JVC

CASSETTE RECEIVER
CASSETTEN-RECEIVER
RADIOCASSETTE
RADIO/CASSETTESPELER

KS-FX433R

Detachable

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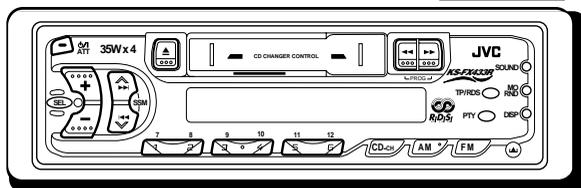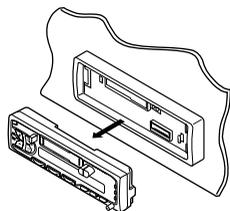
For installation and connections, refer to the separate manual.
Für den Einbau und die Anschlüsse siehe das eigenständige Handbuch.
Pour l'installation et les raccordements, se référer au manuel séparé.
Bijzonderheden over de installatie en aansluiting van het apparaat vindt u in de desbetreffende
handleiding.

INSTRUCTIONS
BEDIENUNGSANLEITUNG
MANUEL D'INSTRUCTIONS
GEBRUIKSAANWIJZING

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.

CONTENTS
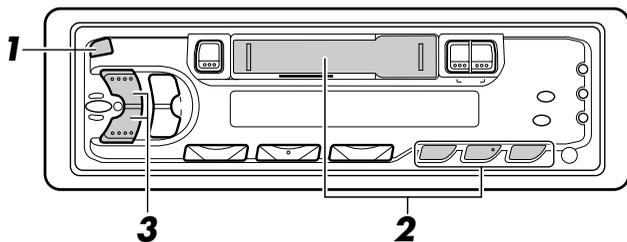
BEFORE USE

* 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.

Note:
When you use this unit for the first time, set the built-in clock correctly, see page 20.

1

Turn on the power.

Note on One-Touch Operation:
• *When you select tuner as a source in step 2 below, the power automatically comes on. You do not have to press this button to turn on the power.*
• *If the cassette is already in the cassette compartment, tape play starts automatically.*

2

CD-CH **A M** **F M**
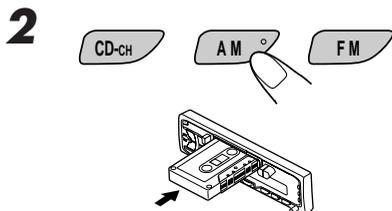
Play the source.

To operate the tuner, see pages 4 – 15.
To operate the tape deck, see page 16.
To operate the CD changer, see pages 24 – 26.

3
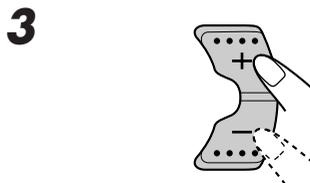
Adjust the volume.

$$VOL \quad 20$$

Volume level appears.

4 Adjust the sound as you want (see pages 17 – 19).

To drop the volume in a moment

Press ⏻ 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.

To turn off the power

Press ⏻ ATT for more than 1 second.

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.

ENGLISH

Listening to the radio

1 Turn on the power.

Note on One-Touch Operation:
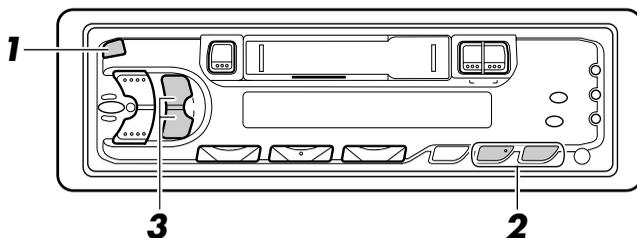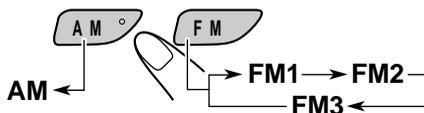*When you select a band in step 2 below, the power automatically comes on. You do not have to press this button to turn on the power.*

2 Select the band (FM1, FM2, FM3 or AM).

You can select any one of FM1, FM2, and FM3 to listen to an FM station.

AM ← **FM** → **FM1** → **FM2** → **FM3** ←

$$87.5$$

Note:
When a cassette is in the cassette compartment, you cannot select the tuner. Be sure to eject the cassette from the cassette compartment to listen to the radio.

3

To search stations of higher frequencies.

To search stations of lower frequencies.
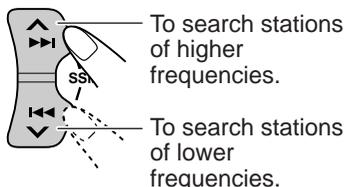
Start searching a station.
When a station is received, searching stops.

$$88.3$$

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

To tune in a particular frequency manually:

1 Select the band (FM or AM).
   Press FM or AM.
2 Press and hold ∧ or ∨ until "M" starts flashing on the display.
   Now you can manually change the frequency while "M" is flashing.
3 Press ∧ or ∨ repeatedly until the frequency you want is reached.
   • 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.

Storing stations in memory

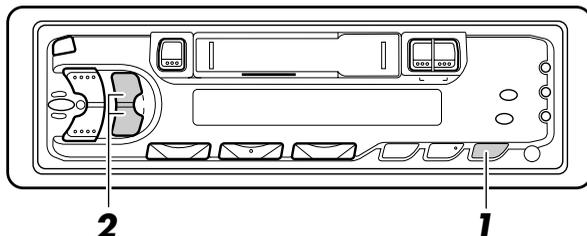You can use one of the following two methods to store broadcasting stations in memory.
• Automatic preset of FM stations: SSM (Strong-station Sequential Memory)
• Manual preset of both FM and AM stations

FM station automatic preset: SSM

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

2 **1**

1

F M

Select the FM band number (FM1, FM2 or FM3) you want to store FM stations into.

