



CD PORTABLE SYSTEM

RC-BM5





INSTRUCTIONS

For Customer Use:

Enter below the Model No. and Serial No. which are located on the rear of the cabinet.

Retain this information for future reference.

Model No.

Serial No.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For U.S.A.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

For Canada/pour le Canada

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQUAU FOND.

CAUTION

To reduce the risk of electrical shocks, fire, etc.:

- 1. Do not remove screws, covers or cabinet.
- 2. Do not expose this appliance to rain or moisture.

ATTENTION

Afin d'éviter tout risque d'électrocution, d'incendie, etc.:

- 1. Ne pas enlever les vis ni les panneaux et ne pas ouvrir le coffret de l'appareil.
- 2. Ne pas exposer l'appareil à la pluie ni à l'humidité.

Caution — POWER ON/OFF button!

Disconnect the mains plug to shut the power off completely. The POWER ON/OFF button in any position does not disconnect the mains line.

Attention — Commutateur POWER ON/OFF!

Déconnecter la fiche de secteur pour couper complètement le courant. Le commutateur POWER ON/OFF ne coupe jamais complètement la ligne de secteur, quelle que soit sa position.

- 1. CLASS 1 LASER PRODUCT
- 2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
- CAUTION: Do not open the top cover. There are no user serviceable parts inside the Unit; leave all servicing to qualified service personnel.
- 1. PRODUIT LASER CLASSE 1
- ATTENTION: Radiation laser invisible quand l'appareil est ouvert ou que le verrouillage est en panne ou désactivé. Eviter une exposition directe au rayon.
- ATTENTION: Ne pas ouvrir le couvercle du dessus. Il n'y a aucune pièce utilisable à l'intérieur. Laisser à un personnel qualifié le soin de réparer votre appareil.

For Canada/pour le Canada

THIS DIGITAL APPARATUS DOES NOT EXCEED THE CLASS B LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS AS SET OUT IN THE INTERFERENCE-CAUSING EQUIPMENT STANDARD ENTITLED "DIGITAL APPARATUS," ICES-003 OF THE DEPARTMENT OF COMMUNICATIONS.

CET APPAREIL NUMERIQUE RESPECTE LES LIMITES DE BRUITS RADIOELECTRIQUES APPLICABLES AUX APPAREILS NUMERIQUES DE CLASSE B PRESCRITES DANS LA NORME SUR LE MATERIEL BROUILLEUR: "APPAREILS NUMERIQUES", NMB-003 EDICTEE PAR LE MINISTRE DES COMMUNICATIONS.

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FEATURES

- 1 Portable system incorporating CD player
 - CD functions can be operated with the remote control unit as well as on the main unit.
 8-cm (3-3/16") CD playback capability
- 2 Digital LCD (Liquid Crystal Display) indicates general playback status.

SAFETY PRECAUTIONS

Prevention of Electric Shocks, Fire Hazards and Damages

- Even when the POWER ON/OFF button is set to OFF, a very small current will flow. To save power and for safety when not using the unit for an extended period of time, disconnect the power cord from the household AC outlet.
- Do not handle the power cord with wet hands.
- When unplugging from the wall outlet, always grasp and pull the plug, not the power cord.
- Consult your nearest dealer when damage, disconnection, or contact failure is found with the cord.
- Do not bend the cord sharply, or pull or twist it.

- 3 Synchronized recording with CD playback
- 4 MP3 playback capability
- 5 Hyper-Bass Sound effect

- Do not modify the power cord in any manner.
- Do not remove screws to disassemble the unit and do not touch anything inside the unit to avoid accidents.
- · Do not insert any metallic objects into the unit.
- Unplug the power cord when there is a possibility of lightning.
- If water gets inside the unit, unplug the power cord from the outlet and consult your dealer.
- Do not block the ventilation holes of the unit so that heat can escape.
- Do not install the unit in a badly ventilated place.

HANDLING PRECAUTIONS

Do not use this unit in direct sunlight or leave the unit in a closed automobile (or yacht, etc.) where it would be exposed to high temperatures above 40° C (104° F).

1 Avoid using the unit in the following places:

- Where the temperature may become excessively high or low; the recommended temperature range is 5°C (41°F) and 35°C (95°F).
- Where it could be subject to vibrations.
- Where it is excessively humid, such as in a bathroom.
- Where it could be magnetized by a magnet or speaker.

2 Pay attention to dust.

Be sure to close the disc holder so that the lens is not contaminated by dust. Do not touch the lens.

