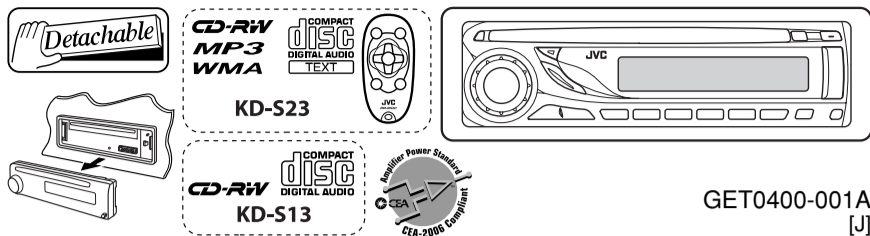


JVC KD-S23/KD-S13

CD RECEIVER: INSTRUCTIONS



Thank you for purchasing a JVC product.

Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

Installation/connection are explained at the last section of this manual (reverse page, indicated with symbol).

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. _____

0706DTSMDTJEIN
EN

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ENGLISH

INFORMATION (For U.S.A.)

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 generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. 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.

Caution

Changes or modifications not approved by JVC could void the user's authority to operate the equipment.

IMPORTANT FOR LASER PRODUCTS

1. CLASS 1 LASER PRODUCT
2. **CAUTION:** Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
3. **CAUTION:** (For U.S.A.) Visible and/or invisible class II laser radiation when open. Do not stare into beam.
(For Canada) Visible and/or invisible class 1M laser radiation when open. Do not view directly with optical instruments.
4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED OUTSIDE THE UNIT.

CAUTION VISIBLE AND/OR INVISIBLE CLASS II LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC60825-1:2001 (EN)	ATTENTION RAYONNEMENT LASER VISIBLE ET/OU INVISIBLE DE CLASSE II LORSQU'EST OUVERT. NE PAS REGARDER DIRECTEMENT AVEC DES INSTRUMENTS OPTIQUES. (FR)	AVISO RADIACION LASER DE CLASE II VISIBLE Y/O INVISIBLE CUANDO ESTA ABIERTO. NO MIRAR DIRECTAMENTE CON INSTRUMENTAL OPTICA. (ES)	VARNING SYNLIG OCH/ELLER OSYNLIG LASERSTRÅLNING KLASS II, NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN MED OPTISKA INSTRUMENT. (SWE)	注意 この装置から 放射される可視 及び不可視の赤 外線レーザー光線 は、クラスIIの レーザー光線が 発生する。 本装置を開け たとき、直射し たり、反射しな いようご注意ください。 (JPN)	CAUTION VISIBLE AND/OR INVISIBLE CLASS II LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM. FEDERAL COMMUNICATIONS COMMISSION (FCC) PART 15 CH 11.103 (EN)
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[European Union only]

MORE ABOUT THIS UNIT

Basic operations

- By pressing SOURCE on the unit, you can also turn on the power. If the source is ready, playback also starts.
- If you turn off the power while listening to a disc, disc play will start from where playback has been stopped previously, next time you turn on the power.
- When no disc is loaded in the unit, you cannot select "DISC" as the playback source.

Tuner operations

- During SSM search...
 - All previously stored stations are erased and stations are stored newly.
 - Received stations are preset in No. 1 (lowest frequency) to No. 6 (highest frequency).
 - When SSM is over, the station stored in No. 1 will be automatically tuned in.

Disc operations

Caution for DualDisc playback

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

General

- KD-S13: This unit has been designed to reproduce CDs and CD-Rs (Recordable)/CD-RWs (Rewritable) in audio CD (CD-DA) formats. KD-S23 can also play back CD Texts and CD-Rs/CD-RWs in MP3/WMA formats.

Playing a CD-R or CD-RW

- Use only "finalized" CD-Rs or CD-RWs.
- This unit can play back multi-session discs; however, unclosed sessions will be skipped while playing.
- Some CD-Rs or CD-RWs may not play back on this unit:
 - Discs are dirty or scratched.
 - Moisture condensation occurs on the lens inside the unit.
 - The pickup lens inside the unit is dirty.
 - CD-R/CD-RW on which the files are written with "Packet Write" method.
 - There are improper recording conditions (missing data, etc.) or media conditions (stain, scratch, warp, etc.).

- CD-RWs may require a longer readout time since the reflectance of CD-RWs is lower than that of regular CDs.

