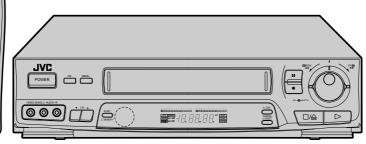


VIDEO CASSETTE RECORDER

HR-J730KR









For Customer Use:

Enter below the Serial No. which is located on the rear of cabinet. Retain this information for future reference.

Model No. HR-J730KR

Serial No.

PU30425-1931





Dear Customer,

Thank you for purchasing the JVC VHS video cassette recorder. Before use, please read the safety information and precautions contained in the following pages to ensure safe use of your new VCR.

CAUTIONS



CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK.

DO NOT REMOVE COVER (OR BACK).

NO USER-SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



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



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

WARNING:

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

CAUTION:

This video cassette recorder should be used with AC $110V-220V \sim$, 60Hz only.

To prevent electric shocks and fire hazards, DO NOT use any other power source.

CAUTION:

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

ATTENTION:

POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

CAUTION:

Changes or modifications not approved by JVC could void user's authority to operate the equipment.

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

1. DO NOT place the VCR . . .

- ... 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 VCR's ventilation openings.
- 3. **DO NOT** place heavy objects on the VCR or remote control.
- 4. <u>DO NOT</u> place anything which might spill on top of the VCR or remote control.
- 5. AVOID violent shocks to the VCR during transport.

**MOISTURE CONDENSATION

Moisture in the air will condense on the VCR when you move it from a cold place to a warm place, or under extremely humid conditions—just as water droplets form on 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 VCR's power 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.

HOW TO USE THIS INSTRUCTION MANUAL

- All major sections and subsections are listed in the Table Of Contents on page 3. Use this when searching for information on a specific procedure or feature.
- The Index on pages 48 49 lists frequently-used terms, and the number of the first page on which they are used or explained in the manual. This section also illustrates the controls and connections on the front and rear panel, the front display panel and the remote control.
- The mark signals a reference to another page for instructions or related information.
- Operation buttons necessary for the various procedures are clearly indicated through the use of illustrations at the beginning of each major section.

BEFORE YOU INSTALL YOUR NEW VCR

. . . please read thoroughly the cautions on this page.

WHS HE

- Cassettes marked "VHS" (or "S-VHS") can be used with this video cassette recorder. However, only "VHS" recordings can be played back in this model.
- HQ VHS is compatible with existing VHS equipment.
- G-Code is a trademark applied for by Gemstar Development Corporation.

G-Code system is manufactured under licence from Gemstar Development Corporation.







3

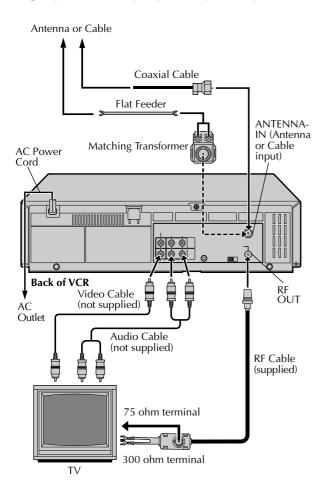
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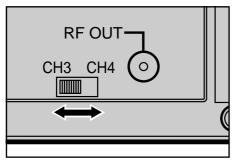
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Basic Connections



Back of VCR



CHECK CONTENTS

Make sure the package contains all of the accessories listed in "SPECIFICATIONS" (F pg. 47).

SITUATE VCR

Place the VCR on a stable, horizontal surface.

CONNECT VCR 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 antenna from the TV.
- b- Connect the TV antenna cable to the ANT IN jack on the rear of the VCR.
- c- Connect the supplied RF cable between the RF OUT jack on the rear of the VCR and the TV's antenna terminal.

AV Connection

- To Connect To A TV With AV Input Terminals . . .
- a- Connect the antenna, VCR and TV as shown in the illustration.
- b-Connect an Audio/Video Cable between the AUDIO OUT and VIDEO OUT jacks on the rear of the VCR and the AV IN jacks on the TV.

CONNECT VCR TO POWER SOURCE

Connect the power plug to an AC outlet.

FINAL PREPARATION FOR

Select the VCR channel (3 or 4) by setting the switch on the rear of the VCR as shown in the illustration.

Turn on the power to the TV. You are now able to perform simple playback (pg. 12) and recording (pg. 13).

NOTES:

- The VCR channel is the channel on the TV which will display the audio and video signals from the VCR. The VCR's CH3-CH4 switch sets the VCR channel to CH3 or CH4.
- The CH3–CH4 switch is preset to the CH3 position. Set to CH4 if CH3 is used for broadcasting in your area.
- If your TV has no AV input terminals, set the channel on the TV to correspond to the CH3-CH4 switch on the back of the
- Even if your TV has AV input terminals, you must connect it to the VCR using an RF cable in order to record one show while watching another (pg. 26).

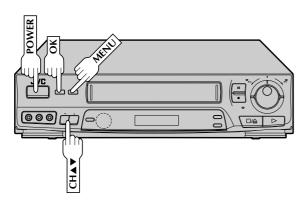
 • For full identification of the VCR's rear panel, refer to the
- Index (REAR VIEW 🖙 pg. 48).

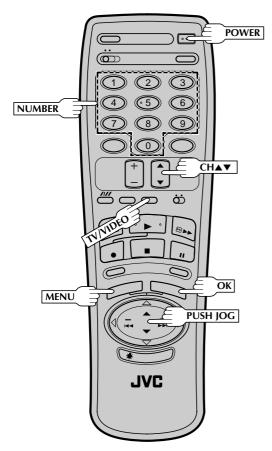






Clock





TURN ON THE VCR

Press **POWER**. If watching channel 3 or 4, press **TV/VIDEO** to select the VIDEO mode. VIDEO is displayed on the front display panel.

ACCESS ON-SCREEN MENU

Press **MENU** to bring up the Main Menu screen.

ACCESS INITIAL SET SCREEN

At the Main Menu screen, place the arrow next to "INITIAL SET" by pressing CH▲▼ or PUSH JOG▲▼, then press OK.

ACCESS CLOCK SET SCREEN

Place the arrow at the Initial Set screen next to "CLOCK SET" by pressing CHA▼ or PUSH JOGA▼, then press OK.

CLOCK SET
G-CODE SET-UP

PRESS (▲,▼), THEN (OK) PRESS (MENU) TO END

INITIAL SET

SET DATE AND TIME

Press the appropriate NUMBER keys to set the date and time (if only 1 digit, press "0" first). Press CH▲▼ or PUSH JOG▲▼ to set AM/PM, then press OK . The next setting that can be set begins flashing. When you're finished with

CLOCK SET

DATE 1/1/96 MON
TIME --:-AM

PRESS NUMBER KEY(0-9) OR (▲,▼), THEN (OK) PRESS (MENU) TO END

this set-up procedure, press **MENU** to start the clock.

NOTE:

CHA▼ or **PUSH JOG**A▼ can be used to perform all operations. (In this case, press **OK** after each setting.)

MAKE CORRECTIONS

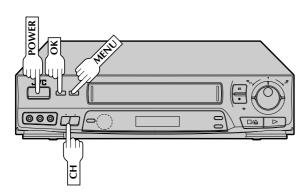
To change any of the settings, press **OK** or **PUSH JOG** |

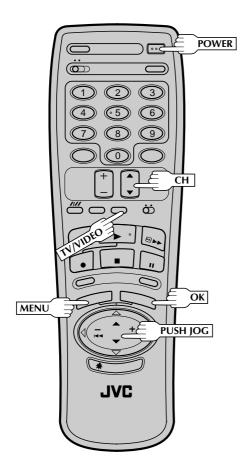
✓ ✓ ► ✓ until the item you want to change blinks, then set as in step 5.





Tuner





Set Receivable Channels

TURN ON THE VCR

Press **POWER**. If watching on channel 3 or 4, press **TV/VIDEO** to select the VIDEO mode. VIDEO is displayed on the front display panel.

ACCESS MAIN MENU SCREEN

Press $\ensuremath{\mathsf{MENU}}$ as many times as necessary .

ACCESS TUNER SET SCREEN

Place the arrow next to "TUNER SET" by pressing CH▲▼ or PUSH JOG▲▼, then press ÓK.

ACCESS BAND SCREEN

Place the arrow next to "BAND" by pressing CH▲▼ or PUSH JOG▲▼, then press OK.

