



ENGLISH

KD-X230

DIGITAL MEDIA RECEIVER
INSTRUCTION MANUAL

JVCKENWOOD Corporation



For customer Use:
Enter below the Model No. and Serial No. which are located on the top or bottom of the cabinet. Retain this information for future reference.
Model No. _____
Serial No. _____

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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):

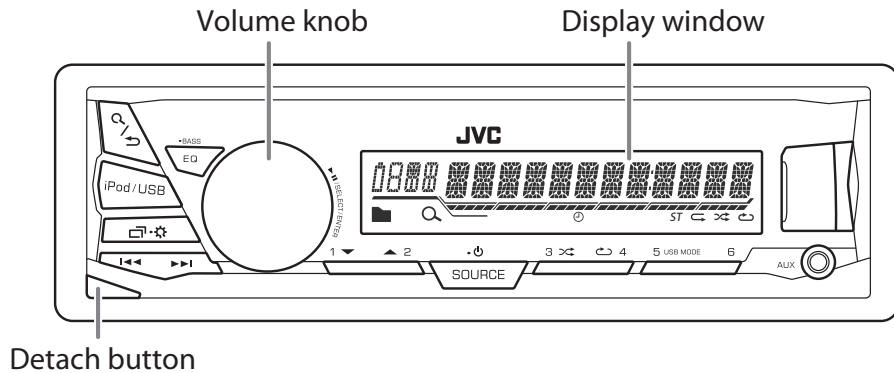
- Do not leave the remote control in hot places such as on the dashboard.
- The Lithium battery is in danger of explosion if replaced incorrectly. Replace it only with the same or equivalent type.
- The battery pack or batteries shall not be exposed to excessive heat such as sunshine, fire or the like.
- 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

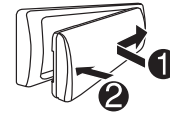
- Operations are explained mainly using buttons on the faceplate.
- English indications are used for the purpose of explanation. You can select the display language from the menu. (→ 4)
- [XX] indicates the selected items.
- (→ XX) indicates references are available on the stated page.

BASICS

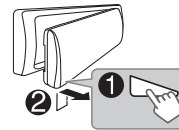
Faceplate



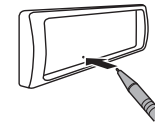
Attach



Detach



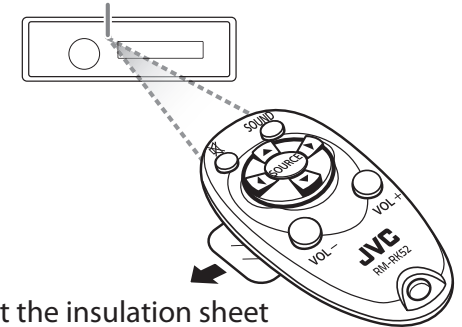
How to reset



Your preset adjustments will be erased except stored radio stations.

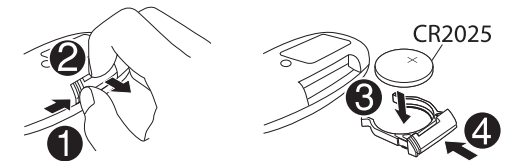
Remote control (RM-RK52)

Remote sensor (Do not expose to bright sunlight.)



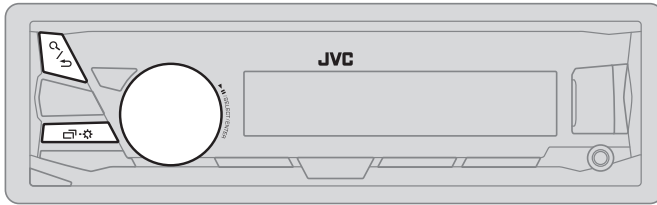
Pull out the insulation sheet when using for the first time.

How to replace the battery



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 the volume knob to mute the sound or pause playback. • Press again to cancel.	Press VOL + or VOL - . 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. (→ 14)	(Not available)

GETTING STARTED



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.

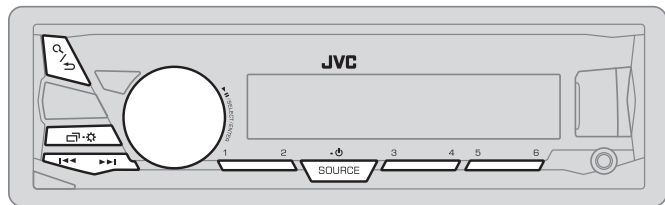
To return to the previous setting item, press .