Playing an MP3/WMA disc (for KD-S23)

- This unit can play back MP3/WMA files with the extension code <.mp3> or <.wma> (regardless of the letter case—upper/lower).
- This unit can show the names of albums, artists (performer), and tag (Version 1.0, 1.1, 2.2, 2.3, or 2.4) for MP3 files and for WMA files.
- This unit can display only one-byte characters. No other characters can be correctly displayed.
- This unit can play back MP3/WMA files meeting the conditions below:
 - Bit rate: 8 kbps — 320 kbps
 - Sampling frequency: 48 kHz, 44.1 kHz, 32 kHz (for MPEG-1) 24 kHz, 22.05 kHz, 16 kHz (for MPEG-2)
 - Disc format: ISO 9660 Level 1/Level 2, Romeo, Joliet, Windows long file name
- The maximum number of characters for file/folder names vary among the disc format used (includes 4 extension characters—<.mp3> or <.wma>).
 - ISO 9660 Level 1: up to 12 characters; ISO 9660 Level 2: up to 31 characters; Romeo: up to 128 characters; Joliet: up to 64 characters; Windows long file name: up to 128 characters
- This unit can play back files recorded in VBR (variable bit rate). Files recorded in VBR have a discrepancy in elapsed time display, and do not show the actual elapsed time. Especially, after performing the search function, this difference becomes noticeable.
- This unit can recognize a total of 512 files, of 200 folders, and of 8 hierarchies.
- This unit cannot play back the following files:
 - MP3 files encoded with: MP3i and MP3 PRO format, in an inappropriate format, layer 1/2.
 - WMA files: encoded with lossless, professional, and voice format; not based upon Windows Media® Audio; copy-protected with DRM.
 - Files which have the data such as WAVE, ATRAC3, etc.
- The search function works but search speed is not constant.

For safety...

- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- 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.

Warning

If you need to operate the unit while driving, be sure to look ahead carefully or you may be involved in a traffic accident.

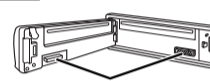
Caution on volume setting

Discs produce very little noise compared with other sources. Lower the volume before playing a disc to avoid damaging the speakers by the sudden increase of the output level.

MAINTENANCE

How to clean the connectors

Wipe the connectors with a cotton swab or cloth moistened with alcohol.



Connector

To keep discs clean

Wipe in a straight line from center of disc to edge. Do not use liquid cleaners, thinners, or benzene.



Moisture condensation

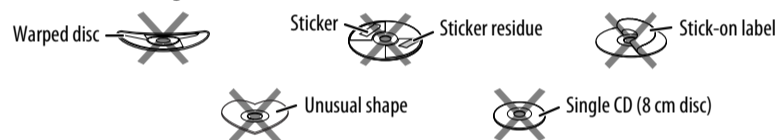
Moisture may condense on the lens inside the unit. Eject the disc and leave the unit turned on for a few hours until the moisture evaporates.

To play new discs

Remove any rough areas from the inner and outer edges of the disc.



Do not use the following discs:



PREPARATIONS

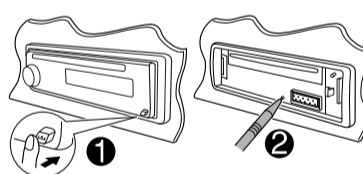
How to reset your unit

Reset the unit after installation is complete.

KD-S23:

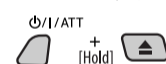


KD-S13:



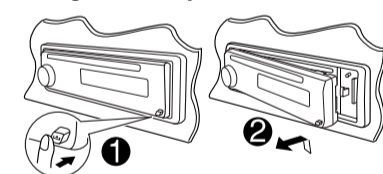
- Your preset adjustments will also be erased.
- KD-S23: If a disc is loaded, it will eject. Be careful not to drop the disc.

How to forcibly eject a disc

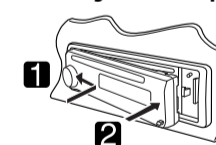


- If this does not work, reset your unit.
- Be careful not to drop the disc when it ejects.

Detaching the control panel



Attaching the control panel



Basic settings

1 Enter PSM menu.

2 Select an item.

3 Set/adjust.

4 Finish

Cancel the display demonstration

DEMO OFF

Deactivate the display demonstration.

Set the clock

CLOCK M

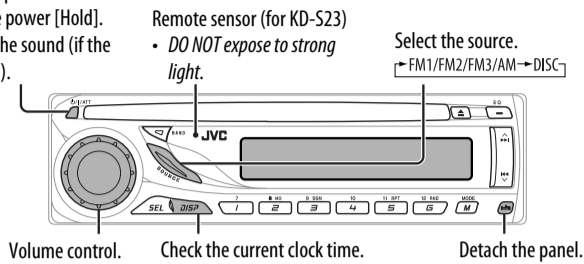
Adjust the hour.

Adjust the minute.