TUNER SET →BAND AFC AUTO CHANNEL SET MANUAL CHANNEL SET PRESS (▲,▼), THEN (OK) PRESS (MENU) TO END

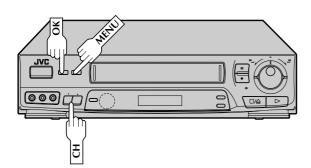
BAND

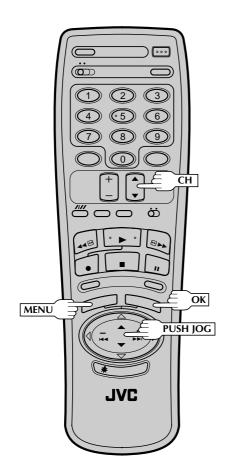
SET FREQUENCY BAND

If you receive your TV channels from an external antenna, select "TV". If you receive your TV channels from a cable TV system, select "CATV". Place the arrow next to your choice by pressing CH▲▼ or **PUSH JOG**▲▼, then

TV →CATV PRESS (▲,▼) TO SELECT PRESS (MENU) TO END press **MENU** to return to the Tuner Set screen.







PERFORM AUTO CHANNEL **SET**

Place the arrow next to "AUTO CHANNEL SET" by pressing CH▲▼ or PUSH JOG▲▼, then press OK. Receivable channels in your area are automatically assigned to the CH▲▼ buttons, and non-receivable channels are skipped.

AUTO CHANNEL SET CH 2 ADD SCANNING ... PRESS (MENU) TO END

NOTES:

- At the end of Auto Channel Set, "SCAN COM-PLETED" appears on screen.
- If the scan was unsuccessful, "SCAN COMPLETED— NO SIGNAL" appears on screen. Check the band setting and connections and start again.

RETURN TO NORMAL **SCREEN**

Press MENU as many times as necessary.









Add Or Delete A Channel

ACCESS TUNER SET SCREEN

Access by performing steps 2 and 3 of the Tuner procedure on page 6.

- To add a channel, go to step 2.
- To delete a channel, skip to step 4.

ACCESS AFC SCREEN

Place the arrow next to "AFC" by pressing CH▲▼ or PUSH JOG▲▼, then press OK.

MAKE SELECTION

Place the arrow next to
"SPCL" by pressing CH▲▼
or PUSH JOG▲▼,
then press MENU to return
to the Tuner Set screen.

AFC NORM →SPCL

PRESS (▲,▼) TO SELECT PRESS (MENU) TO END

ACCESS MANUAL CHANNEL SET SCREEN

Place the arrow next to "MANUAL CHANNEL SET" by pressing CH▲▼ or PUSH JOG▲▼, then press OK.

STORE DESIRED CHANNEL

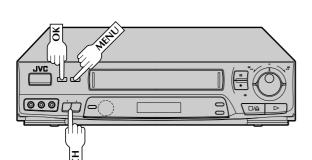
Input the channel number by using the **NUMBER** keys or by pressing **CH**▲▼ or **PUSH JOG**▲▼, then press **ADD** to add or **CH.SKIP** to delete. Repeat for each channel you want to store or skip.

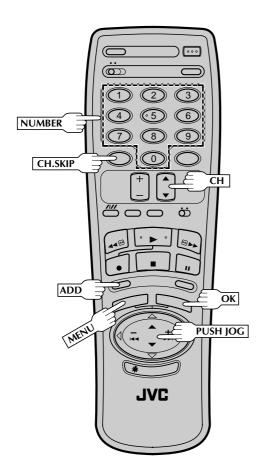
MANUAL CHANNEL SET (CATV) CH 125 SKIP

SELECT CH NO. AND PRESS (ADD/SKIP) PRESS (MENU) TO END

RETURN TO NORMAL SCREEN

Press MENU as many times as necessary.



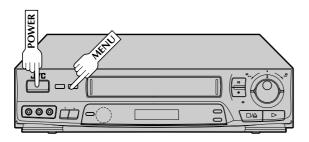






•

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 VCR'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 VCR's "Guide Channel 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:

- Clock setting (pg. 5)
- Tuner setting (pg. 6)

Channel Number Matching

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

If the numbers match, go directly to "G-Code Timer Programming" ($\mathbb{Z}^{\mathbb{F}}$ pg. 30).

If the numbers are different, and you want to be able to timer record programs from those stations, you have to inform the VCR 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" (pg. 30).

TURN ON THE VCR

Press **POWER**. If watching channel 3 or 4, press **TV/VIDEO** to select the TV's VIDEO mode. VIDEO is displayed on the front display panel.

ACCESS MAIN MENU SCREEN

Press **MENU** as many times as necessary.

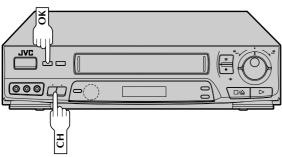
CONTINUED ON NEXT PAGE.

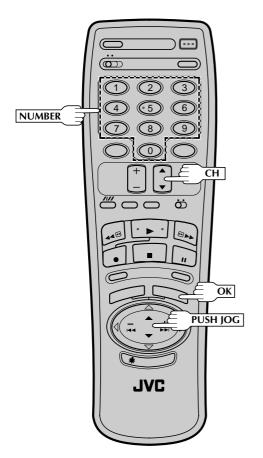












ACCESS INITIAL SET SCREEN

Press CH▲▼ or PUSH JOG▲▼ to place the arrow next to "INITIAL SET", then press OK.

MAIN MENU

PROGRAM SET
FUNCTION SET
TUNER SET
**INITIAL SET
B.E.S.T. PICTURE SYSTEM
R.A. EDIT
PRESS (A, V), THEN (OK)
PRESS (MENU) TO END

ACCESS G-CODE SET-UP SCREEN

Press CH▲▼ or PUSH JOG▲▼ to place the arrow next to "G-CODE SET-UP", then press OK.

INITIAL SET

CLOCK SET → G-CODE SET-UP

PRESS (▲,▼), THEN (OK) PRESS (MENU) TO END

ACCESS GUIDE CHANNEL SET SCREEN

Press CH▲▼ or PUSH JOG▲▼ to place the arrow next to "GUIDE CHANNEL SET", then press OK.

G-CODE SET-UP

GUIDE CHANNEL SET

PRESS (▲,▼), THEN (OK) PRESS (MENU) TO END

INPUT GUIDE CHANNEL NUMBER

Press CH▲▼ or PUSH JOG▲▼ or the appropriate NUMBER keys to input the Guide Channel number as shown in the TV listing. Then press OK.

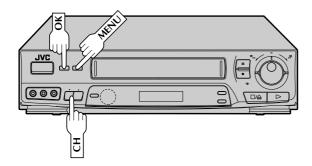
GUIDE CHANNEL SET

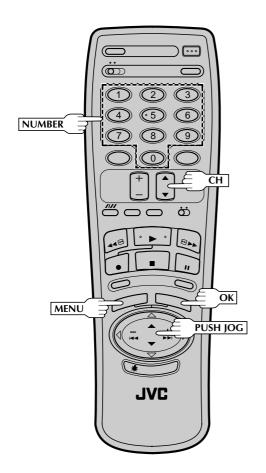
GUIDE CH:VCR CH 1: 1

PRESS NUMBER KEY (0-9) OR (▲,▼), THEN (OK) PRESS (MENU) TO END









INPUT RECEIVING CHANNEL **NUMBER**

Press $CH \blacktriangle \blacktriangledown$ or $PUSH\ JOG \blacktriangle \blacktriangledown$ or the appropriate **NUMBER** keys to input the number of the channel on which the Guide Channel's broadcasts are received. Then press OK.

• If there is more than one mismatch, repeat steps 6 and 7 for each instance.

RETURN TO G-CODE SET-UP SCREEN

Press **MENU**.

CHECK INPUT DATA

Press CH▲▼ or PUSH **JOG**▲▼ to place the arrow next to "GUIDE CHANNEL MAP", then press OK.

- The Guide Channel and VCR channel numbers you input appear on the screen in ascending order. Check to ensure you've entered them correctly.
- If you entered more than 10 sets of numbers, press **OK** to see the next set of numbers.

G-CODE SET-UP

GUIDE CHANNEL SET GUIDE CHANNEL MAP

PRESS (▲,▼), THEN (OK) PRESS (MENU) TO END

GUIDE CHANNEL MAP

GUIDE: VCR	GUIDE : VCR
6:47	10:55
12:41	15:38
33:28	67:49

PRESS (OK) TO NEXT PRESS (MENU) TO END

RETURN TO NORMAL **SCREEN**

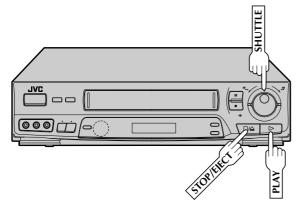
Press MENU as many times as necessary.