Default: **XX**

SETTINGS	
BEEP	ON: Activates the keypress tone. ; OFF: Deactivates.
SRC SELECT	
AM*	ON: Enables AM in source selection. ; OFF: Disables.
PANDORA*	ON: Enables PANDORA in source selection. ; OFF: Disables.
IHEART*	ON: Enables IHEARTRADIO 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).
CLOCK	
CLOCK SYNC	AUTO: The clock time is automatically set using the Clock Time (CT) data in FM Radio Broadcast 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	
ESPAÑOL	Select the display language for menu and music information if applicable. By default, ENGLISH is selected.

* 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 or AM.
- 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.

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: Select the source.

3 01 to 18 (for FM)/ 01 to 06 (for AM): Select the preset station.

4 Set the activation day* 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] in [SRC SELECT] after Radio Timer for AM is selected. (→ 4)

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

RADIO

Default: **XX**

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.
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.
AREA	AREA US: For North/Central/South America, AM/FM intervals: 10 kHz/200 kHz. ; AREA SA: For some South American countries, AM/FM intervals: 10 kHz/50 kHz. ; AREA EU: For any other areas, AM/FM intervals: 9 kHz/50 kHz.
PTY SEARCH*	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, INFORM (information), SPORTS, TALK, ROCK, CLS ROCK (classic rock), ADLT HIT (adult hits), SOFT RCK (softrock), TOP 40, COUNTRY, OLDIES, SOFT, NOSTALGA (nostalgia), JAZZ, CLASSICL (classical), R & B (rhythm and blues), SOFT R&B (soft rhythm and blues), LANGUAGE, REL MUSC (religious music), REL TALK (religious talk), PERSNLTY (personality), PUBLIC, COLLEGE, HABL ESP (Spanish talk), MUSC ESP (Spanish music), HIP HOP, WEATHER

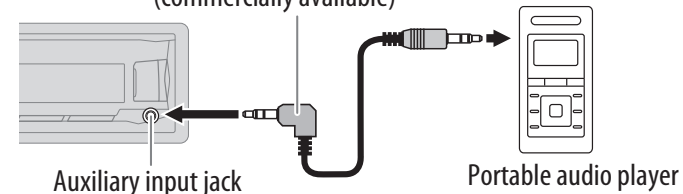
* Only for FM source.

AUX

Use a portable audio player

1 Connect a portable audio player (commercially available).

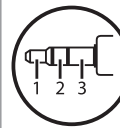
3.5 mm (1/8") stereo mini plug with "L" shaped connector (commercially available)



2 Select [ON] for [AUX] in [SRC SELECT]. (→ 4)

3 Press **SOURCE**-⏻ repeatedly to select AUX.

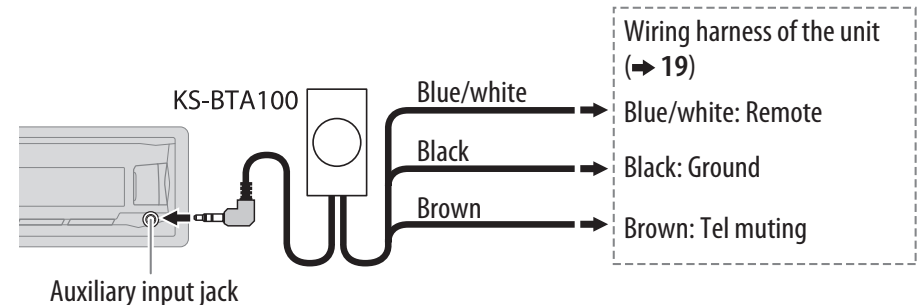
4 Turn on the portable audio player and start playback.



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).



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.

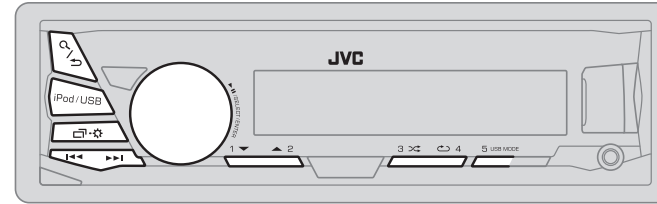
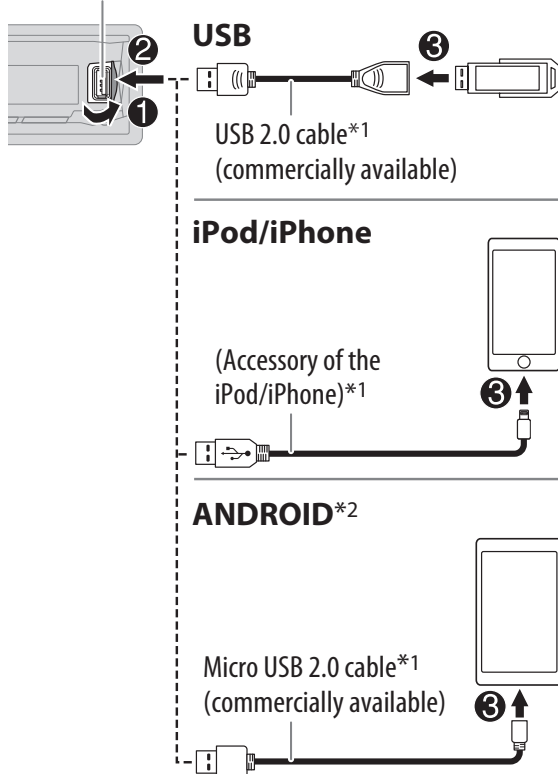
For details, refer to the instruction manual of KS-BTA100.