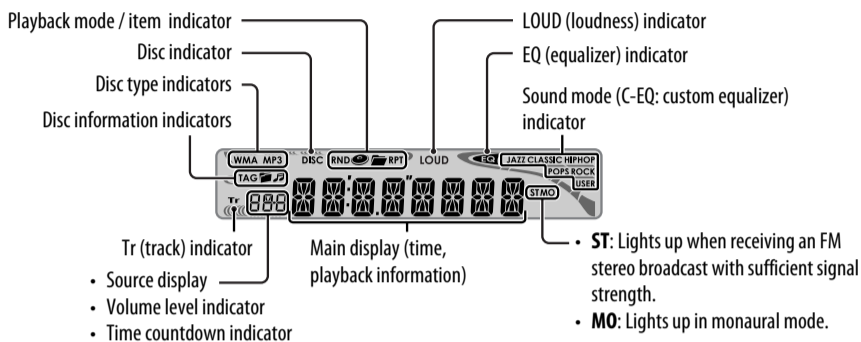
Basic operations

Control panel

- Turn on the power.
- Turn off the power [Hold].
- Attenuate the sound (if the power is on).

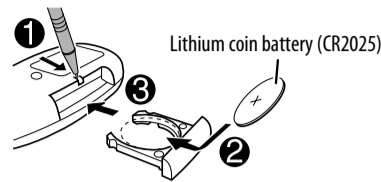


Display window



Remote controller—RM-RK50 (supplied for KD-S23)

Installing battery

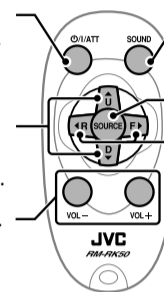


- Warning: To prevent accidents and damage**
- Do not install any battery other than CR2025 or its equivalent.
 - Store out of reach of children.
 - Do not recharge, short, or dismantle.
 - Do not dispose of in fire.
 - Do not carry around with other metallic materials.

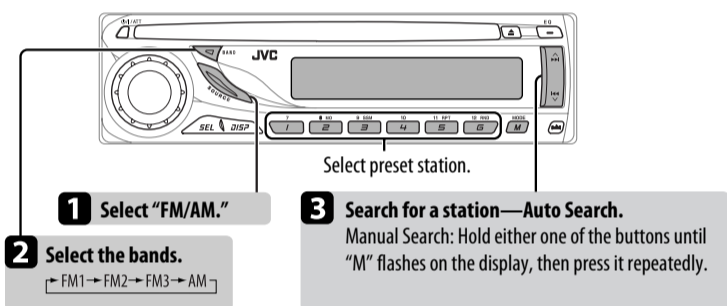
For USA-California Only: This product contains a CR Coin Cell Lithium Battery which contains Perchlorate Material—special handling may apply. See www.dtsc.ca.gov/hazardouswaste/perchlorate

Features

- Turns the power on if pressed briefly or attenuates the sound when power is on.
- Turns the power off if pressed and held.
- Changes the FM/AM bands with ▲ U.
- Changes the preset stations with D ▼.
- Changes the folders of MP3/WMA discs.
- Adjusts the volume level.
- Selects the sound mode (C-EQ: custom equalizer).
- Selects the source.
- Searches for stations if pressed briefly.
- Fast-forwards or reverses the track if pressed and held.
- Changes the tracks of the disc if pressed briefly.



Radio operations



When an FM stereo broadcast is hard to receive



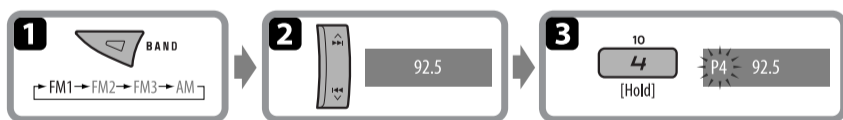
FM station automatic presetting—SSM (Strong-station Sequential Memory)

You can preset six stations for each band.



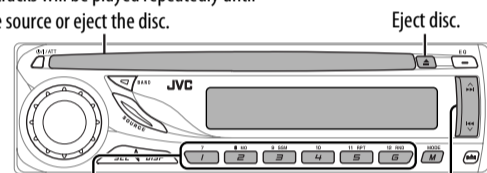
Manual presetting

Example: Storing FM station of 92.5 MHz into preset number 4 of the FM1 band.



Disc operations (MP3/WMA/CD Text discs are playable in KD-S23 only)

Insert disc. All tracks will be played repeatedly until you change the source or eject the disc.



- [Press]: Select track (for CD) or folder* (for MP3/WMA) number (01 – 06).
 - [Hold]: Select track (for CD) or folder* (for MP3/WMA) number (07 – 12).
 - [Press]: Go to the next or previous track.
 - [Hold]: Fast-forwards or reverses the track.
 - MODE M → [Press]: Go to the next or previous folders (for MP3/WMA discs).
- * Folders are required to assigned with 2-digit numbers at the beginning.

Selecting the playback modes

After pressing MODE M, press the following buttons to...

