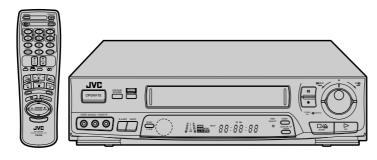


ENGLISH

VIDEO CASSETTE RECORDER

HR-J635EA





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Safety Precautions

The rating plate and the safety caution are on the rear of the unit.

WARNING: DANGEROUS VOLTAGE INSIDE

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

CAUTION

- When you are not using the recorder for a long period of time, it is recommended that you disconnect the power cord from the mains outlet.
- Dangerous voltage inside. Refer internal servicing to qualified service personnel. To prevent electric shock or fire hazard, remove the power cord from the mains outlet prior to connecting or disconnecting any signal lead or aerial.

IMPORTANT

- Please read the various precautions on this page before installing or operating the recorder.
- It should be noted that it may be unlawful to re-record pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable programme and in any literary, dramatic, musical, or artistic work embodied therein.

The OPERATE button does not completely shut off mains power from the unit, but switches operating current on and off.

Video tapes recorded with this video recorder in the LP (Long Play) mode cannot be played back on a single-speed video recorder.

Failure to heed the following precautions may result in damage to the recorder, remote control or video cassette.

- 1. **DO NOT** place the recorder . . .
 - ... in an environment prone to extreme temperatures or humidity.
 - ... in direct sunlight.
 - ... in a dusty environment.
 - ... in an environment where strong magnetic fields are generated.
 - ... on a surface that is unstable or subject to vibration.
- 2. DO NOT block the recorder's ventilation openings.
- 3. <u>DO NOT</u> place heavy objects on the recorder or remote control.
- DO NOT place anything which might spill on top of the recorder or remote control.
- 5. AVOID violent shocks to the recorder during transport.

MOISTURE CONDENSATION

Moisture in the air will condense on the recorder when you move it from a cold place to a warm place, or under extremely humid conditions—just as water droplets form in the surface of a glass filled with cold liquid. Moisture condensation on the head drum will cause damage to the tape. In conditions where condensation may occur, keep the recorder turned on for a few hours to let the moisture dry.

ABOUT HEAD CLEANING

Accumulation of dirt and other particles on the video heads may cause the playback picture to become blurred or interrupted. Be sure to contact your nearest JVC dealer if such troubles occur.



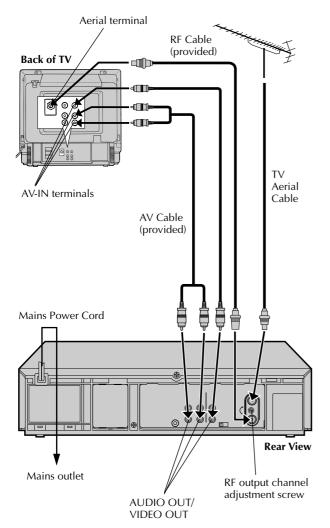
- Only cassettes marked "VHS" can be used with this videorecorder.
- HQ VHS is compatible with existing VHS equipment.
- G-Code is a trademark of Gemstar Development Corporation.
 The G-Code system is manufactured under license from Gemstar Development Corporation.





EN 3

Basic Connections



It's essential that your video recorder be properly connected. Follow these steps carefully. THESE STEPS MUST BE COMPLETED BEFORE ANY VIDEO OPERATION CAN BE PERFORMED.

Make su

CHECK CONTENTS

Make sure the package contains all of the accessories listed in "Specifications" () back cover).

SITUATE RECORDER

Place the recorder on a stable, horizontal surface.

CONNECT RECORDER TO TV

The connection method you use depends on the type of TV you have.

RF CONNECTION

- To Connect To A TV With NO AV Input Terminals . . .
 - a- Disconnect the TV aerial cable from the TV.
 - **b** Connect the TV aerial cable to the ANT. IN jack on the rear panel of the recorder.
- c– Connect the provided RF cable between the RF OUT jack on the rear panel of the recorder and the TV's aerial terminal

After step 4, go to "Tune The TV To Your Video Recorder" on page 4.

AV CONNECTION

- To Connect To A TV With AV Input Terminals . . .
 - a– Connect the aerial, recorder and TV as per "RF CONNECTION".
 - **b** Connect an optional AV cable between the AUDIO OUT and VIDEO OUT connectors on the rear panel of the recorder and the TV's AV-IN terminals.

CONNECT RECORDER TO MAINS

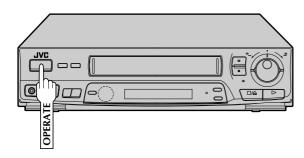
Plug the end of the mains power cord into a mains outlet.

4

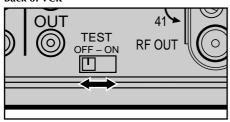




Tune The TV To Your Video Recorder



Back of VCR



The video recorder sends picture and sound signals via the RF connecting cable to your TV on UHF channel 37.

1

TURN ON THE RECORDER

Press **OPERATE**.

SELECT OUTPUT MODE

Set the **TEST** switch on the back of the recorder to ON.

1 -

SET TV CHANNEL

Set your TV to the video channel (UHF channel 37). Two white bars appear on screen vertically.

- Tune the TV until the bars are as clear as they can be.
- Your TV should be set to the channel designated for use with a video recorder, or to a spare channel if there is not a specified video channel on your TV.

RESET OUTPUT MODE

Return the **TEST** switch to OFF.

4

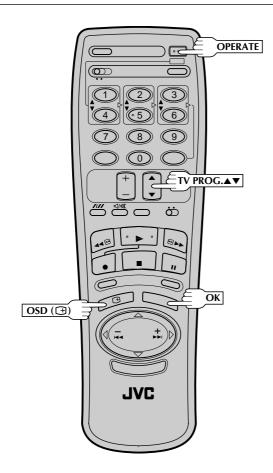
- If CH37 is occupied by a local station, adjust the RF output channel adjustment screw to use another channel between CH33 and CH41 instead.
- If some interference noise is continually seen on the screen, consult your JVC dealer.





On-Screen Displays

Turn on the TV and select the VIDEO channel (or AV mode).



You can choose whether or not to have various operational indicators appear on screen, by setting this function ON or OFF. Messages appear in the language you select. Use the buttons on the remote control for this procedure.

1

TURN ON THE RECORDER

Press **OPERATE**.

ACCESS MODE SELECT SCREEN

Press **OSD**(⊕). The O.S.D./B.E.S.T. screen appears.

4

SELECT MODE

The pointer should already be next to "O.S.D.". If not, press **TV PROG.** ▲/▼ to place it there.

③ 0.S.D. : ON

B.E.S.T. : ON

[TV PROG▲▼] → ○□:ON/OFF
[OSD] :EXIT

ENABLE/DISABLE ON-SCREEN DISPLAY

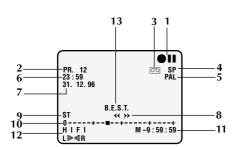
The default setting is "ON", so if you want on-screen displays, leave the setting as is and go to step 5. If you don't want the displays to appear, press **OK** to set "O.S.D." to "OFF".

CLOSE MODE SELECT SCREEN

Press OSD (1).

5

The superimposed indication on the TV screen tells you what the recorder is doing.



- 1- Operation mode indicators
- 2- Channel position number/Aux. indicator (AUX or F-AUX)
- 3– Cassette loaded mark
- **4–** Tape speed SP/LP/EP
- 5- Colour System indicator (pg. 32)
- 6- Clock display
- 7- Current day/month/year
- **8–** Tape direction
- **9–** Type of Broadcast (**□** pg. 17)
- **10** Tape position indicator (pg. 13)
- 11- Counter display (including Counter Memory indicator)
- **12–** Audio mode display
- **13** B.E.S.T. Picture System indicator

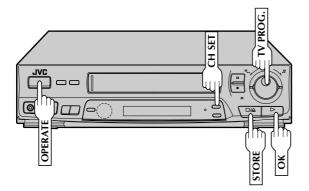


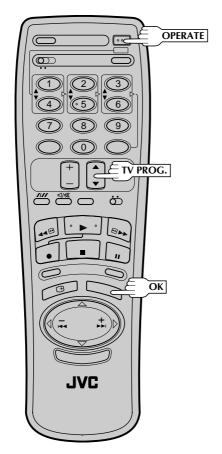




Tuner Set

Turn on the TV and select the VIDEO channel (or AV mode).





Your recorder needs to memorise all necessary stations in channel positions in order to record TV programmes. Once stored, you can call them up with the **TV PROG.** buttons without going through any vacant channels.

TURN ON THE RECORDER

Press **OPERATE**.

ACCESS CHANNEL SET MODE SELECT SCREEN

Press and hold **CH SET** for more than 2 seconds. The Channel Set Mode Select screen appears.

SELECT MODE

Turn the **TV PROG.** dial to place the pointer next to "SEARCH/STORE", then press **OK**. The Band Select screen appears.

SEARCH/STORE
DELETE
FINE TUNING

[TV PROG▲▼] → ⊙K [CANCEL] :EXIT

SELECT BAND

Turn the **TV PROG.** dial to place the pointer next to the band of your choice, then press **OK** to initiate Auto Channel Search.

BAND SELECT

VHF L

VHF H

UHF

UHF

VHF L 00

[CH SET] :EXIT

STORE

CONTINUE

 $[\mathsf{TV} \ \mathsf{PROG} \blacktriangle \blacktriangledown] \to \bigcirc \ltimes \\ [\mathsf{CH} \ \mathsf{SET}] : \mathsf{EXIT}$

SET DESIRED CHANNEL

The following screen appears when a station is detected. To store the detected station, place the pointer next to "STORE" by turning the **TV PROG.** dial, then press **OK**.

If you don't want to store the station, turn the **TV PROG.** dial to place the

pointer next to "CONTINUE", then press **OK**. Auto Channel Search will start resume.

• The blueback screen and the TV picture currently being broadcast appear alternately for 8 seconds

- You can also use the **TV PROG. △**/**▼** button on the remote control instead of the **TV PROG.** dial.
- You can also use the SHUTTLE ring on the recorder instead of the OK button.





SELECT POSITION

Turn the TV PROG. dial until an open position in which you want to store a channel appears, then press OK.

SELECT NUMBER TV PROG. 1

[TV PROG▲▼] → ©© [CH SET] :EXIT

STORE CHANNEL

If fine tuning is not necessary, simply press STORE. For fine tuning adjustment, turn the TV PROG. dial until the picture becomes clearer, then press STORE.

To continue Auto Channel Search, turn the TV **PROG.** dial to select "CONTINUE", then press **OK**. Repeat steps 5 - 7 as necessary.

 To set channels for other bands, turn the TV PROG. dial to select "BAND SELECT", then

TV PROG. 1

[STORE] :STORE [TV PROG▲] :FINE TUNING + [TV PROG▼] :FINE TUNING – [CH SET] :EXIT

TV PROG. 1 ADDED **CONTINUE BAND SELECT**

[TV PROG▲▼] → ©K [CH SET] :EXIT

press **OK** to go back to the Band Select screen. Repeat steps 4 - 7.