FM1 → FM2 → FM3

2

SSM

Press and hold both buttons for more than 2 seconds.

$$-- 5 5 M --$$
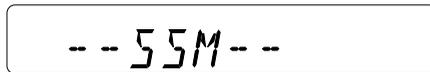
"SSM" appears, then disappears when automatic preset is over.

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.

EXAMPLE: Storing an FM station of 88.3 MHz into preset number 1 of the FM1 band

2 3   **1**

1   `F M`   Select the FM1 band.

FM 1   →   *87.5*

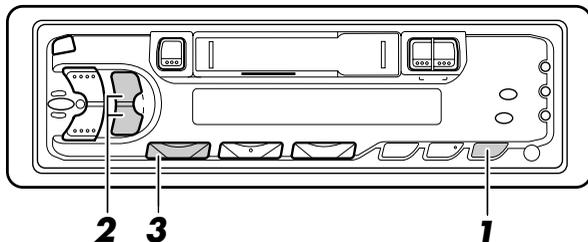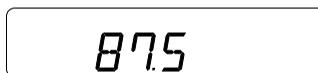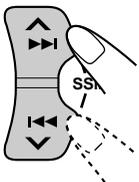**2**   Tune into a station of 88.3 MHz.
See page 4 to tune into a station.

88.3

3   Press and hold the button for more than 2 seconds.

88.3 ◄ *P 1* ►
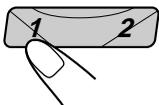
"P1" flashes for a few seconds.

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 into a preset station

You can easily tune into a preset station.
Remember that you must store stations first. If you have not stored them yet, see pages 5 and 6.

2   **1**

1

Select the band (FM1, FM2, FM3 or AM) you want.

AM °   F M

AM ← → FM1 → FM2
       FM3 ←

2

1 2   3 4   5 6
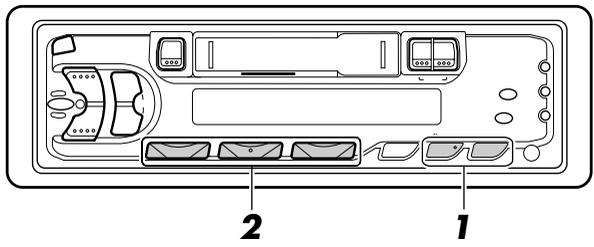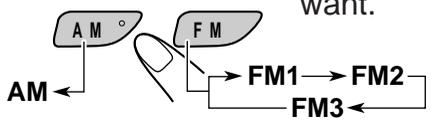
Select the number (1 – 6) for the preset station you want.

7

Using RDS functions in the FM band

RDS (Radio Data System)

RDS button

TP/RDS

To select Network-Tracking mode, press the RDS button for more than 1 second.

- **Mode 1 (AF (Alternative Frequencies): on/REG: off):**
  Network-Tracking is activated.
  Switches between stations belonging to the network being received.

  Note:
  - *In Mode 1, the broadcast may switch between different programmes even within the same network at certain times.*

- **Mode 2 (AF: on/REG: on):**
  Network-Tracking is activated and Regional mode is engaged (switches between stations broadcasting the same programme, at all times).

- **Mode 3 (AF: off/REG: off):**
  Network-Tracking is deactivated.

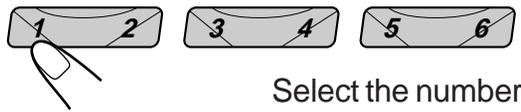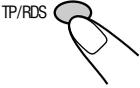**Network-Tracking reception**

When driving in an area where the signal strength drops, the tuner automatically uses PI (Programme Identification) and AF codes to retune to the same programme with a stronger signal from another RDS station in the network. By utilizing these codes, you can continue to listen to the same programme in its finest condition, no matter where you drive. (See illustration.)

- When the RDS station to which you are tuned does not provide AF data or the unit is unable to receive AF data for any reason, Network-Tracking reception will NOT operate even when the signal strength drops below the reference level.

The same programme can be received on different frequencies.

Programme 1 broadcasting on frequency A

Programme 1 broadcasting on frequency E

Programme 1 broadcasting on frequency B

Programme 1 broadcasting on frequency C

Programme 1 broadcasting on frequency D
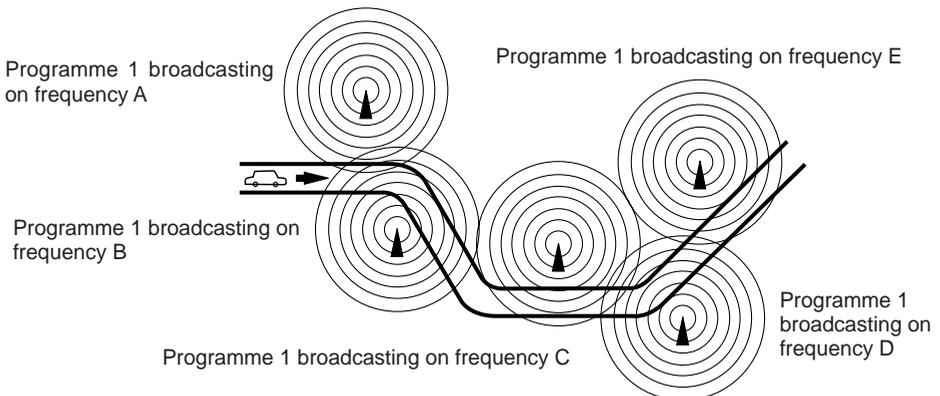
PTY standby mode

