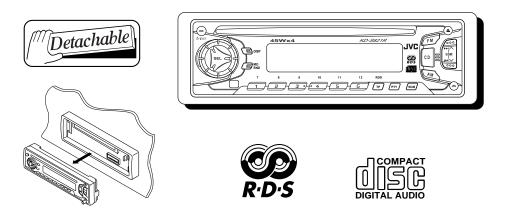




**CD RECEIVER CD-RECEIVER RECEPTEUR CD CD-RECEIVER** 

# **KD-S821**R



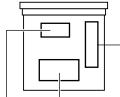
For installation and connections, refer to the separate manual. Für den Einbau und die Anschlüsse siehe das eigenständige Handbuch. Pour l'installation et les raccordements, se référer au manuel séparé. Bijzonderheden over de installatie en aansluiting van het apparaat vindt u in de desbetreffende handleiding.

# **INSTRUCTIONS**

BEDIENUNGSANLEITUNG MANUEL D'INSTRUCTIONS GEBRUIKSAANWIJZING

# Position And Reproduction Of Labels

Bottom panel of the main unit



	CAUTION: Invisible laser	1
	radiation when open and	I
	interlock failed or defeated.	
_	AVOID DIRECT EXPOSURE	I
	TO BEAM. (e)	I

			VARO: Avattaessa ja suo-
			jalukitus ohitettaessa olet
d or defeated.	sikkerhedsafbrydere er ude	är öppnadoch spärren är	alttiina näkymättömälle
EXPOSURE			lasersäteilylle. Älä katso
(e)	telse for stråling. (d)	strälen. (s)	säteeseen. (f)

### IMPORTANT FOR LASER PRODUCTS

Name/Rating plate



#### Caution:

This product contains a laser component of higher laser class than Class 1.

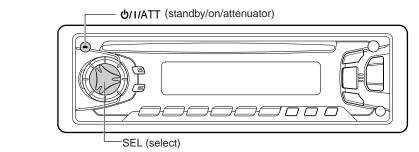
#### Precautions: 1.CLASS 1 LASER PRODUCT

- 2. CAUTION: Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
- 3. **CAUTION**: Do not open the top cover. There are no user-serviceable parts inside. Leave all servicing to qualified service personnel.
- 4. CAUTION: This CD player uses invisible laser radiation and is equipped with safety switches to prevent radiation emission when unloading CDs. It is dangerous to defeat the safety switches.
- 5. **CAUTION**: Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

### How to reset your unit

Press and hold both the SEL (select) and **b**/I/ATT (standby/on/attenuator) buttons at the same time for several seconds.

This will reset the built-in microcomputer.



Notes:

- Your preset adjustments such as preset channels or sound adjustments will also be erased.
- If a CD is in the unit, it will eject when you reset the unit. Be careful not to drop the CD.

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.

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Note:

For security reasons, a numbered ID card is provided with this unit, and the same ID number is imprinted on the unit's chassis. Keep the card in a safe place, as it will help the authorities to identify your unit if stolen.

#### **BEFORE USE**

#### \*For safety....

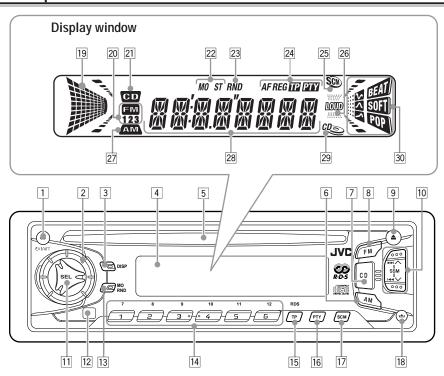
- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- Stop the car before performing any complicated operations.

#### \* 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.

# LOCATION OF THE BUTTONS

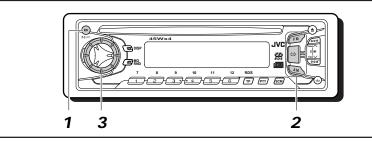
# **Control panel**



- 1 **ウ/I/ATT** (standby/on/attenuator) button
- 2 Control dial
- 3 DISP (display) button
- 4 Display window
- 5 Loading slot
- 6 AM button
- 7 CD button
- 8 FM button
- 9 ▲ (eject) button
- - Also functions as SSM buttons when pressed together.
- 11 SEL (select) button
- 12 Remote sensor
- 13 MO (monaural) button RND (random) button
- 14 Number buttons
- 15 TP (traffic programme) button RDS (radio data system) button
- 16 PTY (programme type) button
- $\fbox{17}$  SCM (sound control memory) button
- 18 (control panel release) button

### Display window

- IgVolume (or audio) level indicatorEqualization pattern indicator
- 20 FM band indicator (FM1, FM2, FM3)
- 21 CD source indicator
- 22 Tuner reception indicators MO (monaural), ST (stereo)
- 23 RND (random) indicator
- 24 RDS (radio data system) indicators AF, REG, TP, PTY
- 25 SCM (sound control memory) indicator
- 26 LOUD (loudness) indicator
- 27 AM band indicator
- 28 Main display
- 29 CD-in indicator
- 30 Sound mode indicators BEAT, SOFT, POP



# Turning on the power

### **1** Turn on the power.



### Note on One-Touch Operation:

When you select a source in step 2 below, the power automatically comes on. You do not have to press this button to turn on the power.

### **2** Select the source.



To operate the tuner (FM or AM), see pages 6 – 15. To operate the CD, see pages 16 – 17.