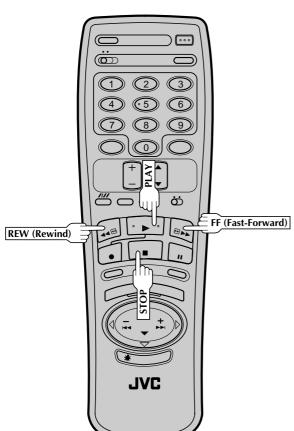
You can now use G-Code for quick and simple timer programming (F pg. 30).





Simple Playback





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 pointing towards the VCR. Don't apply too much pressure when inserting.

- The VCR's power comes on automatically.
- The counter is automatically reset to "0H 00M 00S".
- If the cassette's record safety tab has been removed, playback begins automatically.

FIND PROGRAM 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.

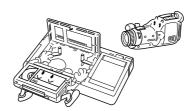
START PLAYBACK

Press **PLAY**. "B.E.S.T. PICTURE SYSTEM" appears on screen (pg. 25).

STOP PLAYBACK

Press **STOP** or **STOP/EJECT**. Then press **STOP/EJECT** to remove the cassette.

Usable cassettes



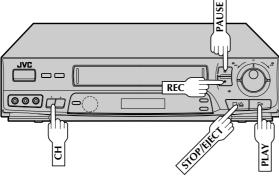
- Compact VHS camcorder recordings can be played on this video recorder. Simply place the recorded cassette into a VHS Cassette Adapter and it can be used just like any full-sized VHS cassette.
- This video recorder can record on regular VHS and Super VHS cassettes. However, it will record and play back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

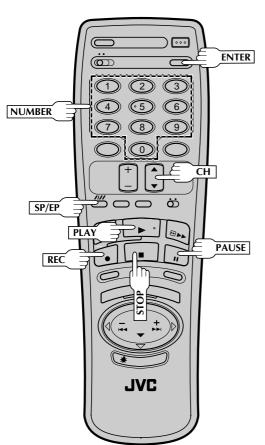






Simple Recording





LOAD A CASSETTE

Make sure the record safety tab is intact. If not, cover the hole with adhesive tape before inserting the cassette.

SELECT RECORDING CHANNEL

Press CH▲▼. Or press the appropriate NUMBER keys, then press ENTER. (The channel changes after a few seconds whether you press ENTER or not.)

SET TAPE SPEED

Press **SP/EP** to set the recording speed.

START RECORDING

Press and hold **REC** and press **PLAY** on the remote control, or press **REC** on the VCR's front panel.

B.E.S.T. takes place at the beginning of both the first SP and the first EP recording after inserting the cassette (\square pg. 24).

PAUSE/RESUME RECORDING

Press PAUSE. Press PLAY to resume recording.

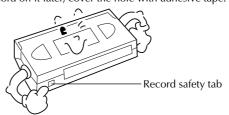
STOP RECORDING

Press **STOP** or **STOP/EJECT**. Then press **STOP/EJECT** to remove the cassette.

Accidental erasure prevention

• To prevent accidental recording on a recorded cassette, remove its record safety tab.

To record on it later, cover the hole with adhesive tape.

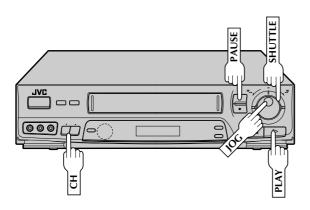


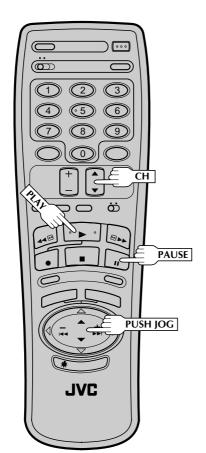






Playback

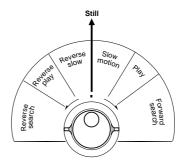




Take advantage of special functions possible with the recorder's controls or the remote control.

NOTE:

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



Still Picture/Frame-By-Frame Playback

button to correct the picture.

PAUSE DURING PLAYBACK
Press PAUSE. If there is vertical jitter, use the CH A or V

ACTIVATE FRAME-BY-FRAME PLAYBACK

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** I◀◀ or ▶►I.

To resume normal playback, press PLAY.

Slow Motion/ Reverse Slow Motion

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 above).

OR

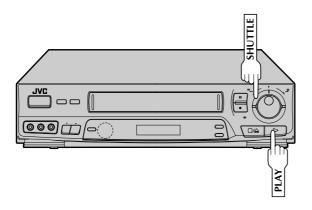
During still picture, press and hold **PUSH JOG** I◀◀ or ►►I. Release to return to still picture.

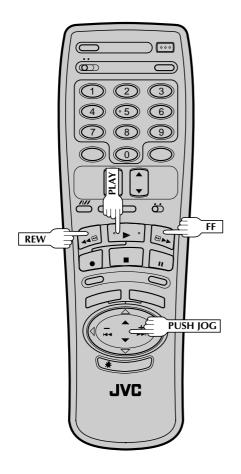
To resume normal playback, press PLAY.











Variable-Speed Search/ Reverse Play

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 on page 14).

OR

During playback, press **PUSH JOG** ► or ► l.

- To increase the speed in the forward direction, press ►►I.
- To decrease the speed in the forward direction, press ►
- To play in reverse slow motion, and in reverse play mode, continue to press I◄◄ after selecting all the forward slow motion modes.

To resume normal playback, press PLAY.

High-Speed Search

ACTIVATE HIGH-SPEED SEARCH

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

OR

During playback or still press **FF** for forward high-speed search, or **REW** for reverse high-speed search.

To resume normal playback, press PLAY.

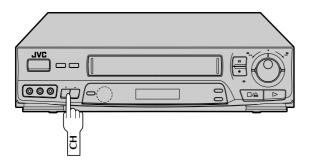
NOTE:

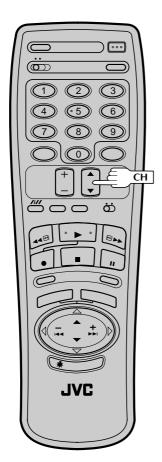
For short searches, during playback or still press and hold **FF** or **REW** for over 2 seconds. When released, normal playback resumes.











Manual Tracking

Once playback begins, the VCR's automatic tracking function is engaged. If noise appears in the picture, you can override this and make the adjustment manually.

ENGAGE MANUAL TRACKING MODE

During playback, press the CH▲▼ buttons on the VCR's front panel simultaneously to cancel the automatic tracking mode and enable manual tracking adjust.

ADJUST MANUAL TRACKING

Press CH▲▼ on the VCR's front panel or remote. Press lightly for fine adjust, or press and hold for coarse adjust. Watch the screen and continue adjusting until optimum picture and sound quality are achieved.

RE-ENGAGE AUTOMATIC TRACKING

Press the CH▲▼ buttons on the VCR's front panel simultaneously.

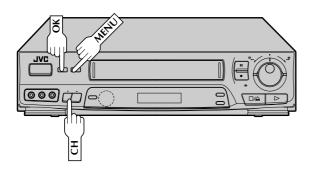
• When automatic tracking is re-engaged, video calibration is automatically activated.

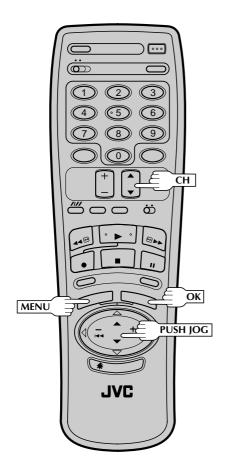
NOTE:

During slow-motion playback, simply press **CH**▲ or **▼** on the VCR's front panel or remote to adjust tracking.









Select The Soundtrack

Your VCR can record two soundtracks simultaneously (Normal and Hi-Fi) and play back the selected one, or both together. Or, when viewing a pre-recorded tape that contains both a main and a sub audio track, you can choose to listen to either one by selecting either "L" or "R" in step 4.

ACCESS MAIN MENU SCREEN

Press **MENU** during playback or when VCR is in stop mode.

• If the G-CODE screen appears press MENU again.

ACCESS FUNCTION SET

Place the arrow next to "FUNCTION SET" by pressing CH▲▼ or PUSH JOG▲▼, then press OK.

ACCESS AUDIO MONITOR **SCREEN**

Place the arrow next to "AUDIO MONITOR" by pressing CH▲▼ or PUSH JOG▲▼, then press OK.

FUNCTION AUTO TIMER
SUPERIMPOSE
AUDIO SELECT
-AUDIO MONITOR
AUX INPUT
AUTO SP/EP TIMER SPECIAL FUNCTION
PRESS (▲, ▼), THEN (OK)
PRESS (MENU) TO END

SELECT MODE

You have five choices:

a- Hi-Fi

b– Left

c- Right

d– Normal

e- Mix

AUDIO MONITOR

→HI-FI R Norm Mix

PRESS (▲,▼) TO SELECT PRESS (MENU) TO END

Place the arrow next to your choice by pressing CH▲▼ or PUSH JOG▲▼.

