

JVC



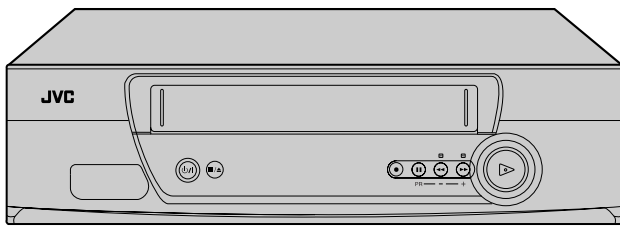
VIDEO CASSETTE RECORDER

HR-J278EU

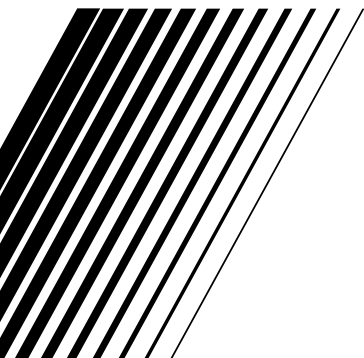
ENGLISH

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INSTRUCTIONS



LPT0570-001A

EN

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.

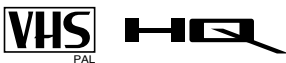
WARNING

There are two different types of SECAM colour systems: SECAM-L, used in FRANCE (also called SECAM-West), and SECAM-B, used in Eastern European countries (also called SECAM-East).

1. This recorder can also receive SECAM-B colour television signals for recording and playback.
2. Recordings made of SECAM-B television signals produce monochrome pictures if played back on a video recorder of SECAM-L standard, or do not produce normal colour pictures if played back on a PAL video recorder with SECAM-B system incorporated (even if the TV set is SECAM-compatible).
3. SECAM-L prerecorded cassettes or recordings made with a SECAM-L video recorder produce monochrome pictures when played back with this recorder.
4. This recorder cannot be used for the SECAM-L standard. Use a SECAM-L recorder to record SECAM-L signals.

IMPORTANT

- Please read the various precautions on page 2 and 3 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.



- Cassettes marked "VHS" (or "S-VHS") can be used with this video cassette recorder. However, S-VHS recording is not possible with this model.
- HQ VHS is compatible with existing VHS equipment.

For Italy:

"It is declared that this product, brand JVC, conforms to the Ministry Decree n. 548 of 28 Aug.'95 published in the Official Gazette of the Italian Republic n. 301 of 28 Dec.'95"

The STANDBY/ON \cup/I button does not completely shut off mains power from the unit, but switches operating current on and off. " \cup " shows electrical power standby and "I" shows ON.

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

When the equipment is installed in a cabinet or a shelf, make sure that it has sufficient space on all sides to allow for ventilation (10 cm or more on both sides, on top and at the rear).

When discarding batteries, environmental problems must be considered and the local rules or laws governing the disposal of these batteries must be followed strictly.

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 or holes.

(If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to get out.)

3. DO NOT place heavy objects on the recorder or remote control.

4. DO NOT place anything which might spill on top of the recorder or remote control.

(If water or liquid is allowed to enter this equipment, fire or electric shock may be caused.)

5. DO NOT expose the apparatus to dripping or splashing.

6. DO NOT use this equipment in a bathroom or places with water. Also DO NOT place any containers filled with water or liquids (such as cosmetics or medicines, flower vases, potted plants, cups, etc.) on top of this unit.

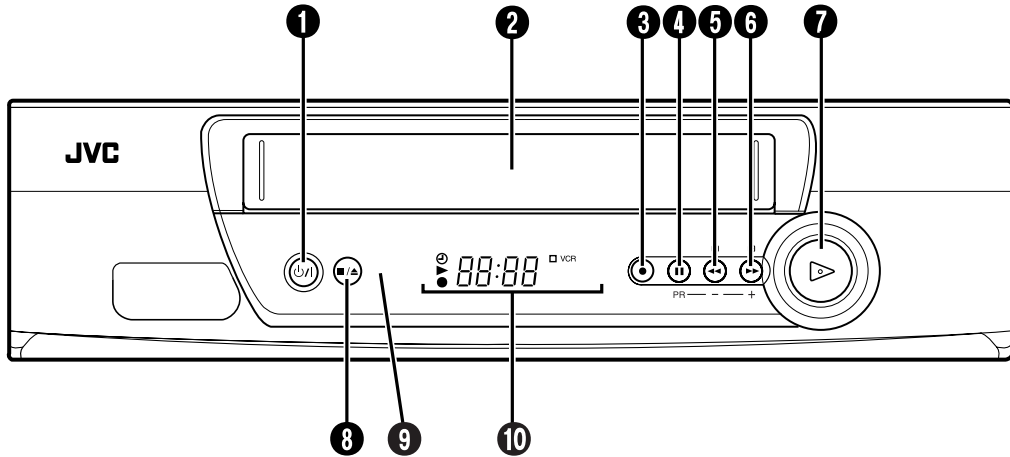
7. DO NOT place any naked flame sources, such as lighted candles, on the apparatus.

8. AVOID violent shocks to the recorder during transport.

MOISTURE CONDENSATION

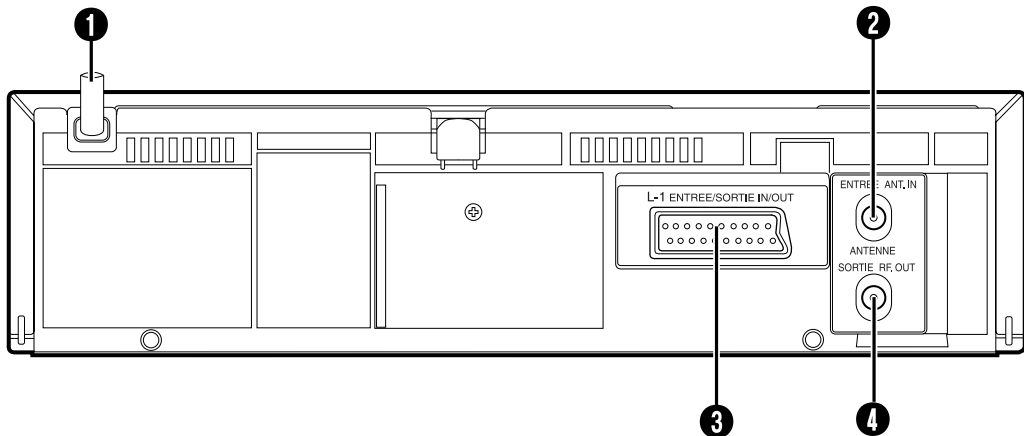
Moisture in the air will condense on the recorder when you move it from a cold place to a warm place, or under extremely humid conditions—just as water droplets form in the surface of a glass filled with cold liquid. Moisture condensation on the head drum will cause damage to the tape. In conditions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

FRONT VIEW



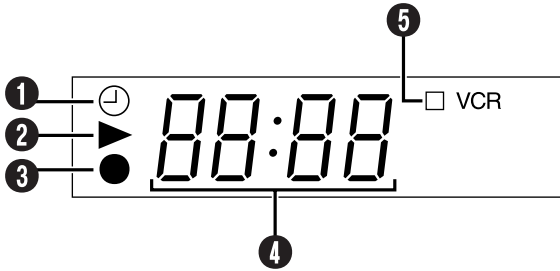
- ❶ STANDBY/ON ⏻ Button ☞ pg. 8
- ❷ Cassette Loading Slot
- ❸ Record \bullet Button ☞ pg. 16
- ❹ Pause ⏸ [PR] Button ☞ pg. 13, 16
- ❺ Rewind ⏮ [PR-] Button ☞ pg. 12, 13, 16
- ❻ Fast Forward ⏭ [PR+] Button ☞ pg. 12, 13, 16
- ❼ Play ▶ Button ☞ pg. 12
- ❽ Stop/Eject ⏏ Button ☞ pg. 12
- ❾ Infrared Beam Receiving Window
- ❿ Front Display Panel ☞ pg. 5

REAR VIEW



- ❶ Mains Power Cord ☞ pg. 7
- ❷ ANT. IN Connector ☞ pg. 7
- ❸ L-1 IN/OUT Connector ☞ pg. 7, 24, 25
- ❹ RF. OUT Connector ☞ pg. 7

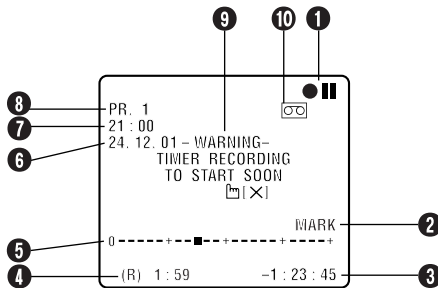
FRONT DISPLAY PANEL



- ❶ "Timer" Indicator ☞ pg. 21
- ❷ Play Indicator
- ❸ Record Indicator
- ❹ Channel/Clock Display
To switch display, press \leftarrow \rightarrow . Channel position is not displayed during playback.
Mode Display (L-1)
- ❺ VCR Indicator ☞ pg. 17

ON-SCREEN DISPLAY

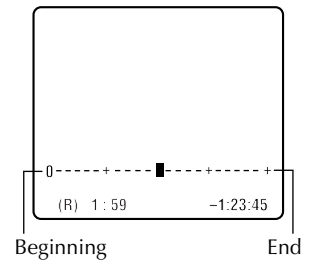
When "O.S.D." is set to "ON" (☞ pg. 27), various operational indicators appear on the TV screen.



- ❶ Operation mode indicators
- ❷ Index MARK Indicator ☞ pg. 16
- ❸ Counter display ☞ pg. 18
- ❹ Tape remaining time indicator ☞ pg. 18

❺ Tape position indicator

The tape position indicator appears on the TV screen when you press \leftarrow or \rightarrow from the Stop mode or perform an Index Search (☞ pg. 15). The position of "■" in relation to "0" (beginning) or "+" (end) shows you where you are on the tape.

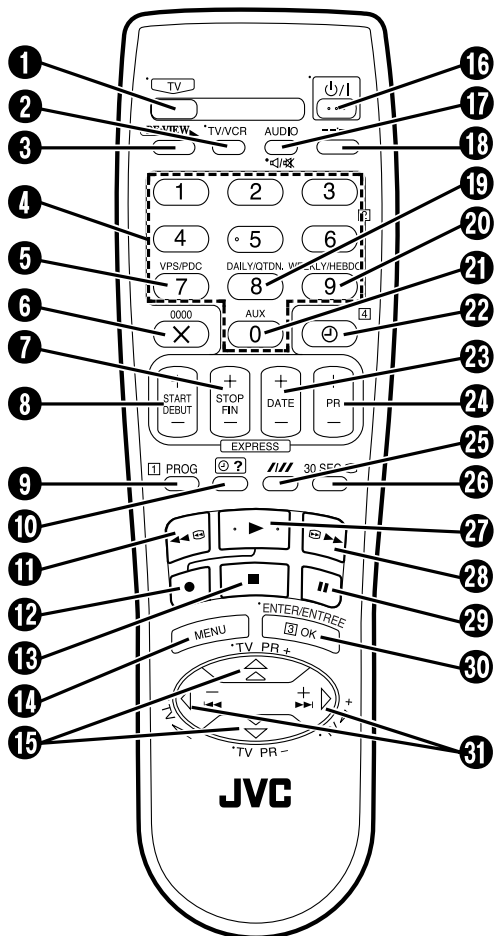


NOTE:

Depending on the type of tape used, the tape position indicator may not appear correctly.