Storing your favourite programme type (PTY) into memory (NEWS is factory-preset.)
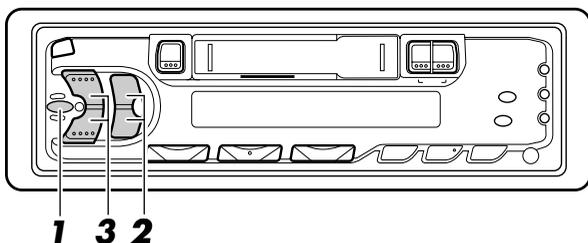
1 3 2

1

SEL

Press the SEL button for more than 2 seconds to enter the preferred setting mode (see page 22).

2
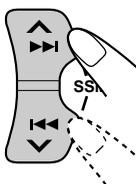
Press the ∧ or ∨ button to select the "PTY STBY" mode.

Each time the ∧ or ∨ button is pressed, the display changes as follows.

$CLOCK\ H \leftrightarrow CLOCK\ M \leftrightarrow 24H/12H \leftrightarrow$
$AUTO\ ADJ \leftrightarrow DISPMODE \leftrightarrow CH\ DISP \leftrightarrow$
$PTY\ STBY \leftrightarrow PTY\ SRCH \leftrightarrow TA\ VOL$

3
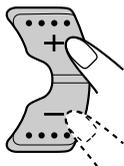
Press the + or – button to select one of 29 PTYs. (See the table on page 13.)
For example, when "CLASSICS" is selected in the display, the classical music PTY is stored automatically.

• Press the SEL button to return to the previous mode.

9

FM AM

Setting and operating PTY standby mode

PTY
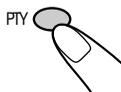
• When you press PTY while listening to an FM station, the PTY indicator is lit during reception of a PTY station and the PTY standby mode is engaged. The PTY name stored on page 9 (for example: "CLASSICS") flashes for 5 seconds.

Note:
When the station being received is not a PTY station, the "PTY" indicator flashes. Press the ∧ or ∨ button to engage the PTY standby mode. "SEARCH" appears in the display, and PTY station search starts. When a PTY station is tuned in, "PTY" is lit.

• If you are listening to a TAPE or CD and wish to hear a selected PTY broadcast, press the PTY button to enter the PTY standby mode. (The "PTY" indicator lights up.)

If the PTY starts broadcasting while the PTY standby mode is active, the selected PTY name is displayed and the FM mode is engaged. The selected PTY can then be heard.

Note:
To deactivate the PTY standby mode, press the PTY button again.

TP (Traffic Programme) button
Setting and operating TA (Traffic Announcement) standby mode
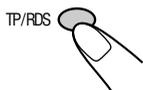
TP/RDS

• 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.

Note:
When the station being received is not a TP station, the TP indicator flashes. Press the ∧ or ∨ button to engage the TA standby mode. "SEARCH" appears in the display, and TP station search starts. When a TP station is tuned in, "TP" is lit.

• If you're listening to a TAPE or CD and wish to hear a TA broadcast, press the TP button to enter the TA standby mode. (The "TP" indicator lights up.)

If a TA programme starts broadcasting while the TA standby mode is active, "TRAFFIC" is displayed and the FM mode is engaged. The volume increases to the preset "TA VOL" level and the TA programme can be heard (see page 14).

Note:
To deactivate the TA standby mode, press the TP button again.

10

PTY search mode

Presetting PTYs in number buttons 1 – 6

The factory-presets are listed below.

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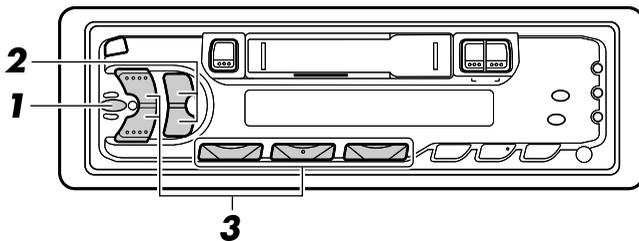
1

Press the SEL button for more than 2 seconds to enter the preferred setting mode (see page 22).

2
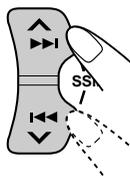
Select the "PTY SRCH" mode with the ∧ or ∨ button.

3
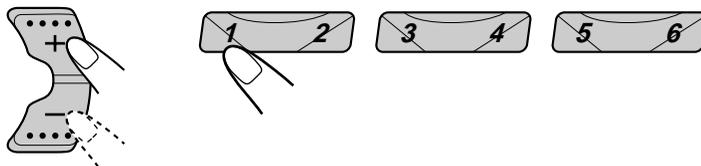
Select the desired PTY with the + or − button (PTYs already stored flash when they are selected), then press the required number button for more than 2 seconds to store it. The stored PTY flashes in the display.