RETURN TO NORMAL SCREEN

Press MENU as many times as necessary.

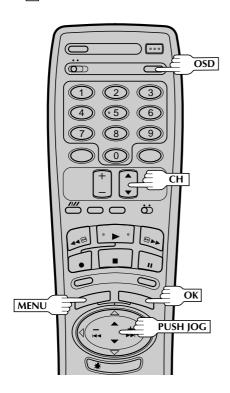
NOTE:

If the tape being played back has no Hi-Fi soundtrack, the Normal soundtrack will be heard no matter what choice you make at the Audio Monitor screen.









To recall an indication

- 1 Press **OSD**.
 - All indications corresponding to the current status are displayed for 5 seconds, leaving the counter information, and RECORD/PAUSE if in the Record Pause mode, on the screen. (No indication during still and search.)
- 2 Press **OSD** again to clear the display.

Superimpose

This function, switchable between ON and OFF, determines whether or not operational indicators will appear on screen.

ACCESS MAIN MENU SCREEN

Press MENU as many times as necessary.

ACCESS FUNCTION SET SCREEN

Place the arrow next to "FUNCTION SET" by pressing CH▲▼ or PUSH JOG▲▼, then press OK.

ACCESS SUPERIMPOSE SCREEN

Place the arrow next to "SUPERIMPOSE" by pressing CHA▼ or PUSH JOGA▼, then press OK.

FUNCTION
AUTO TIMER

→ SUPERIMPOSE
AUDIO SELECT
AUDIO MONITOR
AUX INPUT
AUTO SP/EP TIMER
SPECIAL FUNCTION
PRESS (▲,♥), THEN (OK)
PRESS (MENU) TO END

SELECT MODE

Place the arrow next to "ON" or "OFF" by pressing CH▲▼ or PUSH JOG▲▼.

SUPERIMPOSE

→ON OFF

PRESS (▲,▼) TO SELECT PRESS (MENU) TO END

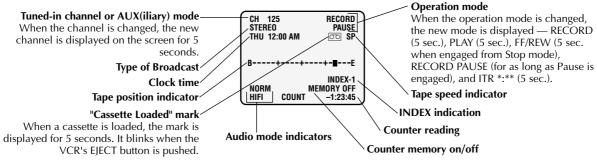
RETURN TO NORMAL SCREEN

Press MENU as many times as necessary.

NOTE:

If you engage the Record Pause mode, RECORD/PAUSE is displayed whether "SUPERIMPOSE" is set to "ON" or "OFF".

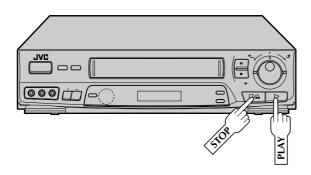
The superimposed indication on the TV screen tells you what the VCR is doing.



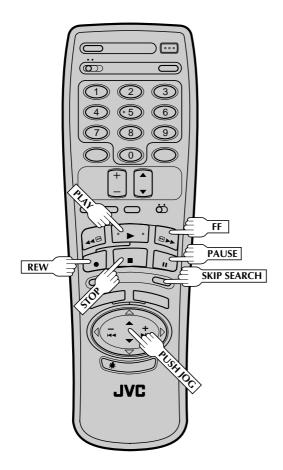












Skip Search

SKIP OVER UNWANTED **SECTIONS**

Press **SKIP SEARCH** 1 to 4 times during playback. Each press initiates a 30-second period of fast-motion playback. Normal playback resumes automatically.

To return to normal playback during a Skip Search, press PLAY.

Repeat Playback

START REPEAT

Press and hold PLAY (until "PLAY" blinks on the front display panel) during playback, then release.

• The entire tape is played back 20 times.

Stop repeat

To stop, press STOP at any time.

NOTE:

Pressing **PLAY**, **REW**, **FF**, **PAUSE** or **PUSH JOG** ► or ▶► also stops Repeat Playback.

Index Search

This function seeks out index codes that are placed on the tape at recording start.

START SEARCH

While the tape is stopped, press **PUSH JOG** ◄ or

ACCESS DISTANT CODE

To access a recording 2-9 index codes away, press **PUSH JOG** ► or ► repeatedly until the correct number is displayed on screen (only if SUPERIMPOSE is set to ON (pg. 18). Playback begins automatically when desired recording is located.

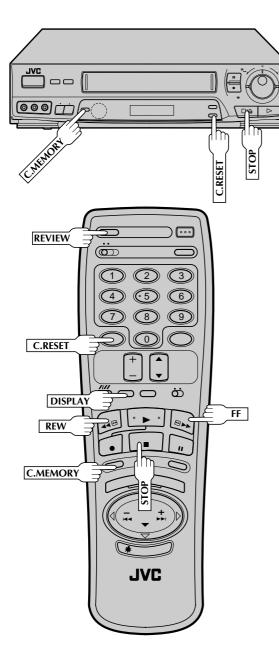
• To find the very beginning of the desired program, press **REW** or **FF** and search visually for the start point.







00



Instant ReView

At the press of a button, you can power up your VCR, rewind the tape and begin viewing the most recent timer-recorded program.

1

ACTIVATE INSTANT REVIEW

After ensuring that the VCR is off and the Timer mode is disengaged, press **REVIEW**.

- The power comes on and the VCR searches for the index code indicating the start of the last timer-recorded program, then begins playback automatically.
- You can access a program 2–9 index codes away from the current position on the tape. If, for example, you have 5 programs recorded and you want to watch the third one, press **REVIEW** three times.
- To find the very beginning of the desired program, press REW or FF and search visually for the program's start point.

Counter Reset

1

RESET COUNTER TO ZERO

Press C.RESET.

NOTE:

By pressing the **DISPLAY** button, you can change the display to show the counter reading, channel number or clock time. (Channel number is not displayed during playback.)

Counter Memory

When activated, this feature returns the tape to counter position "zero".

1

ACTIVATE COUNTER MEMORY

Press **C.RESET** during playback at a point you want to have quick access to later. The counter reads "0H 00M 00S".

Then press **C.MEMORY**. The Counter Memory indicator in the front display panel lights.

RETURN TO COUNTER POSITION ZERO

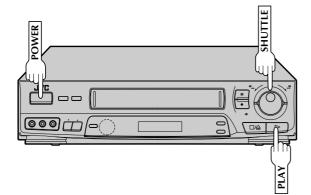
2

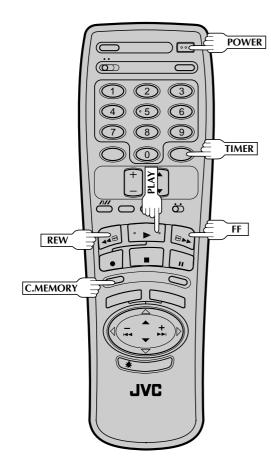
Press **STOP** (during playback), then press **REW**. The tape rewinds and stops at approximately "0H 00M 00S" automatically.

• To cancel Counter Memory, press **C.MEMORY**.



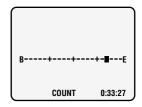






Tape Position Indicator

The Tape position indicator appears on screen when, from the stop mode, you press **FF**, **REW** or perform an Index Search or Instant ReView. The position of "■" in relation to "B" (Beginning) or "E" (End) shows you where you are on the tape.



NOTE:

SUPERIMPOSE must be set to ON, or the indicator will not appear (pg. 18).

Next-Function Memory

The Next Function Memory "tells" the VCR what to do after rewinding.

- * Before continuing, ensure that the VCR is in stop mode.
- a- For Automatic Start Of Playback After Tape Rewind . . .
- . . press **REW**, then press **PLAY** within 2 seconds.
- **b** For Automatic Power Off After Tape Rewind . . .
- ... press **REW**, then press **POWER** within 2 seconds.
- c- For Automatic Timer Standby After Tape Rewind press REW, then press TIMER within 2 seconds.

NOTES:

- To do the above using the VCR's controls: During Stop, turn the SHUTTLE all the way to the left and release it instead of pressing REW, and then press PLAY or POWER within 2 seconds.
- If you want the "next function" to automatically start when the counter reads "0H 00M 00S" (instead of at the beginning of the tape), press C. MEMORY so that the counter memory indicator appears on the front display panel before pressing

AV COMPU LINK Playback

Your VCR is compatible with JVC's AV COMPU LINK components, including amplifiers (or receivers) and televisions. AV COMPU LINK provides one touch control of the audio and video components that are linked via their AV COMPU LINK connectors.

For example: simply load a cassette in the VCR and press PLAY and the AV COMPULLINK components automatically power on

and the AV COMPU LINK components automatically power on, the TV's VIDEO mode is selected and the VCR goes into play mode. (PLAY need not be pressed if the cassette's record safety tab is removed.)