3 Condensation

Condensation may occur in the following cases, in which the unit may not operate correctly:

- The unit is in a room where a heater has just been switched on.
- The unit is in a place where there is smoke or high humidity.
- The unit has just moved from a cold place to a warm room.

In these cases, set the POWER ON/OFF button to ON and wait one or two hours before use.

4 Volume control

Compact discs produce very little noise compared with analog records. If you adjust the volume by listening to the noise as you do with analog records, the speakers could be damaged by a sudden blast of sound when playback starts. Therefore, turn down the volume before starting and adjust it as required while playing a CD.

5 Safety mechanism

The unit incorporates a safety interlock mechanism which switches off the laser beam when the disc holder is opened.

6 Do not place magnetic objects such as cassette tapes near the speakers.

Since the speakers contain magnets inside, do not place cassette tapes or magnetic cards nearby as recorded data could be erased.

7 Keep the unit away from the TV.

When the unit is used near a TV, the TV picture could be distorted. If this happens, move the unit away from the TV. If this does not correct the situation, avoid using the unit when the TV is turned on.

8 Cleaning the cabinet

If the cabinet gets dirty, wipe it with a soft, dry cloth. Never use benzine or thinner as these could damage the surface finish.

9 When listening with headphones

- Do not listen at high volumes as it could damage your hearing.
- For safety, do not drive while listening with headphones.

10 Carrying handle

Do not raise or lower the carrying handle with the telescopic antenna extended, to avoid damaging the antenna. Position the carrying handle so that it does not interfere with operation.

POWER SUPPLY

Operation on household AC

The AC power cord provided with this unit has one-way connections to prevent electric shock. Refer to the figure below for correct connection.



CAUTIONS:

- Use only with the JVC power cord provided with this unit to avoil malfunction or damage to the unit. Remove batteries when using the power cord.
- Be sure to unplug the power cord from the outlet when going out or when the unit is not in use for an extended period of time.

Operation on batteries Loading batteries

1 Open the battery cover.

Pull the battery cover toward you while pressing the sections marked by the arrows.



2 Insert eight R20P (SUM-1)/D (13F)-size batteries. Be sure to insert the batteries with the \oplus and \bigcirc terminals positioned correctly.



R20P (SUM-1)/D (13F)-size batteries

3 Replace the cover.

Checking batteries

When the tape speed or output sound level decreases, or CD playback becomes intermittent, replace all batteries with fresh ones.

When making an important recording, use new batteries (preferably alkaline batteries with a longer service life) to avoid any possible failure.

For better battery usage

- Continuous operation of the unit causes the battery power to be consumed quicker than noncontinuous operation.
- Operation of the unit in a cold place causes the battery power to be consumed more quickly than in a warm place.

CAUTIONS:

- When not using the unit for a long time (more than two weeks) or when using the household AC, remove the batteries to avoid a malfunction or damage to the unit.
- When the JVC power cord provided with this unit is connected, the power is automatically switched from the batteries to the household AC even when the batteries are loaded.

However, remove the batteries when using the power cord.

CAUTIONS WHEN USING BATTERIES:

When batteries are used incorrectly, it may result in the leakage of chemicals from the batteries or they may explode. The following care should be taken:

- Check that the positive \bigoplus and negative \bigoplus terminals of the batteries are positioned correctly and load them as shown in the figure on the left.
- Do not mix new and old batteries together, or mix different types of batteries.
- Do not try to recharge non-rechargeable batteries.
- Remove the batteries when the unit is not to be used for an extended period of time.

If chemicals from the batteries come in contact with your skin, wash them off immediately with water. If chemicals leak onto the unit, clean the unit completely.

NAMES OF PARTS AND CONTROLS

Top and front sides



- 1 POWER ON/OFF button
- 2 VOLUME -/+ buttons
- 3 Tape operation buttons
 II PAUSE button
 I /▲ STOP/EJECT button
 ◄ FF button
 ► REW button
 ◄ PLAY button
 REC button
- 4 Disc door
- 5 OPEN ▲ button
- 6 PRESET UP button PRESET DOWN button FM MODE/BEAT CUT button SOUND button

- 7 CD/RANDOM button TUNER/BAND button TAPE button
- 8 Remote sensor section
- 9 Display window
- 10 Cassette holder
- **11 STANDBY indicator**
- 12 ►/II button
 - I
 - button
- 13 DISPLAY button TITLE SEARCH button REPEAT button PROGRAM button

Rear side



- 14 Telescopic antenna
- 15 Battery compartment cover
- 16 \sim AC IN (AC input) jack

17 PHONES jack

Connect stereo mini headphones (3.5-mm (3/16") diameters, impedance of 16 Ω to 32 Ω) to this jack. The speaker output is switched off with headphones connected.