1/11

### **3** Adjust the volume.



- To increase the volume.

To decrease the volume.

# 4 Adjust the sound as you want. (See pages 18 – 20.)

### To drop the volume in a moment

Press **O**/I/ATT briefly while listening to any source. "ATT" starts flashing on the display, and the volume level will drop in a moment. To resume the previous volume level, press the button briefly again.

• If you turn the control dial clockwise, you can also restore the sound.

### To turn off the power

Press and hold  $\psi/I/ATT$  for more than one second.

### Note:

When you use this unit for the first time, set the built-in clock correctly, see page 21.

### CAUTION on Volume Setting:

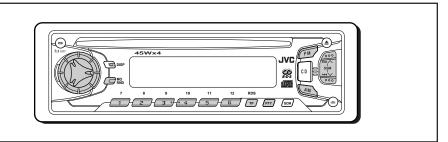
CDs produce very little noise compared with other sources. If the volume level is adjusted for the tuner, for example, the speakers may be damaged by the sudden increase in the output level. Therefore, lower the volume before playing a disc and adjust it as required during playback.





# **RADIO BASIC OPERATIONS**

1



# Listening to the radio

You can use either automatic searching or manual searching to tune in to a particular station.

### Searching a station automatically: Auto search

Select the band (FM1 - 3, AM).

**2** Start searching a station.



To search stations of higher frequencies.

To search stations of lower frequencies.

When a station is received, searching stops.

To stop searching before a station is received, press the same button you have pressed for searching.

Selected band appears.



Audio (see page 23) or volume level indicator.

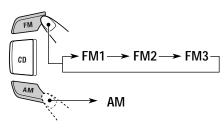
#### Note:

*This receiver has three FM bands (FM1, FM2, FM3). You can use any one of them to listen to an FM broadcast.* 



### Searching a station manually: Manual search

**1** Select the band (FM1 – 3, AM).



#### Note:

*This receiver has three FM bands (FM1, FM2, FM3). You can use any one of them to listen to an FM broadcast.* 

2 Press and hold ►► A or I ◄◄ ➤ until "M (manual)" starts flashing on the display.





Selected band appears.

**3** Tune in to a station you want while "M" is flashing.



To tune in to stations of higher frequencies.

To tune in to stations of lower frequencies.

- If you release your finger from the button, the manual mode will automatically turn off after 5 seconds.
- If you hold down the button, the frequency keeps changing (in 50 kHz intervals for FM and 9 kHz intervals for AM – MW/LW) until you release the button.

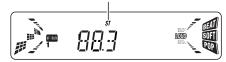
# When an FM stereo broadcast is hard to receive:

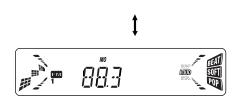
Press MO RND (monaural/random) while listening to an FM stereo broadcast.



Each time you press the button, the MO indicator lights up and goes off alternately.

Lights up when receiving an FM broadcast in stereo.





When the MO indicator is lit on the display, the sound you hear becomes monaural but the reception will be improved (the ST indicator goes off).



# Storing stations in memory

You can use one of the following two methods to store broadcasting stations in memory.

- Automatic preset of FM stations: SSM (Strongstation Sequential Memory)
- Manual preset of both FM and AM stations

### FM station automatic preset: SSM

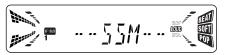
You can preset 6 local FM stations in each FM band (FM1, FM2 and FM3).

1 Select the FM band (FM1 – 3) you want to store FM stations into.



**2** Press and hold both buttons for more than 2 seconds.





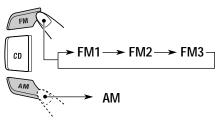
"SSM" appears, then disappears when automatic preset is over.

Local FM stations with the strongest signals are searched and stored automatically in the band number you have selected (FM1, FM2 or FM3). These stations are preset in the number buttons — No.1 (lowest frequency) to No.6 (highest frequency). When automatic preset is over, the station stored in number button 1 will be automatically tuned in.

### Manual preset

You can preset up to 6 stations in each band (FM1, FM2, FM3 and AM) manually.

- Ex.: Storing an FM station of 88.3 MHz into the preset number 1 of the FM1 band
- Select the band (FM1 3, AM) you want to store stations into (in this example, FM1).



**2** Tune in to a station (in this example of 88.3 MHz).



To tune in to stations of higher frequencies.

To tune in to stations of lower frequencies.



- **3** Press and hold the number button (in this example, 1) for more than 2 seconds.
  - Ŕ



"P1" flashes for a few seconds.

# 4 Repeat the above procedure to store other stations into other preset numbers.

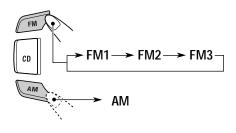
Notes:

- A previously preset station is erased when a new station is stored in the same preset number.
- Preset stations are erased when the power supply to the memory circuit is interrupted (for example, during battery replacement). If this occurs, preset the stations again.

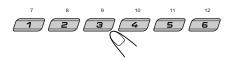
# Tuning in to a preset station

You can easily tune in to a preset station. Remember that you must store stations first. If you have not stored them yet, see "Storing stations in memory" on page 8.

**1** Select the band (FM1 – 3, AM).



2 Select the number (1 – 6) for the preset station you want.







# **RDS OPERATIONS**

# What you can do with RDS

RDS (Radio Data System) allows FM stations to send an additional signal along with their regular programme signals. For example, the stations send their station names, as well as information about what type of programme they broadcast, such as sports or music, etc.