1

MAKE CONNECTION

Connect your VCR to an AV COMPU LINK component as shown in the illustration on page 22.

• The mini-plug cable is a mono 3.5 mm mini-plug to mono 3.5 mm mini-plug connector.

TURN ON THE VCR

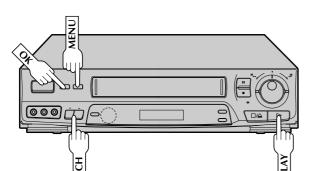
Press **POWER**.

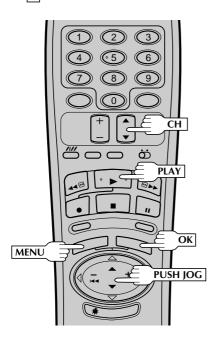
2

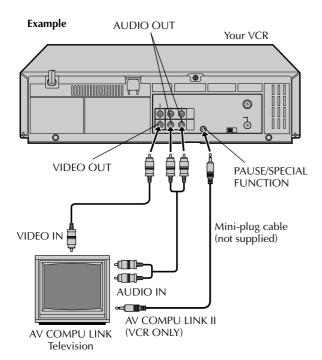
CONTINUED ON NEXT PAGE.











ACCESS MAIN MENU SCREEN

Press **MENU** as many times as necessary.

ACCESS FUNCTION SET SCREEN

Press **CH▲▼** or **PUSH JOG ▲▼** to place the arrow next to "FUNCTION SET", then press **OK**.

ACCESS SPECIAL FUNCTION SCREEN

Press CH▲▼ or PUSH JOG ▲▼ to place the arrow next to "SPECIAL FUNCTION", then press OK.

FUNCTION
AUTO TIMER
SUPERIMPOSE
AUDIO SELECT
AUDIO SELECT
AUDIO MONITOR
AUX INPUT
AUTO SP/EP TIMER
-> SPECIAL FUNCTION
PRESS (A. "V). THEN (OK)
PRESS (MENU) TO END

ENABLE AV COMPU LINK PLAYBACK

Press **CH**▲▼ or **PUSH JOG** ▲▼ to place the arrow next to "AV COMPU LINK".

SPECIAL FUNCTION

R.A. EDIT/PAUSE

→ AV COMPU-LINK

PRESS (▲,▼) TO SELECT PRESS (MENU) TO END

RETURN TO NORMAL SCREEN

Press **MENU** as many times as necessary.

PERFORM AV COMPU LINK PLAYBACK

Simply insert a cassette and press **PLAY** (if the cassette's record safety tab has been removed, playback begins automatically). Linked components are turned on, and the TV set to its VIDEO mode, automatically!

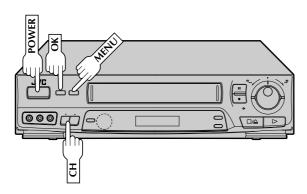
NOTE:

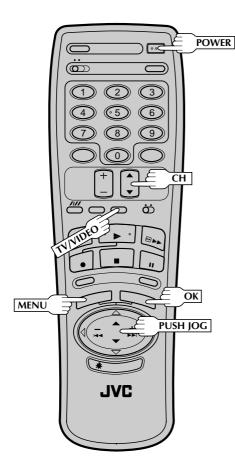
Connection varies depending on the type of JVC TV you have. Please refer to the TV's instruction manual when making this connection.





B.E.S.T. Picture System





Your VCR is equipped with the B.E.S.T. (Biconditional Equalized Signal Tracking) feature, which 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 for both recording and playback is "ON".

Preparation

TURN ON THE VCR

Press **POWER**. If watching channel 3 or 4, press **TV/VIDEO** to select the VIDEO mode. VIDEO is displayed on the front display panel.

ACCESS MAIN MENU SCREEN

Press **MENU** as many times as necessary.

ACCESS B.E.S.T. PICTURE SYSTEM SCREEN

Press CH▲▼ or PUSH JOG▲▼ to place the arrow next to "B.E.S.T. PICTURE SYSTEM", then press OK.

MAIN MENU

PROGRAM SET
FUNCTION SET
TUNER SET
INITIAL SET

→ B.E.S.T. PICTURE SYSTEM
R.A. EDIT
PRESS (▲,▼), THEN (OK)
PRESS (MENU) TO END

SELECT MODE

Place the arrow next to "ON" by pressing CH▲▼ or PUSH JOG▲▼, then press OK to move the arrow to the Playback section. Set Playback to "ON", then press MENU as many times as necessary to return to the normal

RECORDING → ON OFF
PLAYBACK → ON OFF

PRESS (▲,▼), THEN (OK)
PRESS (MENU) TO END

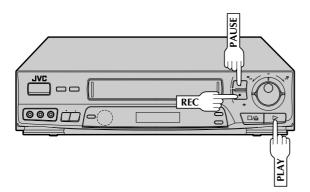
B.E.S.T. PICTURE SYSTEM

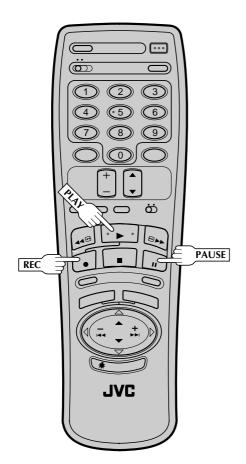
screen. (Pressing **OK** returns the arrow to the Recording section)











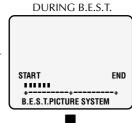
Recording

Perform steps 1 – 3 on page 13 ("Simple Recording") before continuing.

START RECORDING

Press and hold **REC** and press PLAY on the remote control, or press **REC** on the VCR's front panel.

• The VCR takes about 7 seconds to assess the quality of the tape in use, then recording begins with the picture level optimized.



B.E.S.T. COMPLETE

FND

NOTES:

- B.E.S.T. occurs immediately prior to both the first SP and the first EP recording after inserting the cassette. It does not take place during recording.
- B.E.S.T.PICTURE SYSTEM • In the case of timer recording, B.E.S.T. takes place for both SP and EP before the first timer recording after inserting the cassette (regardless of the tape speed selected for that recording).

START

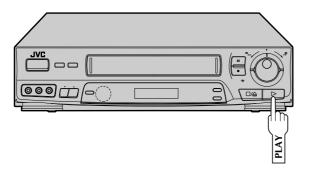
- Once the cassette is ejected, the B.E.S.T. data is canceled. The next time the cassette is used for recording, B.E.S.T. is re-performed.
- While B.E.S.T. is operative, the **PAUSE** button will not
- SUPERIMPOSE must be set to "ON" or the B.E.S.T. Picture System screen will not appear (pg. 18).

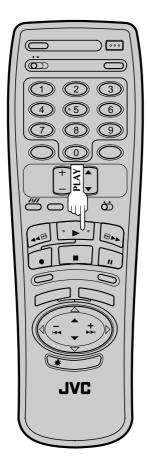
ATTENTION:

- As B.E.S.T. takes place before recording actually starts, there is a delay of about 7 seconds after **REC** and **PLAY** on the remote, or **REC** on the VCR's front panel, are pressed. To make sure you record the desired scene or program completely, first perform the following steps:
- 1) Press and hold PAUSE, and press REC to engage the RECORD PAUSE mode.
 - The VCR then automatically checks the condition of the tape and, after about $7\ \text{seconds}$, re-enters RECORD PAUSE.
- 2) Press PLAY to start recording.
- If you want to bypass B.E.S.T. and start recording right away, set "RECORDING" to "OFF" in step 4 of the Preparation procedure (F pg. 23).









Playback

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

Before beginning, perform steps 1 and 2 on page 12.

START PLAYBACK Press **PLAY**.

• The VCR adjusts the playback picture quality based on the quality of the tape in use.



NOTES:

- When using rental tapes, or tapes recorded on other VCRs, set "PLAYBACK" in step 4 of the Preparation procedure to either "ON" or "OFF" as desired
- © pg. 23).

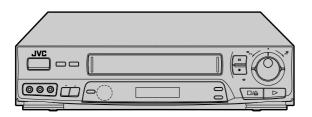
 The B.E.S.T. Picture System screen only appears at the beginning of automatic tracking. Even though the screen doesn't appear after that, the B.E.S.T. function
- SUPERIMPOSE must be set to "ON" or the B.E.S.T. Picture System screen will not appear (pg. 18).

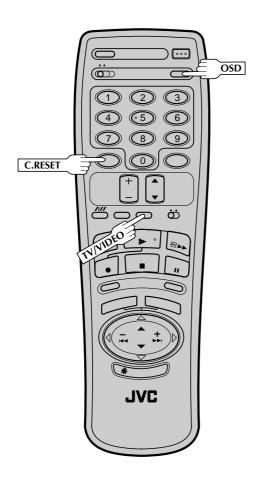






Recording





Record One Program While Watching Another

ENGAGE TV MODE

During recording...