REMOTE CONTROL UNIT

Installing batteries

1 Remove the battery cover from the back of the remote control unit.



2 Insert two R03 (UM4)/AAA (24F)-size batteries (not supplied).

Insert the batteries with the \bigoplus and \bigcirc terminals matching the indication inside the battery compartment. Insert the \bigcirc ends first.

R03 (UM4)/AAA (24F)-size batteries



3 Replace the battery cover.



Battery replacement

The maximum operating distance between the remote control unit and the remote sensor section of the unit is approximately 7 meters (23 feet). When the operating range decreases or remote control operation becomes unstable, replace the batteries with new ones.

Notes on using the remote control unit

- Point the top of the remote control unit toward the remote sensor section of the unit as directly as possible. The operable distance from the main unit decreases if you point the remote control unit at an angle.
- Press the buttons gently and firmly.
- Do not expose the remote sensor section of the unit to strong light (direct sunlight or artificial lighting) and make sure that there are no obstacles between the remote sensor section and the remote control unit.

Names of buttons



- 1 じ/I STANDBY/ON button
- 2 TUNER/BAND button FM MODE/BEAT CUT button PRESET UP/DOWN buttons
- 3 CD operation buttons ►/II button I≪ button ► button ■ button
- 4 SOUND/HBS (Hyper-Bass Sound) button
- 5 CD/RANDOM button PROGRAM/SET button REPEAT button
- 6 Number buttons
- 7 MP3 disc operation buttons DISPLAY button TITLE SEARCH button GROUP UP/DOWN buttons
- 8 VOLUME +/- buttons
- 9 MUTING button

TURNING THE UNIT ON/OFF



POWER ON/OFF button

Press the POWER ON/OFF button on the unit to turn on and off the unit.

You can also press the O/I STANDBY/ON button on the remote control unit, if the POWER ON/OFF button is set to the ON position.

The STANDBY indicator goes out when the unit is turned on. The unit comes on ready to play the source selected when the unit was last turned off.

Notes:

- The *O*/I STANDBY/ON button on the remote control unit does not function when the POWER ON/OFF button is set to OFF.
- Remove the batteries when carrying the unit by hand or in the trunk of a car. This prevents the power from being accidentally turned on, thus avoiding wasteful battery consumption.
- If you plug the AC power cord into the AC outlet with the POWER ON/OFF button set to the ON position, the unit enters standby mode. In this case, press the C/I STANDBY/ON button on the remote control unit, or press the CD/RANDOM, TUNER/BAND or TAPE button on the unit to turn on the unit.

ADJUSTING THE SOUND



Adjusting the volume

Press the VOLUME - or VOLUME + button.

Caution:

DO NOT turn off the unit with the volume set to an extremely high level; otherwise a sudden blast of sound could damage your hearing and/or the speakers and headphones, when you turn on the unit or start playing another source next time.

REMEMBER you cannot adjust the volume unless the unit is turned on.

Turning off the sound temporarily

During playback, press the MUTING button on the remote control unit.

Playback continues without sound.

To restore the sound, press the MUTING button again or increase or decrease the volume level.

Listening through headphones

Connect a pair of headphones to the PHONES jack. No sound comes out of the speakers anymore. Be sure to turn down the volume before connecting headphones.

Selecting the sound mode

Sound mode can be selected to enhance the type of music being played.

Press the SOUND button repeatedly until the sound mode you want appears in the display window.

Alternatively, press the SOUND/HBS button on the remote control unit.

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



* No indication. The sound mode is canceled.

Reinforcing the bass sound

You can enjoy powerful bass sound with the Hyper-Bass Sound effect.

Press and hold the SOUND button so that the HBS indicator lights up in the display window.

Alternatively, press and hold the SOUND/HBS button on the remote control unit.

To turn off the effect, press and hold the button again so that the HBS indicator goes off.

7

PLAYING COMPACT DISCS

Notes on compact discs

This unit is designed to play audio CDs, CD-Rs and CD-RWs.

You can use compact discs with the mark shown below.