- 11 RPT 5 TRK RPT : Plays the current track repeatedly.
- FLDR RPT* : Plays all tracks of the current folder repeatedly.
- RPT OFF : Cancels.
- 12 RND 6 FLDR RND* : Plays all tracks of the current folder, then tracks of the next folder at random.
- DISC RND : Plays all tracks of the current disc at random.
- RND OFF : Cancels.

* Only for MP3/WMA.

Prohibiting disc ejection

You can lock a disc in the loading slot.



To cancel the prohibition, repeat the same procedure.

Changing the display information

- While playing an audio CD or a CD Text
A → Disc title/performer*¹
B ← Track title*¹
- While playing an MP3 or a WMA disc
A → Album name / performer (folder name*²)
B ← Track title (file name*²)
- A : Clock with the current track number
B : Elapsed playing time with the current track number

*¹ If the current disc is an audio CD, "NO NAME" appears.
*² If an MP3/WMA file does not have tags or "TAG DISP" is set to "TAG OFF," folder name and file name appear.

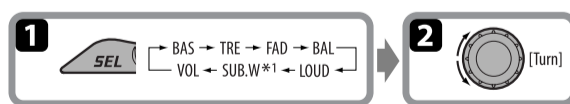
SETTINGS

Sound adjustments



Preset values	BAS (bass)	TRE (treble)	LOUD (loudness)
USER (Flat sound)	00	00	OFF
ROCK (Rock or disco music)	+03	+01	ON
CLASSIC (Classical music)	+01	-02	OFF
POPS (Light music)	+04	+01	OFF
HIP HOP (Funk or rap music)	+02	00	ON
JAZZ (Jazz music)	+02	+03	OFF

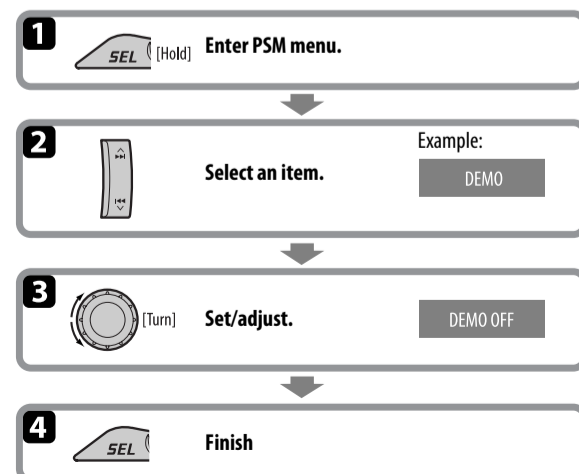
Adjusting the sound



- BAS***² (bass): Adjust the bass. -06 to +06
- TRE***² (treble): Adjust the treble. -06 to +06
- FAD***³ (fader): Adjust the front and rear speaker balance. R06 to F06
- BAL** (balance): Adjust the left and right speaker balance. L06 to R06
- LOUD***² (loudness): Boost low and high frequencies to produce a well-balanced sound at low volume level. LOUD ON or LOUD OFF
- SUB.W** (subwoofer): Adjust the subwoofer output level when a subwoofer is connected. 00 to 08
- VOL** (volume): Adjust the volume. 00 to 30 (or 50)*⁴

*¹ Displayed only when "L/O MODE" is set to "WOOFER."
*² When you adjust the bass, treble, or loudness, the adjustment you have made is stored for the currently selected sound mode (C-EQ) including "USER."
*³ If you are using a two-speaker system, set the fader level to "00."
*⁴ Depending on the amplifier gain control setting.

General settings—PSM



See reverse page →

Indication	Item (__: Initial)	Setting
DEMO	<ul style="list-style-type: none"> DEMO ON DEMO OFF 	<ul style="list-style-type: none"> Display demonstration will be activated automatically if no operation is done for about 20 seconds. Cancels.
CLOCK H (Hour)	1 – 12	: [Initial: 1 (1:00)]
CLOCK M (Minute)	00 – 59	: [Initial: 00 (1:00)]
DIMMER *1	<ul style="list-style-type: none"> ON OFF 	<ul style="list-style-type: none"> Dims the display illumination. Cancels.
SCROLL *1	<ul style="list-style-type: none"> ONCE AUTO OFF 	<ul style="list-style-type: none"> Scrolls the disc information once. Repeats scrolling (at 5-second intervals). Cancels. Pressing DISP for more than one second can scroll the display regardless of the setting.
WOOFER *1, *2	<ul style="list-style-type: none"> LOW MID HIGH 	<ul style="list-style-type: none"> Frequencies lower than 90 Hz are sent to the subwoofer. Frequencies lower than 135 Hz are sent to the subwoofer. Frequencies lower than 180 Hz are sent to the subwoofer.
L/O MODE	<ul style="list-style-type: none"> REAR WOOFER 	<ul style="list-style-type: none"> Select if the REAR LINE OUT terminals are used for connecting the speakers (through an external amplifier). Select if the REAR LINE OUT terminals are used for connecting a subwoofer.
TAG DISP *1	<ul style="list-style-type: none"> TAG ON TAG OFF 	<ul style="list-style-type: none"> Shows the tag while playing MP3/WMA tracks. Cancels.
AMP GAIN *3	<ul style="list-style-type: none"> LOW PWR HIGH PWR 	<ul style="list-style-type: none"> VOL 00 – VOL 30 (Select if the maximum power of each speaker is less than 45 W to prevent the speaker from being damaged.) VOL 00 – VOL 50
AREA	<ul style="list-style-type: none"> AREA US AREA SA AREA EU 	<ul style="list-style-type: none"> When using in North/Central/South America. AM/FM intervals are set to 10 kHz/200 kHz. When using in South American countries where FM interval is 100 kHz. AM interval is set to 10 kHz. When using in any other areas. AM/FM intervals are set to 9 kHz/50 kHz (100 kHz during auto search).