RETURN TO NORMAL SCREEN

Press CH SET.

Delete A Stored Channel

TURN ON THE RECORDER Press **OPERATE**.

ACCESS CHANNEL SET MODE SELECT SCREEN

Press and hold CH SET for more than 2 seconds. The Channel Set Mode Select screen appears.

SELECT MODE

Turn the TV PROG. dial to place the pointer next to "DELETE", then press OK.

SELECT CHANNEL

Turn the TV PROG. dial until the position number of the channel you wish to delete appears.

• If the on-screen display is hard to read, refer to the recorder's display panel.

SELECT NUMBER TV PROG. 1

[TV PROG▲▼] → ØK [CH SET] :EXIT

DELETE CHANNEL

Press **OK** twice. The screen shows the selected channel has been deleted.

• To delete another channel, press OK again, then repeat steps 4 - 5.

TV PROG. 1 DELETED

©K :CONTINUE [CH SET] :EXIT

RETURN TO NORMAL SCREEN

Press CH SET.

NOTE:

If you skipped a channel by mistake, perform steps 1 – 8 on pages 6 and 7 to re-store it.



Fine-Tuning Channels Already Stored

1

TURN ON THE RECORDER

Press **OPERATE**.

ACCESS CHANNEL SET MODE SELECT SCREEN

Press and hold **CH SET** for more than 2 seconds. The Channel Set Mode Select screen appears.

SELECT MODE

Turn the **TV PROG.** dial to place the pointer next to "FINE TUNING", then press **OK**.

SELECT CHANNEL

Turn the **TV PROG.** dial so that the position number of the channel you want to fine-tune appears, then press **OK**.

SELECT NUMBER
TV PROG. 1

[TV PROG▲▼] → ©K [CH SET] :EXIT

PERFORM TUNING

Turn the **TV PROG.** dial until the picture becomes clearer, then press **STORE**.

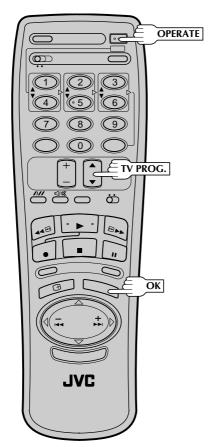
 To fine-tune another channel, press OK and repeat steps 4 − 5. TV PROG. 1

[STORE] :STORE [TV PROG▲] :FINE TUNING + [TV PROG▼] :FINE TUNING – [CH SET] :EXIT

RETURN TO NORMAL SCREEN

Press CH SET.

OPERATE STORE CH SET

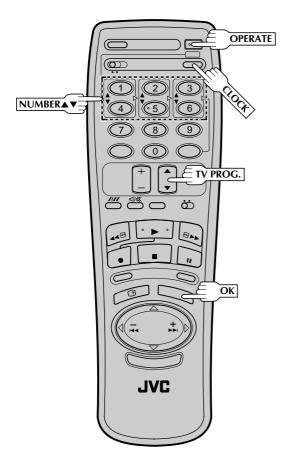






Clock Set

Turn on the TV and select the VIDEO channel (or AV mode).



Use the buttons on the remote control for this procedure.

1

TURN ON THE RECORDER

Press **OPERATE**.

ACCESS MODE SELECT SCREEN

Press CLOCK.

 \bullet If the "G-CODE" screen appears, press **CLOCK** again.

SELECT MODE

Press **TV PROG.** ▲/▼ to place the pointer next to "CLOCK SET", then press **OK**. The Clock Set screen appears.

TIMER PROGRAMMING

[TV PROG▲▼] → ©K [CANCEL] :EXIT

SET TIME

Use **NUMBER** key " $1(\triangle)$ " or " $4(\nabla)$ " to set the time.

 Press and hold either button to delay or advance the time by 30 minutes. CLOCK SET
TIME DATE YEAR
0:00 01:01 00

[1 – 6] [PROG./CLOCK] :EXIT

SET DATE

Use **NUMBER** key " $2(\triangle)$ " or " $5(\nabla)$ " to set the date.

Press and hold either button to change the date by 15 days.

SET YEAR

Use **NUMBER** key " $3(\blacktriangle)$ " or " $6(\blacktriangledown)$ " to set the year.

RETURN TO NORMAL SCREEN

Press CLOCK.

NOTE:

If, in step 7, the year digits are automatically cleared, it is possible that you have input 29th February for a non-leap year. Input the correct data.

To Make Corrections

Perform steps 1-3 to call up the Clock Set screen, use **NUMBER** keys "1" - "6" to make the correction, then press **CLOCK**.



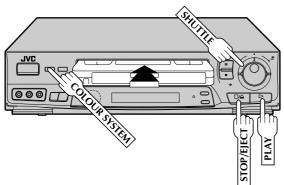


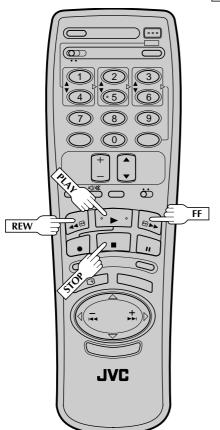


10_{EN} PLAYBACK

Basic Playback

Turn on the TV and select the VIDEO channel (or AV mode).





The easiest, most basic operation possible with your video recorder is tape playback. Already-recorded signals on a video tape are read by your video recorder and displayed on your TV just like a TV programme.

LOAD A CASSETTE

Make sure the window side is up, the rear label side is facing you and the arrow on the front of the cassette is point toward the recorder. Don't apply too much pressure when inserting.

- The recorder power comes on automatically and the counter is reset to 0:00:00.
- Select the appropriate colour system by pressing the COLOUR SYSTEM button. (₱₱ pg. 32)
- If the record safety tab has been removed, playback begins automatically.

FIND PROGRAMME START POINT

If the tape is advanced past the start point, press **REW** or turn the **SHUTTLE** ring to the left and release it.

To go forward, press **FF** or turn the **SHUTTLE** ring to the right and release it.

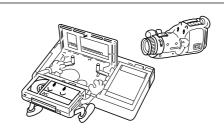
START PLAYBACK

Press **PLAY**. "B.E.S.T." appears on screen (pg. 18)

STOP PLAYBACK

Press **STOP** on the remote or **STOP/EJECT** on the recorder's front panel. Then press **STOP/EJECT** to remove the cassette.

Usable cassettes



- Compact VHS camcorder recordings can be played on this video recorder. Simply place the recorded cassette into a VHS Cassette Adapter and it can be used just like any full-sized VHS cassette.
- This video recorder can record on regular VHS and Super VHS cassettes. However, it will record and play back regular VHS signals only. It is not possible to play back a recorded Super VHS tape.







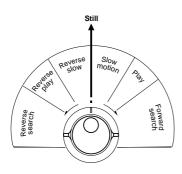


Playback Features

Take advantage of special functions possible with the recorder's controls or the remote control.

NOTE:

Refer to the **SHUTTLE** ring illustration below as you read the following procedures.



Still Picture/Frame-By-Frame Playback

1

PAUSE DURING PLAYBACK

Press **PAUSE**. If there is vertical jitter, use the **TV PROG**. buttons to correct the picture.

ACTIVATE FRAME-BY-FRAME PLAYBACK

2

Turn the **JOG** dial to the right for forward frame-by-frame playback, or to the left for reverse frame-by-frame playback.

OR

Press PAUSE.

OR

Press **PUSH JOG** \triangleleft or \triangleright .

To resume normal playback, press PLAY.

NOTE:

In the search, still or frame-by-frame playback mode, the picture will be distorted, and there may be a loss of colour.

Slow Motion

1

ACTIVATE SLOW-MOTION PLAYBACK

During playback or still, turn the **SHUTTLE** ring to the right for forward slow motion, or to the left for reverse slow motion (refer to the illustration to the left).

OR

During still picture, press and hold **PAUSE** for 2 seconds, then release. Press and release again to return to still picture.

OR

During still picture, press and hold **PUSH JOG** ⊲or ▷. Release to return to still picture.

To resume normal playback, press **PLAY**.

Variable-Speed Search

1

ACTIVATE VARIABLE-SPEED SEARCH

During playback or still, turn the **SHUTTLE** ring to the right for forward variable-speed search, or to the left for reverse variable-speed search (refer to the illustration to the left).

OR

During playback, press **PUSH JOG** \triangleleft or \triangleright .

- The more times you press, the faster the playback picture moves.
- To decrease speed, press the button for the opposite direction.

To resume normal playback, press PLAY.

High-Speed Search

ACTIVATE HIGH-SPEED SEARCH

1

During playback or still, turn the **SHUTTLE** ring all the way to the right for forward high-speed search, or to the left for reverse high-speed search.

- For forward search with a visible picture, turn the SHUTTLE ring all the way to the right and release it within 1 second.
- For reverse search with a visible picture, turn the SHUTTLE ring all the way to the left and release it within 1 second.

OR

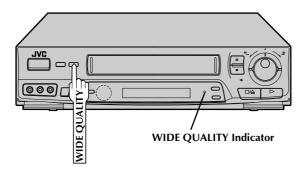
Press **FF** for forward high-speed search, or **REW** for reverse high-speed search.

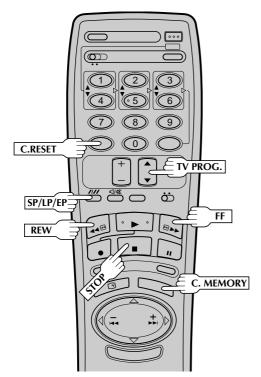
 For short searches, press and hold FF or REW for over 2 seconds. When released, normal playback resumes.

To resume normal playback, press PLAY.









Wide Quality

Use this function to improve image contrast which tends to degrade especially with wide-screen TVs.

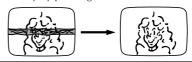
ACTIVATE WIDE QUAL

During playback, press WIDE QUALITY on the

- The WIDE QUALITY indicator will light.
- Pressing the button again turns off the light.
- Turn on/off the light according to the type of playback picture you want.
- The setting will remain effective even though you turn on/off the recorder.
- This function is also effective with large-screen 4:3 aspect ratio TVs as well.

Manual Tracking

Your video recorder is equipped with automatic tracking control. During playback, you can override this and adjust the tracking manually by pressing the TV PROG. button.



OVERRIDE AUTOMATIC TRACKING

Press SP/LP/EP (////) on the remote to engage manual tracking.

ADJUST TRACKING MANUALLY

Press **TV PROG**. ▲ or ▼ to adjust tracking.

RETURN TO AUTOMATIC TRACKING

Press SP/LP/EP (////) on the remote to re-engage automatic tracking.

NOTE:

When a new tape is inserted, the recorder enters the automatic tracking mode automatically.

Counter Memory

Returns to the counter reading of "0:00:00" to conveniently find a specific place on the tape automatically.