PTY search operation

ENGLISH

2   **1**

1

PTY
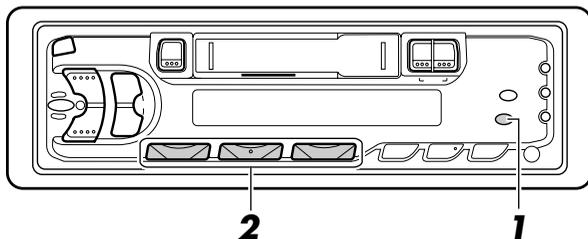
Press and hold the PTY button for more than 1 second in the FM mode. PTY programme search mode is engaged.

$$POP\ M$$

2

1   2   *3   4*   *5   6*
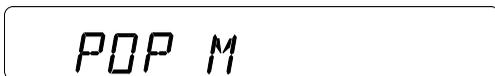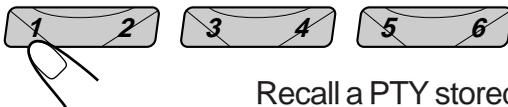
Recall a PTY stored on page 11 using a number button (1 – 6).

Ex. When "CLASSICS" is stored in button 1.

$$CLASSICS$$

• PTY station search starts after 5 seconds.

Successful programme search results in the desired PTY station being received so its programme can be heard.

• When a PTY station cannot be tuned in, the previous station is received.
• After searching, the PTY selected last will be memorized, then displayed first when a PTY search is selected again.

Note:
There may be areas where PTY functions (PTY standby mode, PTY search) will not work.

PTY codes

	PTY display		

No.	DISPLAY	No.	DISPLAY
1	NEWS	16	WEATHER
2	AFFAIRS	17	FINANCE
3	INFO	18	CHILDREN
4	SPORT	19	SOCIAL
5	EDUCATE	20	RELIGION
6	DRAMA	21	PHONE IN
7	CULTURE	22	TRAVEL
8	SCIENCE	23	LEISURE
9	VARIED	24	JAZZ
10	POP M	25	COUNTRY
11	ROCK M	26	NATION M
12	EASY M	27	OLDIES
13	LIGHT M	28	FOLK M
14	CLASSICS	29	DOCUMENT
15	OTHER M		

Descriptions of the PTY Codes

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

ENGLISH

Other RDS functions

EON (Enhanced Other Networks)
• When tuning in a broadcasting station transmitting EON data, the EON indicator is lit and the following operations start.
EON automatically stores the frequencies of stations from other networks transmitting information codes (TP/TA/AF/PTY/PS (Programme Service), etc.) so they can be mutually used. The following points have been improved:

When listening to a station NOT transmitting traffic information or the selected PTY for example, EON automatically tunes to a station in a local network when this information is broadcast and then switches back to the original programme when the broadcast ends. (However, it does not switch back to the original programme if the broadcast continues for a long time.) The transmitted information (AF and other codes) is constantly and automatically updated so that preset programme information can be heard immediately even if in a different network area.

Traffic information volume control
This function adjusts the volume of traffic information broadcasts.
1. Press the SEL button for more than 2 seconds to set the preferred setting mode.
2. Select "TA VOL" with the ∧ or ∨ button.
3. Set to the desired volume with the + or – button. (See page 22.)

Number buttons
When a number button is pressed, if the station with that frequency is broadcasting a sufficiently strong signal, the receiver will tune to that frequency.
When the signal strength is not sufficient for good reception, by referring to the AF list, the receiver searches for a station broadcasting the same programme with a stronger signal. If a station cannot be found in the AF list, PI-seek tuning starts. If a station broadcasting the same PI code cannot be detected in one search-cycle, PI-seek tuning is released and the original preset frequency is tuned to.

CT (Clock Time)
When CT data is received in the RDS signal, the time is correctly renewed.
• RDS updates the local time according to Greenwich Mean Time.

14

• When automatic renewal of clock time is NOT required, follow the steps below.
1. Press the SEL button for more than 2 seconds to set the preferred setting mode.
2. Select "AUTO ADJ" with the ∧ or ∨ button.
3. Press the – button and set to "ADJ OFF". (See page 22.)

Once these steps are completed, clock time is not renewed even if the CT (Clock Time) data is received with the RDS signal. When you wish to reactivate this mode, repeat the same procedure and in step 3 press the + button to set to "ADJ ON." In the activated mode, clock time is automatically renewed when the CT data is received.

Note:
It takes at least 2 minutes to renew the time after receiving CT data. The station must be received for more than 2 minutes continuously, otherwise the clock time will NOT be renewed.

Display Mode
Setting the main display mode.
1. Press the SEL button for more than 2 seconds to set the preferred setting mode.
2. Select "DISPMODE" with the ∧ or ∨ button.
3. Select the desired mode with the + or – button.
   (Station name (PS NAME) ↔ Frequency being received (FREQ) ↔ Clock time (CLOCK) ↔) (See page 22.)

Note:
When the "CLOCK" mode is set, clock time remains on the main display even during tape or CD playback.

Display Button
The DISP button is used to select the Operation (Tuner, Tape or CD) and Clock modes. Each time the button is pressed, the display changes as follows:
Operation mode (Station name* → Frequency being received → PTY* ; or TAPE; or CD) → Clock time.
The display returns to the initially preset mode after a short while.
* When the RDS or PTY signal is weak or when not tuned to an RDS or PTY station, the Station name or PTY is NOT displayed.