*1 For KD-S23.

*2 Displayed only when "L/O MODE" is set to "WOOFER."

*3 The volume level automatically changes to "VOL 30" if you change to "LOW PWR" while the volume level is set higher than "VOL 30."

TROUBLESHOOTING

	Symptoms	Remedies/Causes
General	• Sound cannot be heard from the speakers.	<ul style="list-style-type: none"> Adjust the volume to the optimum level. Check the cords and connections.
	• The buttons on the unit do not work as you intended.	If you press M MODE, some buttons work differently from its original function. Wait for 5 seconds or press M MODE again.
	• This unit does not work at all.	Reset the unit.
FM/AM	• SSM automatic presetting does not work.	Store stations manually.
	• Static noise while listening to the radio.	Connect the antenna firmly.
Disc playback	• Disc ejects.	Insert the disc correctly.
	• CD-R/CD-RW cannot be played back.	<ul style="list-style-type: none"> Insert a finalized CD-R/CD-RW. Finalize the CD-R/CD-RW with the component which you used for recording.
	• Tracks on the CD-R/CD-RW cannot be skipped.	<ul style="list-style-type: none"> Unlock the disc. Eject the disc forcibly.
MP3/WMA playback (for KD-S23 only)	• Disc can be neither played back nor ejected.	<ul style="list-style-type: none"> Stop playback while driving on rough roads. Change the disc. Check the cords and connections.
	• Disc sound is sometimes interrupted.	<ul style="list-style-type: none"> Stop playback while driving on rough roads. Change the disc. Check the cords and connections.
	• "NO DISC" appears on the display.	Insert a playable disc into the loading slot.
MP3/WMA playback (for KD-S23 only)	• Disc cannot be played back.	<ul style="list-style-type: none"> Use a disc with MP3/WMA tracks recorded in the format compliant with ISO 9660 Level 1, Level 2, Romeo, or Joliet. Add the extension code <.mp3> or <.wma> to the file names.
	• Noise is generated.	Skip to another track or change the disc. (Do not add the extension code <.mp3> or <.wma> to non-MP3 or WMA tracks.)
	• A longer readout time is required ("CHECK" keeps flashing on the display).	Do not use too many hierarchies and folders.
	• Tracks do not play back in the order you have intended them to play.	Playback order is determined when the files are recorded.
	• Elapsed playing time is not correct.	This sometimes occurs during play. This is caused by how the tracks are recorded on the disc.
	• "NO FILES" appears on the display.	Insert a disc that contains MP3/WMA tracks.
	• Correct characters are not displayed (e.g. album name).	This unit can only display alphabets (upper case), numbers, and a limited number of symbols.

SPECIFICATIONS

Audio amplifier section

Power Output:	17 W RMS × 4 Channels at 4 Ω and ≤ 1% THD+N
Signal to Noise Ratio:	80 dBA (reference: 1 W into 4 Ω)
Load Impedance:	4 Ω (4 Ω to 8 Ω allowance)
Tone Control Range:	Bass: ±10 dB at 100 Hz Treble: ±10 dB at 10 kHz
Frequency Response:	40 Hz to 20 000 Hz
Line-Out Level/Impedance:	KD-S23: 2.5 V/20 kΩ load (full scale) KD-S13: 2.0 V/20 kΩ load (full scale)
Output Impedance:	1 kΩ
Subwoofer-Out Level/Impedance:	2.0 V/20 kΩ load (full scale)



Tuner section

Frequency Range:	FM: 87.5 MHz to 107.9 MHz (with channel interval set to 100 kHz or 200 kHz) 87.5 MHz to 108.0 MHz (with channel interval set to 50 kHz)
AM:	530 kHz to 1 710 kHz (with channel interval set to 10 kHz) 531 kHz to 1 602 kHz (with channel interval set to 9 kHz)

