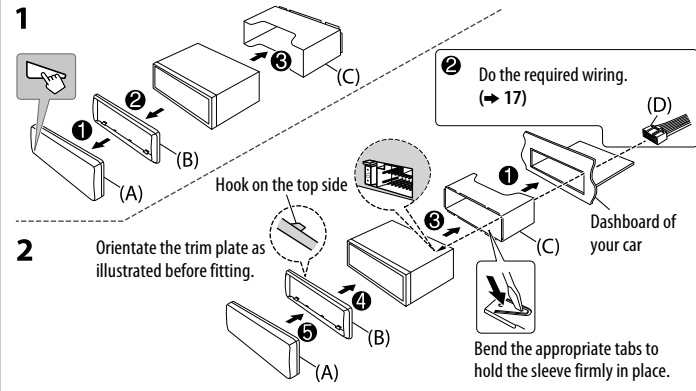
⚠ Caution
- For safety's sake, leave wiring and mounting to professionals. Consult the car audio dealer.
- Install this unit in the console of your vehicle. Do not touch the metal parts of this unit during and shortly after use of the unit. Metal parts such as the heat sink and enclosure become hot.
- Do not connect the ⊖ wires of speakers to the car chassis or Ground wire (black), or connect them in parallel.
- Connect speakers with a maximum power of more than 50 W. If the maximum power of the speakers is lower than 50 W, change the **[AMP GAIN]** setting to avoid damaging the speakers. (➜ 11)
- Mount the unit at an angle of less than 30º.
- If your vehicle wiring harness does not have the ignition terminal, connect Ignition wire (red) to the terminal on the vehicle's fuse box which provides 12 V DC power supply and is turned on and off by the ignition key.
- Keep all cables away from heat dissipate metal parts.
- After the unit is installed, check whether the brake lamps, blinkers, wipers, etc. on the car are working properly.
- If the fuse blows, first make sure the wires are not touching car's chassis, then replace the old fuse with one that has the same rating.

Basic procedure
1. Remove the key from the ignition switch, then disconnect the ⊖ terminal of the car battery.
2. Connect the wires properly.
   See Wiring connection. (➜ 17)
3. Install the unit to your car.
   See Installing the unit (in-dash mounting).
4. Connect the ⊖ terminal of the car battery.
5. Reset the unit. (➜ 3)

Installing the unit (in-dash mounting)

Do the required wiring. (➜ 17)

Hook on the top side

Orientate the trim plate as illustrated before fitting.

Dashboard of your car

Bend the appropriate tabs to hold the sleeve firmly in place.

When installing without the mounting sleeve
1. Remove the mounting sleeve and trim plate from the unit.
2. Align the holes in the unit (on both sides) with the vehicle mounting bracket and secure the unit with screws (commercially available).

⚠ Use only the specified screws. Using wrong screws might damage the unit.

8 mm MAX. M5 mm M5 mm
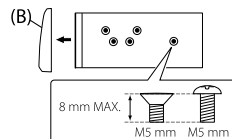
How to remove the unit

Wiring connection

Signal cord (not supplied)

JVC Amplifier*[1]

Rear/subwoofer output

Fuse (10 A)

Antenna terminal
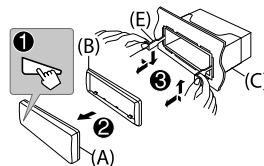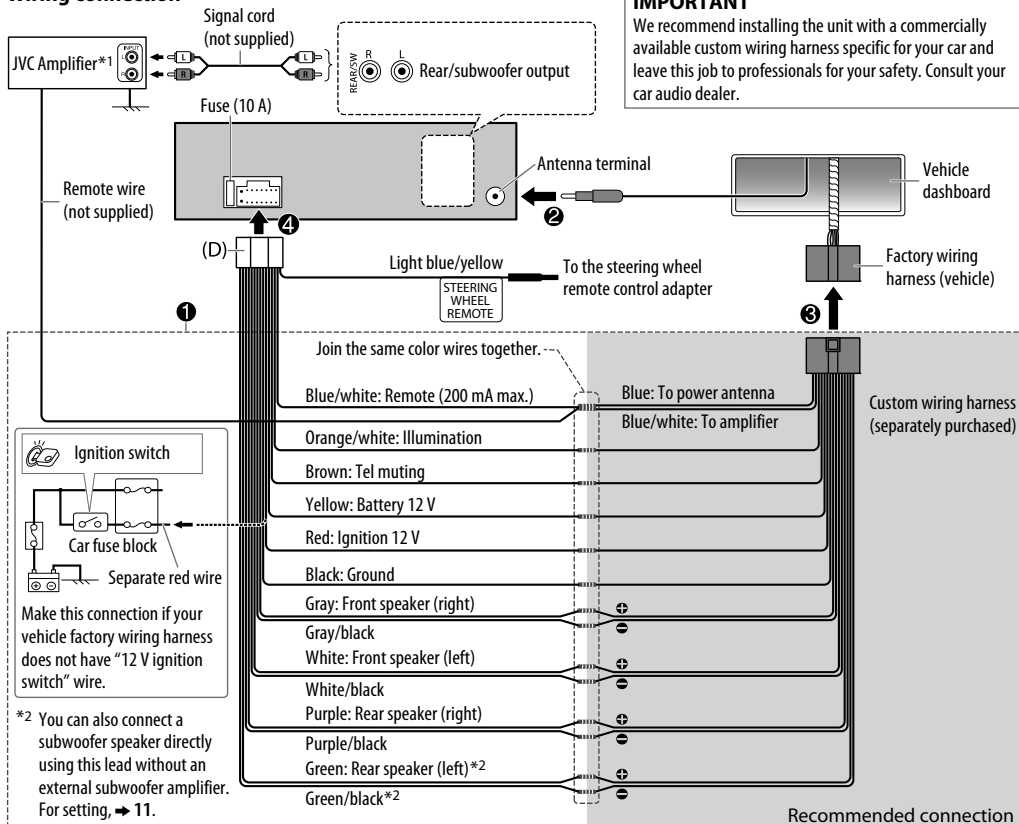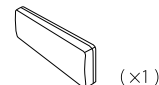
Vehicle dashboard