Note on CD-R and CD-RW

- User-edited CD-Rs (Recordable) and CD-RWs (Rewritable) can be played only if they are already finalized.
- You can play your original CD-Rs or CD-RWs recorded in music CD format. However, they may not be played depending on their characteristics and recording conditions.
- Before playing CD-Rs or CD-RWs, read their instructions or cautions carefully.
- Some CD-Rs or CD-RWs may not be played on the unit because of their disc characteristics, damage or stain on them, or if the player's lens is dirty.
- CD-RWs may require a longer readout time. (This is caused by the fact that the reflectance of CD-RWs is lower than that of regular CDs.)

MP3 formats supported on the unit

- ISO 9660 format 17 characters max.
- Max. number of tracks and albums: 256
- Max. number of directory nesting levels: 8
- Max. number of albums: 99
- Max. length of a track: 255 minutes 59 seconds
- Sampling frequency: 32 kHz, 44.1 kHz, 48 kHz
- Bit rate: 32 kbps, 64 kbps, 96 kbps, 128 kbps, 192 kbps, 256 kbps

Handling discs

Since dirty, damaged or warped discs could damage the unit, care should be taken of the following:

- Do not touch the reflective recorded surface.
- Do not stick or write anything on the label side.
- Do not bend discs.

Storage

- After removing a disc from the unit, be sure to put it back in its case.
- Do not expose discs to direct sunlight, high temperatures from a heater, etc., high humidity or dust.

Cleaning discs

Before loading a disc, wipe off any dust, dirt or fingerprints with a soft, dry cloth. Discs should be cleaned by wiping radially, from the center to edge.

Never use thinner, benzine, record cleaner or antistatic spray.

• Removing the disc from its storage case and replacing it



Press the center and lift out.



Press to secure the disc.

• Handling



Incorrect

• Cleaning



Correct



Incorrect

Basic operation



- **1** Press the CD/RANDOM button to enter CD mode, if the unit is in TUNER or TAPE mode.
- **2** Press the OPEN \triangleq button to open the disc door.
- **3** Load a disc with the label side facing up and close the disc door.
 - 8-cm (3-3/16") compact discs can be played on the unit without an adapter.
 - When loading an MP3 disc, the MP3 indicator lights up, and the total number of albums and total number of tracks scroll through the display window.

4 Press the ►/II button to start playback.

The current track number and elapsed playing time are displayed during playback.



5 Adjust the volume and sound.

Notes:

- When an MP3 disc is loaded, it may take more than 30 seconds to be read in, depending on the amount of information compiled in the disc.
- "UNREAD DISC" scrolls through the display window when the disc cannot be read because it is dirty or scratched.
- The following indication may be displayed when the disc is loaded upside down. Reload the disc correctly.

ND IIISE

- If mistracking occurs during playback, lower the volume.
- Mistracking may occur if a strong shock is applied to the unit or if it is used in a place subject to vibrations (e.g. in a car travelling on a rough road).

To stop playback

Press the ■ button.





Remote

Main unit

Caution:

Press the \blacksquare button before opening the disc door. Check that the disc has completely stopped rotating before unloading the disc.

To pause playback

Press the ►/II button during playback.

To resume playback, press the button again.





Main unit

Remote

Skipping

- To skip to the next track Press the ►►I button during playback to skip to the beginning of the next track.
- To skip back to the previous track Press the I◄◀ button during playback to skip back to the previous track.



Main unit

Remote

Selecting a desired track directly (audio CD only)

Use the number buttons on the remote control unit. Example:

To select track 8, press the 8 button.

To select track 21, press the +10, +10 and 1 buttons in this order.

Playback starts from the specified track.

Search – locating a desired position on the disc (audio CD only)

Press and hold the I◄◄ or ►►I button during playback.

Monitor the sound and release the button when the desired position is located.





Main unit

Remote

Selecting a desired album and track (MP3 disc only)

1 In stop mode, press the PRESET UP or PRESET DOWN button repeatedly until the desired album is displayed.

Alternatively, press the GROUP UP or GROUP DOWN button repeatedly on the remote control unit.

2 Press the I◄◀ or ►►I button to select a desired track from the current album.

Alternatively, use the number buttons on the remote control unit.

3 Press ►/II button to start playback.

If you use the number buttons in step 2, playback starts without your pressing the \blacktriangleright/II button.

Title search (MP3 disc only)

- **1** In stop mode, press the TITLE SEARCH button.
- **2** Press the PRESET UP or PRESET DOWN button repeatedly to input an alphabet or number at the selected position.

Alternatively, press the GROUP UP or GROUP DOWN button on the remote control unit.