USB / iPod / ANDROID

Start playback

The source changes automatically and playback starts.

USB input terminal



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

To	On the faceplate	On the remote control
Reverse / Fast-forward* ³	Press and hold ⏮ / ⏭ .	Press and hold ⏮ / ⏭ .
Select a file	Press ⏮ / ⏭ .	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. (→ 13)

*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)

USB / iPod / ANDROID

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

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  / .

Select a file from a folder/list

- 1 Press  / .
- 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  / .
- To cancel, press and hold  / .
- For iPod, applicable only when [HEAD MODE] is selected.
- For ANDROID, applicable only when [AUTO MODE] is selected.

Pandora®

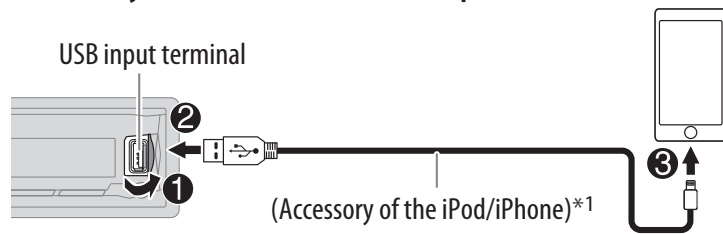
Preparation:

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.




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  .	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 .
- 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 .
- 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 .

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.

iHeartRadio®

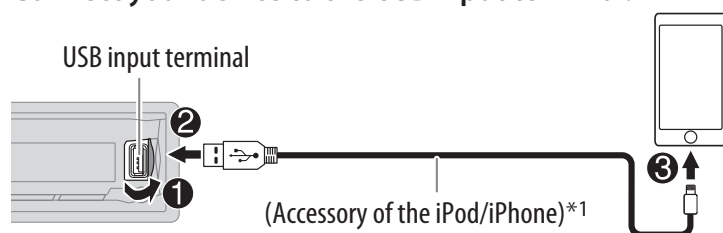
Preparation:

Install the latest version of iHeart Link for JVC application on your device (iPhone/ iPod touch), then create an account and log in to iHeartRadio.

- Select [ON] for [IHEART] in [SRC SELECT]. (→ 4)

Start listening

- 1 Open the iHeart Link application on your device.
- 2 Connect your device to the USB input terminal.



- 3 Press **SOURCE**- repeatedly to select IHEARTRADIO. Broadcast starts automatically

To	On the faceplate	On the remote control
Playback / pause	Press the volume knob.	Press .
Skip a track for custom station	Press .	Press .
Thumbs up or thumbs down for custom station*2	Press 2 / 1 .	Press / .
Create a new/custom station	Press and hold the volume knob.	(Not available)
Add to favorite stations for live station	Press 3 .	(Not available)
Scan for live station	Press 4 .	(Not available)

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

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

Search for a station

- 1 Press / .
- 2 Turn the volume knob to select a category, then press the knob.
- 3 Turn the volume knob to select the desired station, then press the knob. When a city list appears, you can skip cities in alphabetical order.

To cancel, press and hold / .

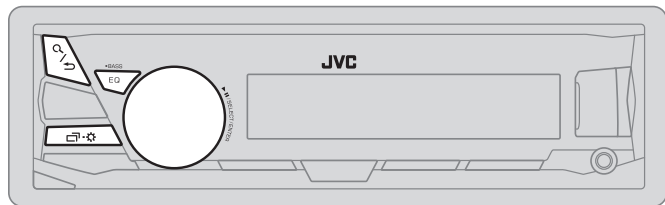
Skip cities by alphabetical order

While a city list appears during search...