Another advantage of RDS function is called "Enhanced Other Networks." By using the Enhanced Other Networks data sent from a station, you can tune in to a different station of a different network broadcasting your favorite programme or traffic announcement while listening to another programme or to another source such as CD.

By receiving the RDS data, this unit can do the following:

- Tracing the same programme automatically (Network-Tracking Reception)
- Standby Reception of TA (Traffic Announcement) or your favorite programme
- PTY (Programme Type) search
- Programme search
- And some other functions

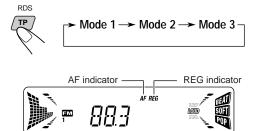
### <u>Tracing the same programme</u> <u>automatically (Network-Tracking</u> <u>Reception)</u>

When driving in an area where FM reception is not good, the tuner built in this unit automatically tunes in to another RDS station, broadcasting the same programme with stronger signals. So, you can continue to listen to the same programme in its finest reception, no matter where you drive. (See the illustration on the next page.)

Two types of the RDS data are used to make Network-Tracking Reception work correctly — PI (Programme Identification) and AF (Alternative Frequency).

Without receiving these data correctly from the RDS station you are listening to, Network-Tracking Reception will not operate.

**To use Network-Tracking Reception,** press and hold TP RDS (Traffic Programme/Radio Data System) for more than 1 second. Each time you press and hold the button, Network-Tracking Reception modes change as follows:



### Mode 1

The AF indicator lights up but the REG indicator does not.

Network-Tracking Reception is activated with Regionalization set to "off."

Switches to another station within the same network when the receiving signals from the current station become weak.

• In this mode, the programme may differ from the one currently received.

#### Mode 2

Both the AF indicator and the REG indicator light up.

Network-Tracking Reception is activated with Regionalization set to "on."

Switches to another station, within the same network, broadcasting the same programme when the receiving signals from the current station become weak.

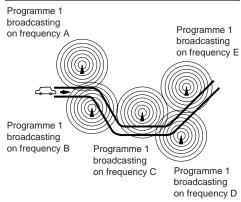
### Mode 3

Neither the AF indicator nor the REG indicator lights up.

Network-Tracking Reception is deactivated.



The same programme can be received on different frequencies.



### Using Standby Reception

Standby Reception allows the unit to switch temporarily to your favorite programme (PTY: Programme Type) and Traffic Announcement (TA) from the current source (another FM station or CD).

• Standby Reception will not work if you are listening to an AM station.

### TA Standby Reception



When you press TP RDS while listening to an FM station, the TP indicator is lit during reception of a TP (Traffic Programme) station and the TA standby mode is engaged.

- When the station being received is not a TP station, the TP indicator flashes. Press ►► ∧ or I ◄ ↓ to engage the TA standby mode. "SEARCH" appears on the display, and TP station search starts. When a TP station is tuned in, the TP indicator is lit.
- If you are listening to a CD and wish to listen to a TP station, press TP RDS to enter the TA standby mode. (The TP indicator lights up.)

If a traffic programme starts broadcasting while the TA standby mode is active, "TRAFFIC" appears and the playback source changes to the FM band. The volume increases to the preset TA volume level (see page 14) and the traffic programme can be heard.

To deactivate the TA standby mode, press TP RDS again.

### **PTY Standby Reception**



When you press PTY while listening to an FM station, the PTY indicator is lit during reception of a PTY station and the PTY standby mode is engaged. The selected PTY name stored on page 12 flashes for 5 seconds.

- When the station being received is not a PTY station, the PTY indicator flashes. Press ►► A or I ◄ ▼ to engage the PTY standby mode. "SEARCH" appears on the display, and PTY station search starts. When a PTY station is tuned in, the PTY indicator is lit.
- If you are listening to a CD and wish to listen to a selected PTY broadcast, press PTY to enter the PTY standby mode. (The PTY indicator lights up.)

If the selected PTY programme starts broadcasting while the PTY standby mode is active, the selected PTY name appears and the playback source changes to the FM band. The selected PTY programme can then be heard.

To deactivate the PTY standby mode, press PTY again.



# Selecting your favorite programme for PTY Standby Reception

You can select your favorite programme for PTY Standby Reception to store in memory.

When shipped from the factory, "NEWS" is stored as the programme type for PTY Standby Reception.

1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display. (PSM: see page 22.)



**2** Select "PTY STBY (standby)" if not shown on the display.



**3** Select one of twenty-nine PTY codes. (See page 15.)



Selected code name appears on the display and is stored into memory.

**4** Finish the setting.



# Searching your favorite programme

You can search one of your 6 favorite programme types stored in memory.

When shipped from the factory, the following 6 programme types have been stored in the number buttons (1 to 6).

To store your favorite programme types, see below.

To search your favorite programme type, see page 13.

1	2	3
POP M	ROCK M	EASY M
4	5	6
CLASSICS	AFFAIRS	VARIED

To store your favorite programme types

 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display. (PSM: see page 22.)



**2** Select "PTY SRCH (search)" if not shown on the display.



**3** Select one of twenty-nine PTY codes. (See page 15.)

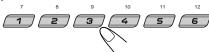


Selected code name appears on the display.

 If the code already stored in memory is selected, it will flash on the display.



4 Press and hold the number button for more than 2 seconds to store the PTY code selected into the preset number you want.



The selected code name will flash on the display.