- **3** Press the I → or → button to select another position to input a letter.
- 4 Repeat steps 2 and 3 to input other letters.
- **5** Press the TITLE SEARCH button to start title search.

The number of titles (tracks) the unit found appears in the display window.

- If one or more titles are found, select a track from them and press the ►/II button to start playback.
- If no title is found, "FIND 000" appears briefly in the display window and the unit returns to step 3.

To exit title search mode, press the \blacksquare button in stop mode.

Alternatively, press the TUNER/BAND or TAPE button.

Changing the display

Press the DISPLAY button repeatedly during playback.

Each time you press the button, the display changes in the following order:

In case of an audio CD:

Track number being played and elapsed playing time

¥ Track number being played and remaining time of the track

("REMAIN" lights up in the display window.)

Elapsed playing time of the disc ("TOTAL" lights up.)

 Remaining time of the disc ("TOTAL REMAIN" lights up.)

Repeat/random playback

In case of an MP3 disc:

Track number being played and elapsed playing time

,

 Album number, album name, track number and track name being played



Repeat playback

Press the REPEAT button during playback. Each time you press the button, the repeat mode changes in the following order:

In case of an audio CD:

 → Repeat playback of a single track ("REPEAT" lights up in the display window.)
 ↓
 Repeat playback of all tracks on the disc ("REPEAT ALL" lights up.)
 ↓

- Repeat playback is canceled.

In case of an MP3 disc:

Repeat playback of a single track ("REPEAT" lights up in the display window.)

Repeat playback of an album ("REPEAT GROUP" lights up.)

Repeat playback of all tracks on the disc ("REPEAT ALL" lights up.)

Repeat playback is canceled.

Random playback

Press the CD/RANDOM button in CD mode so that the RANDOM indicator lights up in the display window.

Tracks are played in random order.

To cancel random playback, press the CD/RANDOM button so that the RANDOM indicator goes off.

Programmed playback of an audio CD

Up to 20 tracks can be programmed to play in any desired order.



1 Press the CD/RANDOM button to enter CD mode.

2 Press the PROGRAM button in stop mode.

Alternatively, press the PROGRAM/SET button on the remote control unit.

The PROG. indicator and the current track number start blinking in the display window.



3 Press the I**◄** or **▶** button to select a desired track to be programmed.

Alternatively, use the number buttons on the remote control unit.



4 Press the PROGRAM button.

"OK" is displayed and the PROG. indicator lights up steadily.

5 Repeat steps 2 to 4 to program other tracks.

6 Press the ►/II button to start programmed playback.

To clear the program, press the \blacksquare button in stop mode. "PROG CLEARED" scrolls through the display window. The program is also cleared when you open the disc door.

To check the programmed tracks, press the I ◄ or ► I button repeatedly in stop mode.

Each time you press the button, the program number and track number are displayed in the display window.

Note:

You cannot program more than 20 tracks. "PRG FULL" is displayed when you try to program the 21st track.

Programmed playback of an MP3 disc

Up to 99 tracks can be programmed to play in any desired order.

1 In stop mode, press the PROGRAM button. Alternatively, press the PROGRAM/SET button on the remote control unit.

The PROG. indicator starts blinking in the display window.

2 Press the PRESET UP or PRESET DOWN button to select a desired album.

Alternatively, press the GROUP UP or GROUP DOWN button on the remote control unit.

3 Press the I ← or ►►I button to select a desired track in the album.

Alternatively, use the number buttons on the remote control unit.

4 Press the PROGRAM button.

"OK" is displayed for a moment and the PROG. indicator lights up steadily.

- **5** Repeat steps 1 to 4 to program other tracks.
- 6 Press the ►/II button to start programmed playback.

To clear the program, press the \blacksquare button in stop mode. "PROG CLEAR" scrolls through the display window. The program is also cleared when you open the disc door.

To check the programmed tracks, press the I ◄ or ► I button repeatedly in stop mode.

Each time you press the button, the program number and track number are displayed in the display window.

Note:

You cannot program more than 99 tracks. "PRG FULL" is displayed when you try to program the 100th track.

RADIO RECEPTION

Tuning in a station



- **1** Press the TUNER/BAND button to enter TUNER mode.
- **2** Press the TUNER/BAND button to select the band, FM or AM.
- **3** Press and hold the I ◄ or ►►I button for more than 1 second.

The unit starts searching and stops when a station of sufficient signal strength is tuned in.

If you press the $| \blacktriangleleft \triangleleft |$ or $| \triangleright \vdash |$ button briefly and repeatedly, the frequency changes step by step.