- ❶ Current day/month/year
- ❷ Clock display
- ❸ Channel position number/ Auxiliary input indicator (L-1)
- ❹ Timer warning display
A warning appears on the TV screen to tell you that the timer recording is to start in 5 minutes if you're not in the Timer mode at that time. The warning blinks for the entire 5 minutes leading up to the start of timer recording. To clear the display, press X.
- ❺ Cassette loaded mark

REMOTE CONTROL



Buttons with a small dot on the left side of the name can also be used to operate your JVC TV while holding down the **TV** button. (☞ “Operating JVC TVs” in the right column)

This remote control transmits A code signals only; it is not applicable to B code signals.

- 1 TV Button ☞ “Operating JVC TVs” below
- 2 TV/VCR Button ☞ pg. 17 and “Operating JVC TVs” below
- 3 REVIEW Button ☞ pg. 14
- 4 NUMBER Keys ☞ pg. 16
- 5 VPS/PDC Button (Not functions with this recorder.)
- 6 Cancel X Button ☞ pg. 22
- 7 STOP +/- Button ☞ pg. 20
- 8 START +/- Button ☞ pg. 20
- 9 PROG Button ☞ pg. 20
- 10 Programme Check ? Button ☞ pg. 22
- 11 Rewind ◀◀ Button ☞ pg. 12, 13
- 12 Record ● Button ☞ pg. 16
- 13 Stop ■ Button ☞ pg. 12, 16
- 14 MENU Button ☞ pg. 11
- 15 △ ▽ Button ☞ pg. 8
- TV PR +/- Button ☞ “Operating JVC TVs” below
- 16 STANDBY/ON ⏻/⏻ Button ☞ pg. 8
- 17 ⏻ (TV Muting) Button ☞ “Operating JVC TVs” below
- 18 Display -- : -- Button ☞ pg. 18
- 19 DAILY Button ☞ pg. 21
- 20 WEEKLY Button ☞ pg. 21
- 21 AUX Button ☞ pg. 24
- 22 ⌚ (Timer) Button ☞ pg. 21
- 23 DATE +/- Button ☞ pg. 20
- 24 PR +/- Button ☞ pg. 16
- 25 Auto Tracking /// Button ☞ pg. 14
- 26 30 SEC Button ☞ pg. 15
- 27 Play ▶ Button ☞ pg. 12
- 28 Fast Forward ►► Button ☞ pg. 12, 13
- 29 Pause || Button ☞ pg. 13
- 30 OK Button ☞ pg. 9
- 31 ◀▶ Button ☞ pg. 13
- TV ◀ +/- Button ☞ “Operating JVC TVs” below

How To Use

The remote control can operate most of your video recorder's functions, as well as basic functions of JVC TV sets. (☞ “Operating JVC TVs” below.)

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

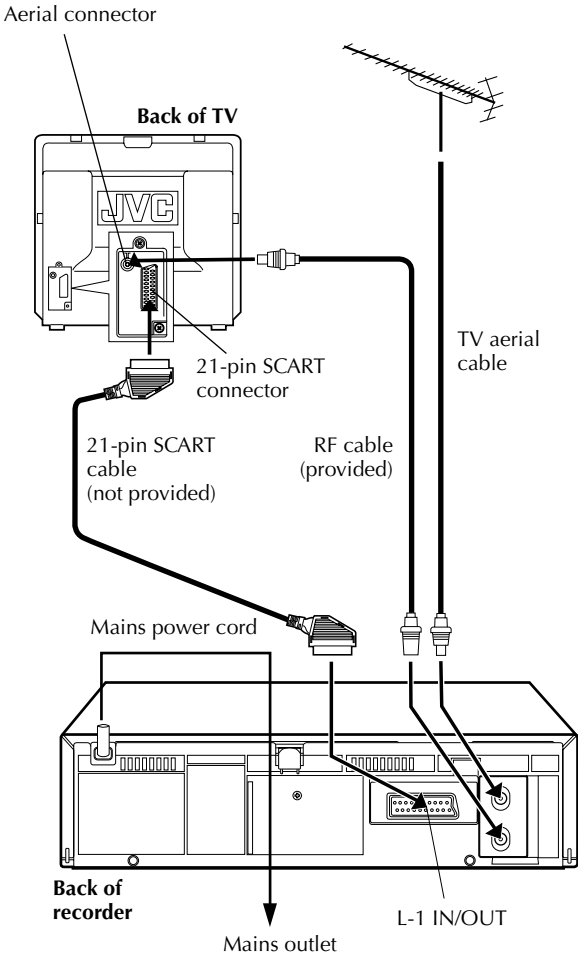
Operating JVC TVs

To operate your TV, while holding down the **TV** button, press the corresponding button: **STANDBY/ON** ⏻/⏻, **TV/VCR**, **TV PR +/-**, **TV** ◀ +/-, ⏻ (TV Muting).

NOTES:

- When inserting the batteries, be sure to insert in the correct directions as indicated under the battery cover.
- Depending on the type of JVC TV, some or all functions may not be operated using the remote control.
- If the remote control doesn't work properly, remove its batteries, wait a short time, replace the batteries and then try again.

Basic Connections



Make AV connection if your TV has a 21-pin AV input connector (SCART) in order to reduce the possibility of interference. And if you are using a stereo TV, you will need an optional 21-pin SCART cable in order to enjoy stereo playback of video tapes.

It's essential that your video recorder be properly connected.

THESE STEPS MUST BE COMPLETED BEFORE ANY VIDEO OPERATION CAN BE PERFORMED.

1 Check the contents.

Make sure the package contains all of the accessories listed in "SPECIFICATIONS" on the back cover.

2 Situate the recorder.

Place the recorder on a stable, horizontal surface.

3 Connect the 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 connectors . . .
- 1 Disconnect the TV aerial cable from the TV.
- 2 Connect the TV aerial cable to the ANT. IN connector on the rear panel of the recorder.
- 3 Connect the provided RF cable between the RF. OUT connector on the rear panel of the recorder and the TV's aerial connector.

AV Connection

- To connect to a TV with AV input connectors . . .
- 1 Connect the aerial, recorder and TV as per "RF Connection".
- 2 Connect an optional 21-pin SCART cable between the L-1 IN/OUT connector on the rear panel of the recorder and the TV's 21-pin SCART connector.

4 Connect the recorder to mains.

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

After the connection is completed, perform "Auto Set Up" on page 8.

Auto Set Up

After the $\phi/1$ button on the recorder or remote control is pressed for the first time to power on the recorder, by simply selecting your country*, the Auto Set Up function sets the tuner channels automatically.

* If you live in Belgium (BELGIUM) or Switzerland (SUISSE), you also need to select your language.

Before starting, make sure of the following:

- The connection is completed. (☞ pg. 7)
- The recorder's mains power cord should be connected to a mains outlet.
- The TV should be set to its AV mode (with AV connection ☞ pg. 7) or UHF channel 36 (with RF connection ☞ pg. 7).

1 Turn on the recorder.

Press $\phi/1$ on the recorder or remote control. The Country Set display appears on the TV screen.

NOTE:

If you have connected your TV to the recorder with RF connection and the on-screen display appearing on UHF channel 36 looks distorted, perform "Video Channel Set" on page 34.



2 Select your country.

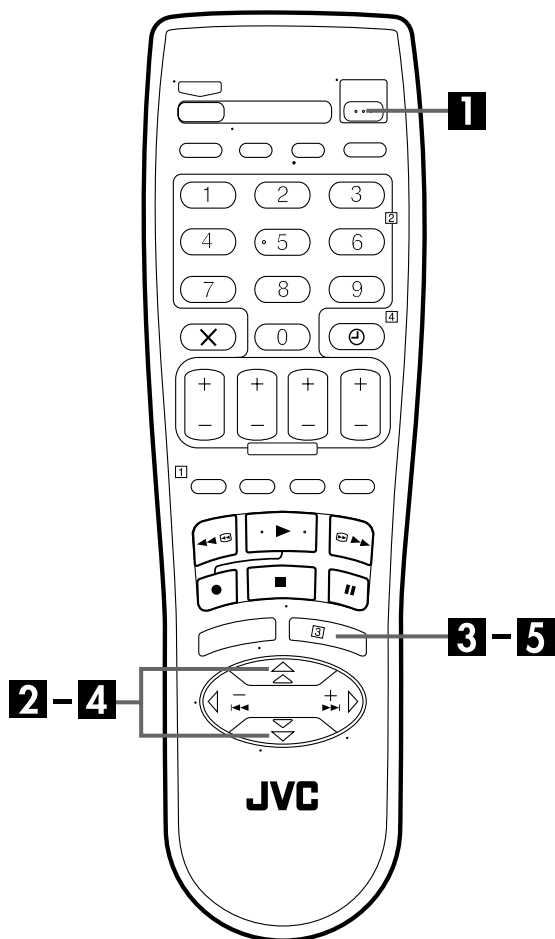
Press Δ/∇ to move the highlight bar (pointer) to your country's name.

(Example) DEUTSCHLAND is selected.



NOTES:

- If you have selected BELGIUM or SUISSE, go to step 3.
- If you have selected any other country name, go to step 4.



3 Select the language.

Press **OK**. The Language Set display appears on the TV screen.

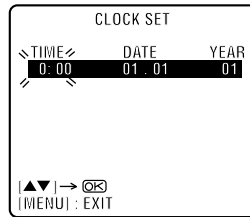
Press Δ / ∇ to move the highlight bar (pointer) to the language of your choice.

(Example) DEUTSCH is selected.



4 Set the date and time.

Press **OK**. The Clock Set screen appears. Press Δ / ∇ to set the time, then press **OK** or \triangleright . The "DATE" display begins blinking. Repeat the same procedure to set the date and year.



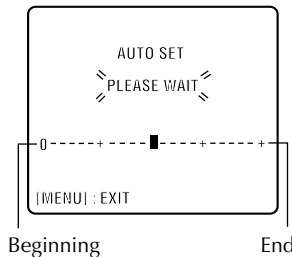
- When you set the time, press and hold Δ / ∇ to change the time by 30 minutes.
- When you set the date, press and hold Δ / ∇ to change the date by 15 days.

5 Perform Auto Set Up.

Press **OK**.

"Auto" blinks on the front display panel; do NOT press any button on the recorder or remote control.

- If you are using the on-screen display, the AUTO SET screen will appear. As Auto Set Up progresses, the "█" mark on the TV screen moves from left to right. When the Auto Set Up is completed, "SCAN COMPLETED" appears for about 5 seconds, then the normal screen appears.



ATTENTION

Once you have performed Auto Set Up, even if the recorder's memory backup has expired, all the stored stations remain in the recorder's memory and the recorder will not perform Auto Set Up again. You only need to set the clock. (☞ pg. 29)

If you have moved to a different area, perform each setting as required.

- Video channel setting (for RF connection users) ☞ pg. 34
- Tuner setting ☞ pg. 30
- Clock setting ☞ pg. 29

If a new station starts broadcasting in your area, perform tuner setting (☞ pg. 30) and, if necessary, video channel setting (☞ pg. 34).

NOTES:

- If there is a power cut, or if you press ⏻ /1 or **MENU** while Auto Set Up is in progress, Auto Set Up will be interrupted; be sure to turn off the recorder power once and try again from step 1.
- If no sound accompanies the picture or the audio sounds unnatural on some channels that have been stored by Auto Set Up, the TV system setting for those channels may be incorrect. Select the appropriate TV system for those channels (☞ pg. 32, "INFORMATION").