SET COUNTER MEMORY

Press C. RESET during playback at a point you wish to locate later. The counter reads "0:00:00". Then press C. **MEMORY**, and "M" appears on the front display panel.

ACTIVATE COUNTER MEMORY

When you wish to return to the designated point, press STOP and then REW or FF.

- The tape rewinds or fast-forwards and stops at about 0:00:00 automatically.
- To cancel Counter Memory, press C.MEMORY again.







Index Search

Your recorder automatically marks index codes at the beginning of each recording. This function gives you quick access to any one of 9 index codes in either direction.



NOTE:

Before starting, make sure the recorder is in the Stop mode.

Instant ReView

easily access any of them.

• Before starting, make sure that the recorder is off and that the Timer mode is disengaged.

Simply by pressing a single button, the recorder power comes

programme. If you have several programmes recorded, you can

on, rewinds, and begins playback of the last timer-recorded

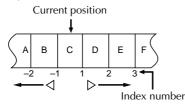
• Turn on the TV and select the VIDEO channel (or AV mode).

ACTIVATE INDEX SEARCH

Press **PUSH JOG** \triangleleft or \triangleright ($\bowtie \blacktriangleleft$ or $\triangleright \bowtie$). " $\bowtie \blacktriangleleft$ 1" or ►► 1" is displayed on screen and search begins in the corresponding direction.

To access index codes 2 through 9, press PUSH JOG or ▷ repeatedly until the correct index number is displayed.

Ex.: To locate the beginning of B from the current position, press **PUSH JOG** < twice. To locate the beginning of D from the current position, press PUSH JOG ⊳once.



 When the specified index code is located, playback begins automatically.

ACTIVATE INSTANT REVIEW

Press **REVIEW**. The recorder power comes on and the recorder searches for the index code indicating the start of the last timer-recorded programme. Once it's found, playback begins automatically.

To watch the first of the 3 programmes, press **REVIEW** three times. The recorder searches and begins playback automatically. You can access a programme as far as 9 index codes away from the current tape position.

NOTE:

Instant ReView is not possible while the recorder is in the Timer mode.

Scene Finder

This function helps you check contents of unlabeled recorded tapes at the touch of a single button.



Next Function Memory

You can set your recorder's power to go off automatically after the tape is fully rewound. Before starting, make sure the recorder is in the Stop mode.

For Automatic Power Off After Tape Rewind press **REW**, then press **OPERATE** within 2 seconds.

NOTE:

Scene Finder cannot be used when the recorder is in the Record mode.

ACTIVATE SCENE FINDER

Press SCENE FINDER. The recorder starts forward high-

speed search for 5 seconds and then fast-forwards 10 minutes on the counter. This cycle is repeated until the

• To start Scene Finder in the reverse direction, press

• During Scene Finder, "PLAY" appears blinking on the display panel. During fast forward or rewind, " >>> "

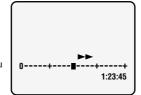
SCENE FINDER and then press the REW button within 2 seconds. This cycle is repeated until the

NOTE:

If you want the power to be turned off automatically when the counter reads "0:00:00" (instead of at the beginning of the tape), press C.MEMORY so that the "M" mark appears before pressing REW.

Tape Position Indicator

The tape position indicator appears on screen when, from the Stop mode, you press FF, REW or perform an Index Search. The position of "■" in relation to "0" (beginning) or "+" (end) shows you where you are on the tape.



"O.S.D." (□ pg. 5) must be set to "ON", or the indicator will not appear.

STOP SCENE FINDER

end of the tape is reached.

beginning of the tape.

or " ▷ □ appears on screen.

Press STOP.

NOTE:

Depending on the type of tape used, there may be times when the indication is not correct.

- During Scene Finder high-speed search, you can also hear the tape sound. During fast forward or rewind, you hear the current TV sound instead.
- Scene Finder does not function during Index Search.





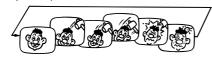


 $14_{\it EN}$

PLAYBACK (cont.)

Repeat Playback

Your video recorder can automatically play back the whole tape 20 times repeatedly.



Start Playbac

Press **PLAY**.

ACTIVATE REPEAT PLAYBACK

Press **PLAY** and hold for over 5 seconds, then release.

- "PLAY" on the display panel blinks slowly.
- The tape plays 20 times automatically, and then stops.

STOP PLAYBACK

Press STOP at any time to stop playback.

NOTE:

Pressing PLAY, REW, FF or PAUSE also stops Repeat Playback.

Remote A/B Code Switching

The remote control is capable of controlling two JVC video recorders independently; one set to respond to the remote control's A code control signals and another set to respond to B code control signals. The remote control is preset to send A code signals because your video recorder is initially set to respond to A code signals. You can easily modify your video recorder to respond to B code signals.

REMOVE POWER SUPPLY

Unplug the mains power cord from the mains outlet.

SET A/B CODE SWITCH Set to B.

RE-SUPPLY POWER

Plug the mains power cord back into the mains outlet.

TURN THE RECORDER ON

Press **OPERATE** on the remote control. The recorder will now only respond to B code signals.

NOTE:

Some TV sets may malfunction in response to the B mode. If this happens, switch back to the A mode.

Soundtrack Selection

Your video recorder is capable of recording three soundtracks (HI-FI L, HI-FI R and NORM) and will play back the one you select.

During Playback

Pressing AUDIO MONITOR (♥/♥ on the remote control) changes the soundtrack being played back as follows:

TRACK			
Recorder's Front Panel	On-Screen Display	USE	
L + R	HIFI L D • • ¶ R	For Hi-Fi stereo tapes	
L	HI FI L D	For main audio of Bilingual tapes	
R	HI FI ⊲∭ R	For sub audio of Bilingual tapes	
NORM	NORM	For audio-dubbed tapes	
L + R + NORM	HI FI NORM	For audio-dubbed tapes	

- "L + R" should normally be selected. In this mode, Hi-Fi stereo tapes are played back in stereo, and the NORM track is played back automatically for tapes with only normal audio.
- For instructions on recording stereo and bilingual programmes, refer to page 17.
 "O.S.D." must be set to "ON" or the on-screen displays will not appear (□ pg. 5).

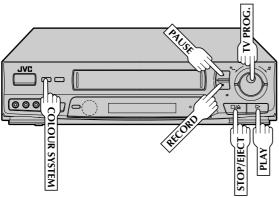


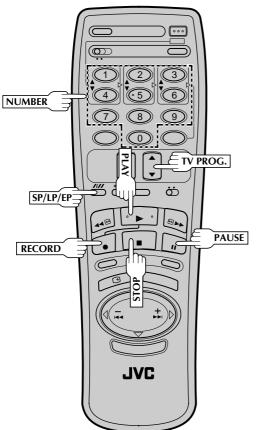


RECORDING EN 15

Basic Recording

Turn on the TV and select the VIDEO channel (or AV mode).





TV signals being received by the recorder's built-in tuner can be recorded onto a video tape. You can "capture" a TV programme using your video recorder.

LOAD A CASSETTE

Insert a cassette with the record safety tab intact.

- The counter is reset to 0:00:00 and the recorder power comes on automatically.
- Select the appropriate colour system by pressing the COLOUR SYSTEM button. (☞ pg. 32)

CHOOSE A PROGRAMME

Press **TV PROG. △**/**▼** or the **NUMBER** keys to select the channel you wish to record.

• The TV PROG. dial can also be used to select a channel.

SET TAPE SPEED

Press **SP/LP/EP**. Check the SP/LP* indicator on the recorder display panel to confirm the selected tape speed.

* EP is displayed on screen only.

START RECORDING

Press and hold **RECORD** and **PLAY** on the remote control, or press **RECORD** on the recorder.

B.E.S.T. takes place at the beginning of each first SP and first LP (or EP) recording after inserting the cassette (pp. 18).

PAUSE/RESUME RECORDING

Press PAUSE. Press PLAY to resume recording.

STOP RECORDING

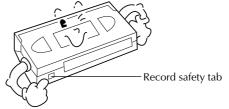
Press **STOP** on the remote control or **STOP/EJECT** on the recorder. Then press **STOP/EJECT** to remove the cassette.

NOTE:

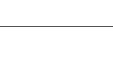
Hi-Fi audio recording in NTSC EP mode is not possible.

Accidental erasure prevention

 To prevent accidental recording on a recorded cassette, remove its safety tab. To record on it later, cover the hole with adhesive tape.









16 en

Recording Features

Record One Programme While Watching Another

1

SELECT CHANNEL TO WATCH

Once recording is in progress, all you need to do is to set the channel controls on the TV for the station you wish to view.

 The programme selected with the TV's channel controls appears on the TV screen while the one selected with the TV PROG. button(s) is recorded on the tape.

Elapsed Recording Time Indication

You can check the exact time of a recording.

1

SET COUNTER DISPLAY

Press **DISPLAY** until a counter reading appears on the dispay panel.

 Pressing the button changes the type of display: Channel, Clock or Counter.

RESET COUNTER

Press C. RESET before starting recording or playback.

• The counter is reset to "0:00:00" and shows the exact elapsed time as the tape runs.

Instant Timer Recording (ITR)

This easy method lets you record for from 30 minutes to 6 hours (selectable in 30-min. increments), and shuts the recorder off after recording is finished.

1

START RECORDING

Press **RECORD** on the recorder.

2

ENGAGE ITR MODE

Press **RECORD** again. "REC" blinks and 0:30 appears on the front display panel.

li R

SET RECORDING DURATION

If you want to record for more than 30 minutes, press **RECORD** to extend the time. Each press extends recording time by 30 minutes.

NOTE:

You can only perform ITR using the **RECORD** button on the recorder's front panel.

Usable Cassettes And Their Recording Times

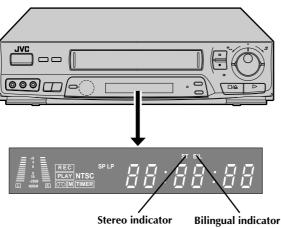
This video recorder can record on regular VHS and Super VHS cassettes. However, it will record and play back regular VHS video signals only. It is not possible to play back a recorded Super VHS tape.

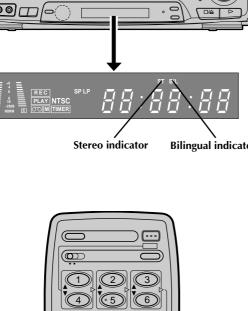
Type of Cassette	Recording/Pla (min		Recording/Playback System
Cassette	SP Speed	LP Speed	System
E-240	240	480	PAL/MESECAM
E-180	180	360	PAL/MESECAM
E-120	120	240	PAL/MESECAM
E-90	90	180	PAL/MESECAM
E-60	60	120	PAL/MESECAM
E-30	30	60	PAL/MESECAM
Type of Cassette	Recording/Playback Time (minutes)		Recording/Playback System
Casselle	SP Speed	EP Speed	System
T-160	160	480	NTSC
T-120	120	360	NTSC
T-90	90	270	NTSC
T-60	60	180	NTSC
T-30	30	90	NTSC

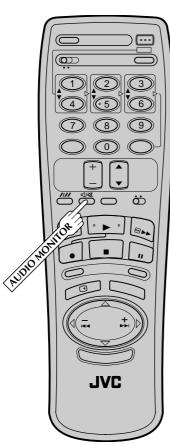












Receiving Stereo And Bilingual Programmes

Your recorder is equipped with a Sound-Multiplex decoder, making reception of stereo and bilingual broadcasts possible.