Remote wire (not supplied)

IMPORTANT
We recommend installing the unit with a commercially available custom wiring harness specific for your car and leave this job to professionals for your safety. Consult your car audio dealer.

Factory wiring harness (vehicle)

(D)

Light blue/yellow → To the steering wheel remote control adapter

STEERING WHEEL REMOTE

Join the same color wires together.

Blue/white: Remote (200 mA max.) | Blue: To power antenna
Blue/white: To amplifier

Custom wiring harness (separately purchased)

Orange/white: Illumination

Ignition switch

Brown: Tel muting

Yellow: Battery 12 V

Red: Ignition 12 V

Car fuse block — Separate red wire

Black: Ground

Gray: Front speaker (right)

Make this connection if your vehicle factory wiring harness does not have "12 V ignition switch" wire.

Gray/black
White: Front speaker (left)

White/black
Purple: Rear speaker (right)

*[2] You can also connect a subwoofer speaker directly using this lead without an external subwoofer amplifier. For setting, → **11**.

Purple/black
Green: Rear speaker (left) *[2]

Green/black *[2]

Recommended connection

*[1] Firmly connect the ground wire of the amplifier to the car's chassis to avoid damaging the unit.

Part list for installation

(A) Faceplate (×1)

(B) Trim plate (×1)

(C) Mounting sleeve (×1)

(D) Wiring harness (×1)

(E) Extraction key (×2)

ENGLISH 17
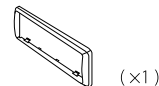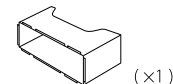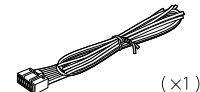
SPECIFICATIONS

Tuner	FM	Frequency Range	87.5 MHz — 108.0 MHz (50 kHz step)
		Usable Sensitivity (S/N = 26 dB)	8.2 dBf (0.71 µV/75 Ω)
		Quieting Sensitivity (DIN S/N = 46 dB)	17.2 dBf (2.0 µV/75 Ω)
		Frequency Response (±3 dB)	30 Hz — 15 kHz
		Signal-to-Noise Ratio (MONO)	64 dB
		Stereo Separation (1 kHz)	40 dB
	AM	Frequency Range	Band 1 (AM): 531 kHz — 1 611 kHz (9 kHz step) Band 2 (SW1): 2 940 kHz — 7 735 kHz (5 kHz step) Band 3 (SW2): 9 500 kHz — 10 135 kHz / 11 580 kHz — 18 135 kHz (5 kHz step)
		Channel Space Selection	Band 1: 9 kHz Band 2/3: 5 kHz
		Usable Sensitivity (S/N = 20 dB)	AM: 29 dBµ (28.2 µV) SW: 30 dBµ (32 µV)

USB	USB Standard	USB 1.1, USB 2.0 (Full speed)
	Compatible Devices	Mass storage class
	File System	FAT12/ 16/ 32
	Maximum Supply Current	DC 5 V --- 1 A
	D/A Converter	24 Bit
	Frequency Response (±1 dB)	20 Hz — 20 kHz
	Signal-to-Noise Ratio (1 kHz)	105 dB

USB	Dynamic Range	90 dB
	Channel Separation	85 dB
	MP3 Decode	Compliant with MPEG-1/2 Audio Layer-3
	WMA Decode	Compliant with Windows Media Audio
	WAV Decode	RIFF waveform Audio Format (Linear PCM only)
	FLAC Decode	FLAC files

Auxiliary	Frequency Response (±3 dB)	20 Hz — 20 kHz
	Input Maximum Voltage	1 000 mV
	Input Impedance	30 kΩ

Audio	Maximum Output Power	50 W × 4 or 50 W × 2 + 50 W × 1 (Subwoofer = 4 Ω)
	Full Bandwidth Power (at less than 1 % THD)	22 W × 4
	Speaker Impedance	4 Ω — 8 Ω
	Preout Level/Load (USB)	2 500 mV/10 kΩ
	Preout Impedance	≤ 600 Ω

General	Operating Voltage (10.5 V — 16 V allowable)	14.4 V
	Maximum Current Consumption	10 A
	Operating Temperature Range	−10℃ — +60℃
	Installation Size (W × H × D)	182 mm × 53 mm × 107 mm
	Weight	0.6 kg

Subject to change without notice.