- 1 Turn the volume knob quickly to enter character search. You can search through the list quickly according to the first character (A to Z).
- 2 Turn the volume knob or press **2** / **1** to select the character to be searched for.
- 3 Press the volume knob to start searching.

To cancel, press and hold / .

AUDIO SETTINGS



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 **Q/↵**.
- To exit, press **EQ-BASS**.

Other settings

- 1 Press and hold **EQ-BASS**.
- 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 **EQ-BASS** to exit.

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

Default: **XX**

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]. (→ 12)

*2 Displayed only when [SPK/PRE OUT] is set to [SUB.W/SUB.W]. (→ 12)

*3 Displayed only when [SPK/PRE OUT] is set to [REAR/SUB.W] or [SUB.W/SUB.W]. (→ 12)

AUDIO SETTINGS

SUB.W LEVEL *4	SPK-OUT *5	00 to +06 (+03) : Adjusts the output level of the subwoofer connected via speaker lead. (➔ 19)
	PRE-OUT *6	-08 to +08 (00) : Adjusts the output level of the subwoofer connected to the lineout terminals (REAR/SW) through an external amplifier. (➔ 19)
SUB.W *6	ON / 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°) / NORMAL (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 (00) : Adjusts the front and rear speaker output balance.	
BALANCE *7	L06 — R06 (00) : Adjusts the left and right speaker output balance.	
VOL ADJUST	-15 — +06 (00) : 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.) ; HIGH POWER : The maximum volume level is 35.	
D.T.EXP (Digital Track Expander)	ON : 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). ; OFF : 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. (➔ 19)

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. (➔ 19)

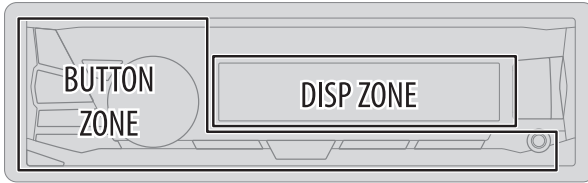
Setting on [SPK/PRE OUT]	Audio signal through rear speaker lead	
	L (left)	R (right)
REAR/REAR	Rear speakers output	Rear speakers output
REAR/SUB.W	Rear speakers output	Rear speakers output
SUB.W/SUB.W	Subwoofer output	(Mute)

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 /↶.

Default: **XX**

DISPLAY	
DIMMER	<p>Dim the display and buttons illumination.</p> <p>OFF: Dimmer is turned off.</p> <p>ON: Dimmer is turned on. Brightness changes to [NIGHT] setting. (→ [BRIGHTNESS])</p> <p>DIMMER TIME: Set the dimmer on and off time.</p> <ol style="list-style-type: none"> 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) <p>AUTO: Dimmer turns on and off automatically when you turn off or on the car headlights.*1</p>
BRIGHTNESS	<p>Set the button, display and USB input terminal brightness for day and night separately.</p> <ol style="list-style-type: none"> 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	<p>ONCE: Scrolls the display information once. ; AUTO: Repeats scrolling at 5-second intervals. ; OFF: Cancels.</p>

*1 The illumination control wire connection is required. (→ 19)

*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)

- 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.
- 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.

About iHeartRadio

- iHeartRadio® is a third-party service, therefore 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 iHeartRadio® functionality cannot be operated from this unit.

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 Broadcast 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)
IHEARTRADIO	Station name → Track title → Track Artist → Day/Clock → (back to the beginning)
AUX	AUX ↔ Day/Clock
BT AUDIO	BT AUDIO ↔ Day/Clock

TROUBLESHOOTING

	Symptom	Remedy
General	Sound cannot be heard.	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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. (➔ 13)
	"READING" keeps flashing.	<ul style="list-style-type: none"> Do not use too many hierarchical levels and folders. Reattach the USB device.
	"CANNOT PLAY" flashes and/or connected device cannot be detected.	<ul style="list-style-type: none"> Check whether the connected device is compatible with this unit and ensure the files are in supported formats. (➔ 13) Reattach the device.
	The iPod/iPhone does not turn on or does not work.	<ul style="list-style-type: none"> 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. (➔ 4)