When the channel is changed, the type of broadcast being received will be displayed on the TV screen for a few seconds and the corresponding indicator on the display panel will light.

Type of Broadcast Being Received	On-screen Display	Display Panel
Stereo	ST	ST
Bilingual	BIL	BIL
Regular Monaural	(none)	(none)

- To listen to a stereo programme, press AUDIO MONITOR until "L" and "R" appear on the front display panel.
- To listen to a bilingual programme, press AUDIO MONITOR until either "L" or "R" appears on the front display panel (as required).

NOTE:

"O.S.D." must be set to "ON" or the on-screen displays will not appear (pg. 5).

To Record Stereo And Bilingual Programmes

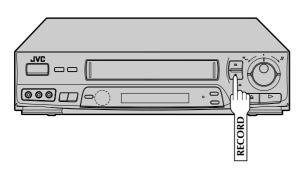
- Stereo programmes are automatically recorded in stereo on the Hi-Fi audio track (with the normal audio track recording mixed L and R channel sound).
- Bilingual programmes are automatically recorded in bilingual on the Hi-Fi audio track. The main soundtrack will be recorded on the normal audio track.

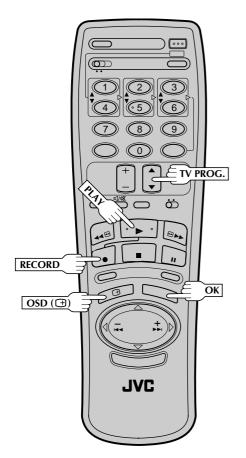
- If the quality of stereo sound being received is poor, the broadcast will be received in monaural with better quality.
- Before playing back a programme recorded in stereo, or a bilingual programme, refer to "Soundtrack Selection" (pg. 14).



B.E.S.T. Picture System

Turn on the TV and select the VIDEO channel (or AV mode).





The B.E.S.T. (Biconditional Equalised Signal Tracking) system checks the condition of the tape in use during recording and playback, and compensates to provide the highest-possible recording and playback pictures. The default setting is "ON".

Recording

LOAD A CASSETTE

Insert a cassette with the record safety tab intact.

• The recorder power comes on automatically.

ACCESS MODE SELECT SCREEN

Press **OSD**(→) and the O.S.D./B.E.S.T. screen appears.

CONFIRM B.E.S.T. STATUS

The default setting is "ON". If this is the case, go to step 4. If not, press TV PROG.▼ to place the pointer next to "B.E.S.T.", then press OK to set to "ON"

0.S.D. : ON B.E.S.T. : ON

CLOSE MODE SELECT SCREEN

4

Press **OSD** (🛨).

START RECORDING

Press and hold **RECORD** and **PLAY** on the remote, or press **RECORD** on the recorder.

- The recorder spends approximately 7 seconds assessing the condition of the tape, then begins recording
- "B.E.S.T." appears on screen and blinks when adjustment is complete.

Display Panel Indication

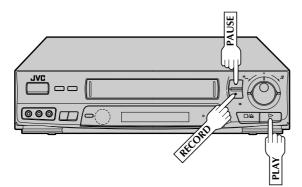


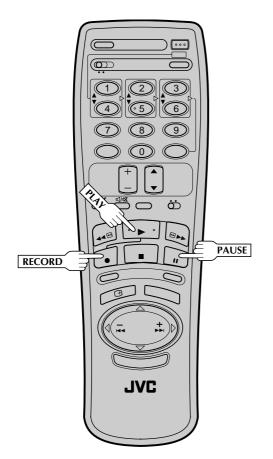
As the tape check progresses, the "--" marks on the display panel increase upward.





EN 19





NOTES:

- The B.E.S.T. system works for SP and LP (or EP) modes only after a tape has been inserted and the Record mode is first initiated. It does not work during recording.
- In the case of timer recording, the B.E.S.T. system works before recording is initiated.
- Once the cassette is ejected, the B.E.S.T. data is cancelled. The next time the cassette is used for recording, B.E.S.T. is reperformed.

ATTENTION:

Since the B.E.S.T. system works before recording actually starts, there is a delay of approximately 7 seconds after **RECORD** and **PLAY** on the remote are pressed, or **RECORD** on the recorder is pressed. To make sure you record the desired scene or programme in its entirety, first perform the following steps:

- 1) Press and hold **PAUSE** and **RECORD** to engage the RECORD PAUSE mode.
- The recorder then automatically checks the condition of the tape and, after approximately 7 seconds, reenters RECORD PAUSE.
- 2) Press PLAY to start recording.
 - If you want to bypass the B.E.S.T. system and begin recording immediately, set "B.E.S.T." to "OFF" in step 3 on page 18.

Playback

The recorder assesses the quality of the tape once you initiate playback.

When watching a tape recorded with "B.E.S.T." set to "ON", it is recommended that you leave B.E.S.T. on during playback as well.

1

START PLAYBACK

Press **PLAY**.

- The recorder adjusts the playback picture quality based on the quality of the tape in use.
- B.E.S.T. is active during Auto Tracking. "B.E.S.T." appears blinking on the screen.

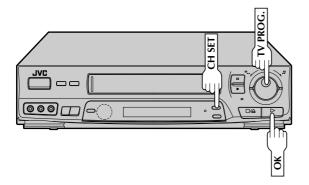
- When watching a rental tape, or one recorded on another video recorder, set B.E.S.T. to your preference by performing steps 2 through 4 on page 18.
- "B.E.S.T." only appears at the beginning of automatic tracking. Even though it doesn't appear after that, the B.E.S.T. function is operative.

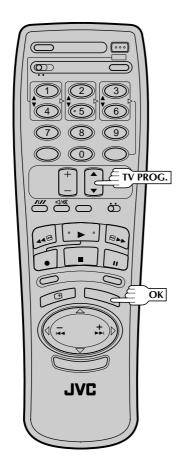






G-Code Setup





The G-Code timer programming system eliminates the need to input channel, date, start and stop time data when setting the timer record function. Simply key in the G-Code number for the TV program you wish to record (found in most TV listings) and the recorder's timer is automatically programmed.

Depending on the TV or cable stations that you receive and the channel numbers that they are received on in your area, you may have to make certain changes in your recorder's "Guide Prog. Set" menu to get proper results. Please read the following information carefully to find out which tasks you need to perform.

Before G-Code setup you must have performed the following procedures:

- Tuner setting (pg. 6)
- Clock setting (□ pg. 9)

Channel Number Matching

Most TV listings have a chart indicating the "Guide Prog." number assigned to each station for purposes of G-Code programming. Check the chart in your TV listings and see if the Guide Prog. numbers listed for the stations you receive are the same as the channel number on which each is received by your recorder .

If the numbers match, go directly to "G-Code Timer Programming" (CF pg. 22).

If the numbers are different, and you want to be able to timer record programs from those stations, you have to inform the recorder of the mismatch. Go to step 1. If you will not want to timer record from those stations, you can go directly to "G-Code Timer Programming" (EF pg. 22).

ACCESS CHANNEL SET MODE SELECT SCREEN

Press and hold **CH SET** for more than 2 seconds. The Channel Set Mode Select screen appears.

SEARCH/STORE
DELETE
FINE TUNING

GUIDE PROG. SET

[TV PROG. T] - OR
[CANCEL]:EXIT

SELECT MODE

Turn the **TV PROG.** dial to place the cursor next to "GUIDE PROG. SET", then press **OK**. The Guide Prog. Set screen appears.

GUIDE PROG. TV PROG.

1 1

[TV PROG▲▼]

©SG:GUIDE PROG. SET

[CH SET] :EXIT

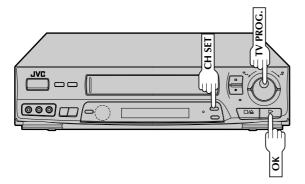
- You can also use the TV PROG. ▲/▼ button on the remote control instead of the TV PROG. dial.
- You can also use the SHUTTLE ring on the recorder instead of the OK button.

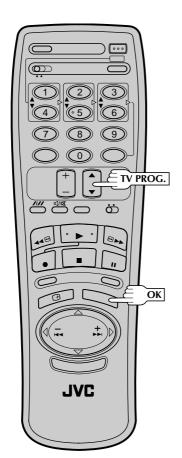






EN 21





START SETTING

Press **OK**.

• The GUIDE PROG. number starts blinking.



INPUT GUIDE PROG. NUMBER

Turn the **TV PROG.** dial to input the Guide Prog. number, then press **OK**.

• The TV PROG. number starts blinking.



INPUT RECEIVING CHAN-NEL (TV PROG.) NUMBER

Turn the **TV PROG.** dial to input the TV Prog. number, then press **OK**.

• Repeat steps 3 - 5 as necessary.

RETURN TO NORMAL SCREEN

Press **CH SET**.

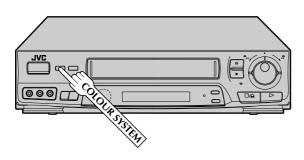
6

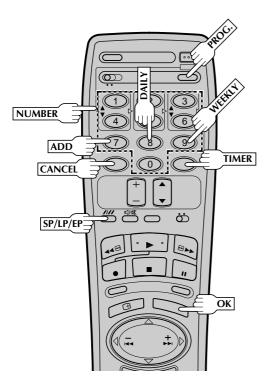


TIMER RECORDING (cont.)

G-Code Timer Programming

Before performing G-Code timer recording, be sure to read "G-Code Setup" (pg. 20).





To Delay The Stop Time . . .

... press **ADD** after pressing **OK** in step **3**. Each time you press, the Stop time is delayed by 5 minutes (meaning that 5 minutes of recording time is added). You can easily compensate for anticipated programme schedule delays this way.

To Timer-Record Weekly Or Daily Serials . .

... after pressing **OK** in step **3**, press **WEEKLY** (**NUMBER** key "9") for weekly serials or **DAILY** (**NUMBER** key "8") for daily serials (Monday–Friday).

Before performing the following steps:

- Insert a cassette with the safety tab in place. The recorder will come on automatically.
- Turn on the TV and select the VIDEO channel (or AV mode).
- Select the appropriate colour system by pressing the COLOUR SYSTEM button. (□ pg. 32)

ACCESS G-CODE SCREEN

Press **PROG.**



ENTER G-CODE NUMBER

Press the appropriate **NUMBER** keys to enter the G-Code number.