[FM Tuner]

Usable Sensitivity:	11.3 dBf (1.0 μV/75 Ω)
50 dB Quiet Sensitivity:	16.3 dBf (1.8 μV/75 Ω)
Alternate Channel Selectivity (400 kHz):	65 dB
Frequency Response:	40 Hz to 15 000 Hz
Stereo Separation:	35 dB

[AM Tuner]

Sensitivity:	20 μV
Selectivity:	35 dB

CD player section

Type:	Compact disc player
Signal Detection System:	Non-contact optical pickup (semiconductor laser)
Number of channels:	2 channels (stereo)
Frequency Response:	5 Hz to 20 000 Hz
Dynamic Range:	96 dB
Signal-to-Noise Ratio:	98 dB
Wow and Flutter:	Less than measurable limit
For KD-S23:	
MP3 Decoding Format:	MPEG1/2 Audio Layer 3 Max. Bit Rate: 320 kbps
WMA (Windows Media® Audio) Decoding Format:	Max. Bit Rate: 192 kbps

- Microsoft and Windows Media are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

General

Power Requirement:	Operating Voltage: DC 14.4 V (11 V to 16 V allowance)
Grounding System:	Negative ground
Allowable Operating Temperature:	0°C to +40°C (32°F to 104°F)
Dimensions (W × H × D):	
Installation Size (approx.):	182 mm × 52 mm × 150 mm (7-3/16" × 2-1/16" × 5-15/16")
Panel Size (approx.):	188 mm × 58 mm × 11 mm (7-7/16" × 2-5/16" × 7/16")
Mass (approx.):	1.2 kg (2.6 lbs) (excluding accessories)

Design and specifications are subject to change without notice.

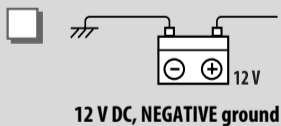
If a kit is necessary for your car, consult your telephone directory for the nearest car audio speciality shop.

PREPARATIONS

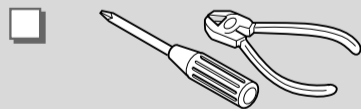
You need the installation kits which corresponds to your car.

- Mark all the check boxes (☑) to make sure you have follow the instructions and the listed parts.

Check the battery system in your car



Prepare this before installation



TROUBLESHOOTING

• The fuse blows.

- * Are the red and black leads connected correctly?

• Power cannot be turned on.

- * Is the yellow lead connected?

• No sound from the speakers.

- * Is the speaker output lead short-circuited?

• Sound is distorted.

- * Is the speaker output lead grounded?
- * Are the "-" terminals of L and R speakers grounded in common?

• Noise interfere with sounds.

- * Is the rear ground terminal connected to the car's chassis using shorter and thicker cords?

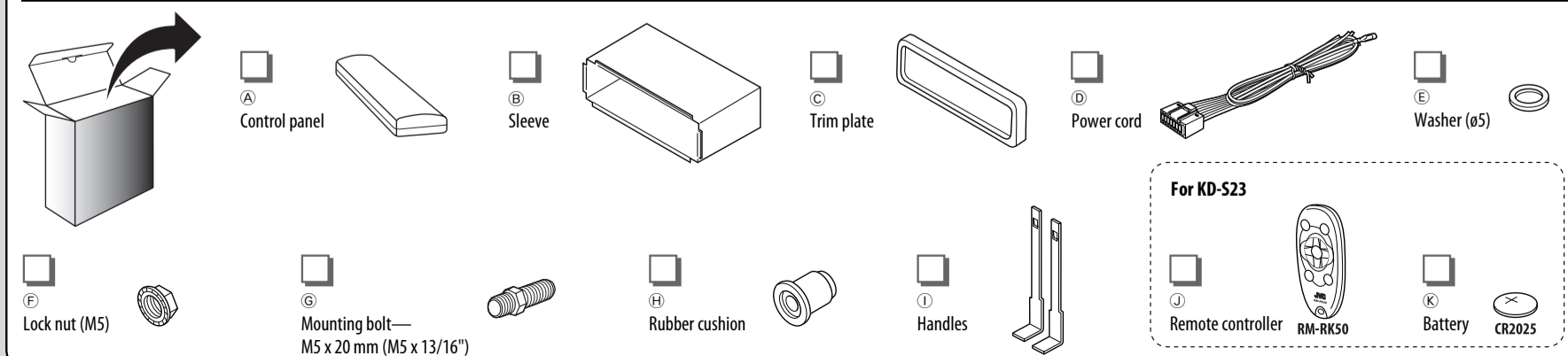
• This unit becomes hot.

- * Is the speaker output lead grounded?
- * Are the "-" terminals of L and R speakers grounded in common?

• This unit does not work at all.

- * Have you reset your unit?