4 Adjust the volume and sound.

Changing the FM reception mode

When an FM stereo broadcast is hard to receive or noisy, reception improves in monaural reception.

Press the FM MODE/BEAT CUT button to change to the manaural reception.

Each time you press the button, the reception toggles between monaural and stereo modes.



The STEREO indicator lights up steadily in the display window when the unit receives an FM stereo broadcast

of sufficient signal strength in stereo reception mode.

Using the antennas

FΜ







Note:

The built-in ferrite core antenna may pick up interference from television receivers in the neighborhood disturbing AM reception.

Presetting stations

You can preset 20 FM and 10 AM stations.



- **1** Press the TUNER/BAND button to select the band, FM or AM.
- 2 Press the Id or ►►I button to tune in the station you want to preset.
- **3** Press the PROGRAM button. Alternatively, press the PROGRAM/SET button on the remote control unit.

4 Press the PRESET UP or PRESET DOWN button to select the preset number.

The selected preset number flashes.



5 Press the PROGRAM button.

"STORED" is displayed in the display window. The preset number lights up steadily.

6 Repeat steps 2 to 5 to preset other stations, using different preset numbers.

Tuning in a preset station

- **1** Press the TUNER/BAND button to select the band, FM or AM.
- **2** Press the PRESET UP or PRESET DOWN button repeatedly until the desired preset number appears.

CASSETTE PLAYBACK

Notes on cassette tapes

- Use only type-I normal tapes. The recording/playback characteristics of this unit are those for normal tapes, which have different characteristics from CrO₂ and metal tapes.
- The use of tapes longer than 120 minutes is not recommended, since characteristic deterioration may occur and these tapes easily jam in the pinch roller and the capstan.
- Loose tape may cause trouble. Gently tighten the tape with a pencil as shown in the figure below.



• To prevent recordings from being accidentally erased, remove the tab(s) with a screwdriver. After the tabs have been broken off, reseal the slots with adhesive tape to erase or re-record.



Loading a cassette

- **1** Press the $\blacksquare / \triangleq$ STOP/EJECT button to open the cassette holder.
- **2** Load a cassette with the open side up and the playback side facing out as shown in the figure below.



3 Close the cassette holder by pressing it gently and firmly.

The cassette holder clicks back into position.

Basic operation



- **1** Press the TAPE button to enter TAPE mode.
- **2** Load a cassette. Use only a type-I normal tape.
- **3** Press the ◄ PLAY button to start playback.
- 4 Adjust the volume and sound.

To stop playback

Press the $\blacksquare / \triangleq$ STOP/EJECT button. The tape also stops when it reaches the end.

Fast-winding a tape

Press the $\triangleright \triangleright$ REW or $\triangleleft \triangleleft$ FF button.

When the tape reaches the end, press the \blacksquare/\triangle STOP/ EJECT button to release the $\triangleright \triangleright$ REW or $\blacktriangleleft \blacksquare$ FF button.

RECORDING

Basic operation



1 Prepare the recording source.

- When recording from the radio Set to the TUNER mode and tune in a desired station.
- When recording from a CD Set to the CD mode and load a CD.
- **2** Load a blank or erasable cassette. Use only a type-I normal tape.
- **3** Press the REC and ◄ PLAY buttons simultaneously.

To stop recording

Press the ■/▲ STOP/EJECT button.

The tape also stops when it reaches the end.

Notes:

- It should be noted that it may be unlawful to rerecord pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable program and in any literary, dramatic, musical, or artistic work embodied therein.
- In recording, the ALC circuit automatically optimizes the recording level. Adjustment of the recording level is unnecessary.
- If a recording you made has excessive noise or static, the unit may have been too close to a TV which was on during the recording. Either turn off the TV or increase the distance between the TV and the unit.

Using the beat-cut function

When recording an AM broadcast, beats may occur. If this happens, press the FM MODE/BEAT CUT button to select the better beat-cut position, "BEAT 01" or "BEAT 02".

To start recording at the exact moment

- 1 Press the II PAUSE button first, then press the
 REC and < PLAY buttons simultaneously, thus entering the record-pause (standby) mode.
- **2** Press the II PAUSE button to release the tape at the exact moment you want to start recording.

Note:

Do not leave the unit in pause mode for more than a few minutes. Instead, press the \blacksquare / \triangle STOP/EJECT button to stop the tape.

Synchronized recording with CD playback

You can make the CD player to start playback when the tape deck enters the recording mode.