• If using the RF connection (

- If using the RF connection (pg. 4), press TV/VIDEO. The VCR's VIDEO indicator goes out and the TV broadcast being recorded disappears.
- If using the AV connection (pg. 4), change the TV's input mode from AV to TV.

SELECT CHANNEL FOR VIEWING

Use the TV's channel selector to set the channel you want to watch.

Display Elapsed Recording Time

RESET COUNTER TO ZERO

Before recording starts, press **C.RESET**. The counter resets to zero and displays the exact elapsed time as the tape runs.

DISPLAY ELAPSED TIME ON SCREEN

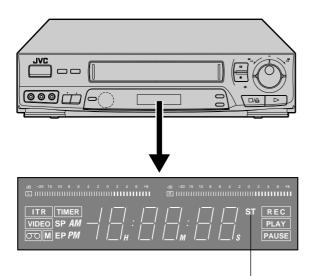
During recording, press **OSD** at any time to see the elapsed time. All indications corresponding to the current status of the VCR are displayed for 5 seconds. The counter display remains on the screen indicating the elapsed time. Press **OSD** again to remove the display.

• Make sure "SUPERIMPOSE" is set to "ON" (pg. 18).









ST(ereo) indicator

Receiving Stereo And Bilingual Programs

Your VCR's built-in MTS decoder enables reception of Multi-Channel TV Sound broadcasts.

- When receiving a stereo broadcast, "STEREO" appears on the TV screen, and "ST" appears on the recorder's front display panel.
- When receiving a bilingual broadcast, "BILINGUAL" appears on the TV screen. (No indication on the front display panel.)

To Record Stereo And Bilingual Programs

To record a stereo program...

To play back a recorded stereo program...

... Select "Hi-Fi" at the AUDIO MONITOR screen (pg. 17).

To record a bilingual program...

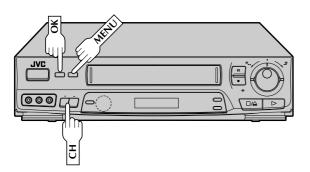
... Select "STEREO/BILINGUAL" at the AUDIO SELECT screen (F) pg. 28). Both the main and sub audio will be recorded.

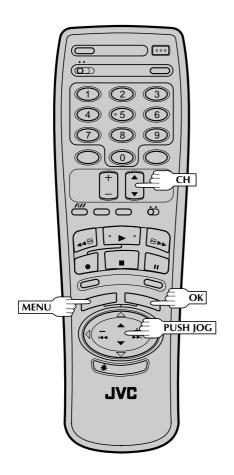
To play back a recorded bilingual program...

... Select "L (main audio)" or "R (sub audio)" as required at the AUDIO MONITOR screen (\square pg. 17).









To Record Monaural Programs

If the quality of stereo sound is poor, perform the following steps before starting recording.

> **ACCESS MAIN MENU** SCREEN

Press **MENU** as many times as necessary.

ACCESS FUNCTION SET SCREEN

Place the arrow next to "FUNCTION SET" by pressing CH▲▼ or PUSH JOG▲▼, then press OK.

ACCESS AUDIO SELECT SCREEN

Place the arrow next to "AUDIO SELECT" by pressing CH▲▼ or PUSH JOG▲▼, then press OK.

SELECT MODE

Place the arrow next to "MONO" by pressing CH▲▼ or PUSH JOG▲▼.

AUDIO SELECT

STEREO/BILINGUAL →MONO

PRESS (▲,▼) TO SELECT PRESS (MENU) TO END

RETURN TO NORMAL SCREEN

Press MENU as many times as necessary.

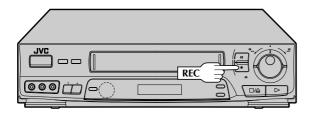
NOTES:

- If you record a builingual program with "AUDIO SELECT" set to "MONO", only the main audio will be recorded.
- If "AUDIO SELECT" is set to "MONO", stereo and bilingual broadcasts being received will be output in monaural, even though the relevant indicator, STEREO or BILINGUAL, appears on the screen.





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 VCR off after recording is finished.

START RECORDING

ENGAGE ITR MODE

Press REC again. ITR blinks and 0:30 appears on the front display panel.

SET RECORDING DURATION

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

NOTES:

- ullet You can only perform ITR using the **REC** button on the VCR's front panel.
- After you set the time, the previous display reappears.
- To check remaining recording time, press **REC** once during recording and the remaining time is displayed for about 5 seconds. Be careful not to press again during this 5 seconds, or you'll add 30 more minutes to the recording.



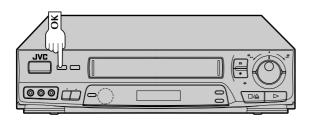


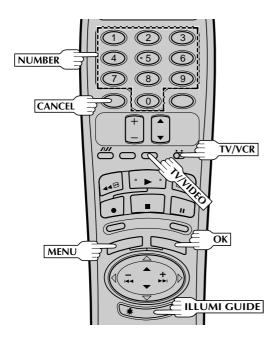
30

TIMER RECORDING

G-Code Timer Programming

Before G-Code Timer programming, see "G-Code Setup" on page 9.





When Using The Illumi-Guide Feature

- Buttons light or blink on the remote control for approximately 10 seconds. If the button or buttons extinguish during timer programming, press ILLUMI GUIDE and the button or buttons previously lit or blinking come back on. If the button or buttons do not re-light or start blinking again, press MENU as many times as necessary to return to the normal screen and extinguish all illuminated buttons, and re-perform the timer programming procedure from the beginning.
- If for some reason the remote control's signal is not received by the VCR, press MENU as many times as necessary to return to the normal screen and extinguish all illuminated buttons, and re-perform the timer programming procedure from the beginning.

During G-Code and on-screen timer programming, the Illumi-Guide feature tells you which button on the remote control must be pressed next by lighting it up. To use this feature, with the **TV/VCR** switch set to "VCR", press **ILLUMI GUIDE** before performing step **2**. (MENU, REW, PLAY, FF light up at this time.)

If you aren't going to use the Illumi-Guide feature, go directly to step $\boldsymbol{1}.$

1

LOAD A CASSETTE

Make sure the record safety tab is present.

- The VCR's power comes on automatically.
- If you're watching on channel 3 or 4, press TV/VIDEO to select the VIDEO mode. VIDEO is displayed on the front display panel.

ACCESS G-CODE SCREEN

Press **MENU** on the remote control.

G-CODE ■

 The clock must be set in order to access the G-Code screen. If you haven't set the clock, the Main Menu screen appears when you press

PRESS NUMBER KEY(0-9) PRESS (MENU) TO MAIN MENU

MENU. Refer to page 5 for the clock setting procedure.

 If you are using the Illumi-Guide feature, OK blinks when the following buttons are lit: NUMBER keys (0 – 9), CANCEL and MENU.

ENTER G-CODE NUMBER

Press the appropriate **NUMBER** keys to enter the G-Code number printed in the TV listings for the TV program you wish to record.

- To make corrections, press **CANCEL** and input the correct G-Code number.
- If the G-Code number you input is incorrect, "ERROR" may appear on the screen to advise you of the error. This happens when the G-Code number is for a program which has already passed. "ERROR" is displayed for about 4 seconds and the G-Code screen reappears (step 2).
- If you are using the Illumi-Guide feature, OK blinks when the following buttons are lit: NUMBER keys (0 − 9), CANCEL and MENU.



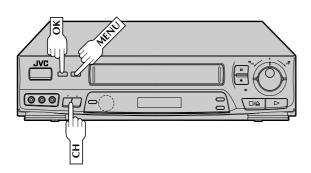


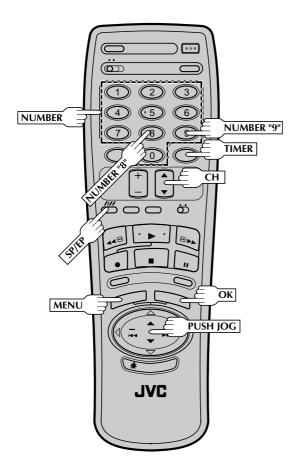


PROGRAM 1 (G-CODE 12345678) 7/10 WED T 8:00 PM 9:00 PM

PRESS (8=DAILY, 9=WEEKLY SP/EP=REC SPEED)
PRESS (MENU) TO END

START STOP CHANNEL





CHECK INPUT DATA

Press **OK** and the Program screen appears.

The G-Code number you entered appears in the Program screen, Check to make sure it's accurate.