Other convenient tuner functions
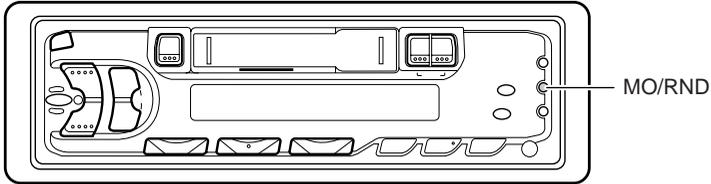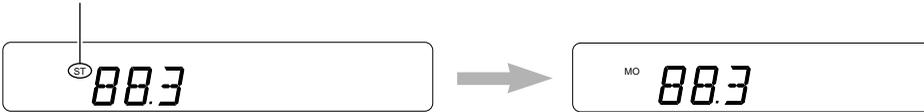
MO/RND

Selecting FM reception sound

When an FM stereo broadcast is hard to receive:

Press MO/RND (mono/random) while listening to an FM stereo broadcast. The sound you hear becomes monaural but reception will be improved.
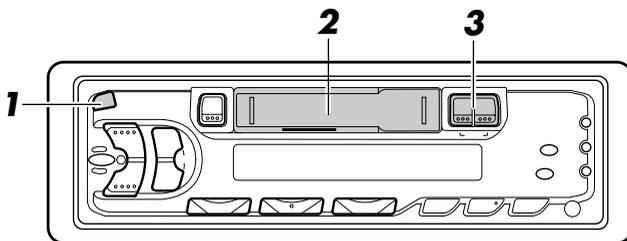
Lights when receiving an FM broadcast in stereo.

ST **88.3**   MO **88.3**

To restore the stereo effect, press the same button again.

◼️ *TAPE OPERATIONS*

Listening to a tape
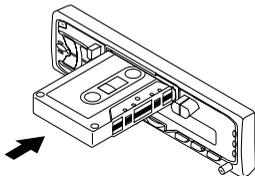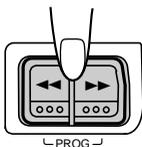

2   *3*

1

1

Turn on the power.

2

Insert a cassette.

When one side of the tape reaches its end during play, the other side of the tape automatically starts playing. (Auto Reverse)

3

Select the tape direction.

• *Press both buttons at the same time.*
Each time you press both buttons, the tape direction changes alternatively – forward (*TAPE〉〉〉*) and reverse (*TAPE〈〈〈*).

To stop play and eject the cassette

Press ▲.
Tape play stops and the cassette ejects from the cassette compartment.
You can hear the last received station, or CD playback from the CD changer.
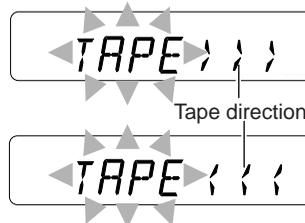• *You can also eject the cassette with the unit turned off.*

To fast-wind a tape

Press either ►► or ◄◄.
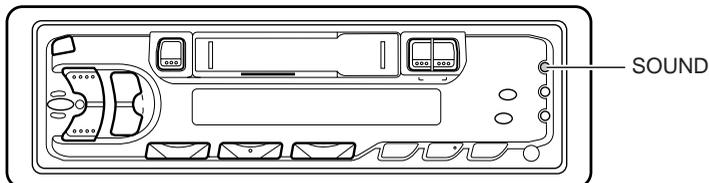The tape will be wound in the direction of the arrows (►► or ◄◄).
To restart playback, press ►► or ◄◄ lightly.

◄*TAPE*►〉〉〉
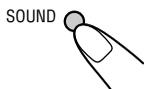
Tape direction

◄*TAPE*►〈〈〈

16

Selecting preset sound modes

You can select a preset sound adjustment suitable to the music genre.

SOUND

Each time you press SOUND, the sound mode changes as follows.

SOUND

$$\rightarrow SCM\ OFF \rightarrow BEAT \rightarrow SOFT \rightarrow POP$$

| Indication	For:	Preset values		
		Bass	Treble	Loudness
SCM OFF	(Flat sound)	00	00	On
BEAT	Rock or disco music	+2	00	On
SOFT	Quiet background music	+1	–3	Off
POP	Light music	+4	+1	Off

Notes:
- *You can adjust the preset 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 19.
- *To adjust only the bass and treble reinforcement levels to your preference, see "Adjusting the sound" on page 18.*
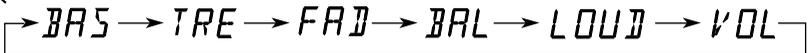
Adjusting the sound

You can adjust the sound characteristics to your preference.

1

SEL
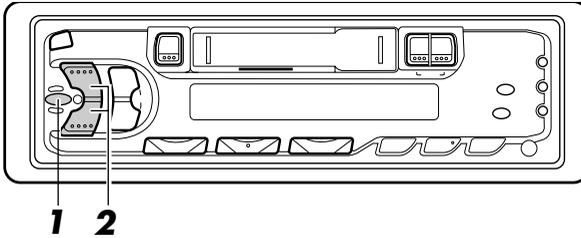
Select the item you want to adjust.

$$BAS \rightarrow TRE \rightarrow FAD \rightarrow BAL \rightarrow LOUD \rightarrow VOL$$

Indication	To do:	Range
BAS (Bass)	Adjust the bass	–6 (min.) — +6 (max.)
TRE (Treble)	Adjust the treble	–6 (min.) — +6 (max.)
FAD (Fader)*	Adjust the front and rear speaker balance	R6 (rear only) — F6 (front only)
BAL (Balance)	Adjust the left and right speaker balance	L6 (left only) — R6 (right only)
LOUD (Loudness)	Boost low and high frequencies to produce a well-balanced sound at low volume level.	ON — OFF
VOL (Volume)	Adjust the volume	00 (min.) — 50 (max.)

Note:
* *If you are using a two-speaker system, set the fader level to "00" (center).*

2

Adjust the level.

Press the + button to turn on the loudness function, and the – button to turn it off.