1 Load a cassette.

Use only a type-I normal tape.

- 2 Load a CD.
- **3** Press the CD/RANDOM button to enter CD mode.
- 4 Specify a track or point on the disc to start recording.
 - To start recording from the desired track, select the track by pressing the I◄◄ or ►►I button in stop mode.
 - To start recording from the desired point on a disc, play the disc and pause at the desired point by pressing the ►/II button.

5 Press the ● REC and ◄ PLAY buttons simultaneously.

Synchronized recording starts.

When the tape reaches the end first, the CD player continues playback.

When the CD player stops first, the tape continues running. In this case, press the \square / \triangle STOP/EJECT button to stop the tape.

Erasing

When recording on a pre-recorded tape, the previous recording is erased and only the new recording is heard next time the tape is played back.

To erase a tape without making a new recording

- **1** Press the (CD stop) button with no disc loaded in the unit.
- 2 Press the REC and ◄ PLAY buttons simultaneously.

MAINTENANCE

Cleaning the heads, capstan and pinch roller

Cleaning is important!

When the tape is running, magnetic powder and dust naturally accumulate on the heads, capstan and pinch roller. When they become too dirty;

- Sound quality deteriorates.
- The sound output level drops.
- The previous recording is not completely erased.
- Recording is not performed satisfactorily.

To avoid these, clean the heads, capstan and pinch roller every 10 hours of use.



Pinch roller

Open the cassette holder. Clean the heads, capstan and pinch roller.

For effective cleaning, use a cleaning kit available at an audio store.

After cleaning, make sure that the cleaning fluid has dried completely before loading a cassette.

Cautions:

- Keep magnets and metallic objects away from the head. If the head becomes magnetized, noise will increase and the sound will deteriorate.
- Demagnetize the recording/playback head every 20 to 30 hours of use with a head demagnetizer available at an audio store. When demagnetizing the head, the POWER ON/OFF button should be set to OFF.

As the erasure head of the unit is of magnetic type, do not demagnetize it.

• Do not use anything other than alcohol for cleaning. Thinner and benzine will damage the rubber pinch roller.

Cleaning the CD pickup lens

If the CD pickup lens is dirty, the sound may be degraded.

Open the disc door and clean the lens.

Use a blower (available at a camera store, etc.) to blow off dust on the lens.



TROUBLESHOOTING

What appears to be trouble is not always serious. Make sure first ...

- **1 Power cannot be turned on.** * Is the power cord unplugged?
- 2 When the ◄ PLAY button is pressed, tape does not move.
 * Is the II PAUSE button pressed?
- **3 Playback sound is at a very low level.** * Are the batteries run down?
 - * Is the head dirty?
- 4 The REC button does not function.
 * Have the safety tabs of the cassette been broken off?
 - * Is a cassette loaded?
- 5 The disc is loaded but does not play.
 - * Is the disc upside down?
 - * Is the disc dirty?
 - * Is the disc damaged or warped?
 - * Is the lens dirty?
 - * Is there lens condensation? If so, set the POWER ON/OFF button to ON and wait one or two hours before use.

6 No sound from the speakers.

* Are headphones connected?

7 Since tape speed is irregular, wow and flutter occur.

- * Is the pinch roller or capstan dirty?
- * Are the batteries run down?
- 8 Radio reception is poor and there is much static.
 - * Is the antenna properly adjusted?

9 Remote control is impossible.

- * Are the batteries in the remote control unit exhausted?
- * Is the remote sensor section exposed to bright light (direct sunlight, etc.)?

Note:

When the unit is moved from a cold place of around 0°C (32°F) to a warm place, it may not operate normally, because moisture has formed inside the deck. Normal operation will be restored after waiting one or two hours.

SPECIFICATIONS

Compact disc player section

Type Signal detection system : Compact disc player
: Non-contact optical pickup (semiconductor laser)
: 2 channels (stereo)
: 20 Hz to 20 000 Hz
: 90 dB
: Less than measurable limit

Dedie eestier

Number of channels

Frequency response Signal-to-noise ratio

Wow & flutter

Radio section

Frequency range	: FM 87.5 MHz to
	108.0 MHz
	AM 530 kHz to 1 710 kHz
Antennas	: Telescopic antenna for FM
	Ferrite core antenna for AM