IMPORTANT

Your video recorder memorizes all detected stations even if reception of some of them is poor. You can delete those stations with an unacceptable picture (see pg. 32, "Delete A Channel").

INFORMATION**Language for the on-screen display**

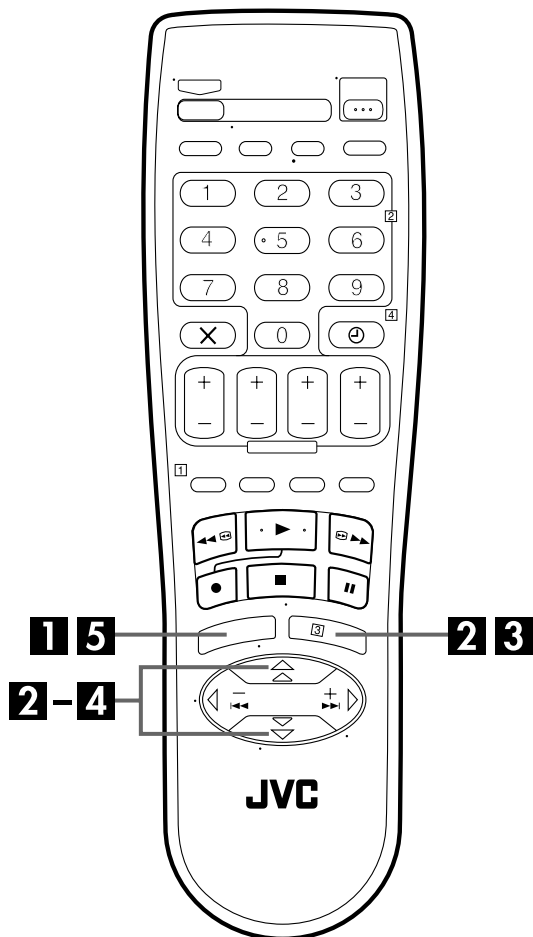
Auto Set Up also selects the language automatically for the on-screen display depending on the Country setting you have made in step 2 on page 8 (unless you have selected BELGIUM or SUISSE), as shown below.

SUOMI	→ SUOMI	DANMARK	→ DANSK	NEDERLAND	→ NEDERLANDS
PORTUGAL	→ ENGLISH	ÖSTERREICH	→ DEUTSCH	GREECE	→ ENGLISH
DEUTSCHLAND	→ DEUTSCH	ČESKÁ REPUBLIKA	→ ČESTINA	OTHER WESTERN EUROPE	→ ENGLISH
POLSKA	→ POLSKI	ITALIA	→ ITALIANO	OTHER EASTERN EUROPE	→ ENGLISH
NORGE	→ NORSK	MAGYARORSZÁG	→ MAGYAR		
SVERIGE	→ SVENSKA	ESPAÑA	→ CASTELLANO		

If you want to change the language setting manually, see "Language" on page 11.

Language

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



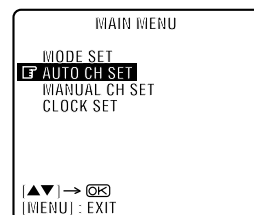
This recorder offers you the choice to view on-screen messages in 13 different languages. Though Auto Set Up selects the language automatically (see pg. 10), you can change the language setting manually as required.

1 Access the Main Menu screen.

Press **MENU**.

2 Access the Country Set screen.

Press \triangle / ∇ to move the highlight bar (pointer) to "AUTO CH SET", then press **OK** or \triangleright .



3 Select your country.

Press \triangle / ∇ to move the highlight bar (pointer) to your country's name, then press **OK** or \triangleright .

4 Select the language.

Press \triangle / ∇ to move the highlight bar (pointer) to the language of your choice.

- You do not have to press **OK**; pressing **OK** starts Auto Channel Set.

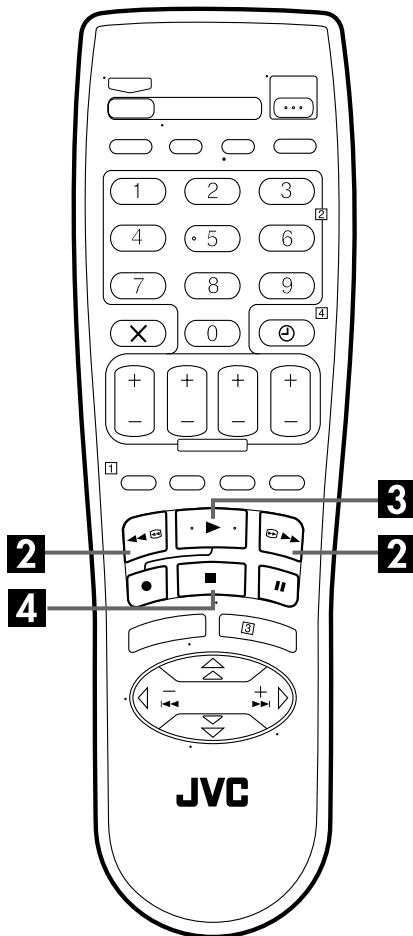
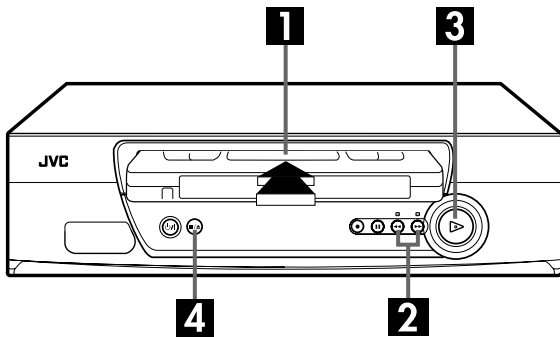


5 Return to the normal screen.

Press **MENU**.

Basic Playback

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



1 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 pointed toward the recorder.

- Don't apply too much pressure when inserting.
- The recorder's power comes on automatically and the counter is reset to 0:00:00.
- If the record safety tab has been removed, playback begins automatically.

2 Find the programme start point.

If the tape is advanced past the start point, press ◀◀. To go forward, press ▶▶.

3 Start playback.

Press ▶. "bEst" appears blinking in the recorder's front display panel during automatic tracking. (☞ pg. 19)

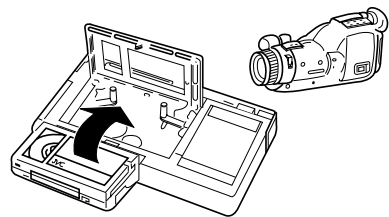
4 Stop playback.

Press ■ on the remote control or ■/▲ on the recorder's front panel. Then press ■/▲ to remove the cassette.

Clean the video heads using a dry cleaning cassette — TCL-2UX — when:

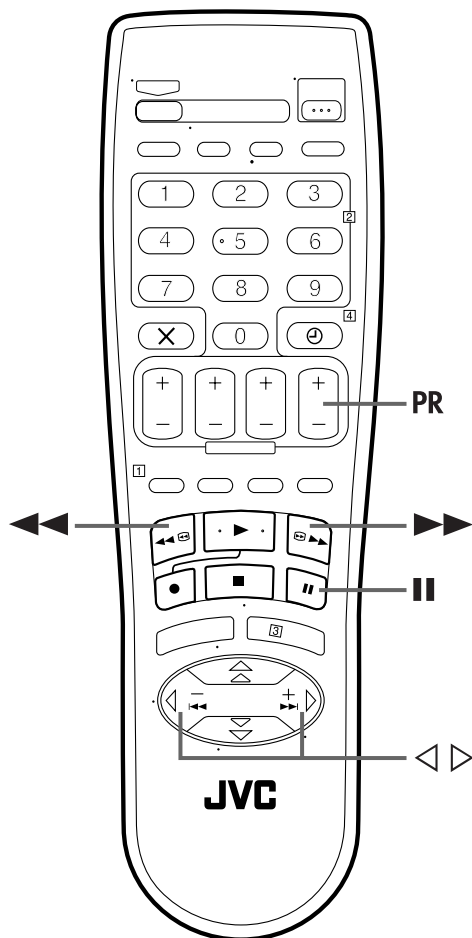
- Rough, poor picture appears while a tape is played back.
- The picture is unclear or no picture appears.
- "USE CLEANING CASSETTE" appears on the screen (only with "O.S.D." set to "ON" (☞ pg. 27).

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



ATTENTION

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

Still Picture/Frame-By-Frame Playback

1 Pause during playback.

Press **II**.

- If there is vertical jitter, use the **PR** buttons on the remote control to correct the picture.

2 Activate Frame-by-frame playback.

Press **II**.

OR

Press ◀ or ▶.

Slow Motion

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

OR

During still picture, press and hold ◀ or ▶. Release to return to still picture.

High-Speed Search

During playback or still, press ►► for forward high-speed search, or ◀◀ for reverse high-speed search.

NOTE:

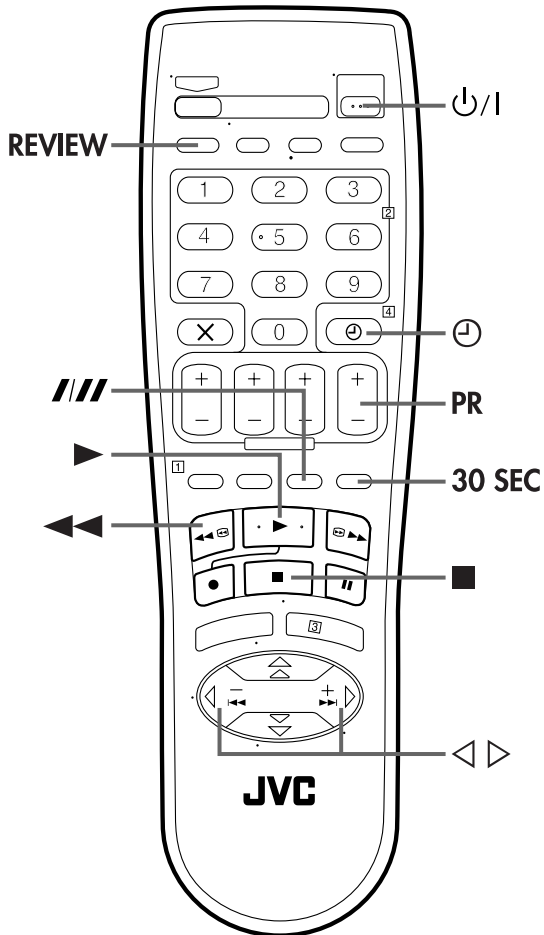
For short searches, press and hold ►► or ◀◀ for over 2 seconds during playback or still picture. When released, normal playback resumes.

Variable Speed Search

During still picture, press ◀ or ▶.

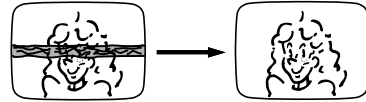
- The more times you press, the faster the playback picture moves.
- To decrease speed, press the button for the opposite direction.

To resume normal playback, press ►.



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 **PR** buttons.



1 Override automatic tracking.

Press **///** on the remote control.

2 Adjust the tracking manually.

Press **PR +** or **-**.

- Press **///** again to return to automatic tracking.

NOTE:

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

Instant ReView

Simply by pressing a single button, the recorder power comes on, rewinds, and begins playback of the last timer-recorded programme. If you have several programmes recorded, you can easily access any of them.

NOTE:

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

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.