**5** Finish the setting.

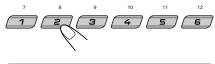


To search your favorite programme type

**1** Press and hold PTY (programme type) for more than 1 second while listening to an FM station.

The last selected PTY code appears.

2 Select one of the PTY codes stored in the preset number buttons (1 to 6).





Ex.: When "ROCK M" is stored in preset number button 2

PTY search for your favorite programme starts after 5 seconds.

- If there is a station broadcasting a programme of the same PTY code as you selected, that station is tuned in.
- If there is no station broadcasting a programme of the same PTY code as you selected, the station will not change.

#### Note:

In some areas, the PTY search will not work correctly.

# Other convenient RDS functions and adjustments

# Automatic selection of the station when using the number buttons

Usually when you press the number button, the preset station is tuned in.

However, when the preset station is an RDS station, something different will happen. If the signals from that preset station are not sufficient for good reception, this unit, using the AF data, tunes in to another frequency broadcasting the same programme as the original preset station is broadcasting. (Programme search)

• The unit takes some time to tune in to another station using Programme search.

To activate programme search, follow the procedure below.

- See also "Changing the general settings (PSM)" on page 21.
- 1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
- 2 Press ►►I ∧ or I◄◀ ∨ to select "P(Programme)-SEARCH."
- **3** Turn the control dial clockwise to select "ON." Now programme search is activated.
- **4** Press SEL (select) to finish the setting.

**To cancel programme search,** repeat the same procedure and select "OFF" in step 3 by turning the control dial counterclockwise.



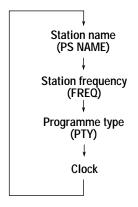
# Changing the display mode while listening to an FM station

You can change the initial indication on the display to station name (PS NAME), station frequency (FREQ) or clock time (CLOCK) while listening to an FM RDS station.

- See also "Changing the general settings (PSM)" on page 21.
- **1** Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
- 2 Press ►►I ∧ or I ◄ ∨ to select "DISPMODE (display mode)."
- **3** Turn the control dial to set to the desired indication ("PS NAME", "FREQ" or "CLOCK").
- 4 Press SEL (select) to finish the setting.

#### Note:

By pressing DISP (display), you can change the display while listening to an FM RDS station only. Each time you press the button, the following information appears on the display:



• Then, the display goes back to the original indication in several seconds.

# Setting the TA volume level

You can preset the volume level for TA Standby Reception. When a traffic programme is received, the volume level automatically changes to the preset level.

- See also "Changing the general settings (PSM)" on page 21.
- **1** Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
- 2 Press ►► ∧ or I < ∨ to select "TA VOL (volume)."
- **3** Turn the control dial to set to the desired volume. You can set it from "VOL 00" to "VOL 50."
- 4 Press SEL (select) to finish the setting.

## Automatic clock adjustment

When shipped from the factory, the clock built in this unit is set to be readjusted automatically using the CT (Clock Time) data in the RDS signal. If you do not want to use automatic clock

adjustment, follow the procedure below.

- See also "Changing the general settings (PSM)" on page 21.
- **1** Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
- 2 Press ►►I ∧ or I◄◀ ∨ to select "AUTO ADJ (adjustment)."
- **3** Turn the control dial counterclockwise to select "OFF."

Now automatic clock adjustment is canceled.

4 Press SEL (select) to finish the setting.

To reactivate clock adjustment, repeat the same procedure and select "ON" in step 3 by turning the control dial clockwise.

#### Note:

You must stay tuned to the same station for more than 2 minutes after setting "AUTO ADJ" to "ON." Otherwise, the clock time will not be adjusted. (This is because the unit takes up to 2 minutes to capture the CT data in the RDS signal.)



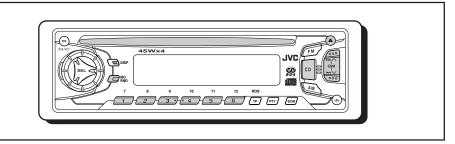
ENGLISH

## PTY codes

PTY codes			
NEWS:	News	SOCIAL:	Programmes on social activities
AFFAIRS:	Topical programmes expanding on current news or affairs	RELIGION:	Programmes dealing with any aspect of belief or faith, or the
INFO:	Programmes which impart advice	PHONE IN.	nature of existence or ethics
SPORT:	on a wide variety of topics Sport events	PHONE IN:	Programmes where people can express their views either by
EDUCATE:	Educational programmes		phone or in a public forum
DRAMA:	Radio plays	TRAVEL	Programmes about travel
CULTURE:	Programmes on national or	INAVEL.	destinations, package tours, and
OULIONE.	regional culture		travel ideas and opportunities
SCIENCE:	Programmes on natural science	LEISURE:	Programmes concerned with
COLLINGE.	and technology	LEIGORE.	recreational activities such as
VARIED:	Other programmes like comedies		gardening, cooking, fishing, etc.
	or ceremonies	JAZZ:	Jazz music
POP M:	Pop music	COUNTRY:	Country music
ROCK M:	Rock music	NATION M:	Current popular music from
EASY M:	Easy-listening music		another nation or region, in that
LIGHT M:	Light music		country's language
CLASSICS:	Classical music	OLDIES:	Classic pop music
OTHER M:	Other music	FOLK M:	Folk music
WEATHER:	Weather information	DOCUMENT:	Programmes dealing with factual
FINANCE:	Reports on commerce, trading,		matters, presented in an
	the Stock Market, etc.		investigative style
CHILDREN:	Entertainment programmes for		
	children		



# **CD OPERATIONS**



# Playing a CD

### **1** Insert a disc into the loading slot.



The unit turns on, draws the CD and starts playback automatically.