Note:
Normally the + and – buttons work as the volume control buttons. So you do not have to select "VOL" to adjust the volume level.

18

Storing your own sound adjustments

You can adjust the sound modes (BEAT, SOFT, POP: see page 17) to your preference and store your own adjustments in memory.
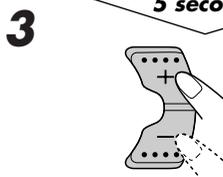

2 3   *1, 4*
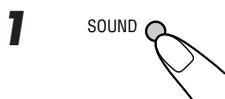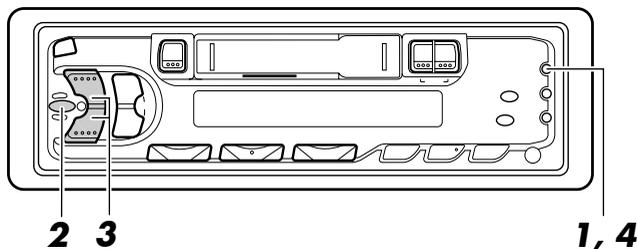
1 SOUND

Call up the sound mode you want to adjust.
See page 17 for details.

Within 5 seconds

2 SEL

Select "BAS", "TRE" or "LOUD".

Within 5 seconds

3

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

Within 5 seconds
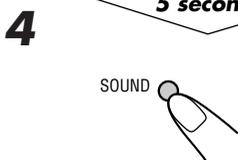
4 SOUND

Press and hold SOUND until the sound mode you have selected in step 1 flashes on the display.
Your setting is stored in memory.

5

Repeat the same procedure to store other settings.

To reset to the factory settings
Repeat the same procedure and reassign the preset values listed in the table on page 17.

Setting the clock

Selecting 24-hour or 12-hour clock display

(Set to 24-hour at the factory)

1. Press the SEL button for more than 2 seconds to set the preferred setting mode. (See page 22.)
2. Select the "24H/12H" mode with the ⌃ or ⌄ button.
3. Select 24H or 12H with the level control buttons (+,–).

How to select the clock mode as the main display mode

1. Press the SEL button for more than 2 seconds to set the preferred setting mode. (See page 22.)
2. Select "DISPMODE" with the ⌃ or ⌄ button.
3. Select "CLOCK" with the level control buttons (+,–).

With the clock display mode selected, when any other operation button is pressed, the display mode of the source you selected is shown.

After a few seconds, the display returns to the clock mode.
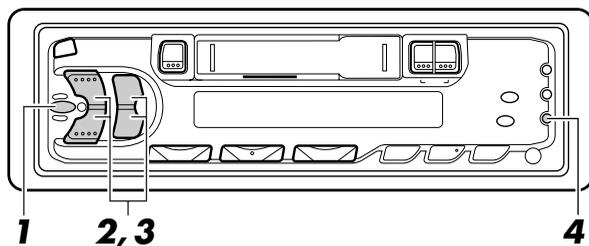
1   *2,3*   *4*

1

SEL   Press and hold the button for more than 2 seconds to set the preferred setting mode. (See page 22.)

2

Set the hour.
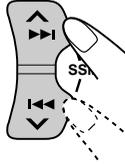
1   Select "CLOCK H" if not shown on the display.

20

2		Adjust the hour.

3   Set the minute.

1		Select "CLOCK M."

2		Adjust the minute.

4   DISP   Start the clock.

To check the current clock time (changing the display mode)

Press DISP repeatedly. Each time you press the button, the display mode changes as follows.

| **During tuner operation:**	**During tape operation:**	**During CD operation:**
Frequency ◄──► Clock (See page 14 when RDS is on.)	Play mode ◄──► Clock	Clock ──► Elapsed ──► Disc playing time number

21

Storing your own mode settings
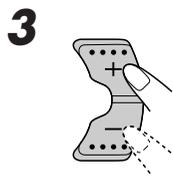
Preferred setting mode control

This mode has been set at the factory, but it can be set to suit your needs.
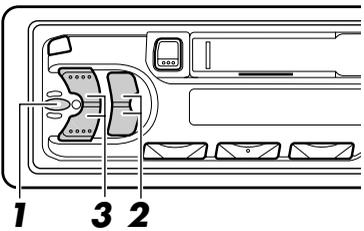
1

SEL

Press the SEL button for more than 2 seconds to set the preferred setting mode.

1   3 2

2

SEL

Select each mode.

3

+
−
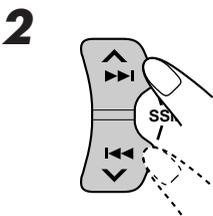
Set the desired mode.

1 SEL Select.	**2** SEL	**3** − + Set.		Factory-preset settings	See page
CLOCK H	Hour adjustment	Back	Advance	0:00	20 – 21
CLOCK M	Minute adjustment	Back	Advance		
24H/ 12H	24/12-hour time display	12H	24H	24H	20
AUTO ADJ	Automatic setting of the clock	ADJ OFF	ADJ ON	ADJ ON	14
DISPMODE	Display mode	PS NAME ↔ FREQ ↳ CLOCK ↵		PS NAME	14, 21
CH DISP	Changer display	TIME	DISC	DISC	24
PTY STBY	PTY standby	29 programme types (See page 13.)		NEWS	9 – 10
PTY SRCH	PTY search			POP M	11 – 12
TA VOL	Traffic announce-ment volume	VOL (00 – 50)	VOL (00 – 50)	VOL (20)	14