 If you made a mistake, press CANCEL and enter the correct G-Code number. G - CODE 12345678 ☐ (0-9) → ∞

CHECK INPUT DATA

Press **OK** on the remote control. The G-Code Programming screen appears.

• If the G-Code number you entered is incorrect, "ERROR" will be displayed on the screen. Press CANCEL and enter the correct G-Code number.

	– P		
G-CODE	12345678		
START		STOP	
21:00	→	22:00	
WEEKLY		SP	
DATE		TV PROG.	
25. 12		29	
©K:0K			
(

SET TAPE SPEED

Press SP/LP/EP.

RETURN TO NORMAL SCREEN

Press OK.

• Repeat steps 1–5 for each additional programmes.

ENGAGE TIMER MODE

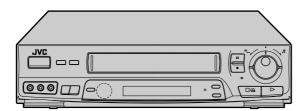
Press **TIMER**.







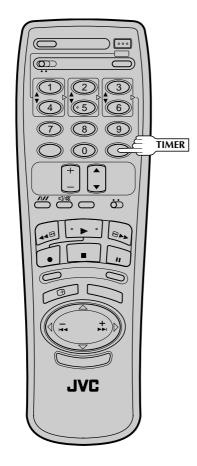
EN 23



- You can programme this recorder to timer-record as many as 8 programmes. If you try to programme the recorder to record a ninth, "PROGRAM FULL" appears on screen. To record the extra programme, you must first cancel any unnecessary programmes (☐ pg. 25, "Check And Cancel Programmes").

 • For safety, your recorder disables all other functions while in
- the Timer mode. If you want to use the recorder but its Timer mode is engaged, press TIMER and all other functions are operable. To re-engage the timer, press TIMER.

 • In case of a power failure after programming, the recorder's
- memory backup keeps your selections for 18 hours.
- Backup time becomes shorter as the unit's internal parts become old. When this occurs, please consult your nearby JVC dealer.





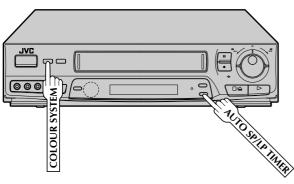


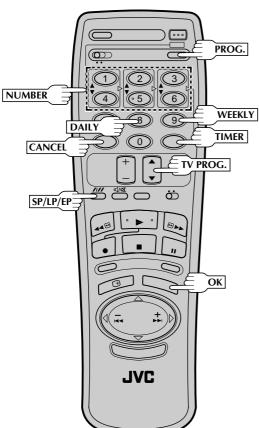


TIMER RECORDING (cont.)

Regular Timer Programming

Remember, the clock must be set before you can programme the timer ($\mathbb{L}\mathbb{F}$ pg. 9).





Before performing the following steps:

- Insert a cassette with the safety tab in place. The recorder will come on automatically.
- Turn on the TV and select the VIDEO channel (or AV mode).
- Select the appropriate colour system by pressing the **COLOUR SYSTEM** button. (gp. 32)

ACCESS MODE SELECT SCREEN

Press **PROG.** twice.

ACCESS TIMER PROGRAM-MING SCREEN

Press **TV PROG.** ▲/▼ to place the pointer next to "TIMER PROGRAM-MING", then press **OK** on the remote control.

☐ TIMER PROGRAMMING

CLOCK SET

[TV PROG▲▼] → © © [CANCEL] :EXIT

ENTER PROGRAMME START TIME

Press **NUMBER** key "1(▲)" or "4(▼)" to enter the time you want recording to start.

 Press and hold either button to delay or advance the time by 30 minutes. -P1START STOP
21:00 → --:-SP
DATE TV PROG.
25.12 -[1-6] [TV PROG.▼]
[PROG./CLOCK] :NEXT

• If the Programme is already used, press **PROG.** until a vacant Programming screen appears.

ENTER PROGRAMME STOP TIME

Press **NUMBER** key "2(▲)" or "5(▼)" to enter the time you want recording to

 Press and hold either button to delay or advance the time by 30 minutes.

START 21:00	- P1- STOP → 22:00
	SP
DATE	TV PROG.
25.12 [1–6] [TV PROG▲▼] [PROG./CLOCK] :NEXT	

ENTER PROGRAMME DATE

Press **NUMBER** key "3(▲)" or "6(▼)" to enter the date.

5





6

ENTER CHANNEL POSITION

Press **TV PROG.** ▲/▼ to select the channel you wish to record.



7

SET TAPE SPEED

Press SP/LP/EP to set the tape speed.

 For each additional programme, press PROG. and repeat steps 3 – 7.

RETURN TO NORMAL SCREEN

8

Press **PROG.** as many times as necessary to return to normal screen.

ENGAGE RECORDER'S TIMER MODE

Press TIMER.

9

To Timer-Record Weekly Or Daily Serials anytime during steps 3 through 7, press WEEKLY (NUMBER key "9") for weekly serials or DAILY (NUMBER key "8") for daily serials (Monday–Friday).

NOTES:

- You can programme this recorder to timer-record as many as 8 programmes. To record the extra programme, you must first cancel any unnecessary programmes (**) Check And Cancel Programmes).
- For safety, your recorder disables all other functions while in the Timer mode. If you want to use the recorder but its Timer mode is engaged, press TIMER and all other functions are operable. To re-engage the timer, press TIMER.
- In case of a power failure after programming, the recorder's memory backup keeps your selections for 18 hours.
- Backup time becomes shorter as the unit's internal parts become old. When this occurs, please consult your nearby JVC dealer.

Check And Cancel Programmes

MIN Perform

ACCESS TIMER PROGRAM-MING SCREEN

Perform steps 1 and 2 of Regular Timer Programming to call up the Timer Programming screen.

• If the recorder is in the Timer mode, first press **TIMER** to exit the mode.

SELECT PROGRAMME

Press **PROG.** until the programme you wish to call up appears.

- Each time you press **PROG.** the next programme's information appears up to "P8" (Programme 8).
- If you want to make a correction, use NUMBER key
 "1" "6" and TV PROG.▲/▼.
- If you want to cancel a programme, press CANCEL.

RETURN TO NORMAL SCREEN

Press **PROG.** as many times as necessary to return to normal screen.

• Press **TIMER** to engage the recorder's timer mode.

Auto SP/LP Timer

If, when recording in SP mode, there is not enough tape to record the entire programme, the recorder automatically switches to LP mode (with PAL broadcasts) or EP mode (with NTSC broadcasts) to allow complete recording.

1

ENGAGE AUTO SP/LP TIMER

Press **AUTO SP/LP TIMER** on the recorder front panel. The button lights "orange".

For Example . .

Recording a PAL-broadcast program of 210 minutes in length onto a 180-minute tape

Approximately 150 minutes

SP mode LP mode

Total 210 minutes

Make sure you press **AUTO SP/LP TIMER** before performing timer programming.

- The Auto SP/LP Timer feature is not available during ITR (Instant Timer Recording), and the feature will not work properly with any tapes longer than E-180 as well as some tapes of shorter lengths.
- Even if, in step 1, you press AUTO SP/LP TIMER and it lights "orange", that doesn't mean that the recorder will automatically change from SP to LP (or EP) mode during the course of the recording. Watch the tape later to confirm.
- If you have programmed the recorder to timer-record 2 or more programs, the second programme and those thereafter may not fit on the tape if you engage the Auto SP/LP Timer mode. In this case, make sure the mode is not engaged, then set the tape speed manually during timer programming.
- There may be some noise at the point on the tape where the recorder switches from SP to LP (or EP) mode.



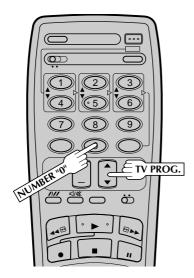




26 EN

EDITING

Edit To Or From Another Video Recorder



IMPORTANT:

- To edit, both the player and the recorder must be of the same colour system. Press your recorder's COLOUR SYSTEM button to select the appropriate colour system.
- For more information on multi-system compatibility,
 g pg. 32.

You can use your video recorder as the source player or the recording deck.

1

MAKE CONNECTIONS

Connect the player's AUDIO/VIDEO OUT connector to the recorder's AUDIO/VIDEO IN connector.

• Use the L connector for monaural connection.

SET RECORDING DECK'S INPUT MODE

Set to AUX. With this video recorder, press **NUMBER** Key "0" or **TV PROG.**."AU" will appear instead of a channel number.

START SOURCE PLAYER

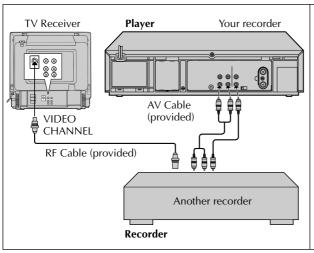
Engage its Play mode.

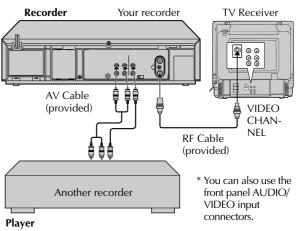
J

START RECORDING DECK

Engage its Record mode.

- NTSC tapes being played back in the NTSC → PAL mode
 (□ pg. 33) cannot be dubbed to another recorder.
- When you dub an NTSC tape using your recorder as the playback deck, select NTSC 3.58 (or NTSC 4.43) with the COLOUR SYSTEM button. (☐ pg. 32)
- Connections made to the front panel AUDIO/VIDEO input connectors automatically override those made to the rear panel AUDIO/VIDEO input connectors.

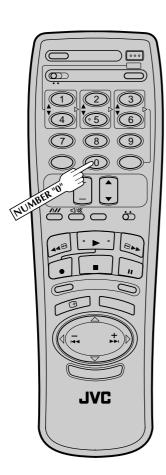








Edit From A Camcorder



IMPORTANT:

- To edit, both the player and the recorder must be of the same colour system. Press your recorder's COLOUR SYSTEM button to select the appropriate colour system.
- PAL, SECAM and NTSC camcorders can be used as a player for editing.
- For more information on multi-system compatibility, \$\mathbb{G}\$ pg. 32.

You can use a camcorder as the source player and your video recorder as the recorder.

MAKE CONNECTIONS

Connect the camcorder's AUDIO/VIDEO OUT connectors to the recorder's front panel AUDIO IN and VIDEO IN connectors.

- Use the L connector for monaural connection.
- When a Master Edit Control-equipped JVC camcorder is used, the camcorder is capable of controlling the recorder. Refer to the camcorder's instruction manual for operating procedure.

SET RECORDER'S INPUT MODE

Press **NUMBER** key "0". "F-AU" appears in place of a channel number.

START CAMCORDER

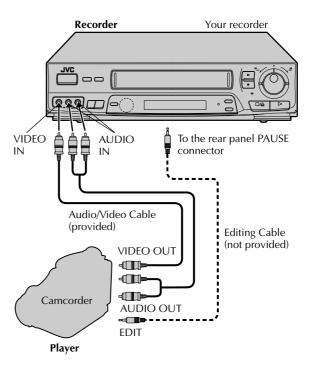
Engage its Play mode.