### Note on One-Touch Operation:

When a CD is already in the loading slot, pressing the CD button turns on the unit and starts playback automatically.



# a CD

Note:

When a CD is inserted upside down, the CD automatically ejects.

### To stop play and eject the CD

#### Press ▲.

CD play stops and the CD automatically ejects from the loading slot.

If you change the source, the CD play also stops (without ejecting the CD this time).

#### Notes:

- If the ejected disc is not removed for about 15 seconds, the disc is automatically inserted again into the loading slot to protect it from dust. (CD play will not start this time.)
- You can eject the CD even when the unit is turned off.

Elapsed playing time

CD

Current track

17



# Locating a track or a particular portion on a CD

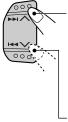
### To fast-forward or reverse the track



Press and hold  $\rightarrow$ , while playing a CD, to fast-forward the track.

Press and hold I◄◀ ✓, while playing a CD, to reverse the track.

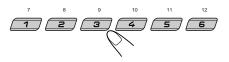
# To go to the next tracks or the previous tracks



Press ►►I ∧ briefly, while playing a CD, to go ahead to the beginning of the next track. Each time you press the button consecutively, the beginning of the next tracks is located and played back.

 Press I < briefly, while playing a CD, to go back to the beginning of the current track.
 Each time you press the button consecutively, the beginning of the previous tracks is located and played back.

### To go to a particular track directly



Press the number button corresponding to the track number to start its playback.

- To select a track number from 1 6: Press 1 (7) – 6 (12) briefly.
- To select a track number from 7 12: Press and hold 1 (7) – 6 (12) for more than 1 second.

# Playing at Random

You can play back all tracks on the CD at random.



Each time you press MO RND (monaural/random) while playing a CD, CD random play mode turns on and off alternately.

When the random mode is turned on, the RND indicator lights up on the display and a track randomly selected starts playing.

# **Prohibiting CD ejection**

You can prohibit CD ejection and can lock a CD in the loading slot.

While pressing CD, press and hold  $\blacktriangle$  for more than 2 seconds.





"EJECT" flashes on the display for about 5 seconds, and the CD is locked and cannot be ejected.

#### To cancel the prohibition and unlock the CD,

press  $\triangleq$  again for more than 2 seconds, while pressing CD.

"EJECT" appears on the display, and the CD ejects from the loading slot.

# SOUND ADJUSTMENTS

1

# Adjusting the sound

You can adjust the sound characteristics to your preference.

### Select the item you want to adjust.



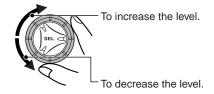
Each time you press the button, the adjustable items change as follows:

 $\begin{array}{c|c} & \mathsf{BAS} & \longrightarrow & \mathsf{TRE} & \longrightarrow & \mathsf{FAD} \\ & & & & & \\ & & & & \\ & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\$ 

Indication	To do:	Range
BAS	Adjust the bass.	-06 (min.)   +06 (max.)
TRE	Adjust the treble.	-06 (min.)   +06 (max.)
FAD*	Adjust the front and rear speaker balance.	R06 (Rear only)   F06 (Front only)
BAL	Adjust the left and right speaker balance.	L06 (Left only)   R06 (Right only)
LOUD	Boost low and high frequencies to produce a well- balanced sound at low volume level.	LOUD ON   LOUD OFF
VOL	Adjust the volume.	00 (min.)   50 (max.)

\* If you are using a two-speaker system, set the fader level to "00."

# 2 Adjust the level.



Equalization pattern changes as you adjust the bass or treble.



#### Note:

Normally, the control dial works as the volume control. So you do not have to select "VOL" to adjust the volume level.



# Using the sound control memory (SCM)

You can select and store a preset sound adjustment suitable for each playback source (Advanced SCM).

### Selecting and storing the sound modes

Once you select a sound mode, it is stored in memory. It will be recalled every time you select the same source and will be shown on the display. A sound mode can be stored for each of the following sources — FM1, FM2, FM3, AM, and CD.

 If you do not want to store the sound mode separately for each playback source, but want to use the same sound mode for all the sources, see "To cancel Advanced SCM – SCM LINK" on page 23.

### Select the sound mode you want.



Ex.: When you select "BEAT"

Each time you press the button, the sound mode changes as follows:



- When "SCM LINK" is set to "LINK ON," the selected sound mode can be stored in memory for the current source and the effect applies only to the current source.
- When "SCM LINK" is set to "LINK OFF," the selected sound mode effect applies to any source.

Indication	For:	Preset values		
		BAS	TRE	LOUD
SCM OFF	(Flat sound)	00	00	ON
BEAT	Rock or disco music	+02	00	ON
SOFT	Quiet background music	+01	-03	OFF
POP	Light music	+04	+01	OFF

### Recalling the sound modes

When "SCM LINK" is set to "LINK ON," select the source.





Each time you change the playback source, the SCM indicator flashes on the display.

The sound mode stored in memory for the selected source is recalled.

#### Notes:

• You can adjust each sound mode to your preference, and store it in memory.

If you want to adjust and store your original sound mode, see "Storing your own sound adjustments" on page 20.

 To adjust the bass and treble reinforcement levels or to turn on/off the loudness function temporarily, see page 18. (Your adjustments will be canceled if another source is selected.)