- You can access a programme as far as 9 index codes away from the current tape position. To watch the first of the 3 programmes, press **REVIEW** three times. The recorder searches and begins playback automatically.
- The Instant Review function will also operate if the recorder is turned on.
- The Instant Review function does not work during Power Save mode (ⓘ pg. 28).

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.

Activate Index Search.

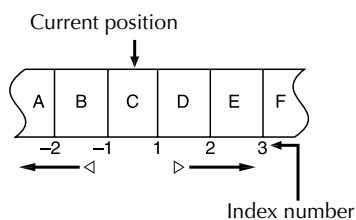
Press ◀ or ▶ (◀◀ or ▶▶). "◀◀ 1" or "▶▶ 1" is displayed on the TV screen and search begins in the corresponding direction.

- To access index codes 2 through 9, press ◀ or ▶ repeatedly until the correct index number is displayed.

Example:

To locate the beginning of B from the current position, press ◀ twice.

To locate the beginning of D from the current position, press ▶ once.



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

Skip Search

During playback, press **30 SEC** 1 to 4 times to skip over unwanted sections. To resume normal playback, press ▶.

- Each press initiates a 30-second period of fast-motion playback. Normal playback resumes automatically.

Next Function Memory

The Next Function Memory "tells" the recorder what to do after rewinding. Before continuing, make sure the recorder is in the Stop mode.

- For Automatic Start Of Playback
Press ◀◀, then press ▶ within 2 seconds.
- For Automatic Power Off
Press ◀◀, then press ⏻ within 2 seconds.
- For Automatic Timer Standby
Press ◀◀, then press ⊖ (TIMER) within 2 seconds.

Repeat Playback

Your recorder can automatically play back the whole tape 100 times repeatedly.

1 Start playback.

Press ▶.

2 Activate Repeat Playback.

Press ▶ and hold for over 5 seconds, then release.

- The Play indicator (▷) on the front display panel blinks slowly.
- After playing back a tape 100 times, the recorder stops automatically.

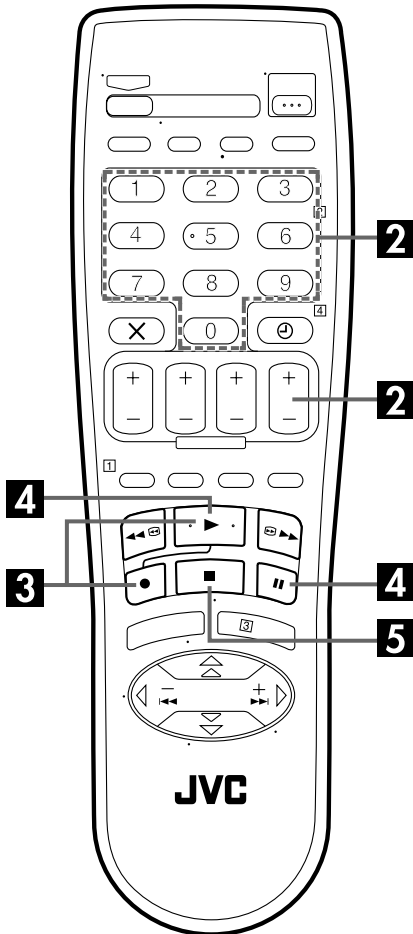
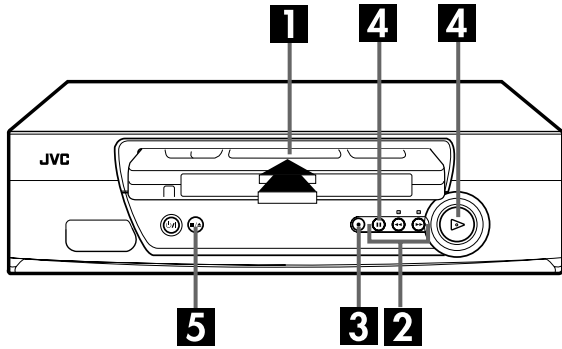
3 Stop Repeat Playback.

Press ■ at any time.

- Pressing ▶, ◀◀, ▶▶ or || also stops Repeat Playback.

Basic Recording

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



1 Load a cassette.

Insert a cassette with the record safety tab intact.

- The recorder's power comes on automatically and the counter is reset to 0:00:00.

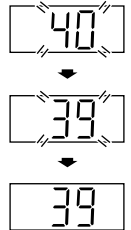
2 Choose a programme.

On the remote control

Press **PR+/-** or the **NUMBER** keys.

On the recorder

Press **II [PR]**. The channel display on the front display panel starts blinking. While the display is blinking, press **▶▶ [PR+]** or **◀◀ [PR-]** to select channel. After about 5 seconds, the channel display stops blinking.



- You can select channel in the stop mode, Record Pause mode or during forward/reverse high-speed search.
- If no cassette is loaded, or during Record Pause mode, you can select channel only by pressing **▶▶ [PR+]** or **◀◀ [PR-]**.
- If you connect the TV and the recorder only using the RF connection, press **TV/VCR** on the remote control so that the VCR indicator lights on the front display panel, to view the program to be recorded.

3 Start recording.

Press and hold **●** and press **▶** on the remote control, or press **●** on the recorder.

- If "O.S.D." is set to "ON" (☞ pg. 27), "MARK" blinks on the screen while an index code is being marked.

B.E.S.T. takes place at the beginning of the first recording after inserting the cassette. (☞ pg. 19)

4 Pause/Resume recording.

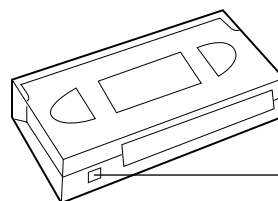
Press **II**. Press **▶** to resume recording.

5 Stop recording.

Press **■** on the remote control or **■/▲** on the recorder. Then press **■/▲** to remove the cassette.

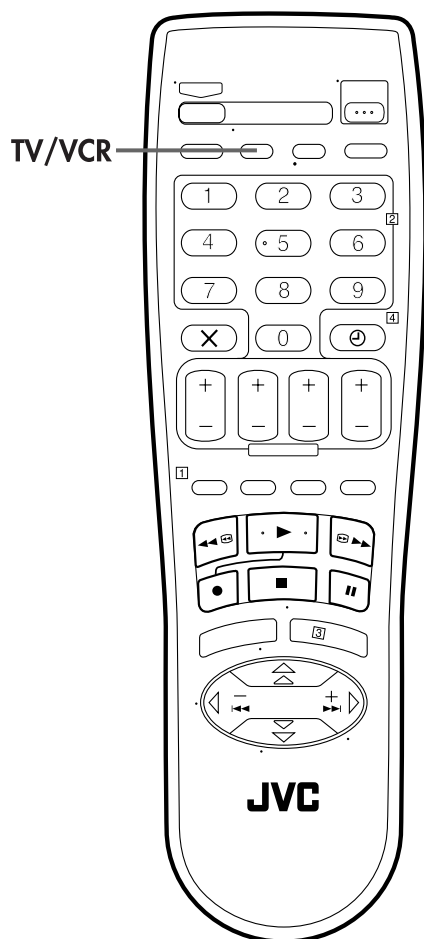
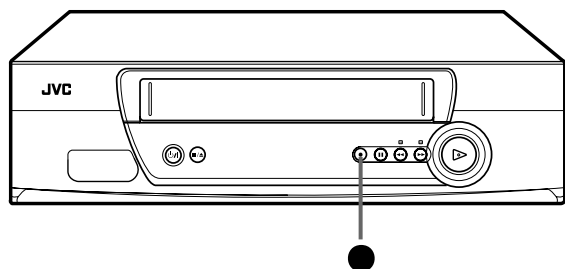
Accidental erasure prevention

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



Record safety tab

Recording Features



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 ● on the recorder.

2 Engage the ITR mode.

Press ● again. "○" blinks and 0:30 appears on the front display panel.

3 Set the recording duration.

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

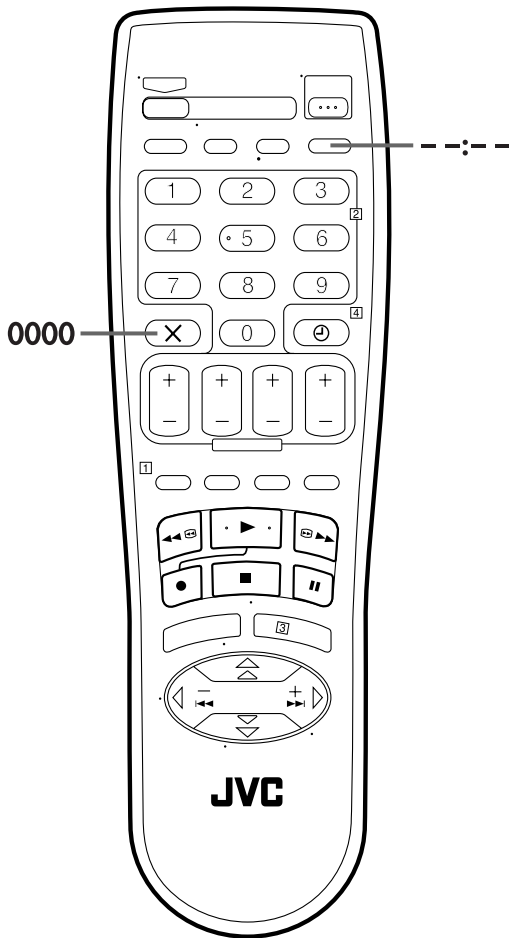
NOTE:

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

Record One Programme While Watching Another

If your recorder is connected to the TV via the AV connection, press **TV/VCR**. The recorder's VCR indicator and the TV broadcast being recorded disappear. 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 recorder's **PR** buttons is recorded on the tape.



Elapsed Recording Time Indication

1 Display the counter.

Press **--:--** so that a counter reading appears on the TV screen.

2 Reset the counter.

Press **0000** before starting recording or playback.

- The counter is reset to "0:00:00" and shows the exact elapsed time as the tape runs. You can check the exact time of a recording or playback.

Tape Remaining Time

Press **--:--** so that the time remaining on the tape appears on the TV screen.

NOTE:

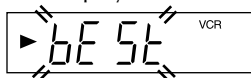
Depending on the type of tape used, the tape remaining time reading may not appear right away, or is not correct. "--:--" may sometimes appear, or the display may blink on occasion.

B.E.S.T. Picture System

The B.E.S.T. (Biconditional Equalised Signal Tracking) system checks the condition of the tape in use during playback and recording, and compensates to provide the highest-possible playback and recording pictures. You can set "B.E.S.T." to "ON" or "OFF" to your preference (☞ pg. 27).

Playback

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



- 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. "bEst" appears blinking on the recorder's front display panel.

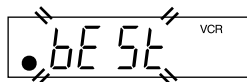
NOTES:

- 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.
- When watching a rental tape or one recorded on another video recorder, or when using this recorder as the player for editing, set B.E.S.T. to your preference (☞ pg. 27).
- "bEst" only appears at the beginning of automatic tracking. Even though it doesn't appear after that, the B.E.S.T. function is operative.

Recording

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

DURING B.E.S.T.



B.E.S.T. COMPLETE



- The recorder spends approximately 7 seconds assessing the condition of the tape, then begins recording.

NOTES:

- The B.E.S.T. system works 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 recordings, 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 re-performed.
- Pressing the recorder's ● button while "bEst" is displayed does not start Instant Timer Recording (☞ pg. 17).