	Symptom	Remedy
ANDROID	<ul style="list-style-type: none"> Sound cannot be heard during playback. Sound output only from the Android device. 	<ul style="list-style-type: none"> 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. (➔ 14)
	Cannot playback at [AUTO MODE].	<ul style="list-style-type: none"> 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]. (➔ 14)
	"NO DEVICE" or "READING" keeps flashing.	<ul style="list-style-type: none"> 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]. (➔ 14)
	Playback is intermittent or sound skips.	Turn off the power saving mode on the Android device.
	"CANNOT PLAY"	<ul style="list-style-type: none"> Make sure Android device contains playable audio files. Reconnect the Android device. Restart the Android device.
	"ADD ERROR"	New station creation is unsuccessful.
Pandora	"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.
iHeartRadio	Station cannot be selected.	If "Explicit Content" in [Account Settings] is checked in the web version of iHeartRADIO, custom stations become unavailable.
	"CREATE ERR"	Custom station name creation is unsuccessful.
	"SAVE ERROR"	Addition to the favorite category failed.
	"DISCONNECTED"	Check the connection to the device.
	"NO SKIPS"	The skip limit has been reached. Retry later.
	"NO STATIONS"	No stations are found.
	"NOT CONNCTD"	Link to the application is impossible.
	"UPDATE APP"	Make sure you have installed the latest version of the iHeart Link for JVC application on your device.
"PLS LOGIN"	You haven't log in. Log in again.	

	Symptom	Remedy
iHeartRadio	"STATION NOT AVAILABLE"	Broadcast from the station is over.
	"STATION NOT SELECTED"	No station is selected.
	"STREAM ERR"	Broadcast data is interrupted.
	"THUMBS ERR"	Registration of Thumbs Up/Down has failed.
	"TIMED OUT"	The request has resulted in time-out.

SPECIFICATIONS

Tuner	FM	Frequency Range	87.9 MHz — 107.9 MHz (200 kHz step) 87.5 MHz — 108.0 MHz (50 kHz step)
		Channel Space Selection	50 kHz/200 kHz
		Usable Sensitivity (S/N = 26 dB)	8.2 dBf (0.71 μ V/75 Ω)
		Quieting Sensitivity (DIN S/N = 46 dB)	17.2 dBf (2.0 μ V/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	530 kHz — 1 700 kHz (10 kHz step) 531 kHz — 1 611 kHz (9 kHz step)	
	Channel Space Selection	9 kHz/10 kHz	
	Usable Sensitivity (S/N = 20 dB)	29 dB μ (28.2 μ V)	
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 \equiv 1 A	
	D/A Converter	24 Bit	
	Frequency Response (± 1 dB)	20 Hz — 20 kHz	
	Signal-to-Noise Ratio (1 kHz)	105 dB	
	Dynamic Range	88 dB	
	Channel Separation	90 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 k Ω
Audio	Maximum Output Power	50 W \times 4 or 50 W \times 2 + 50 W \times 1 (Subwoofer = 4 Ω)
	Full Bandwidth Power (at less than 1 % THD)	22 W \times 4
	Speaker Impedance	4 Ω — 8 Ω
	Preout Level/Load (USB)	2 500 mV/10 k Ω
	Preout Impedance	\leq 600 Ω
General	Operating Voltage (10.5 V — 16 V allowable)	14.4 V
	Maximum Current Consumption	10 A
	Operating Temperature Range	-10°C — +60°C
	Installation Size (W \times H \times D)	182 mm \times 53 mm \times 107 mm (7-3/16" \times 2-1/8" \times 4-1/4")
	Weight	0.6 kg (1.4 lbs)

Subject to change without notice.

▲ 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.