• Press the SEL button when you have finished setting to return to the previous mode.
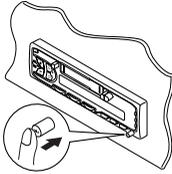
Detaching the control panel

You can detach the control 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.
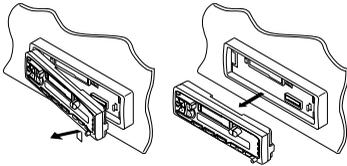
How to detach the control panel

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.
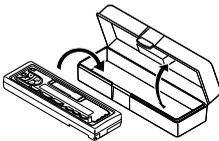
How to attach the control panel

1 Insert the left side of the control panel into the groove on the panel holder.
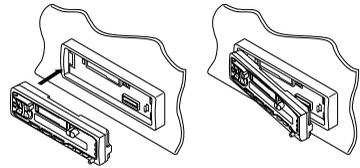
2 Press the right side of the control panel to fix it to the panel holder.
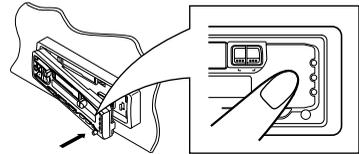
Note on cleaning the connectors:
If you frequently detach the control panel, the connectors will deteriorate.
To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.

Connectors

23
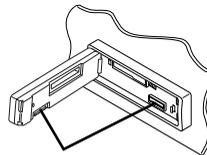
🔘 *CD CHANGER OPERATIONS*

We recommend that you use one of the CH-X series (ex: CH-X1200) with your KS-FX433R. If you have another CD automatic changer, consult your JVC IN-CAR ENTERTAINMENT dealer for connections.
* *For example, if your CD automatic changer is one of the KD-MK series, you need a cord (KS-U15K) for connecting it to this unit.*

Before operating your CD automatic changer:
* Refer also to the Instructions supplied with your CD changer.
* If no discs are in the magazine of the CD changer or the discs are inserted upside down, "NO CD" or "NO DISC" will appear on the display. If this happens, remove the magazine and set the discs correctly.
* If "RESET 1 – RESET 8" appears on the display, something is wrong with the connection between this unit and the CD changer. If this happens, check the connection, connect the connecting cord(s) firmly if necessary, then press the reset button of the CD changer.

Playing CDs

▶▶| ∧
|◀◀ ∨
Number buttons   **1**
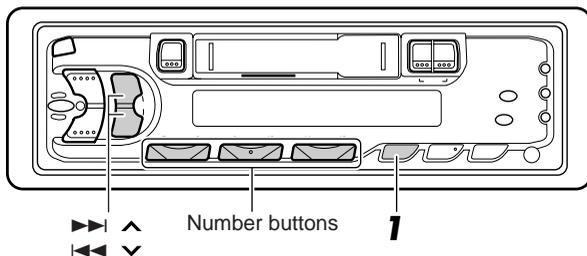
1   CD-CH   Select the CD automatic changer.

Playback starts from the first track of the first disc.
All tracks of all discs are played back.

* "DISC" or "TIME" can be selected in the preferred setting mode control (see page 22).

When "DISC" is selected

Disc number

$$C\!\!\!\!\!\!\square\ |\ \!\!\!-\!\!\square\ |\qquad \text{CD-CH}$$

Track number

When "TIME" is selected

$$\square\square\square 5'\ \square\ |\qquad \text{CD-CH}$$

Elapsed playing time
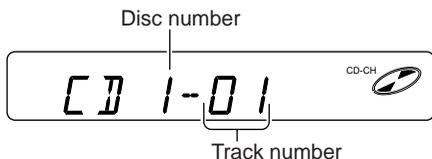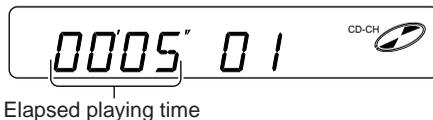
Note on One-Touch Operation:
When you press CD-CH, the power automatically comes on. You do not have to press ⏻/| ATT to turn on the power.

24

To fast-forward or reverse the track

Press and hold ►►⊢ ∧, while playing a CD, to fast-forward the track.

Press and hold ⊢◄◄ ∨, while playing a CD, to reverse the track.

To go to the next track or the previous track

Press ►►⊢ ∧ 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 track is located and played back.

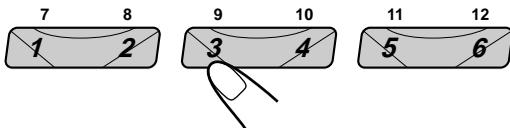Press ⊢◄◄ ∨ briefly, while playing a CD, to go back to the beginning of the current track. Each time you press the button consecutively, the beginning of the previous track is located and played back.
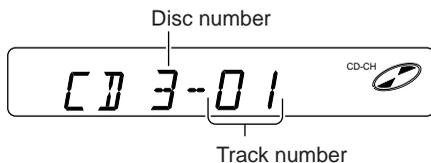
To go to a particular disc directly

Press the number button corresponding to the disc number to start its playback.
• To select a disc number from 1 – 6:
  Press 1 (7) – 6 (12) briefly.
• To select a disc number from 7 – 12:
  Press and hold 1 (7) – 6 (12) for more than 1 second.