# Storing your own sound adjustments

You can adjust the sound modes (BEAT, SOFT, POP) to your preference and store your own adjustments in memory.

- There is a time limit in doing the following procedure. If the setting is canceled before you finish, start from step 1 again.
- 1 Call up the sound mode you want to adjust.
  - See "Using the sound control memory" on page 19 for details.



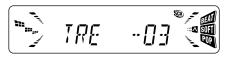
an Pr



Ex.: When you select "SOFT"

2 Select "BAS (bass)", "TRE (treble)" or "LOUD (loudness)".





Ex.: When you adjust "TRE (treble)"

- **3** Adjust the bass or treble level, or turn the loudness function ON/OFF.
  - See page 18 for details.



Equalization pattern changes as you adjust the bass or treble.



- **4** Repeat steps 2 and 3 to adjust the other items.
- **5** Press and hold SCM until the sound mode you have selected in step 1 flashes on the display.





Your adjustment made for the selected sound mode is stored in memory.

6 Repeat the same procedure to store other sound modes.

### To reset to the factory settings

Repeat the same procedure and reassign the preset values listed in the table on page 19.

# Setting the clock

You can also set the clock system to either 24 hours or 12 hours.

 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display. (See page 22.)



# **2** Set the hour.

- Select "CLOCK H (hour)" if not shown on the display.
- 2 Adjust the hour.





# **3** Set the minute.

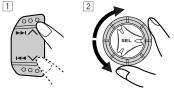
- 1 Select "CLOCK M (minute)."
- 2 Adjust the minute.





## **4** Set the clock system.

- 1 Select "24H/12H."
- 2 Select "24H" or "12H."



# **5** Finish the setting.



# To check the current clock time while the unit is turned off, press DISP (display).

The power turns on, the clock time is shown for 5 seconds, then the power turns off.

# Changing the general settings (PSM)

You can change the items listed on the next page by using the PSM (Preferred Setting Mode) control.

## Basic Procedure

 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display. (See page 22.)



2 Select the PSM item you want to adjust. (See page 22.)



**3** Adjust the PSM item selected.



**4** Repeat steps 2 and 3 to adjust the other PSM items if necessary.

**5** Finish the setting.



### Preferred Setting Mode (PSM) items

1 Hold.	2 Select.	3 Set. Counter- clockwise	eL Clockwise	Factory-preset settings	See page
CLOCK H	Hour adjustment	Back	Advance		
CLOCK M	Minute adjustment	Back	Advance	0:00	21
SCM LINK	Sound control memory linkage	LINK OFF	LINK ON	LINK ON	19, 23
24H/12H	24/12-hour time display	12H	24H	24H	21
AUTO ADJ	Automatic clock setting	OFF	ON	ON	14
DISPMODE	Display mode	PS NAME ↔	→ FREQ OCK ←	PS NAME	14
PTY STBY	PTY standby	29 programme types		NEWS	12
PTY SRCH	PTY search	(see page 15.)		(See page 12.)	12
TA VOL	Traffic announcement volume	VOL 00 – VOL 50		VOL 20	14
P-SEARCH	Programme search	OFF	ON	OFF	13
LEVEL	Level display	A 0 0 1 0 1	→ AUDIO 2 FF ←	AUDIO 2	23
TEL	Telephone muting	<b>▲</b>	→ MUTING 2 FF ←	OFF	23

• Press SEL (select) to finish the setting.

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ENGLISH

### To cancel Advanced SCM – SCM LINK

You can cancel the Advanced SCM (Sound Control Memory), and unlink the sound modes and the playback sources.

When shipped from the factory, a different sound mode can be stored in memory for each source so that you can change the sound modes simply by changing the sources.

- LINK ON: Advanced SCM (different sound modes for different sources).
- LINK OFF: Conventional SCM (one sound mode for all sources).
- 1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
- 2 Press ►►I ∧ or I ◄ ∨ to select "SCM LINK."
- **3** Turn the control dial to set to the desired indication ("LINK ON" or "LINK OFF").
- 4 Press SEL (select) to finish the setting.

### To select the level meter - LEVEL

You can select the level display according to your preference.

When shipped from the factory, "AUDIO 2" is selected.

- AUDIO 1: Level meter illuminates from bottom to top.
- AUDIO 2: Alternates level meter (moves from bottom to top) and illumination display.
- OFF: Erases the audio level indicator.
- **1** Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
- 2 Press ►►I ∧ or I◄◀ ∨ to select "LEVEL."
- **3** Turn the control dial to set to the desired indication ("AUDIO 1", "AUDIO 2" or "OFF").
- **4** Press SEL (select) to finish the setting.

### To select the telephone muting - TEL

This mode is used when a cellular phone system is connected. Depending on the phone system used, select either "MUTING 1" or "MUTING 2," whichever mutes the sounds from this unit.

When shipped from the factory, this mode is deactivated.

- MUTING 1: Select this if this setting can mute the sounds.
- MUTING 2: Select this if this setting can mute the sounds.
- OFF: Cancels the telephone muting.
- 1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
- 2 Press >> A or I >> to select "TEL."
- **3** Turn the control dial to set to the desired indication ("MUTING 1", "MUTING 2" or "OFF").
- 4 Press SEL (select) to finish the setting.

## <sup>\$7</sup> 0:00 🏠

# Detaching the control panel

You can detach the contol panel when leaving the car.