START RECORDER

Engage its Record mode.

NOTE:

Connections made to the front panel AUDIO/VIDEO input connectors automatically override those made to the rear panel AUDIO/VIDEO input connectors.

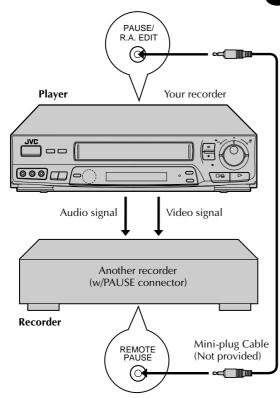


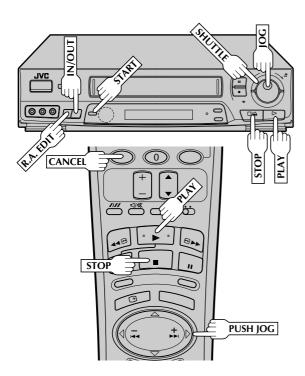






Random Assemble Editing





This function makes it easier to create edited videos when your video recorder is used as the source player in combination with another JVC video recorder equipped with a Remote PAUSE Connector. You can pre-program up to 8 scenes or "cuts" for automatic editing in the sequence you have specified.

You can also perform Random Assemble Editing with a second non-JVC recorder. ☞ pg. 29

MAKE CONNECTIONS

Connect your recorder's VIDEO OUT and AUDIO OUT connectors to the VIDEO IN and AUDIO IN connectors on the recording deck, and connect your recorder's PAUSE/R.A. EDIT connector to the PAUSE connector on the recording deck.

- If the recording deck doesn't have a PAUSE connector, connect to the R.A. EDIT connector instead.
- The Mini-plug cable is a mono 3.5 mm mini-plug to mono 3.5 mm mini-plug connector.

PREPARE FOR EDITING

Insert the cassette to be recorded on into the recorder and set the recorder's input mode.

LOAD SOURCE CASSETTE

Insert the source cassette into your recorder.

START SOURCE PLAYBACK

Press **PLAY**.

ACCESS R.A. EDIT FUNC-TION

Press R.A. EDIT.

 The screen is superimposed on the video playback in step 6.

LOCATE EDIT-IN POINT

Find the point on the source tape from where you want the edited scene to begin by pressing **PUSH JOG** ⊲ ▷ or using the **SHUTTLE** ring or the **JOG** dial, then press **IN/OUT**.

1 1 2 3 4 5 6 7 8 0:00:00 (+) 0:00:00

• The edit-in point is

registered in memory and appears on the screen. You can also perform an Index Search (if index marks

You can also perform an Index Search (if index marks have been previously recorded on the tape at the desired points) to find the points you want, but this will result in reduced accuracy.



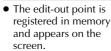




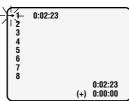
•

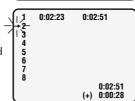
LOCATE EDIT-OUT POINT

Find the point where you want the edited scene to end by pressing PUSH JOG ▷ or using the SHUTTLE ring or the JOG dial, then press IN/OUT.



- The total time of the edited scenes is displayed to the right of "(+)".
- Repeat steps 6 and 7 for each additional scene.





PREPARE RECORDING DECK

Engage its Record-Standby mode.

START R.A. EDIT

Press START.

- Automatic editing begins; all the specified scenes are copied to the recording deck in the order they were registered.
- The on-screen display remains while your recorder searches for each scene (blinking cursor indicates scene currently being searched for), but disappears during actual editing.
- During scene search, the recording deck automatically enters its Record-Standby mode.
- When all registered scenes have been edited, your recorder enters the Pause mode, the recording deck enters its Record-Standby mode, and the cursor blinks at the next available number.

END R.A. EDIT

Press **R.A. EDIT** again, and engage the Stop mode for your recorder and for the recording deck.

NOTES:

- You can also monitor the sound when searching for scenes you want to edit in steps 6 – 7. Since you can hear the soundtrack during selection, you can avoid abrupt or unnatural sounding scene-to-scene transitions.
- When editing, there may be a discrepancy of about 2 seconds on the source tape between the locations you chose as edit-in/-out points and the locations your recorder recognizes as those points.
- For any scene, the edit-out point must have a counter reading that is at least 1 second after the corresponding edit-in point. Any less than 1 second and the edit-out point will not be registered.
- Since the source recorder prerolls during Random Assemble Editing, there must be at least 15 seconds worth of recorded material prior to any edit-in point on the source tape.
- If the search time for an edit-in point exceeds 5 minutes, the recording deck enters its Stop mode and editing will not take place.
- During steps 6 and 7 if you engage the Pause mode while registering edit-in and -out points in the R.A. Edit screen, the characters in the on-screen display may become distorted. This is normal.

To Make Corrections . . .

... during step 6 or 7, you can cancel registered in and out points by pressing **CANCEL** on the remote control. Each time you press, the preceding point is erased.

• If, for example, you have registered 5 sets of in and out points and want to reset the first set, you have to press **CANCEL** until all points after the first set have been erased. Reenter them after you've repaired the first set of points.

Memory Capacity

Random Assemble Editing shares memory space with the recorder's timer. If there are programs occupied by timer-recording data, those spaces cannot be used to register edit-in and -out points — meaning you won't be able to edit 8 scenes.

PROGRAM FULL

0:00:00
(+) 0:00:00

- When all 8 programs are full, "PROGRAM FULL" appears on the R.A. EDIT screen.
- To cancel a program, see page 25.

RM-V704U Multi-Brand R.A. Edit Controller (Not provided)

By connecting this controller to your recorder's R.A. EDIT connector, you can perform Random Assemble Editing in combination with a second non-JVC video recorder. The controller is compatible with various major recorder brands. For compatible systems and availability, please consult your JVC dealer.

NOTE:

Although the RM-V704U is designed to operate the recording deck, it may not work with some recorders, or may have limited function capability.

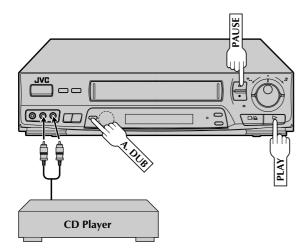


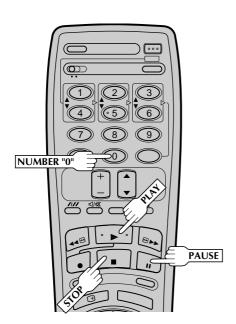




30 en **EDITING** (cont.)

Audio Dubbing

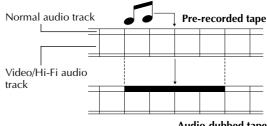




NOTES:

- When monitoring the sound during Audio Dubbing, the normal soundtrack is automatically selected. If you wish to hear the mixed sound (Hi-Fi + Normal soundtracks), press **AUDIO MONITOR** to select "L+R+NORM" (pg. 14).
- Audio dubbing stops automatically when the counter reaches "0:00:00", and the recorder enters the Play mode. Check the counter reading before dubbing.
- Audio dubbing is also possible using the rear panel AUDIO IN connectors. When using these connectors, make sure to select the correct input mode in step 2.
- Connections made to the recorder's front panel are given priority over those made to the rear panel connectors.
- Audio dubbing cannot be performed on a cassette that has had its record safety tab removed.
- When playing back an audio-dubbed tape, press AUDIO MONITOR to select the soundtrack you wish to hear (C pg. 14).

Audio dubbing replaces the normal audio sound of a previously recorded tape with a new soundtrack.



Audio-dubbed tape

MAKE CONNECTIONS

Connect an audio component to the AUDIO IN L + R connectors on the recorder's front panel.

• When connecting monaural equipment, use only the recorder's AUDIO IN L connector.

SET INPUT MODE

Press NUMBER key "0". "F-AU" appears in place of a channel number.

LOCATE START POINT

Press PLAY to start playback of the tape in your recorder, and press PAUSE when you find the point where you want to start dubbing.

ENGAGE AUDIO DUBBING

Press A. DUB.

You recorder enters the Audio Dubbing Pause mode. (REC blinks and PLAY lights up on the front display panel.

START DUBBING

Engage the audio component's Play mode, then press **PLAY** to start the tape in your recorder. Audio dubbing begins at this point and " \bigoplus " appears on the screen for 5 seconds.

• To stop dubbing temporarily, press PAUSE. Press **PLAY** to resume dubbing.

END AUDIO DUBBING

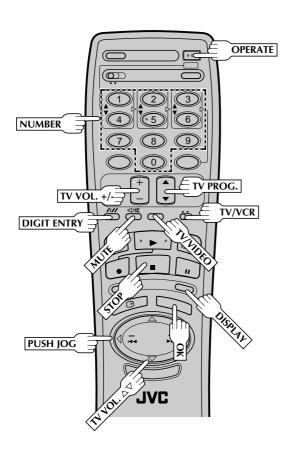
Press STOP to stop the tape in your recorder, and engage the audio component's Stop mode.







Multi-Brand Remote Control



CODE	TV BRAND NAME
01	JVC
02	BRANDT, NORDMENDE, SABA, TELEAVIA,
	TELEFUNKEN, THOMSON
03	FERGUSON
04	PHILIPS
05	BLAUPUNKT, GRUNDIG
06	SONY
07	PANASONIC
08	GRAETZ, ITT, LUXOR, SALORA, SELECO
09	MIVAR
10	HITACHI
11	TOSHIBA
12	MITSUBISHI
13	FINLUX
14	NOKIA
15	SHARP
16	SAMSUNG

Your remote control can operate the basic functions of your TV set. In addition to JVC TVs, other manufacturer's TVs can also be controlled by setting the appropriate switch on the remote control.

Before you start . .

- Turn on the TV using its remote control.
- Set the remote control's TV/VCR switch to TV.

NOTE:

If your TV is a JVC, you don't have to set the code in step 1. Go to step 2.

SET TV BRAND CODE

Refer to the chart below. While holding down **OPER-ATE**, enter your TV's brand code using the **NUMBER** keys, then press **STOP**.

 You don't have to repeat this step until you replace your remote control's batteries.

TRY OPERATING TV

Press **OPERATE** on the remote to turn the TV off. If it goes off, try other operations.

- The OPERATE button, TV/VIDEO button, TV PROG.
 ▲/▼ button, TV VOL. +/- (or △/▽) button and MUTE button on the remote can all be used to operate the TV/
- To return the remote to video recorder control, set its TV/VCR switch to VCR.

IMPORTANT

Although the provided remote control unit is compatible with JVC televisions, as well as many other models, <u>it may not work with your TV</u>, or in some instances, may have limited function <u>capability</u>.

Control Your TV Using Additional Buttons

The **NUMBER** keys on the remote can also be used to select the TV's channel by setting the remote control to the TV mode.