Parts list for installation and connection

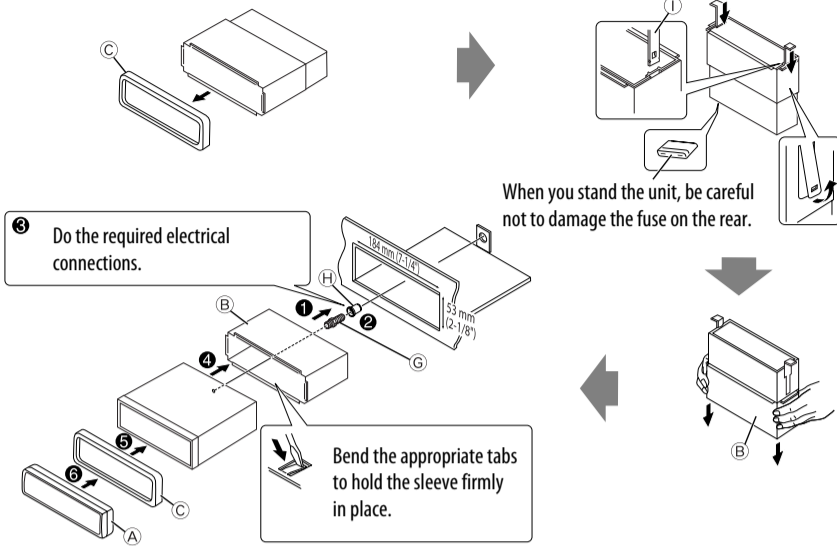


INSTALLATION



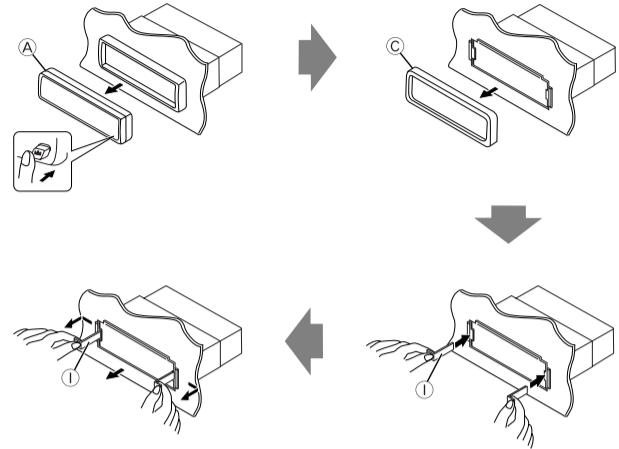
☐ If you are not sure how to install this unit correctly, consult your JVC car audio dealer.

In dash-mounting

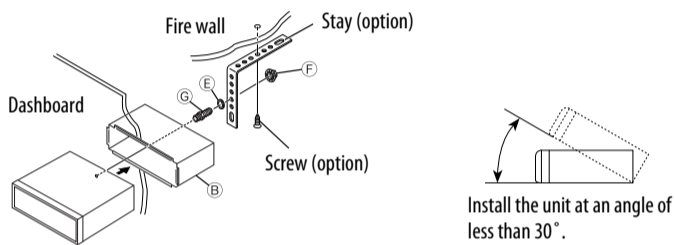


Removing the unit

Before removing the unit, release the rear section.



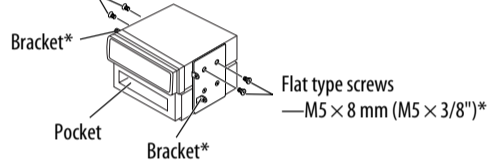
When using the optional stay



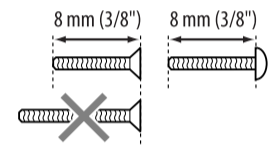
When installing the unit without using the sleeve

In a Toyota car for example, first remove the car radio and install the unit in its place.

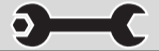
Flat type screws
—M5 × 8 mm (M5 × 3/8")*



* Not supplied for this unit.



ELECTRICAL CONNECTIONS

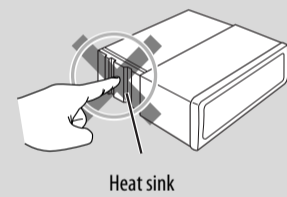
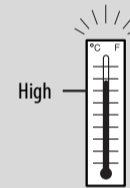


☐ Make sure to disconnect the battery's negative terminal.