When detaching or attaching the control panel, be careful not to damage the connectors on the back of the control panel and on the panel holder.

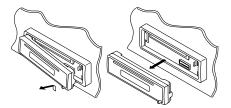
# Detaching the control panel

Before detaching the control panel, be sure to turn off the power.

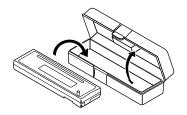
**1** Unlock the control panel.



**2** Lift and pull the control panel out of the unit.

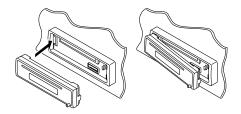


**3** Put the detached control panel into the provided case.

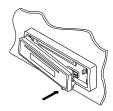


### Attaching the control panel

**1** Insert the left side of the control panel into the groove on the panel holder.



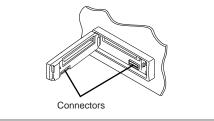
**2** Press the right side of the control panel to fix it to the panel holder.



#### Note on cleaning the connectors:

If you frequently detach the control panel, the connectors will deteriorate.

To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.

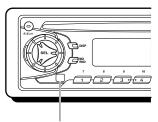


# USING THE REMOTE CONTROLLER «

This unit can be remotely controlled as instructed here **(with an optionally purchased remote controller)**. We recommend that you use remote controller RM-RK31 or RM-RK50 with your unit. (Example: When you using RM-RK31)

Before using the remote controller:

 Aim the remote controller directly at the remote sensor on the main unit. Make sure there is no obstacle in between.



Remote sensor

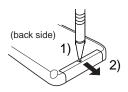
• Do not expose the remote sensor to strong light (direct sunlight or artificial lighting).

## Installing the battery

When the controllable range or effectiveness of the remote controller decreases, replace the battery.

### 1. Remove the battery holder.

- Push out the battery holder in the direction indicated by the arrow using a ball-point pen or a similar tool.
- 2) Remove the battery holder.



### 2. Place the battery.

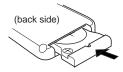
Slide the battery into the holder with the + side facing upwards so that the battery is fixed in the holder.



 Lithium coin battery (product number: CR2025)

### **3.** Return the battery holder.

Insert again the battery holder pushing it until you hear a clicking sound.



### WARNING:

• Store the battery in a place where children cannot reach.

If a child accidentally swallows the battery, consult a doctor immediately.

- Do not recharge, short, disassemble or heat the battery or dispose it in a fire. Doing any of these things may cause the battery to give off heat, crack or start a fire.
- Do not leave the battery with other metallic materials.

Doing this may cause the battery to give off heat, crack or start a fire.

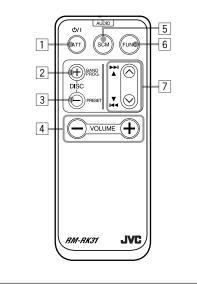
- When throwing away or saving the battery, wrap it in tape and insulate; otherwise, the battery may start to give off heat, crack or start a fire.
- Do not poke the battery with tweezers or similar tools.

Doing this may cause the battery to give off heat, crack or start a fire.



# Location of the buttons

### RM-RK31



- 1 Turns on the unit if pressed when the unit is turned off.
  - Turns off the unit if pressed and held for more than 1 second.
  - Drops the volume level in a moment if pressed briefly.

Press again to resume the volume.

 Functions as the BAND button while listening to the radio.

Each time you press the button, the band changes.

• Does not function as the PROG/DISC + button.

- 3 Functions as the PRESET button while listening to the radio. Each time you press the button, the preset station number increases, and the selected station is tuned in.
  - Does not function as the DISC button.
- 4 Functions the same as the control dial on the main unit.

**NOTE:** This button does not function for the preferred setting mode adjustment.

- 5 Selects the sound mode. Each time you press the button, the mode changes.
- 6 Selects the source.

Each time you press the button, the source changes.

- 7 Searches stations while listening to the radio.
  - Fast-forwards or reverses the track if pressed and held while listening to a CD.
  - Skips to the beginning of the next track or goes back to the beginning of the current (or previous tracks) if pressed briefly while listening to a CD.

# Handling CDs

This unit has been designed to reproduce CDs and CD-Rs.



• Other discs cannot be played back.

# How to handle CDs

Center holder

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

 Always hold the CD by the edges. Do not touch its recording surface.

When storing a CD into its case, gently insert the CD around the center holder (with the printed surface facing up).

• Make sure to store CDs into the cases after use.

# To keep CDs clean

A dirty CD may not play correctly. If a CD does become dirty, wipe it with a soft cloth in a straight line from center to edge.

# To play new CDs

New CDs may have some rough spots around the inner and outer edges. If such a CD is used, this unit may reject the CD. To remove these rough spots, rub the edges with a pencil or ball-point pen, etc.

### About mistracking:

Mistracking may result from driving on extremely rough roads. This does not damage the unit and the CD, but will be annoying. We recommend that you stop CD play while driving on such rough roads.

## Moisture condensation

Moisture may condense on the lens inside the CD player in the following cases:

MAINTENANCE

- After starting the heater in the car.
- If it becomes very humid inside the car. Should this occur, the CD player may malfunction. In this case, eject the CD and leave the unit turned on for a few hours until the moisture evaporates.

# When playing a CD-R (Recordable)

You can play back your original CD-Rs on this receiver.