- 1 Set the TV/VCR switch to TV.
- 2 Use the **NUMBER** keys, and the **DIGIT ENTRY** (//// button, the **PUSH JOG** button, the **DISPLAY** button or the **OK** button to select the TV's channel.
- With televisions under Code 01, 03, 04, 06, 07, 10 or 11, the **DIGIT ENTRY** button corresponds to the 1-digit/2-digit entry switching button (often labelled /– –) of your TV's remote control.
- With televisions under Code 01, 08 or 09, the PUSH JOG
 ✓ button corresponds to the 10 + button, and the PUSH JOG
 ▷ button corresponds to the 20 + button of your TV's remote control.
- With televisions using Code 09, the **DISPLAY** button corresponds to the 30 + button.
- With televisions using Code 06, the OK button corresponds to the ENTER button of your TV's remote control.

NOTE:

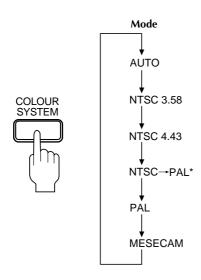
The way these buttons are used is determined by your TV. Use these buttons as instructed for your TV's remote control.







Setting Of The Colour System Select Buttons



* "NTSC→PAL" appears during playback only.

Use the **COLOUR SYSTEM** button on the recorder's front panel to select the colour system. Pressing this button changes the mode as illustrated on the left. The On-Screen display will show which mode is selected.

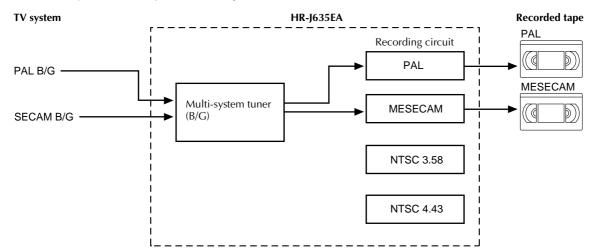
Mode Display	Description	
AUTO (Colour Signal)	Usually set to this mode. This mode automatically detects PAL, NTSC, SECAM or MESECAM and adjusts to the colour system being recorded or played back. When it does not perform properly, set the colour system manually.	
MANUAL (Colour Signal)	For recording, there is a choice of 4 selectable modes; PAL/MESECAM/NTSC 3.58/NTSC4.43. Select the mode that matches the colour signal being received. For playback, there is an additional mode which allows NTSC tapes to be played back and viewed on PAL TVs.	

NOTES:

- In the AUTO mode, NTSC signals will be automatically recorded as NTSC 3.58.
- In the AUTO mode, NTSC tapes will be played back as NTSC 3.58.
- SECAM signals will always be recorded as MESECAM. Select the AUTO or the MESECAM mode when recording SECAM signals.
- When playing back a SECAM tape, select the AUTO or the MESECAM mode. The playback picture will always be monochrome.

Off-Air Recording

The built-in multi-system tuner is capable of receiving PAL B/G and SECAM B/G broadcasts.



NOTE:

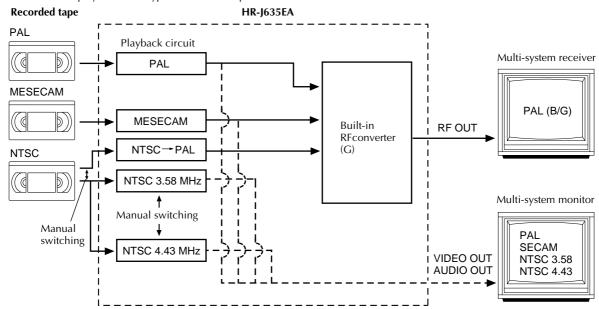
This model does not operate in BRAZIL (PAL-M) or ARGENTINA (PAL-N).





Playback

This recorder can play back all 3 types of recorded tape.



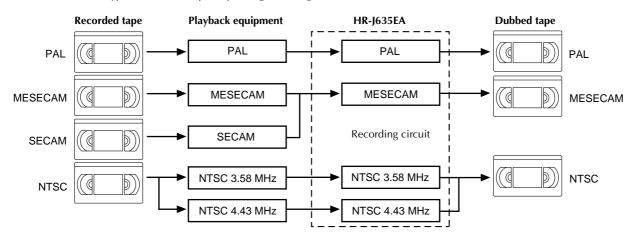
NOTES:

When viewing NTSC tapes on a PAL TV set:

- The picture may shrink vertically with black bars appearing at the top and bottom of the screen. This is not a malfunction on the part of the video recorder nor the TV.
- The picture may roll up or down. This can be corrected using the V-HOLD control found on some TVs. (This cannot be corrected if the TV does not have a V-HOLD control.)
- During search, still, or frame-by-frame playback, the picture will be distorted, and there may be a loss of colour.

Tape-To-Tape Editing

There are 4 different types of recorded tape, depending on the signal recorded.









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TROUBLESHOOTING

Before requesting service for a problem, use this chart and see if you can repair the trouble yourself. Small problems are often easily corrected, and this can save you the trouble of sending your video recorder off for repair.

POWER		
SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
No power is applied to the recorder.	The mains power cord is disconnected.	Connect the mains power cord.
The clock is functioning properly, but the recorder cannot be powered.	 "TIMER" is displayed on the display panel. 	Press the TIMER button to turn the TIMER indicator off.
TAPE TRANSPORT		
SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
The tape does not run during recording.	• The recorder is in the Pause mode.	Press PLAY to disengage the Pause mode.
The tape stops during rewind or fast-forward.	 "M" is displayed on the display panel. 	Press C.MEMORY to deactivate the Counter Memory function and turn the "M" indicator off.
The tape will not rewind or fast- forward.	 The tape is already fully rewound or fast-forwarded. 	Check the cassette.
PLAYBACK		
SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
The playback picture does not appear while the tape is running.	 If you're using the RF OUT connection, the TV receiver's channel selector is set to the wrong video channel. If you're using the AV connection, the TV receiver is not set to the AV mode. 	If you are using the RF OUT connection, set the TV receiver to the RF converter channel (UHF 36). (F) pg. 4) If you are using the AV connection, set the TV to its AV mode.
2. Noise appears during visual search.	• This is normal.	
 Noise appears during normal playback. 	 The automatic tracking mode is engaged. 	Try manual tracking. (F pg. 12)
Noise appears during slow-motion playback.	 The automatic tracking mode is engaged. 	Try manual tracking. (🖙 pg. 12)
5. Noise appears during still play- back.		Press TV PROG. ▲ or ▼ a few times to remove the noise bars from the screen.
6. Breaks are noticeable in Hi-Fi soundtrack.	Automatic tracking is engaged.	Engage and adjust tracking manually. (☞ pg. 12)
7. The playback picture is blurred or interrupted while TV broadcasts are clear.	• The video heads may be dirty.	Consult your JVC dealer.
8. Playback picture has a loss of colour.	 The wrong colour system is selected for the tape being played back. The wrong colour system was selected during recording. 	Select the correct colour system by pressing the COLOUR SYSTEM button. (© pg. 32) Once recorded, the signal cannot be corrected. Be sure to choose the correct setting before recording.









RECORDING				
SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION		
Recording cannot be started.	 There is no cassette loaded, or the cassette loaded has had its Record Safety tab removed. 	Insert a cassette, or using adhesive tape, reseal the slot where the tab was removed.		
2. TV broadcasts cannot be recorded.	 "AU" has been selected as the input mode. 	Set to the desired channel.		
3. Tape-to-tape editing is not possible.	 The source (another video recorder, camcorder) has not been properly connected. All necessary power switches have not been turned on. The input mode is not correct. 	Confirm that the source is properly connected. Confirm that all units' power switches are turned on. Set the input mode to "AU".		
Camcorder recording is not possible.	The camcorder has not been properly connected.The input mode is not correct.	Confirm that the camcorder is properly connected. Set the input mode to "AU".		
TIMER RECORDING				
SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION		
1. Timer recording won't work.	The clock and/or the timer have been set incorrectly.The timer is not engaged.	Re-perform the clock and/or timer settings. Press TIMER and confirm that "TIMER" is displayed on the display panel.		
On-screen timer programming is not possible.	• Timer recording is in progress.	Timer programming can't be performed while a timer recording is in progress. Wait until it finishes.		
3. "TIMER" and "OO" on the display panel won't stop blinking.	The timer is engaged but there's no cassette loaded.	Load a cassette with the Record Safety tab intact, or cover the hole using adhesive tape.		
4. The cassette is automatically ejected, and "TIMER" and "つつ" on the display panel won't stop blinking.	 The loaded cassette has had its Record Safety tab removed. 	Remove the cassette and cover the hole with adhesive tape, or insert a cassette with the Record Safety tab intact.		
5. "TIMER" blinks for 10 seconds and the Timer mode is disengaged.	 TIMER has been pressed when there are no programs in memory, or the timer record information has been programmed incorrectly. 	Check the programmed data and reprogram as necessary, then press TIMER again.		
6. The cassette is automatically ejected, the power shuts off and "TIMER" and "団" won't stop blinking.	 The end of the tape was reached during timer recording. 	The programme may not have been recorded in its entirety. Next time make sure you have enough time on the tape to record the entire programme.		
7. G-Code does not timer-record properly.	 The recorder's channel positions have been set incorrectly. 	Refer to "G-Code Setup" and reperform the procedure (137 pg. 20).		
OTHER PROBLEMS	OTHER PROBLEMS			
SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION		
Whistling or howling is heard from the TV during camcorder record- ing.	The camcorder's microphone is too close to the TV.The TV's volume is too high.	Position the camcorder so its microphone is away from the TV. Turn the TV's volume down.		
2. The channel cannot be changed.	• Recording is in progress.	Press PAUSE to pause the recording, change channels, then press PLAY to resume recording.		







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QUESTIONS AND ANSWERS

PLAYBACK

Q. What happens if the end of the tape is reached during playback or search? A. The tape is automatically rewound to the beginning. Q. Can the video recorder indefinitely remain in the **A.** No. It stops automatically after 5 minutes to protect the heads. Q. During search, slow, still and frame-by-frame playback, I can't hear any audio. What's the problem? **A.** This is normal. Q. When returning from multi-speed search to normal playback, the picture is disturbed. Should I be concerned about this? A. No, it is normal. Q. Noise bars appear during multi-speed search. What's the problem? **A.** This is normal. Q. Other than preventing further recording, what effect does removing the Record Safety tab have? **A.** It disables marking of index codes. Q. Sometimes, during Index Search, the video recorder can't find the programme I want to see. Why not? **A.** There may be index codes too close together.

RECORDING

- Q. When I pause and then resume a recording, the end of the recording before the pause is overlapped by the beginning of the continuation of recording. Why does this happen?
- **A.** This is normal. It reduces distortion at the pause and resume points.
- Q. Can the video recorder indefinitely remain in the Record-Pause mode?
- **A.** No. The video recorder goes to its Stop mode automatically after 5 minutes to protect the heads.
- Q. What happens if the tape runs out during recording?
- A. The video recorder automatically rewinds it to the beginning.