Ex. When disc number 3 is selected

Disc number

$$CD \ 3-01 \quad ^{CD\text{-}CH}$$

Track number

Selecting CD playback modes
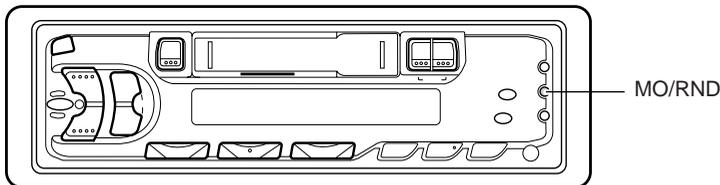
MO/RND

To play back tracks at random (Random Play)

Each time you press MO/RND (mono/random) while playing a CD, CD random play mode changes as follows:

→ **RND1** → **RND2** → **Cancelled** ⌐
  (Random1) **(Random2)**

Mode	RND Indicator	Plays at random
RND1	Lights	All tracks of the current disc, then the tracks of the next disc, and so on.
RND2	Flashes	All tracks of all discs inserted in the magazine.

To extend the lifetime of the unit

This unit requires very little attention, but you will be able to extend the life of the unit if you follow the instructions below.

To clean the heads
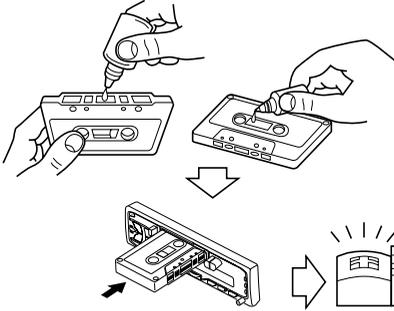
- Clean the heads after every 10 hours of use using a wet-type head cleaning tape (available at an audio store).
  When the head becomes dirty, you may realize the following symptoms:
  – Sound quality is reduced.
  – Sound level decreases.
  – Sound drops out.
- Do not play dirty or dusty tapes.
- Do not touch the highly-polished head with any metallic or magnetic tools.

To keep the tape clean
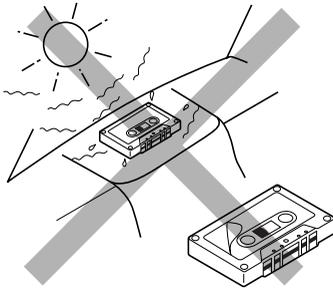
- Always store the tapes to their storage cases after use.
- Do not store tapes in the following places:
  – Subject to direct sunlight
  – With high humidity
  – At extremely hot temperatures

CAUTIONS:
- *Do not play the tapes with peeling labels; otherwise, they can damage the unit.*
- *Tighten tapes to remove slack since loose tape may become entangled with the mechanism.*
- *Do not leave a cassette in the cassette compartment after use, as the tape may become slack.*

27

?! *TROUBLESHOOTING*

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

Symptoms	Causes	Remedies
• A cassette tape cannot be inserted.	You have tried to insert a cassette in the wrong way.	Insert the cassette with the exposed tape facing right.
• Cassette tapes become hot.	This is not a malfunction.	———————
• Tape sound is at very low level and sound quality is degraded.	The tape head is dirty.	Clean it with a head cleaning tape.
• Sound is sometimes interrupted.	Connections are not good.	Check the cords and connections.
• Sound cannot be heard from the speakers.	The volume control 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.
• "NO CD" or "NO DISC" appears on the display.	No CD is in the magazine.	Insert CDs into the magazine.
	CDs are inserted incorrectly.	Insert them correctly.
• "RESET 8" appears on the display.	This unit is not connected to a CD changer correctly.	Connect this unit and the CD changer correctly and press the reset button of the CD changer.
• "RESET 1 – RESET 7" appears on the display.	———————	Press the reset button of the CD changer.

SPECIFICATIONS

AUDIO AMPLIFIER SECTION

Maximum Power Output:
    Front: 35 watts per channel
    Rear: 35 watts per channel
Continuous Power Output (RMS):
    Front: 15 watts per channel into 4 Ω, 40
        to 20,000 Hz at no more than 0.8%
        total harmonic distortion.
    Rear: 15 watts per channel into 4 Ω, 40
        to 20,000 Hz at no more than 0.8%
        total harmonic distortion.
Load Impedance: 4 Ω (4 to 8 Ω allowance)
Tone Control Range
    Bass: ±10 dB at 100 Hz
    Treble:±10 dB at 10 kHz
Frequency Response: 40 to 20,000 Hz
Signal-to-Noise Ratio: 70 dB
Line-Out Level/Impedance: 1.0 V/20 kΩ load
    (250 nWb/m)

TUNER SECTION

Frequency Range
FM: 87.5 to 108.0 MHz
AM: (MW) 522 to 1,620 kHz
      (LW) 144 to 279 kHz

[FM Tuner]
Usable Sensitivity: 11.3 dBf (1.0 µV/75 Ω)
50 dB Quieting Sensitivity:
        16.3 dBf (1.8 µV/75 Ω)
Alternate Channel Selectivity (400 kHz):
        65 dB
Frequency Response: 40 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

CASSETTE DECK SECTION

Wow & Flutter: 0.15% (WRMS)
Fast-Wind Time: 190 sec. (C-60)
Frequency Response:
    50 to 14,000 Hz
Signal-to-Noise Ratio: 52 dB
Stereo Separation: 40 dB

GENERAL

Power Requirement
Operating Voltage: DC 14.4 volts (11 to 16
    volts allowance)
Grounding System: Negative ground
Allowable Operating Temperature:
    0 °C to +40 °C
Dimensions (W × H × D)
Installation Size: 182 × 52 × 150 mm
Panel Size: 188 × 58 × 14 mm
Mass: 1.3 kg (excluding accessories)

*Design and specifications subject to change
without notice.*

JVC

VICTOR COMPANY OF JAPAN, LIMITED