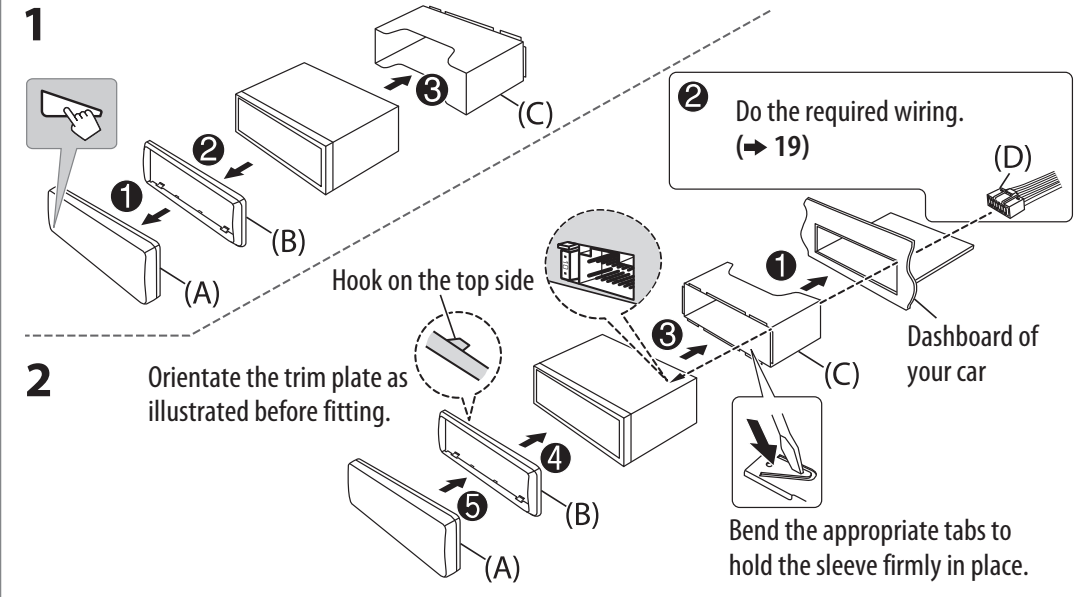
▲ Caution

- 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 \ominus 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. (→ 12)
- Mount the unit at an angle of less than 30°.
- 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

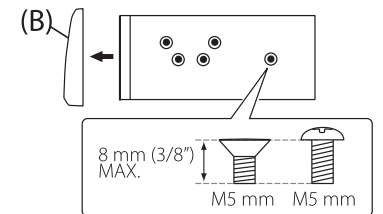
- 1 Remove the key from the ignition switch, then disconnect the \ominus terminal of the car battery.
- 2 Connect the wires properly.
See Wiring connection. (→ 19)
- 3 Install the unit to your car.
See Installing the unit (in-dash mounting).
- 4 Connect the \ominus terminal of the car battery.
- 5 Reset the unit. (→ 3)

Installing the unit (in-dash mounting)

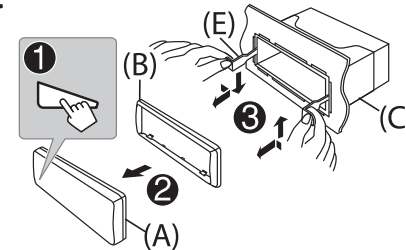


When installing without the mounting sleeve

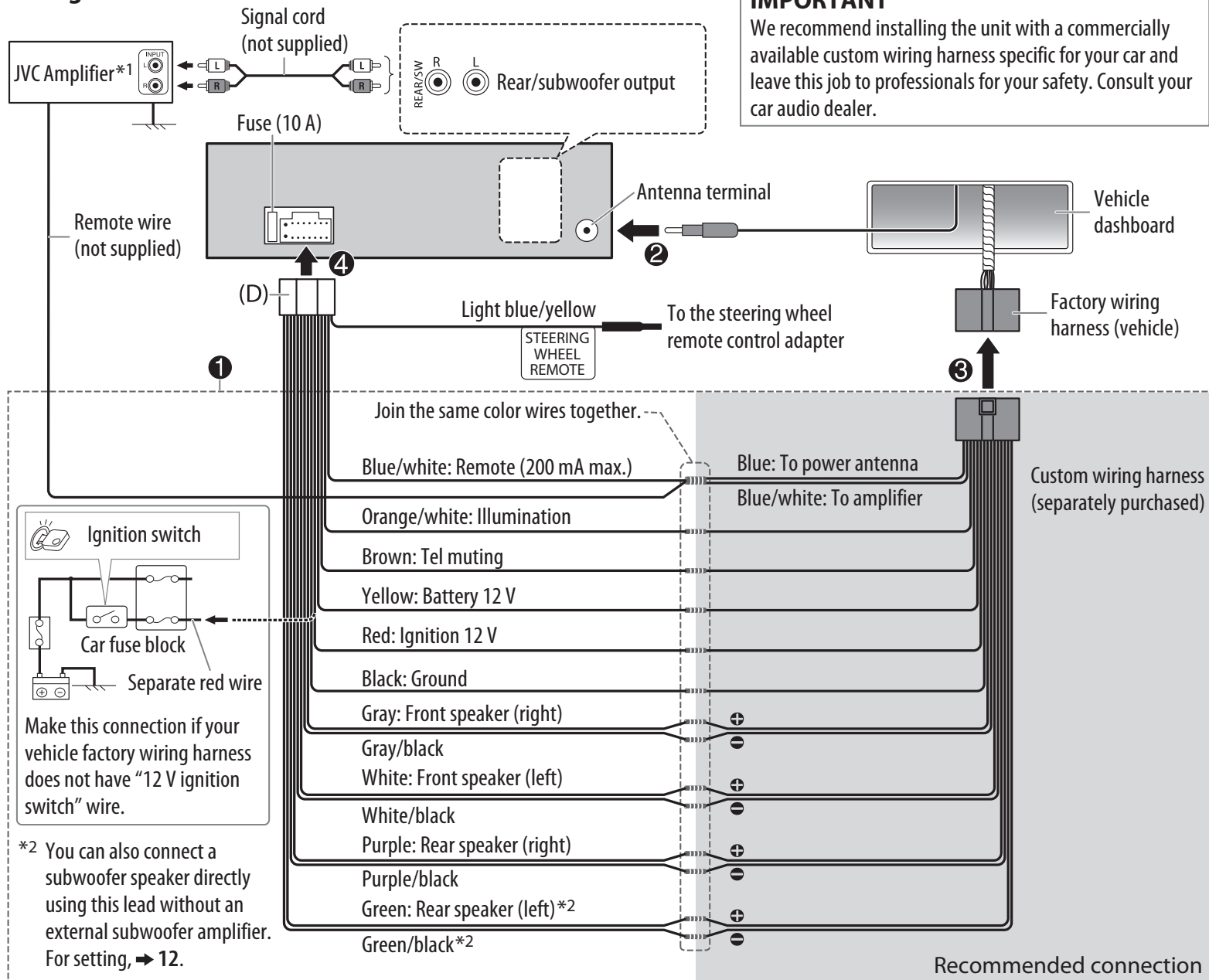
- 1 Remove the mounting sleeve and trim plate from the unit.
 - 2 Align the holes in the unit (on both sides) with the vehicle mounting bracket and secure the unit with screws (commercially available).
- ▲ Use only the specified screws. Using wrong screws might damage the unit.