Tape deck section

Track system	: 4-track 2-channel stereo
Motor	: Electronic governor DC
	motor for capstan
Heads	: Hard permalloy head for
	recording/playback,
	magnetic head for erasure
Frequency response	: 80 Hz to 12 500 Hz
Wow & flutter	: 0.15% (WRMS)
Fast wind time	: Approx. 120 sec.
	(C-60 cassette)

Speakers : 10 cm $(3-15/16") \times 2$, $5 \text{ cm} (2'') \times 2$, $2.7 \text{ cm} (1-1/8'') \times 2$: 5 W per channel, min. RMS, Power output at 3 Ω from 150 Hz to 15 kHz with no more than 10% total harmonic distortion Output terminals : PHONES \times 1 (Output level: 0 mW to 30 mW/32 Ω , Matching impedance: 16 Ω to 32 Ω) : AC 120 V ∿, 60 Hz Power supply DC 12 V (R20P (SUM-1)/D (13F)-size batteries \times 8) Power consumption : 18 W (power-on mode) Dimentions : 520 (W) mm \times 173 (H) mm $\times 250$ (D) mm $(20^{1}/_{2}" \times 6^{13}/_{16}" \times 9^{7}/_{8}")$ Mass : Approx. 4.5 kg (10 lbs) (without batteries) : AC power cord $\times 1$ Accessories provided Remote control unit $\times 1$

General

Design and specifications are subject to change without notice.

Authorized Service Centers

QUALITY **JVC**[®] SERVICE HOW TO LOCATE YOUR JVC SERVICE CENTER TOLL FREE: 1 (800) 537-5722 http://www.jvc.com

Dear Customer,

In order to receive the most satisfaction from your purchase, please read the instruction booklet before operating the unit. In the event that repairs are necessary, please call 1 (800)537-5722 for your nearest authorized servicer or visit our website at **www.JVC.com** Remember to retain your Bill of Sale for Warranty Service.

Do not service the television yourself

Caution

To prevent electrical shock, do not open the cabinet. There are no user serviceable parts inside. Please refer to qualified service personnel for repairs.

Accessories

To purchase accessories for your JVC product, please call toll free: 1 (800)882-2345 or on the web at **www.JVC.com**



LIMITED WARRANTY ONLY FOR PRODUCT PURCHASED IN U.S.A.

PORTABLE AUDIO 1-90 USA ONLY

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

PARTS 1 YR	LABOR 90 DAYS
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THIS LIMITED WARRANTY IS VALID ONLY IN THE FIFTY (50) UNITED STATES, THE DISTRICT OF COLUMBIA AND IN COMMONWEALTH OF PUERTO RICO.

WHAT WE WILL DO:

★★

★ ★

★ ★ ★

If this product is found to be defective, JVC will repair or replace defective parts at no charge to the original owner. Such repair and replacement services shall be rendered by JVC during normal business hours at JVC authorized service centers. Parts used for replacement are warranted only for the remainder of the Warranty Period. All products and parts thereof may be brought to a JVC authorized service center on a carry-in basis except for Television sets having a screen size 25 inches and above which are covered on an in-home basis.

WHAT YOU MUST DO FOR WARRANTY SERVICE:

Return your product to a JVC authorized service center with a copy of your bill of sale. For your nearest JVC authorized service center, please call toll free: (800) 537-5722.

If service is not available locally, box the product carefully, preferably in the original carton, and ship, insured, with a copy of your bill of sale plus a letter of explanation of the problem to the nearest JVC Factory Service Center, the name and location of which will be given to you by the toll-free number.

If you have any questions concerning your JVC Product, please contact our Customer Relations Department.

WHAT IS NOT COVERED:

- This limited warranty provided by JVC does not cover:
- Products which have been subject to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty
 installation, lack of reasonable care, or if repaired or serviced by anyone other than a service facility authorized by
 JVC to render such service, or if affixed to any attachment not provided with the products, or if the model number
 or serial number has been altered, tampered with, defaced or removed;
- 2. Initial installation and installation and removal for repair;
- 3. Operational adjustments covered in the Owner's Manual, normal maintenance, video and audio head cleaning;
- 4. Damage that occurs in shipment, due to act of God, and cosmetic damage;
- 5. Signal reception problems and failures due to line power surge;
- 6. Video Pick-up Tubes/CCD Image Sensor, Cartridge, Stylus (Needle) are covered for 90 days from the date of purchase;
- 7. Batteries (except that Rechargeable Batteries are covered for 90 days from the date of purchase);

There are no express warranties except as listed above.

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For customer use:

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

Model No. :

Serial No. :

Purchase data :

Name of dealer :