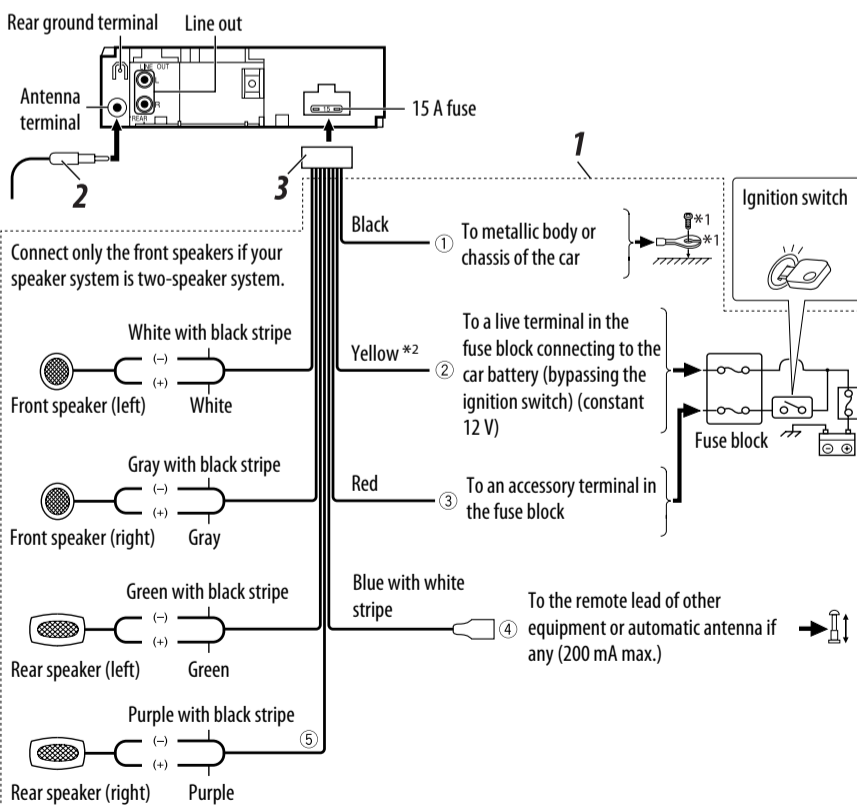
• Be sure to ground this unit to the car's chassis again after installation.

Note:

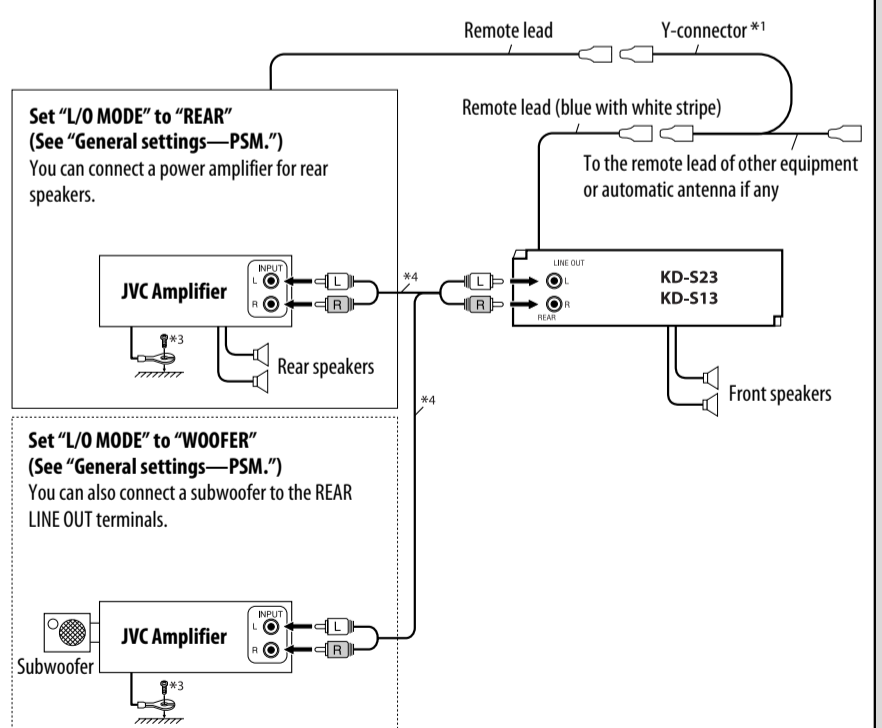
It is recommended to connect to the speakers with maximum power of more than 45 W (both at the rear and at the front, with an impedance of 4 Ω to 8 Ω). If the maximum power is less than 45 W, change "AMP GAIN" setting to prevent the speakers from being damaged (see "General settings—PSM").



Typical connections



Connecting the external amplifier or subwoofer



*1 Not supplied for this unit.

*2 Before checking the operation of this unit prior to installation, this lead must be connected, otherwise power cannot be turned on.

*3 Firmly attach the ground wire to the metallic body or to the chassis of the car—to the place uncoated with paint (if coated with paint, remove the paint before attaching the wire). Failure to do so may cause damage to the unit.

*4 Signal cord (not supplied for this unit)

PRECAUTIONS on power supply and speaker connections