• To timer-record daily or weekly serials, press

DAILY (NUMBER "8") or WEEKLY (NUMBER "9"). "DAILY" or "WEEKLY" appears on the Program screen.

- If you made a mistake, press CANCEL and, after pressing MENU as many times as necessary to access the G-Code screen, input the correct G-Code number.
- If you are using the Illumi-Guide feature, OK blinks when the following buttons are lit: NUMBER keys (0-9), CANCEL and MENU.

Set tape speed

Press SP/EP.

CHECK/CORRECT INPUT DATA

If the data is correct as it is, go to step 7. If not, press OK or PUSH JOG | Intil the item you want to change begins to blink. Then press the appropriate NUMBER keys, CH▲▼ or PUSH JOG ▲▼ to obtain the desired setting.

• If you are using the Illumi-Guide feature, **OK** blinks when the following buttons are lit: NUMBER keys (0-9), **CANCEL** and **MENU**.

RETURN TO NORMAL SCREEN

Press MENU as many times as necessary.

- Press just once to access the Auto Timer screen (**□** pg. 36).
- If you are using the Illumi-Guide feature, all buttons

ENGAGE TIMER MODE

Press TIMER. The VCR turns off automatically.

NOTES:

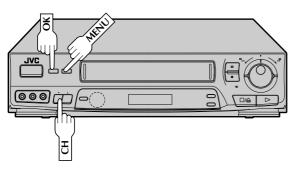
- To disengage the timer before recording starts, press TIMER again. Pressing once more re-engages it.
- In case of a power failure after programming, the VCR's memory backup keeps your selections for 18 hours.
- Backup time becomes shorter as the unit's internal parts become old. When this occurs, please consult your nearby JVC dealer.

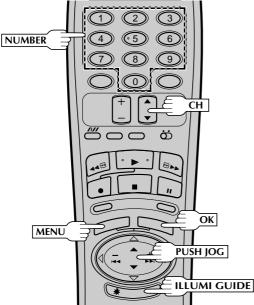






On-Screen Timer Programming





When Using The Illumi-Guide Feature

- Buttons light or blink on the remote control for approximately 10 seconds. If the button or buttons extinguish during timer programming, press ILLUMI GUIDE and the button or buttons previously lit or blinking come back on. If the button or buttons do not re-light or start blinking again, press MENU as many times as necessary to return to the normal screen and extinguish all illuminated buttons, and re-perform the timer programming procedure from the beginning.
- If for some reason the remote control's signal is not received by the VCR, press MENU as many times as necessary to return to the normal screen and extinguish all illuminated buttons, and re-perform the timer programming procedure from the beginning.

You can directly program the VCR's timer to record up to 8 shows, as far as a year in advance. Remember, the clock must be set before you can program the timer (F) pg. 5). Or you can use the Illumi-Guide feature, where the remote control tells you which button to press next by lighting it up. To use the Illumi-Guide feature, with the TV/VCR switch set to "VCR", press ILLUMI GUIDE before performing step 2. (MENU, REW, PLAY, FF light up at this time.)

If you aren't going to use the Illumi-Guide feature, go directly to step ${\bf 1}.$

LOAD A CASSETTE

Make sure the record safety tab is intact. If not, cover the hole with adhesive tape, then load.

- The VCR comes on, and the counter is reset, automatically.
- If watching channel 3 or 4, press TV/VIDEO to select the VIDEO mode. VIDEO is displayed on the front display panel.

ACCESS ON-SCREEN MENU

Press **MENU** as many times as necessary to bring up the Main Menu screen.

 If you are using the Illumi-Guide feature, OK blinks when the following buttons are lit: NUMBER keys (0 – 9), CANCEL and MENU.

ACCESS PROGRAM SET SCREEN

Make sure the arrow is to the left of "PROGRAM SET", then press **OK**.

• If you are using the Illumi-Guide feature, **OK** blinks when the following buttons are lit: **NUMBER** keys (0 – 9),

PROGRAM 1

DATE --/-START --:--AM
STOP --:--AM
CHANNEL --SP

PRESS NUMBER KEY(0-9)
OR (▲,▼), THEN (OK)
PRESS (MENU) TO END

PUSH JOG, CANCEL and MENU.

SELECT PROGRAM NUMBER

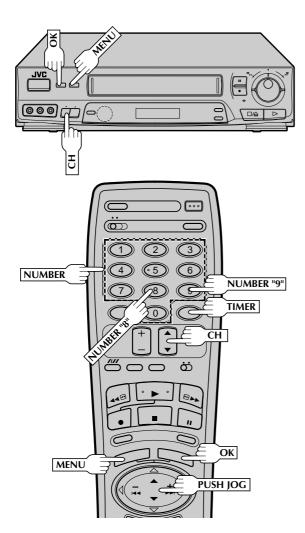
Press the appropriate **NUMBER** keys or **CH**▲▼ or **PUSH JOG** ▲▼ to select a vacant program number, then press **OK**. The first time you do this, all numbers will be vacant, so just press **OK** when the screen appears.

 If you are using the Illumi-Guide feature, OK blinks when the following buttons are lit: NUMBER keys (0 − 9), PUSH JOG, CANCEL and MENU.









EXAMPLE

If you program the VCR to timer record a show on September 6 on channel 40 from 12:00 noon to 1:00 PM in SP mode, the screen will look like this:

PROGRAM 1

DATE 9/6 FRI START 12:00 PM STOP 1:00 PM CHANNEL 40 SP

PRESS NUMBER KEY(0-9) OR (▲,▼), THEN (OK) PRESS (MENU) TO END

Press the appropriate NUMBER start/stop time and channel number

SET PROGRAM

Press the appropriate **NUMBER** keys to set the date, start/stop time and channel number. Press **CH**▲▼ or **PUSH JOG** ▲▼ to set AM/PM and tape speed. Press **OK** after AM/PM, channel number and tape speed settings. The next setting that can be set begins flashing.

- Any information comprised of 1 digit (except the channel number) should have a "0" entered before it.
- It is possible to set all information using the CH▲▼ or PUSH JOG ▲▼ button.
 - (In this case, press **OK** after each setting.) Do not use the **CH** ▼ or **PUSH JOG** ▼ button to set the date.
- If you are using the Illumi-Guide feature, OK blinks when the following buttons are lit: NUMBER keys (0 – 9), PUSH JOG, CANCEL and MENU.
- **You can record selected programs at the same time every weekday, or once a week. Before entering the month, press **NUMBER** key "8" (DAILY) or "9" (WEEKLY). Either "DAILY" or "WEEKLY" appears. Press again and "DAILY" or "WEEKLY" disappears.

MAKE CORRECTIONS

To change any of the settings, press **OK** or **PUSH JOG**

✓ ► until the item you want to change begins blinking. Then set as in step 5.

 If you are using the Illumi-Guide feature, OK blinks when the following buttons are lit: NUMBER keys (0 – 9), PUSH JOG, CANCEL and MENU.

return to normal Screen

Press MENU as many times as necessary.

- Press just once to access the Auto Timer screen (pg. 36).
- If you are using the Illumi-Guide feature, all buttons

ENGAGE TIMER MODE

Press **TIMER**. The VCR turns off automatically.

NOTES:

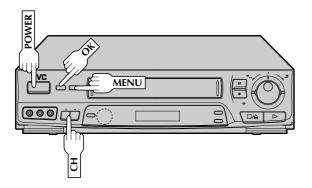
- To disengage the timer before recording starts, press TIMER again. Pressing once more re-engages it.
- In case of a power failure after programming, the VCR's memory backup keeps your selections for 18 hours.
- Backup time becomes shorter as the unit's internal parts become old. When this occrs, please consult your nearby JVC dealer
- If you select "PROGRAM SET" without having set the date and time, an error message appears. Follow its instructions.
- If you enter a start time that has already passed, "ERROR" appears on the screen and flashes.
- Programs that start after midnight must have the next day's date.
- After timer recording is completed, the VCR's power goes off automatically.
- You can program the timer while a regular recording is in progress; the on-screen menu will not be recorded.
- If the end of tape is reached during timer recording, the cassette is automatically ejected.

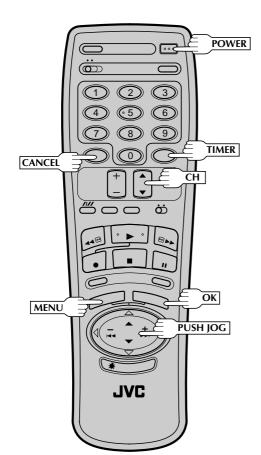






Check And Cancel Programs





DISENGAGE TIMER

Press **TIMER**, then press **POWER**.

ACCESS MAIN MENU SCREEN

Press **MENU** as many times as necessary.

ACCESS PROGRAM SET SCREEN

Press CH▲▼ or PUSH JOG▲▼ to place the arrow next to "PROGRAM SET", then press OK.