How to remove the unit



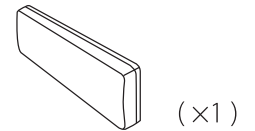
Wiring connection



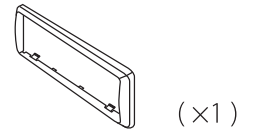
*1 Firmly connect the ground wire of the amplifier to the car's chassis to avoid damaging the unit.

Part list for installation

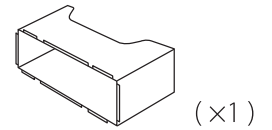
(A) Faceplate



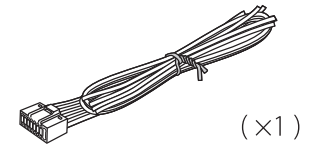
(B) Trim plate



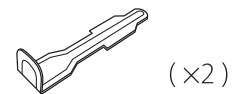
(C) Mounting sleeve



(D) Wiring harness



(E) Extraction key



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.

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libFLAC

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REMOVE THIS LABEL FROM CABLE BEFORE USE.

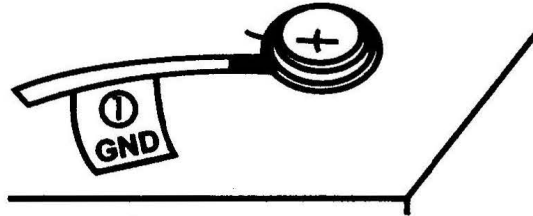


CAUTION CONNECT BLACK WIRE (① GND) TO GROUND FIRST. OTHERWISE, DAMAGE TO YOUR UNIT MAY OCCUR.

INCORRECT CONNECTION CAUSES SERIOUS DAMAGE TO THIS UNIT
PLEASE READ INSTALLATION/CONNECTION MANUAL CAREFULLY.