ATTENTION

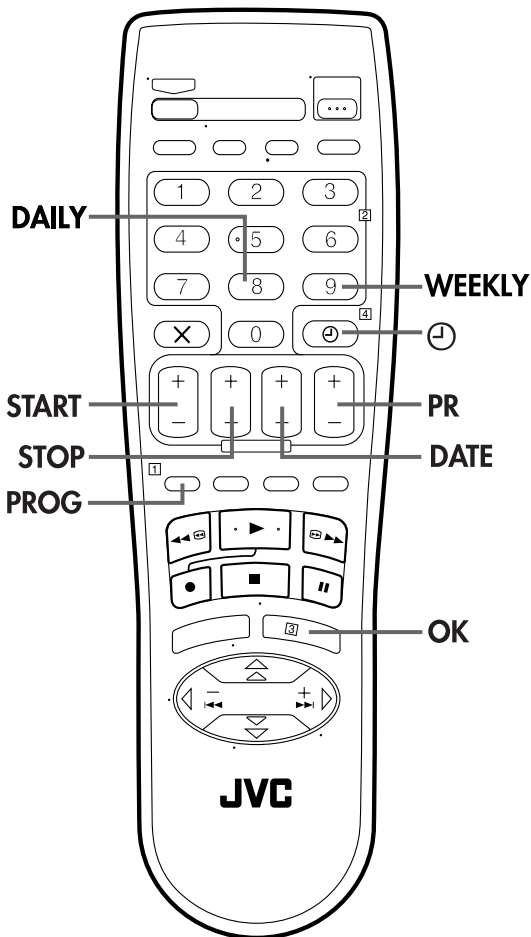
Since the B.E.S.T. system works before recording actually starts, there is a delay of approximately 7 seconds after ● and ► on the remote control are pressed, or ● on the recorder is pressed. To make sure you record the desired scene or programme in its entirety, first perform the following steps:

- 1 Press and hold **||** and press ● to engage the Record Pause mode.
 - The recorder then automatically checks the condition of the tape and, after approximately 7 seconds, re-enters Record Pause.
 - 2 Press ► 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" (☞ pg. 27).

Express Timer Programming

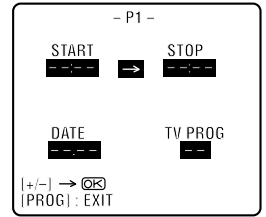
Before performing Express Timer Programming:

- Make sure that the recorder's built-in clock is set properly.
- 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).



1 Access the Programme screen.

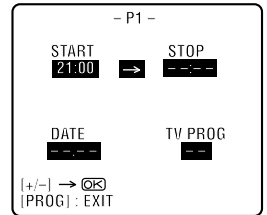
Press **PROG.** (If you're just starting out, "P1" appears.)



2 Enter the programme start time.

Press **START +/-** to enter the time you want recording to start.

- Press and hold **START +/-** to move in 30-minute increments, or press and release repeatedly to move 1 minute at a time.



3 Enter the programme stop time.

Press **STOP +/-** to enter the time you want recording to stop.

- Press and hold **STOP +/-** to move in 30-minute increments, or press and release repeatedly to move 1 minute at a time.

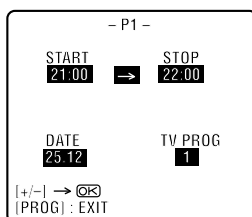
4 Enter the programme date.

Press **DATE +/-**.

- The current date appears on the TV screen. The date you enter appears in its place.

5 Enter the channel position.

Press **PR +/-**.



To Timer-Record Weekly Or Daily Serials . . .

. . . anytime during steps 2 through 5, press **WEEKLY** (NUMBER key "9") for weekly serials or **DAILY** (NUMBER key "8") for daily serials (Monday – Friday). Either "WEEKLY" or "DAILY" appears on the TV screen. Pressing the button again makes the corresponding indication disappear.

NOTE:

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 the TV screen. To record the extra programme, you must first cancel any unnecessary programmes (pg. 22).

6 Return to the normal screen.

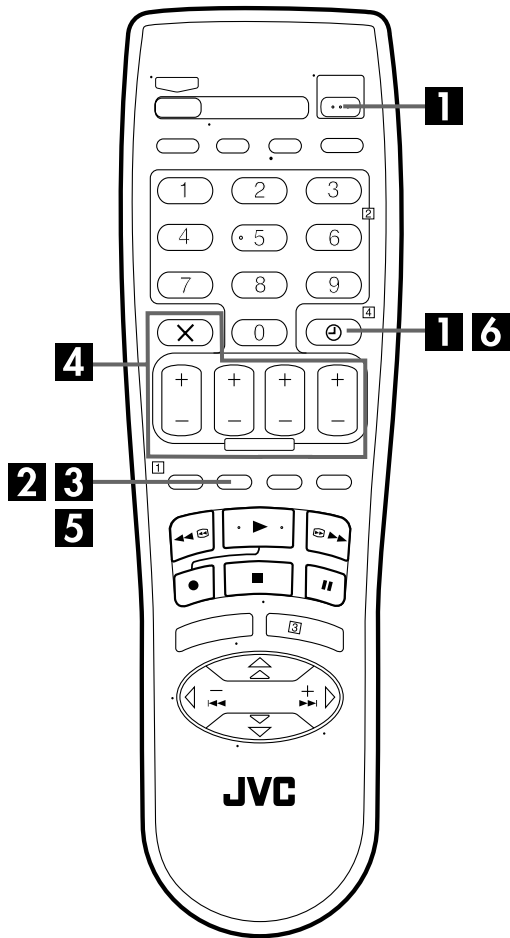
After confirming all information is correct, press **PROG** or **OK**. "PROGRAM COMPLETED" appears on the TV screen for about 5 seconds, then the normal screen appears. If "PROGRAM OVERLAPPED" appears on the TV screen, see page 23.

- Repeat steps 1 – 6 for each additional programme.

7 Engage the recorder's timer mode.

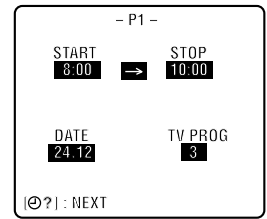
Press **⊖ (TIMER)**. The recorder turns off automatically and **⊖** appears on the front display panel.

- To disengage the timer mode, press **⊖ (TIMER)** again.



3 Access the Programme screen.

Press $\odot ?$ again to check more information. Each time you press $\odot ?$, the next programme's information appears.



To cancel or change a programme...

4 Cancel or change a programme.

Press X to cancel a programme. To change programme settings, press the appropriate button: START+/-, STOP+/-, DATE+/- and/or PR+/-.

5 Return to the normal screen.

Press $\odot ?$ as many times as necessary. If there are still some programmes remaining, go on to step 6.

6 Return to the timer mode.

Press \odot (TIMER).

Check, cancel and change programmes

1 Disengage the timer mode.

Press \odot (TIMER), then press $\odot/!$.

2 Access the Programme Check screen.

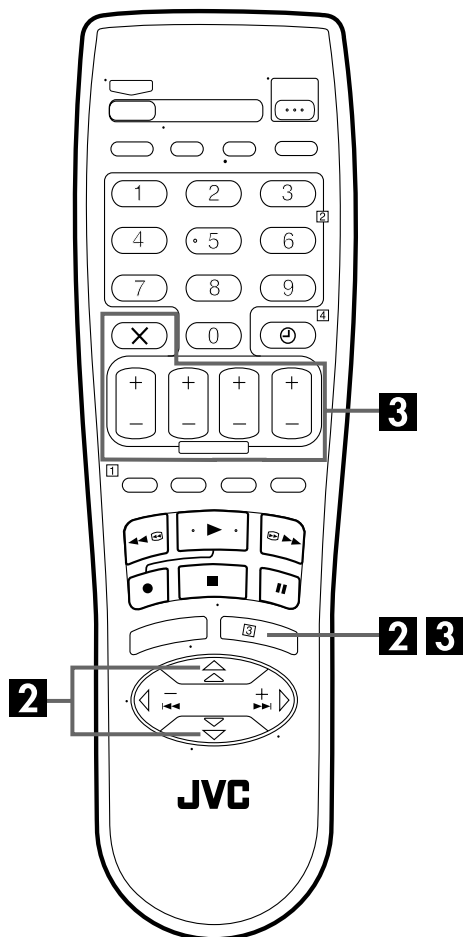
Press $\odot ?$.

	START	STOP	CH	DATE
1	8:00	10:00	3	24.12
2	10:00	10:45	2	25.12
3	11:30	13:00	1	25.12
4				
5				
6				
7				
8				

|⊙?| : NEXT

When programmes overlap each other

If "PROGRAM OVERLAPPED" appears, you have another programme overlapping the programme you have just made. The Programme Check screen appears and conflicting programmes will start blinking.



	START	STOP	CH	DATE
1	6:00	10:00	3	24.12
2	10:00	10:45	2	25.12
3	11:30	13:00	1	25.12
4	9:00	10:00	92	DAILY
5				
6				
7				
8				

▲▼|→|⊗| [PROG] : EXIT

Example: Programme 1 (you have just made) and Programme 4 overlap each other.

1 Confirm the overlapping programmes.

Overlapping programmes blink on the TV screen.

2 Select the programme to modify.

Press ▲▼, then press **OK** or ▷.

- You can only select one of the overlapping programmes.

NOTE:

If you do not mind this overlap, press **PROG** to finish the timer programme setting. The programme with the lower programme number will be recorded and the other one will not be recorded correctly. If no changes are made for approximately 1 minute, the recorder will return to the normal screen.

3 Cancel or change programme setting.

To cancel a programme, press **X** when the Programme screen you do not want is shown. "PROGRAM COMPLETED" appears on the TV screen for about 5 seconds, then the normal screen appears.

To change a programme, press the appropriate button: **START+/-**, **STOP+/-**, **DATE+/-** and/or **PR+/-** when the Programme screen on which you want to make changes is shown, then press **OK**. "PROGRAM COMPLETED" appears on the TV screen for about 5 seconds, then the normal screen appears.

NOTE:

If the overlap is not yet solved, or another overlap occurs with the timer programme setting after making the last correction on a programme, the conflicting programmes will be shown on the Programme Check screen again. Repeat the above steps again until the overlap is solved.

Edit From A Camcorder

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

1 Make connections.

Connect the camcorder's AUDIO/VIDEO OUT connectors to the recorder's L-1 IN/OUT connector via a cable adapter.

2 Set the recorder's input mode.

Press **AUX** (NUMBER key "0") and/or **PR** on the remote control to select "L-1". You can select the input mode also by pressing **II [PR]**, and then **▶▶ [PR+]** or **◀◀ [PR-]** on the recorder. See step 2 in "Basic Recording" (pg. 16).

3 Set the edit mode.

See "PICTURE CONTROL" on page 27.