TIMER RECORDING

- Q. " REC " and "TIMER" remain lit on the display panel. Is there a problem?
- **A.** No. This is a normal condition for a timer recording in progress.
- Q. Can I program the timer while I'm watching a tape or a TV broadcast?
- **A.** You won't see the picture as it is replaced by the onscreen menu, but the audio from the program or tape you're viewing can be heard.

ATTENTION

This recorder contains microcomputers. External electronic noise or interference could cause malfunctioning. In such cases, switch the recorder off and unplug the mains power cord. Then plug it in again and turn the recorder on. Take out the cassette. After checking the cassette, operate the unit as usual.



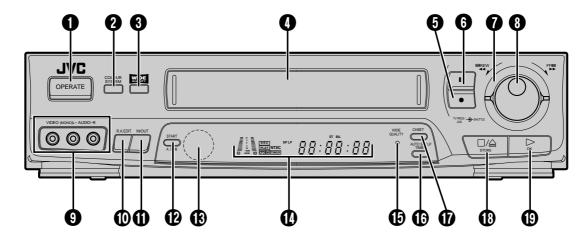




INDEX

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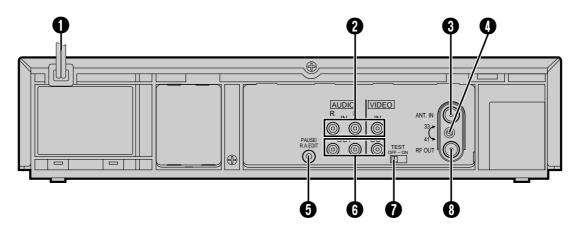
FRONT VIEW



- OPERATE Button (127 pg. 4)
- 2 COLOUR SYSTEM Button (pg. 32)
- 3 WIDE QUALITY Button (pg. 12)
- Cassette loading Slot
- **⑤** RECORD Button (☞ pg. 15)
- 6 PAUSE Button (pg. 11)
- SHUTTLE Ring (F) pg. 10)
- 3 Jog Dial (pg. 11) TV PROG. Dial (pg. 6)
- **9** VIDEO and AUDIO Input Connectors (pg. 27)
- n R.A.EDIT Button (pg. 28)
- 1N/OUT Button (F pg. 28)

- **1** START Button (☞ pg. 29)
 - A. DUB [Audio Dubbing] Button (pg. 30)
- 13 infrared Beam Receiving window
- Display Panel (□ pg. 38)
- WIDE QUALITY Indicator (□ pg. 12)
- (AUTO SP/LP TIMER Button (pg. 25)
- **(** CH SET Button (□ pg. 6)
- STOP/EJECT Button (pg. 10) STORE Button (pg. 7)
- PLAY Button (pg. 10)
 OK Button (pg. 5)

REAR VIEW



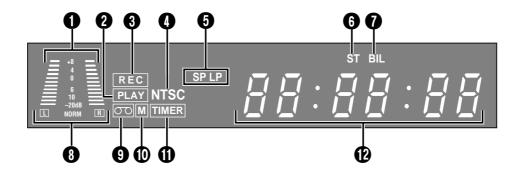
- Mains Power Cord (□ pg. 3)
- 2 AUDIO and VIDEO IN Connectors (pg. 26)
- **3** ANT. IN Connector (☐ pg. 3)
- **6** Remote PAUSE Connector (☐ pg. 27) R.A.EDIT Connector (☐ pg. 28)
- **6** AUDIO and VIDEO OUT Connectors (☐ pg. 3)
- **7** TEST Switch (pg. 4)
- **8** RF OUT Connector (□ pg. 3)





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DISPLAY PANEL



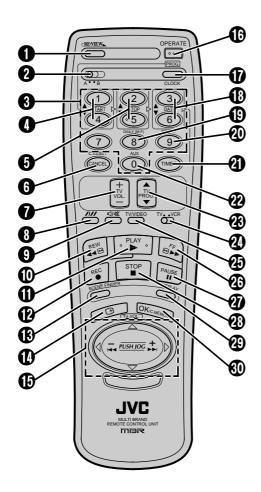
- 1 B.E.S.T. Picture System Display (pg. 18) Audio Level Indicator
- PLAY Indicator (pg. 10)
 REC[ORD] Indicator (pg. 15)
 NTSC Indicator (pg. 32)
- **⑤** Tape Speed Indicators (☞ pg. 15)
- **6** ST[EREO] Indicator (□ pg. 17)

- BIL[INGUAL] Indicator (pg. 17)
 Audio Mode Indicator (pg. 14)
- "Cassette Loaded" Mark
- 1 "TIMER" Indicator (F pg. 22)
- Clock/Counter/Channel Display (pg. 6)





REMOTE CONTROL

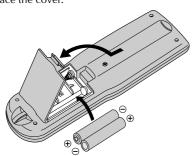


- REVIEW Button (© pg. 13)
- 2 A/B CODE Switch (pg. 14)
- 3 NUMBER Keys (pg. 15)
- **4** START **△**/**▼** Buttons □ pg. 9)
- **5** STOP **△**/**▼** Buttons (□ pg. 9)
- **6** CANCEL Button (☞ pg. 22) C.RESET Button (☞ pg. 12)
- **7** TV VOL. +/– Button (☐ pg. 31)
- 3 SP/LP/EP Button (pg. 15) DIGIT ENTRY Button (pg. 31)
- **9** AUDIO MONITOR Button (☐ pg. 14) TV MUTE Button (☐ pg. 31)
- Rewind [REW] Button (pg. 10)
- PLAY Button (F pg. 10)
- RECORD Button (pg. 15)
- **13** SCENE FINDER Button (□ pg. 13)
- **1** OSD (**□**) Button (**□** pg. 5)
- 15 PUSH JOG Button (pg. 11)
- (OPERATE Button (pg. 4)
- PROG Button (Fpg. 22) CLOCK Button (Fpg. 9)
- **1** DATE **△**/**▼** Buttons (**□** pg. 9)
- (DAILY Button (Fpg. 22)
- WEEKLY Button (☐ pg. 22)
- 1 TIMER Button (pg. 22)
- **②** AUX Button (**□** pg. 26)
- **3** TV PROG. **△**/**▼** Buttons (**□** pg. 5)
- **②** TV/VCR Switch (□ pg. 31)
- **②** TV/VIDEO Button (☐ pg. 31)
- Fast Forward [FF] Button (pg. 10)
- PAUSE Button (pg. 11)
- 3 STOP Button (F pg. 10)
- 29 DISPLAY Button (F pg. 16)
- **③** OK Button (**□** pg. 5)

C.MEMORY Button (pg. 12)

Installing Batteries

- 1 Open the battery compartment cover.
- Insert 2 "R6/UM-3"-size batteries (provided) in the correct directions.
- 3 Replace the cover.



How To Use

The remote control can operate most of your video recorder's functions, as well as basic functions of TV sets of JVC and other brands (pg. 31).

- Point the remote control toward the sensor window.
- The maximum operating distance of the remote control is about 8 m.

NOTE:

If for some reason the remote control doesn't work properly, remove its batteries, wait a short time and then try again.







SPECIFICATIONS

GENERAL

Power requirement : AC 220 – 240 V \sim , 50/60 Hz : 24 W

Power consumption

Operating

Temperature

: 5°C to 40°C

: -20°C to 60°C Storage Operating position : Horizontal only Dimensions (WxHxD) : 400 x 94 x 340 mm

Weight : 4.3 kg **Format** : VHS standard

Maximum recording time

: 240 min. with E-240 video cassette (PAL/ (SP)

MESECAM)

: 160 min. with T-160 video cassette (NTSC) : 480 min. with E-240 video cassette (PAL/ (LP)

MESECAM)

(EP) : 480 min. with T-160 video cassette (NTSC)

VIDEO/AUDIO

: PAL-type colour signal and CCIR monochrome Signal system

signal, 625 lines 50 fields

: NTSC colour and EIA monochrome signals,

525 lines/60 fields

Recording system : DA-4 (Double Azimuth) head helical scan system

: 45 dB Signal-to-noise ratio

Horizontal resolution : 250 lines (PAL/MESECAM)

: 220 lines (NTSC)

: 70 Hz to 10,000 Hz (Normal audio) Frequency range

20 Hz to 20,000 Hz (Hi-Fi audio)

: RCA connectors (IN x 2, OUT x 1) Input/Output

TUNER/TIMER

TV channel storage

capacity : 48 positions (+AUX position "AU")

: Voltage synthesized tuner Tuning system

Channel coverage : AUS

VHF 44 – 153 MHz CH 0 - 5, 5A, CATV CH 1-3, CATV 153 - 470 MHz CH 6 - 11, CATV CH 4 - 11, CATV

UHF 470 - 862 MHz CH 28 - 69 CH 21 - 69 : UHF channel 37 (Adjustable 33 - 41) Aerial output

Memory backup time : Approx. 18 hours.

ACCESSORIES

Provided accessories : RF cable, Infrared remote control unit,

"R6/UM-3" battery x 2, Audio/Video cable

Specifications shown are for SP mode unless otherwise specified. Design and specifications subject to change without notice.









SPECIFICATIONS

GENERAL

Power requirement : AC 220 – 240 V \sim , 50/60 Hz : 24 W

Power consumption

Operating

Temperature

: 5°C to 40°C

: -20°C to 60°C Storage Operating position : Horizontal only Dimensions (WxHxD) : 400 x 94 x 340 mm

Weight : 4.3 kg **Format** : VHS standard

Maximum recording time

: 240 min. with E-240 video cassette (PAL/ (SP)

MESECAM)

: 160 min. with T-160 video cassette (NTSC) : 480 min. with E-240 video cassette (PAL/ (LP)

MESECAM)

(EP) : 480 min. with T-160 video cassette (NTSC)

VIDEO/AUDIO

: PAL-type colour signal and CCIR monochrome Signal system

signal, 625 lines 50 fields

: NTSC colour and EIA monochrome signals,

525 lines/60 fields

Recording system : DA-4 (Double Azimuth) head helical scan system

: 45 dB Signal-to-noise ratio

Horizontal resolution : 250 lines (PAL/MESECAM)

: 220 lines (NTSC)

: 70 Hz to 10,000 Hz (Normal audio) Frequency range

20 Hz to 20,000 Hz (Hi-Fi audio) : RCA connectors (IN x 2, OUT x 1)

Input/Output

TUNER/TIMER

TV channel storage

capacity : 48 positions (+AUX position "AU")

Tuning system : Voltage synthesized tuner

Channel coverage : AUS

CH 0 - 5, 5A, CATV CH 1 - 3, CATV

VHF 44 - 153 MHz 153 - 470 MHz CH 6 - 11, CATV CH 4 - 11, CATV UHF 470 - 862 MHz CH 28 - 69 CH 21 - 69

Aerial output

: UHF channel 37 (Adjustable 33 - 41)

Memory backup time : Approx. 18 hours.

ACCESSORIES

Provided accessories : RF cable, Infrared remote control unit,

"R6/UM-3" battery x 2, Audio/Video cable

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