①

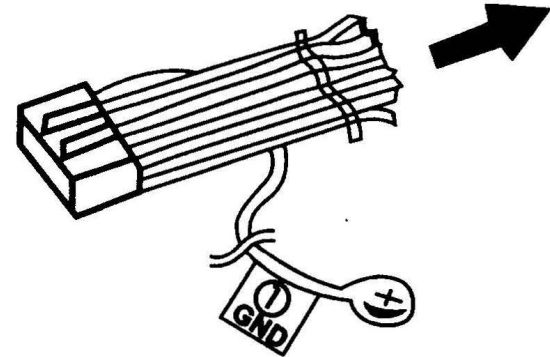
CONNECT GROUND FIRST



METALLIC BODY OR CHASSIS
OF THE CAR

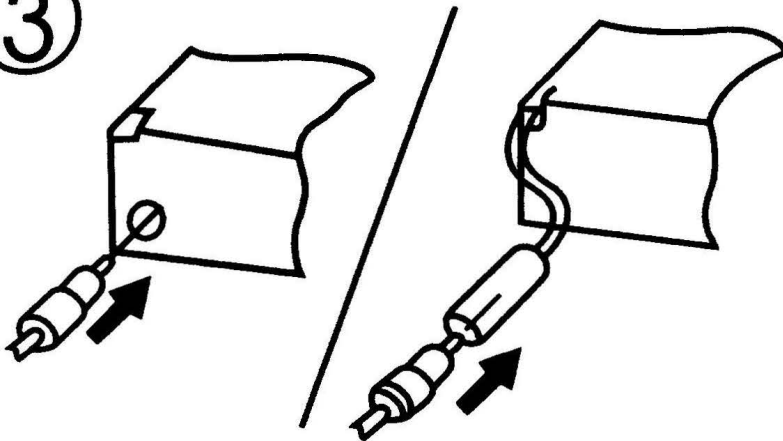
②

CONNECT OTHER WIRES



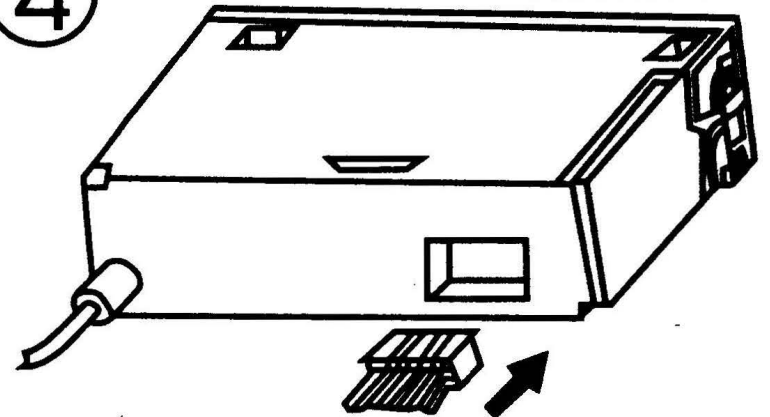
③

CONNECT ANTENNA TERMINAL



④

CONNECT POWER CORD TO
THE UNIT





LIMITED WARRANTY

ONLY FOR PRODUCT PURCHASED IN U.S.A.

JVC/KENWOOD USA Corporation warrants this product and all parts thereof, except as set forth below ONLY TO THE ORIGINAL RETAIL PURCHASER to be FREE FROM DEFECTIVE MATERIALS AND WORKMANSHIP from the date of original purchase for the period shown below. ("The Warranty Period")

PARTS 2 YRS / LABOR 2 YRS : Car audio ARSENAL series

PARTS 1 YR / LABOR 1 YR : All other car audio products

THIS LIMITED WARRANTY IS VALID ONLY IN THE FIFTY (50) UNITED STATES, THE DISTRICT OF COLUMBIA AND IN THE COMMONWEALTH OF PUERTO RICO.

WHAT WE WILL DO:

If this product is found to be defective within the warranty period, JVC will repair or replace defective parts with new or rebuilt equivalents at no charge to the original owner. Such repair and replacement services shall be rendered by JVC during normal business hours at JVC authorized service centers. Parts used for replacement are warranted only for the remainder of the Warranty Period. All products may be brought to a JVC authorized service center on a carry-in basis. Color televisions with a screen size of 37" class or greater qualify for in-home service. In such cases, a technician will come to your home and either repair the TV there or remove and return it if it cannot be repaired in your home.

WHAT YOU MUST DO FOR WARRANTY SERVICE:

Please do not return your product to the retailer. Instead, return your product to the JVC authorized service center nearest you. If shipping the product to the service center, please be sure to package it carefully, preferably in the original packaging, and include a brief description of the problem(s) and a copy of the proof of purchase to verify purchase date.

WHAT IS NOT COVERED:

This limited warranty provided by JVC does not cover:

1. Products which have been subject to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, or if repaired or serviced by anyone other than a service facility authorized by JVC to render such service, or if affixed to any attachment not provided with the products, or if the model or serial number has been altered, tampered with, defaced or removed;
2. Initial installation, installation and removal from cabinets or mounting systems.
3. Operational adjustments covered in the Owner's Manual, normal maintenance, video and audio head cleaning;
4. Damage that occurs in shipment, due to act of God, and cosmetic damage;
5. Signal reception problems and failures due to line power surge;
6. User Removal Memory Devices/Video Pick-up Tubes/CCD Image Sensors are covered for 90 days from the date of purchase;
7. Accessories;
8. Batteries (except that Rechargeable Batteries are covered for 90 days from the date of purchase);
9. Products used for commercial purposes, including, but not limited to rental.
10. Loss of data resultant from malfunction of hard drive or other data storage device;

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For customer use:

Enter below the Model No. and Serial No. which is located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No.: _____

Serial No.: _____

Purchase date: _____

Name of dealer: _____