4 Start the camcorder.

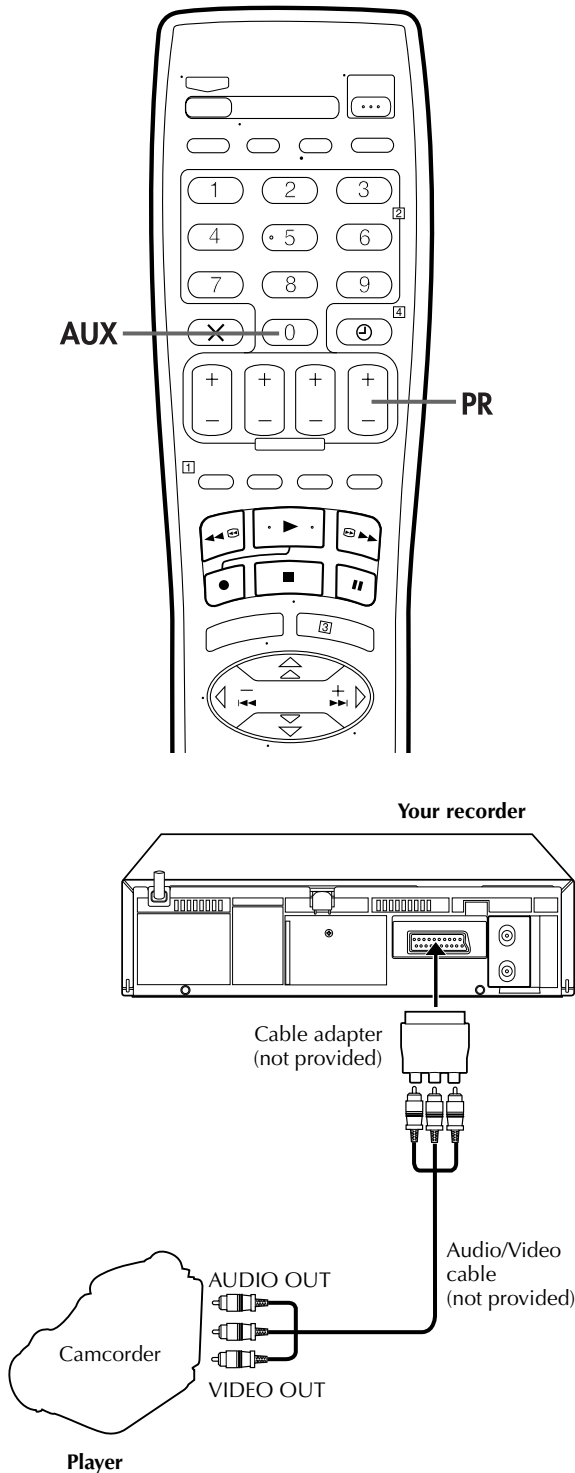
Engage the Play mode of the camcorder.

5 Start the recorder.

Engage the Record mode of the recorder.

NOTES:

- All necessary cables can be obtained from your dealer.
- When you select "EDIT" to dub tapes in step 3, be sure to select "AUTO" (or "NORM" when "B.E.S.T." is set to "OFF") after you finish dubbing the tapes.



Edit To Or From Another Video Recorder

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

1 Make connections.

Connect the player's 21-pin SCART connector to the recorder's 21-pin SCART connector as illustrated.

2 Set the input mode of recording deck.

With this video recorder, press **AUX** (NUMBER key "0") and/or **PR** on the remote control to select "L-1". You can select the input mode also by pressing **II [PR]**, and then **▶▶ [PR+]** or **◀◀ [PR-]** on the recorder. See step 2 in "Basic Recording" (pg. 16).

- When using another recorder as the recording deck, refer to its instruction manual.

3 Set the edit mode.

See "PICTURE CONTROL" on page 27.

4 Start the source player.

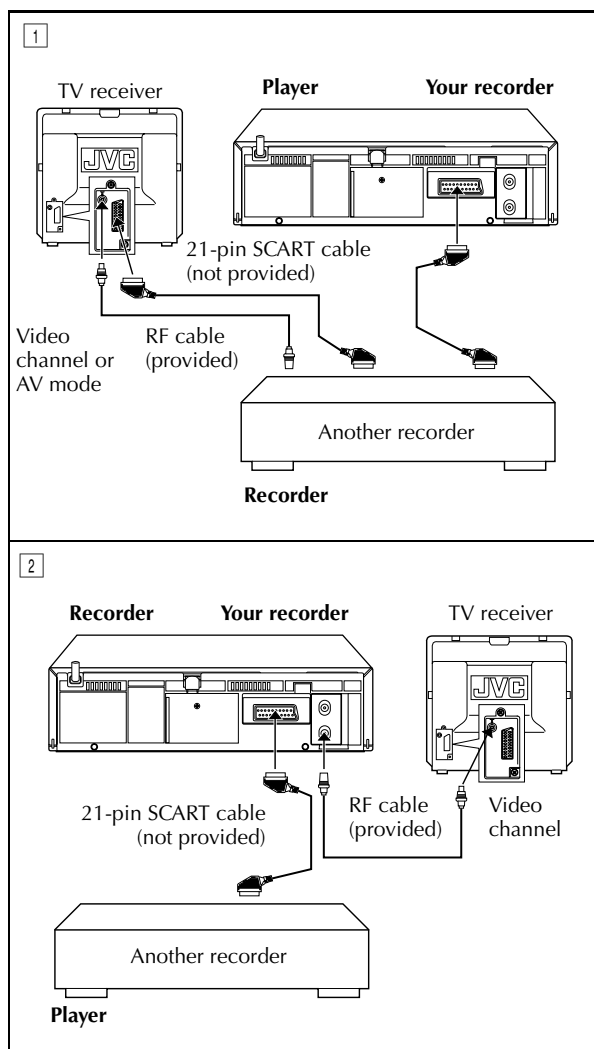
Engage the Play mode of the source player.

5 Start the recording deck.

Engage the Record mode of the recording deck.

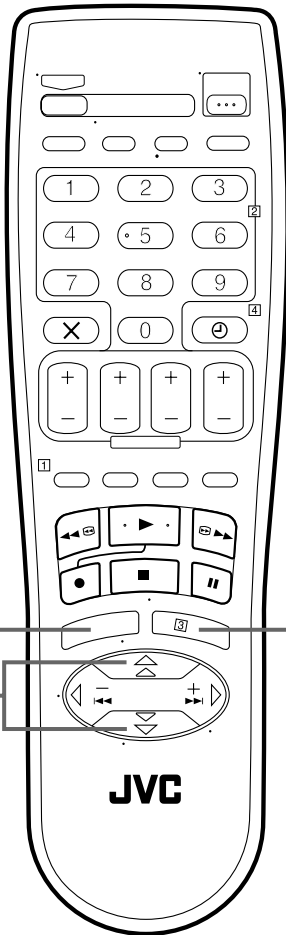
NOTES:

- All necessary cables can be obtained from your dealer.
- When you select "EDIT" to dub tapes in step 3, be sure to select "AUTO" (or "NORM" when "B.E.S.T." is set to "OFF") after you finish dubbing the tapes.
- When you use this recorder as the source player for editing, be sure to set "O.S.D." to "OFF" before starting (pg. 27).



Mode Set

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



You can change various mode settings on the Mode Set screen by following the procedure described below.

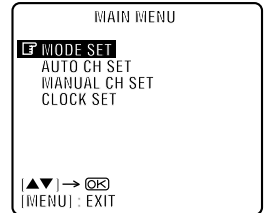
- For each mode setting, see pages 27 to 28.

1 Access the Main Menu screen.

Press MENU.

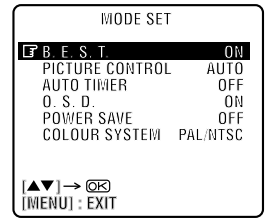
2 Access the Mode Set screen.

Press Δ / ∇ to move the highlight bar (pointer) to "MODE SET", then press OK or \triangleright .



3 Select the mode.

Press Δ / ∇ to move the highlight bar (pointer) to the item you want to change.



4 Select the mode setting.

Press OK or \triangleright .

5 Return to the normal screen.

Press MENU.

* The default setting is **bold** in the table below.

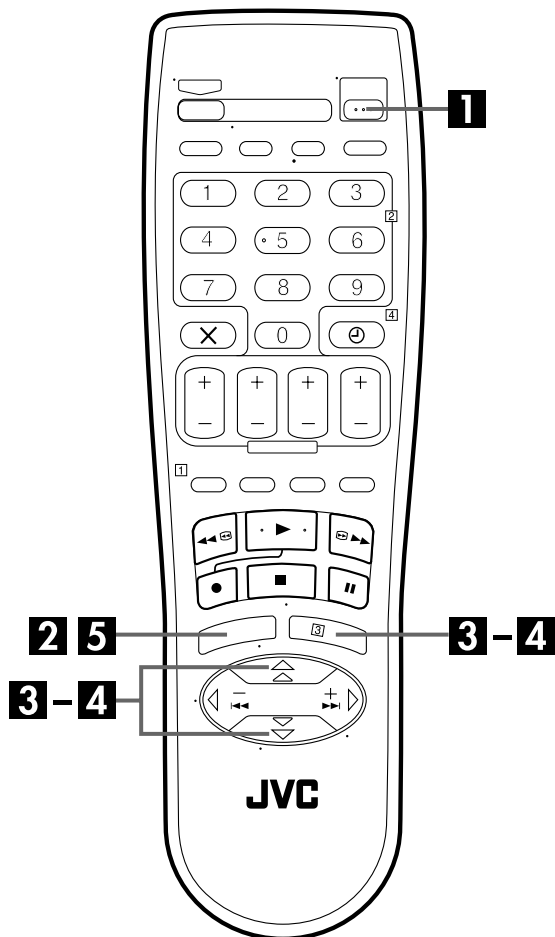
<p>■ B.E.S.T. ON OFF</p>	<p>You can set the B.E.S.T. (Biconditional Equalised Signal Tracking) system to "ON" or "OFF" (☞ pg. 19).</p>
<p>■ PICTURE CONTROL</p> <p>AUTO: Provides the optimised picture benefits of the B.E.S.T. Picture System.</p> <p>EDIT: Minimizes picture degradation during editing (recording and playback).</p> <p>SOFT: Reduces image coarseness when viewing overplayed tapes containing a lot of noise.</p> <p>SHARP: Clearer, sharper-edged picture when viewing images with lots of flat, same-coloured surfaces such as cartoons.</p>	<p>This feature helps you to adjust the playback picture quality according to your preference. Normally select "AUTO".</p> <p>NOTES:</p> <ul style="list-style-type: none"> • When you select "EDIT", "SOFT" or "SHARP", the selected mode will not change until you select another mode. • When you select "EDIT" to dub tapes, be sure to select "AUTO" after you finish dubbing the tapes. • When "B.E.S.T." is "OFF", "PICTURE CONTROL" switches automatically from "AUTO" to "NORM".
<p>■ AUTO TIMER ON OFF</p>	<p>When this function is set to "ON", the timer is automatically engaged when the recorder power is turned off, and automatically disengaged when the recorder is powered back on.</p> <p>NOTE:</p> <p><i>For safety, when "AUTO TIMER" is set to "OFF", all other recorder functions are disabled while the Timer mode is engaged. To disengage the timer, press ⊕ (TIMER).</i></p>
<p>■ O.S.D. ON OFF</p>	<p>When this function is set to "ON", various operational indicators appear on the TV screen. Messages appear in the selected language (☞ pg. 10 or 11).</p> <p>NOTES:</p> <ul style="list-style-type: none"> • When you use this recorder as the source player for editing, be sure to set "O.S.D." to "OFF" before starting. • During playback, the operation mode indicators may be disturbed depending on the type of tape being used.

* The default setting is **bold** in the table below.