- Before playing back CD-Rs, read their instructions or cautions carefully.
- Some CD-Rs recorded on CD recorders may not be played back on this receiver because of their disc characteristics, and of the following reasons:
  - Discs are dirty or scratched.
  - Moisture condensation occurs on the lens inside the unit.
- The pickup lens inside the CD player is dirty.
- Use only "finalized" CD-Rs.
- CD-RWs (Rewritable) cannot be played back on this receiver.
- Do not use CD-Rs with stickers or sticking labels on the surface. They may cause malfunctions.

### CAUTIONS:

- Do not insert 8 cm CDs (single CDs) into the loading slot. (Such CDs cannot be ejected.)
- Do not insert any CD of unusual shape like a heart or flower; otherwise, it will cause a malfunction.
- Do not expose CDs to direct sunlight or any heat source or place them in a place subject to high temperature and humidity. Do not leave them in a car.
- Do not use any solvent (for example, conventional record cleaner, spray, thinner, benzine, etc.) to clean CDs.







# 

What appears to be trouble is not always serious. Check the following points before calling a service center.

Symptoms	Causes	Remedies
<ul> <li>CD cannot be played back.</li> </ul>	CD is inserted upside down.	Insert the CD correctly.
CD sound is sometimes interrupted.	You are driving on rough roads.	Stop playing CD while driving on rough roads.
	The disc is scratched.	Change the disc.
	Connections are incorrect.	Check the cords and connections.
<ul> <li>Sound is sometimes interrupted.</li> </ul>	Connections are incorrect.	Check the cords and connections.
<ul> <li>Sound cannot be heard from the speakers.</li> </ul>	The volume is turned to the minimum level.	Adjust it to the optimum level.
	Connections are incorrect.	Check the cords and connections.
SSM (Strong-station Sequential Memory) automatic preset does not work.	Signals are too weak.	Store stations manually.
• Static noise while listening to the radio.	The antenna is not connected firmly.	Connect the antenna firmly.
<ul> <li>"NO DISC" appears on the display.</li> </ul>	No CD is inserted.	Insert a CD correctly.
CD cannot be ejected.	CD is locked.	Unlock the CD (see page 17).
CD can neither be played back nor ejected.	The unit may function incorrectly.	Press and hold both <b>⊍/I/ATT</b> and <b>▲</b> at the same time for several seconds. Be careful not to drop the CD when it is ejected.
This unit does not work at all.	The built-in microcomputer may function incorrectly due to noise, etc.	Press and hold both SEL and <b>b</b> /I/ATT at the same time for several seconds to reset the unit. (The clock setting and preset stations stored in memory are erased.) (See page 2.)

ENGLISH

# AUDIO AMPLIFIER SECTION

Maximum Power Output: 45 W per channel Front: Rear: 45 W per channel Continuous Power Output (RMS): 17 W per channel into 4 Ω, 40 Hz Front: to 20 000 Hz at no more than 0.8% total harmonic distortion. Rear: 17 W per channel into 4 Ω, 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion. Load Impedance: 4  $\Omega$  (4  $\Omega$  to 8  $\Omega$  allowance) Tone Control Range: Bass: ±10 dB at 100 Hz Treble<sup>.</sup> ±10 dB at 10 kHz Frequency Response: 40 Hz to 20 000 Hz Signal-to-Noise Ratio: 70 dB Line-Out Level/Impedance: 2.0 V/20 k $\Omega$  load (full scale) Output Impedance: 1 kΩ

# TUNER SECTION

Frequency Range:

FM:	87.5 MHz to 108.0 MHz	
AM:	(MW) 522 kHz to 1 620 k	κHz
	(LW) 144 kHz to 279 kH	z

### [FM Tuner]

Usable Sensitivity: 11.3 dBf  $(1.0 \ \mu V/75 \ \Omega)$ 50 dB Quieting Sensitivity: 16.3 dBf  $(1.8 \ \mu V/75 \ \Omega)$ Alternate Channel Selectivity (400 kHz): 65 dB Frequency Response: 40 Hz to 15 000 Hz Stereo Separation: 30 dB Capture Ratio: 1.5 dB

[MW Tuner]

Sensitivity: 20 µV Selectivity: 35 dB

[LW Tuner] Sensitivity: 50 µV

# 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

# **GENERAL**

 $\begin{array}{l} \mbox{Power Requirement:} & \mbox{Operating Voltage: DC 14.4 V} & (11 \mbox{V to 16 V allowance}) \\ \mbox{Grounding System: Negative ground} \\ \mbox{Allowable Operating Temperature: 0°C to +40°C} \\ \mbox{Dimensions (W \times H \times D):} & \mbox{Installation Size: 182 mm} \times 52 \mbox{ mm} \times 150 \mbox{ mm} \\ \mbox{Panel Size: 188 mm} \times 58 \mbox{ mm} \times 14 \mbox{ mm} \\ \mbox{Mass: 1.3 kg (excluding accessories)} \end{array}$ 

Design and specifications subject to change without notice.

Having TROUBLE with operation? Please reset your unit Refer to page of How to reset your unit

# Haben Sie PROBLEME mit dem Betrieb? Bitte setzen Sie Ihr Gerät zurück

Siehe Seite Zurücksetzen des Geräts

# Vous avez des PROBLÈMES de fonctionnement? Réinitialisez votre appareil

Référez-vous à la page intitulée Comment réinitialiser votre appareil

# Hebt u PROBLEMEN met de bediening? Stel het apparaat terug

Zie de pagina met de paragraaf Het apparaat terugstellen