<p>■ POWER SAVE ON OFF</p>	<p>When this function is set to "ON", you can reduce the power consumption while the recorder is turned off.</p> <p>NOTES:</p> <ul style="list-style-type: none"> • <i>During Power Save mode the front display panel will be turned off. ... the picture may be distorted momentarily when you turn on/off the recorder.</i> • <i>Power Save does not work when the recorder is in the Timer mode.</i>
<p>■ COLOUR SYSTEM</p> <p>PAL/NTSC: To record PAL signals, or play back a PAL or NTSC tape.</p> <p>MESECAM: To record SECAM signals, or play back a MESECAM tape.</p>	<p>You can play back PAL, NTSC and MESECAM tapes, or record PAL and SECAM* signals on this recorder. Select the appropriate colour system.</p> <p>* <i>SECAM signals will be recorded as MESECAM on this recorder; MESECAM is the designation for tapes with SECAM signals that have been recorded on a MESECAM-compatible PAL video cassette recorder.</i></p> <p>NOTES:</p> <p>About NTSC Playback</p> <ul style="list-style-type: none"> • <i>Some TVs shrink the picture vertically and place black bars at the top and bottom of the TV screen. This is not a malfunction on the part of either the video recorder or the TV.</i> • <i>The picture may roll up and 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.)</i> • <i>The counter and tape remaining time readings will be incorrect.</i> • <i>During search, still, or frame-by-frame playback, the picture will be distorted, and there may be a loss of colour.</i> • <i>Depending on the type of TV, the top and bottom portions of superimposed displays may be cut off during NTSC playback.</i>

Clock Set

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



IMPORTANT

Perform the following steps only if —
—the recorder's memory backup has expired.

OR

—you want to adjust the time lag of the recorder's built-in clock.

1 Turn on the recorder.

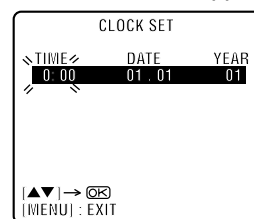
Press ⏻.

2 Access the Main Menu screen.

Press MENU.

3 Access the Clock Set screen.

Press \triangle / ∇ to move the highlight bar (pointer) to "CLOCK SET", then press **OK** or \triangleright . The Clock Set screen appears.



4 Set the date and time.

Press \triangle / ∇ to set the time, then press **OK** or \triangleright . The "DATE" display begins blinking. Repeat the same procedure to set the date and year.

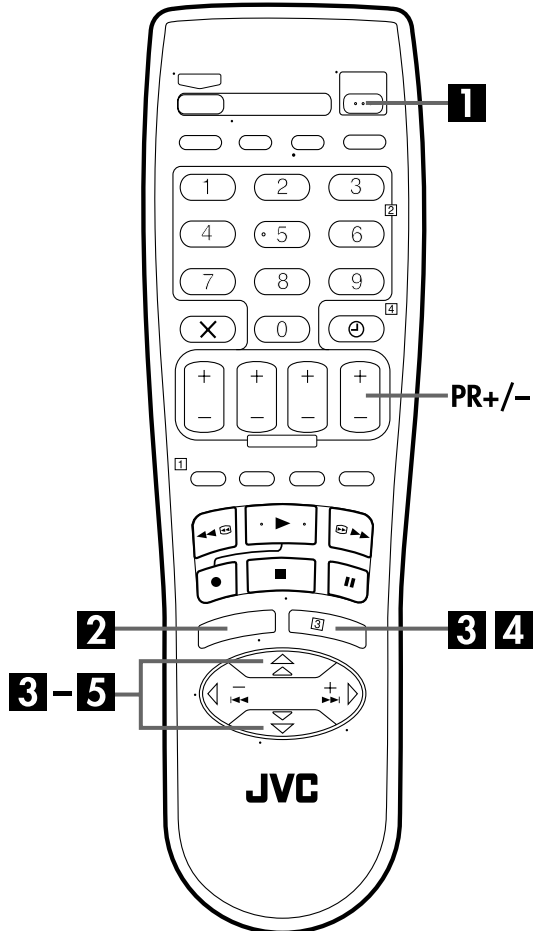
- When you set the time, press and hold \triangle / ∇ to change the time by 30 minutes.
- When you set the date, press and hold \triangle / ∇ to change the date by 15 days.

5 Start the clock operation.

Press MENU.

Tuner Set

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



IMPORTANT

Perform the following steps only if —
 — Auto Channel Set has not been set correctly by Auto Set Up. (pg. 8)
 — you have moved to a different area or if a new station starts broadcasting in your area.

Your recorder needs to memorize all necessary stations in channel positions in order to record TV programmes. Auto Channel Set automatically assigns all receivable stations in your area to call them up by using the **PR** buttons without going through any vacant channels.

Auto Channel Set

1 Turn on the recorder.

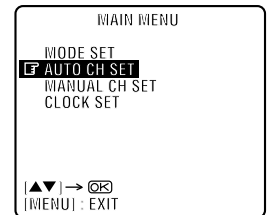
Press **⏻**.

2 Access the Main Menu screen.

Press **MENU**.

3 Access the Auto Channel Set screen.

Press **△▽** to move the highlight bar (pointer) to "AUTO CH SET", then press **OK** or **▶**.

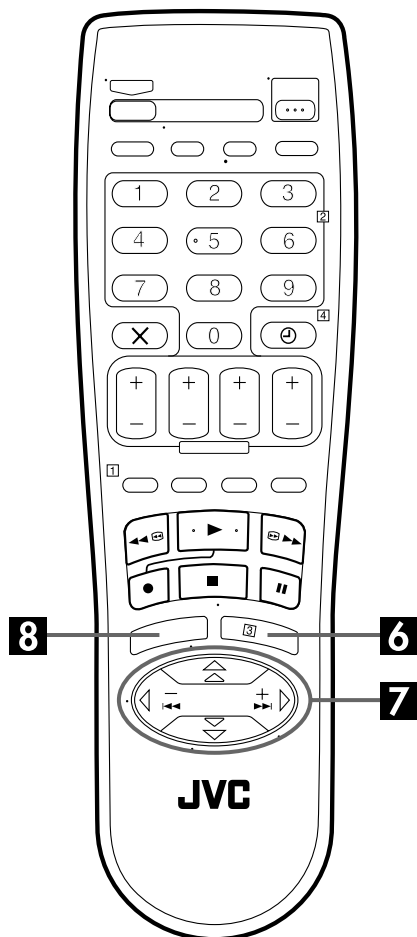


4 Select your country.

Press **△▽** to move the highlight bar (pointer) to your country's name, then press **OK** or **▶**.

5 Select the language.

Press **△▽** to move the highlight bar (pointer) to the language of your choice.

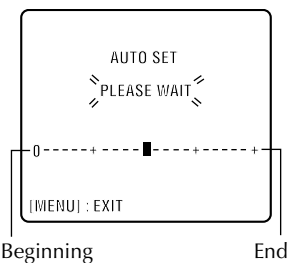


6 Perform Auto Channel Set.

Press **OK**.

- The Auto Set screen appears, and remains on screen while the recorder searches for receivable stations.

As Auto Channel Set progresses, the "█" mark on the TV screen moves from left to right. Wait until the TV screen as shown in step 7 appears.



7 View the Confirmation screen.

After "SCAN COMPLETED" is displayed on the TV screen for about 5 seconds, the Confirmation screen looking like the one to the right appears. The stations your recorder located appear on a Confirmation screen —

PR	FRQ	PR	FRQ
01	150	07	229
02	165	08	237
03	195	09	355
04	205	10	365
05	213	11	374
06	221	12	384

▲| → [OK] : EDIT
 ▼| → [X] : DELETE
 [MENU] : EXIT

channel positions (PR) and frequency (FRQ). The blueback screen and the programme currently being broadcast by the blinking station appear alternately for 8 seconds each. To view the next page, use the Δ / ∇ button on the remote control.

The stations located in the selected country appear at the top of the list.

- If you have selected MAGYARORSZÁG, ČESKÁ REPUBLIKA, POLSKA or OTHER EASTERN EUROPE for the country setting (pg. 8, 11), refer to "INFORMATION" on page 32.

8 Return to the normal screen.

Press **MENU**.

- Using the Confirmation screen, you can delete channels, swap channel positions and fine-tune channels already stored. Refer to pages 32 – 33 for the procedures.

IMPORTANT

Your video recorder memorizes all detected stations even if reception of some of them is poor. You can delete those stations with an unacceptable picture (pg. 32, "Delete A Channel").

NOTES:

- Fine tuning is performed automatically during Auto Channel Set. If you want to perform it manually, refer to page 33.
- If you perform Auto Channel Set when the aerial cable is not connected properly, "SCAN COMPLETED -NO SIGNAL-" appears on the TV screen in step 7. When this happens, make sure of the aerial connection and press **OK**; Auto Channel Set will take place again.
- If no sound accompanies the picture or the audio sounds unnatural on some channels that have been stored by Auto Set Up, the TV system setting for those channels may be incorrect. Select the appropriate TV system for those channels (pg. 32, "INFORMATION").

Manual Channel Set

You can delete channels, swap channel positions and fine-tune channels already stored.

- ☞ "Delete A Channel" below
- ☞ "Swap Channel Positions" on page 33
- ☞ "Fine-Tuning Channels Already Stored" on page 33

NOTE:

Perform *Auto Channel Set* if you have moved to a different area or if a new station starts broadcasting in your area.

Delete A Channel

1 Access the Main Menu screen.

Press **MENU**.

2 Access the Confirmation screen.

Press Δ / ∇ to move the highlight bar (pointer) to "MANUAL CH SET", then press **OK** or \triangleright . The Confirmation screen appears.

3 Select the item.

Press Δ / ∇ until the item you want to delete begins blinking.

PR	FRO	PR	FRO
01	150	07	229
02	165	08	237
03	195	09	355
04	205	10	365
05	213	11	374
06	221	12	384

\uparrow / \downarrow : EDIT
 \leftarrow : DELETE
 [MENU] : EXIT

4 Delete a channel.

Press **X**, then press **OK** or \triangleright .

- Repeat steps 3 and 4 as necessary.

PR	FRO	PR	FRO
01	150	07	229
02	X	08	237
03	195	09	355
04	205	10	365
05	213	11	374
06	221	12	384

\uparrow / \downarrow : EDIT
 \leftarrow : DELETE
 [MENU] : EXIT

5 Close the Confirmation screen.

Press **MENU**.

INFORMATION

If you have selected MAGYARORSZÁG, ČESKÁ REPUBLIKA, POLSKA or OTHER EASTERN EUROPE for the country setting (☞ pg. 8, 11), the Confirmation screen looking like the one below appears.

When you can see the picture but can hear no audio, select appropriate TV system (D/K or B/G). Normally, TV programmes are broadcasted as follows.

For Eastern Europe : D/K

For Western Europe : B/G

- 1 Perform steps 1 and 2 of "Delete A Channel" in the left column to access the Confirmation screen before continuing.

PR	FRO	SYS	PR	FRO	SYS
01	150	B/G	07	229	B/G
02	165	B/G	08	237	B/G
03	195	B/G	09	355	B/G
04	205	B/G	10	365	B/G
05	213	B/G	11	374	B/G
06	221	B/G	12	384	B/G

\uparrow / \downarrow : SELECT
 \leftarrow : OK
 [MENU] : EXIT

- 2 Press Δ / ∇ until the channel you want to change its TV system (D/K or B/G) begins blinking, then press **OK** three times.
- 3 Press Δ / ∇ to select appropriate TV System (D/K or B/G).
- 4 Press **MENU** to close the Confirmation screen.

Swap Channel Positions

Example: To swap PR 03 and PR 09.

1 Access the Main Menu screen.

Press MENU.

2 Access the Confirmation screen.

Press Δ / ∇ to move the highlight bar (pointer) to "MANUAL CH SET", then press **OK** or \triangleright . The Confirmation screen appears.


3 Select the position. (e.g. 03)

Press Δ / ∇ until the section of PR "03" begins blinking,

then press **OK** or \triangleright .

- Only "03" will blink.


PR	FRO	PR	FRO
01	150	07	229
02	165	08	237
03	195	09	355
04	205	10	365
05	213	11	374
06	221	12	384

[0-9] : SELECT
 : FINE TUNING
 [MENU] : EXIT

4 Select the position. (e.g. 09)

Press **NUMBER** keys to input "0" and "9". The two selected channels will be swapped.

PR	FRO	PR	FRO
01	150	07	229
02	165	08	237
03	355	09	195
04	205	10	365
05	213	11	374
06	221	12	384

[0-9] : SELECT
 : FINE TUNING
 [MENU] : EXIT

- To cancel the channel swapping, press \triangleleft .
- Repeat steps 3 and 4 as necessary.

5 Close the Confirmation screen.

Press MENU.

Fine-Tuning Channels Already Stored

1 Access the Main Menu screen.

Press MENU.


2 Access the Confirmation screen.

Press Δ / ∇ to move the highlight bar (pointer) to "MANUAL CH SET", then press **OK** or \triangleright . The Confirmation screen appears.

3 Select the channel to fine-tune.

Press Δ / ∇ until the channel you want to tune begins blinking, then press **OK** or \triangleright twice.

PR	FRO	PR	FRO
01	150	07	229
02	165	08	237
03	195	09	355
04	205	10	365
05	213	11	374
06	221	12	384


[Δ / ∇] : FINE TUNING
 : OK
 [MENU] : EXIT

4 Perform tuning.

Press Δ / ∇ until the picture is its clearest. Then press **OK**.

- Repeat steps 3 – 4 as necessary.

PR	FRO	PR	FRO
01	150	07	229
02	165	08	237
03	195	09	355
04	205	10	365
05	213	11	374
06	221	12	384

[Δ / ∇] : FINE TUNING
 : OK
 [MENU] : EXIT

5 Close the Confirmation screen.

Press MENU.

Video Channel Set

Video channel (RF output channel) is the channel on which your TV receives picture and sound signals from the recorder through the RF cable.

IMPORTANT

Perform the following steps only if —

- interference appears in the TV picture after you have moved to a different area or a new station has started broadcasting in your area.
- you change the connection between your recorder and TV from RF connection to AV connection, or vice versa.

If you have connected the recorder to your TV via the AV connection (☞ pg. 7), since you do not need the video channel you have to set the video channel to off.

If you have connected the recorder to your TV via the RF connection (☞ pg. 7), you have to set the correct video channel.

Before performing the following steps:

Make sure the recorder's power is off and there is no cassette inserted in the recorder.

1 Access the Video Channel Set mode.

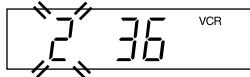
Hold down **■/▲** on the recorder until the front display panel shows the following.



2 Set the RF output system.

The blinking number on the display indicates the RF output system of your country.

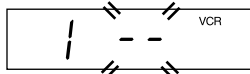
- If you have selected MAGYARORSZÁG, ČESKÁ REPUBLIKA, POLSKA or OTHER EASTERN EUROPE for the country setting (☞ pg. 8, 11), press **△▽** to set to "2".
- For other countries, set to "1". Then press **OK**.
(1: B/G 2: D/K)



3 Set the video channel.

With AV Connection

Press **PR -** until the front display panel shows "1 --" (or "2 --").

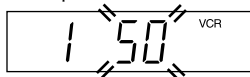


- Now the video channel is set to off.

With RF Connection

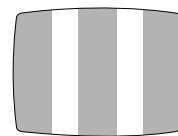
Press **PR +** or **-** to set the video recorder to a vacant channel between 28 and 60 which is not occupied by any local station in your area.

(Example) If channel 50 is available in your area



Then set your TV to UHF channel 50.

- If the two vertical white bars appear clearly on the TV screen as shown to the right, go to step 4.
- If the two vertical white bars do not appear clearly, re-set the video recorder to another vacant channel and try again.



NOTES:

- If you set the video recorder to a channel which is occupied by a local station or has neighbouring channels that are occupied by local stations, the picture reception quality will be affected and some interference noise will appear on the TV screen. Be sure to select a vacant channel which has no broadcast on neighbouring channels.
- If you cannot obtain the two vertical white bars clearly with any channel between 28 and 60, consult your JVC dealer.

4 Exit the Video Channel Set mode.

Press **OK** on the remote control.

With AV Connection

To view picture signals from the video recorder, set your TV to its AV mode.

With RF Connection

The channel on which the TV screen in step 3 appears clearly is your video channel.

To view picture signals from the video recorder, set your TV to the video channel.

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
1. No power is supplied to the recorder.	• The mains power cord is disconnected.	Connect the mains power cord.
2. The clock is functioning properly, but the recorder cannot be powered.	• "⊖" is displayed on the front display panel with Auto Timer set to "OFF".	Press the ⊖ button to turn the "⊖" indicator off.
3. The remote control won't function.	• The batteries are discharged.	Replace the dead batteries with new ones.

TAPE TRANSPORT

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
1. During recording, the tape does not run. "○" lights up and the channel display blinks on the front display panel.	• The recorder is in the Record Pause mode.	Press ► to resume recording.
2. 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
1. The playback picture does not appear while the tape is running.	<ul style="list-style-type: none"> • If you're using the RF connection, . . . the TV receiver's channel selector is not set to the video channel. . . . the recorder's video channel has not been correctly set. • If you're using the AV connection, the TV receiver is not set to the AV mode. 	<p>If you are using the RF connection, . . . set the TV receiver to the video channel. . . . perform "Video Channel Set" (☞ pg. 34)</p> <p>If you are using the AV connection, set the TV to its AV mode.</p>
2. Noise appears during visual search.	• This is normal.	
3. Noise appears during normal playback.	• The automatic tracking mode is engaged.	Try manual tracking. (☞ pg. 14)
4. The playback picture is blurred or interrupted while TV broadcasts are clear or "USE CLEANING CASSETTE" message appears on the screen.	• The video heads may be dirty.	Use a dry cleaning cassette TCL-2UX or consult your JVC dealer.

RECORDING

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
1. Recording cannot be started.	<ul style="list-style-type: none"> 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.	<ul style="list-style-type: none"> "L-1" has been selected as the input mode. 	Set to the desired channel.
3. Tape-to-tape editing is not possible.	<ul style="list-style-type: none"> 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. 	<p>Confirm that the source is properly connected.</p> <p>Confirm that all units' power switches are turned on.</p> <p>Set the input mode to "L-1".</p>
4. Camcorder recording is not possible.	<ul style="list-style-type: none"> The camcorder has not been properly connected. The input mode is not correct. 	<p>Confirm that the camcorder is properly connected.</p> <p>Set the input mode to "L-1".</p>

TIMER RECORDING

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
1. Timer recording won't work.	<ul style="list-style-type: none"> The clock and/or the timer have been set incorrectly. The timer is not engaged. 	<p>Re-perform the clock and/or timer settings.</p> <p>Press \ominus and confirm that "\ominus" is displayed on the front display panel.</p>
2. Timer programming is not possible.	<ul style="list-style-type: none"> Timer recording is in progress. 	Timer programming can't be performed while a timer recording is in progress. Wait until it finishes.
3. " \ominus " on the front display panel won't stop blinking.	<ul style="list-style-type: none"> The timer is engaged but there's no cassette loaded. 	Load a cassette with the record safety tab intact.
4. " \ominus ", " \circ " and " \triangleright " on the front display panel won't stop blinking.	<ul style="list-style-type: none"> The loaded cassette has had its record safety tab removed. The end of the tape was reached during timer recording. 	<p>Remove the cassette and cover the hole with adhesive tape, or insert a cassette with the record safety tab intact.</p> <p>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.</p>
5. " \ominus " blinks for 10 seconds and the Timer mode is disengaged.	<ul style="list-style-type: none"> \ominus has been pressed when there are no programs in memory, or the timer record information has been programmed incorrectly. 	Check the programmed data and re-program as necessary, then press \ominus again.

OTHER PROBLEMS

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
1. Whistling or howling is heard from the TV during camcorder recording.	<ul style="list-style-type: none"> • The camcorder's microphone is too close to the TV. • The TV's volume is too high. 	<p>Position the camcorder so its microphone is away from the TV.</p> <p>Turn the TV's volume down.</p>
2. The channel cannot be changed.	<ul style="list-style-type: none"> • Recording is in progress. 	<p>Press II to pause the recording, change channels, then press ▶ to resume recording.</p>
3. Channel settings that were made manually seem to have changed or disappeared.	<ul style="list-style-type: none"> • After the manual settings were made, Auto Channel Set was performed. 	<p>Perform manual setting again.</p>
4. No channels are stored in the recorder's memory.	<ul style="list-style-type: none"> • The TV aerial cable was not connected to the recorder when Auto Set Up was performed. 	<p>Turn off the recorder once and connect the TV aerial cable to the recorder properly, then turn on the recorder again. Then perform Auto Set Up again (☞ pg. 8).</p>

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.

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. During search, slow, still and frame-by-frame playback, I can't hear any audio. What's the problem?

A. This is normal.

Q. Can the video recorder indefinitely remain in the still mode?

A. No. It stops automatically after 5 minutes to protect the heads.

Q. When returning from variable-speed search to normal playback, the picture is disturbed. Should I be concerned about this?

A. No, it is normal.

Q. Noise bar appear during variable-speed search. What's the problem?

A. This is normal.

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 stops recording, and "○" and "▷" on the front display panel won't stop blinking.

TIMER RECORDING

Q. "○" and "⊖" remain lit on the front display panel. Is there a problem?

A. No. This is a normal condition for a timer recording in progress.

Q. Can I programme 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 on-screen menu, but the audio from the programme or tape you're viewing can be heard.

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SPECIFICATIONS

GENERAL

Power requirement	: AC 220 V – 240 V~, 50 Hz/60 Hz
Power consumption	
Power on	: 14 W
Power off	: 4.0 W
Temperature	
Operating	: 5°C to 40°C
Storage	: -20°C to 60°C
Operating position	: Horizontal only
Dimensions (WxHxD)	: 360 mm x 94 mm x 258 mm
Weight	: 3.1 kg
Format	: VHS PAL standard
Maximum recording time	
(SP)	: 240 min. with E-240 video cassette

VIDEO/AUDIO

Signal system	: PAL-type colour signal and CCIR monochrome signal, 625 lines 50 fields
Recording system	: Rotary two-head herical scan system
Signal-to-noise ratio	: 45 dB
Horizontal resolution	: 250 lines
Frequency range	: 70 Hz to 10,000 Hz
Input/Output	: 21-pin SCART connector : IN/OUT x 1

TUNER/TIMER

TV channel storage capacity	: 99 positions (+AUX position)
Tuning system	: Frequency synthesized tuner
Channel coverage	: VHF 47 MHz – 89 MHz/ 104 MHz – 300 MHz/ 302 MHz – 470 MHz UHF 470 MHz – 862 MHz
Aerial output	: UHF channels 28 – 60 (Adjustable)
Memory backup time	: Approx. 10 min.

ACCESSORIES

Provided accessories	: RF cable, Infrared remote control unit, "R6" battery x 2
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*Specifications shown are for SP mode unless otherwise specified.
E.& O.E. Design and specifications subject to change without notice.*

JVC

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