CHECK PROGRAM INFOR-MATION

Press CH▲▼ or PUSH JOG▲▼ to check the programs in succession.

To Cancel A Program . . .

CANCEL A PROGRAM

Press CANCEL.

• Repeat steps 4 and 5 as many times as necessary.

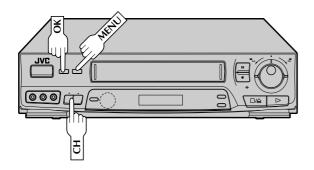
RETURN TO NORMAL SCREEN

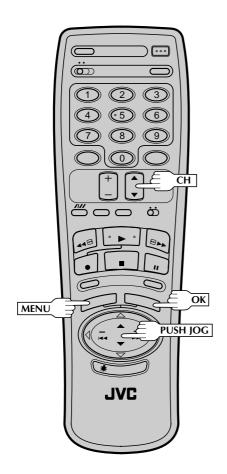
Press **MENU** as many times as necessary. If there are still programs remaining, go to step **7**.

RE-ENGAGE TIMER

Press **TIMER** again.







NOTES:

- If you have programmed the VCR to timer-record 2 or more programs, the second program and those thereafter may not fit on the tape if you set the Auto SP/EP Timer mode to "ON". 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 VCR switches from SP to EP mode.
- The Auto SP/EP Timer feature is not available during ITR (Instant Timer Recording), and the feature will not work properly with any tapes other than the following: T-30, T-60, T-90, and T-120.

Auto SP/EP Timer

If, when recording in SP mode, there is not enough tape to record the entire program, the VCR automatically switches to EP mode to allow complete recording. This feature is especially handy when recording a program of more than 2 hours in length.

For Example . . .

Recording a program of 140 minutes in length onto a 120minute tape

Approximately 30 minutes Approximately 110 minutes SP mode EP mode

Total 140 minutes

Make sure you select "ON" at the Auto SP/EP Timer screen before performing timer programming.

ACCESS MAIN MENU SCREEN

Press **MENU** as many times as necessary.

ACCESS FUNCTION SET SCREEN

Place the arrow next to "FUNCTION SET" by pressing CH▲▼ or PUSH JOG▲▼, then press OK.

ACCESS AUTO SP/EP TIMER SCREEN

Place the arrow next to "AUTO SP/EP TIMER" by pressing CH▲▼ or PUSH JOG▲▼, then press OK.

SELECT MODE

Place the arrow next to your choice ("ON" or , "OFF") by press **CH▲▼** or PUSH JOG▲▼.

AUTO SP/EP TIMER

→ON

PRESS (▲,▼) TO SELECT PRESS (MENU) TO END

RETURN TO NORMAL SCREEN

Press MENU as many times as necessary.



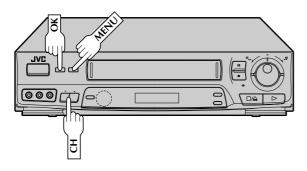


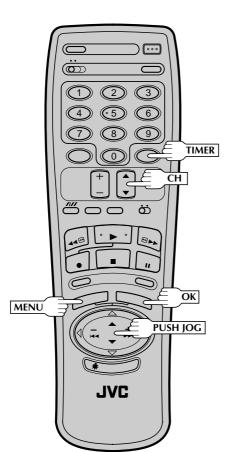


TIMER RECORDING (cont.)

Auto Timer

When the Auto Timer is set to ON the timer is automatically engaged when the VCR's power is turned off and automatically disengaged when the VCR is powered back on.





ACCESS MAIN MENU SCREEN

Press MENU as many times as necessary.

ACCESS FUNCTION SET SCREEN

Place the arrow next to "FUNCTION SET" by pressing CH▲▼ or PUSH JOG▲▼, then press OK.

ACCESS AUTO TIMER SCREEN

Place the arrow next to "AUTO TIMER" by pressing CHAV or PUSH JOGAV, then press OK. Now skip to step 2 of the procedure below.

Or, during on-screen timer programming ...

ACCESS AUTO TIMER SCREEN

In step **7** in the G-Code Timer Programming procedure (pg. 31) or in step **7** in the On-Screen Timer Programming procedure (pg. 33), press **MENU**.

SELECT MODE

Place the arrow next to your choice ("ON" or "OFF") by pressing CHAV or PUSH JOGAV.

AUTO TIMER →ON

PRESS (▲,▼) TO SELECT PRESS (MENU) TO END

RETURN TO NORMAL SCREEN

Press **MENU** as many times as necessary.

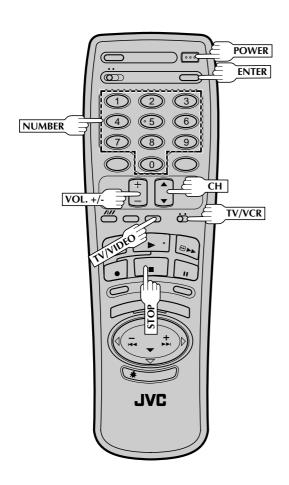
NOTE:

For safety, when AUTO TIMER is set to "OFF", all other VCR functions are disabled while the Timer mode is engaged. To disengage the timer, press **TIMER**.









TV BRAND NAME	BRAND CODE
JVC	01
PHILIPS	03
PHILICO	05
HITACHI	05
SHARP	06
TOSHIBA	07
MITSUBISHI	08
PHILICO/DAEWOO	09
PACKARD BELL	09
KIOTE/DAEWOO	09
DAEWOO	10
SAMSUNG	11
GOLDSTAR	12
RCA	14
PANASONIC	15, 16
SONY	18
ZONDA	19, 20, 21
AKAWA	21, 22
ELECTRA	23

TV Multi-Brand Remote Control

The VCR's remote control can control several functions on JVC remote control TVs and on the brands of remote control TVs listed below. Some TV brands have more than one code. If the TV will not function with one code, try entering another.

TURN ON THE TV

Turn the power on using the TV's remote control.

SET REMOTE CONTROL MODE

Set the **TV/VCR** switch on the VCR's remote control to TV.

SET TV BRAND CODE

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

• Once you have set the remote control to operate the TV, you don't have to repeat this step until you replace your remote control's batteries.

OPERATE TV

First, press **POWER** on the remote to see if the TV's power goes off as it should. If it does, try other operations.

- The POWER, TV/VIDEO, CH▲▼, VOL +/- and NUMBER keys on the remote can all be used to operate the TV. *For some brands of TV, you must press ENTER after having pressed the NUMBER keys.
- To return the remote to VCR control, set the TV/VCR switch to VCR.

NOTE:

Depending on the kind of TV, there may be cases where some or all functions cannot be operated using the remote control.

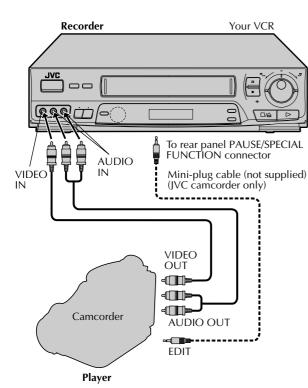


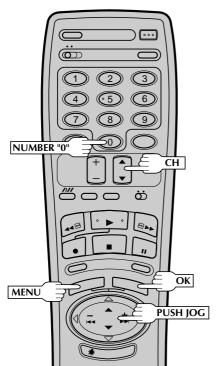




38 EDITING

Edit From A Camcorder





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

MAKE CONNECTIONS

Connect an AV cable (not supplied) between the camcorder's VIDEO OUT and AUDIO OUT connectors and your VCR's VIDEO IN and AUDIO IN connectors.

 When a Master Edit Control-equipped JVC camcorder is used, the camcorder is capable of controlling your VCR. The Mini-plug cable is a mono 3.5 mm mini-plug to mono 3.5 mm mini-plug connector.

LOAD A CASSETTE

Insert the cassette to be recorded on into the recorder.

SET RECORDER'S INPUT MODE

Press **NUMBER** key "0" to set to AUX.

ACCESS MAIN MENU SCREEN

Press MENU as many times as necessary.

ACCESS FUNCTION SET SCREEN

Press CH▲▼ or PUSH JOG▲▼ to place the arrow next to "FUNCTION SET", then press OK.

If you're using a JVC Master Edit Control-equipped camcorder — step 6
If not — step 9

ACCESS SPECIAL FUNCTION SCREEN

Press **CH**▲▼ or **PUSH JOG**▲▼ to place the arrow next to "SPECIAL FUNCTION", then press **OK**.

SELECT MODE

Press CH▲▼ or PUSH JOG▲▼ to place the arrow next to "R.A. EDIT/PAUSE".

SPECIAL FUNCTION

→R.A. EDIT/PAUSE

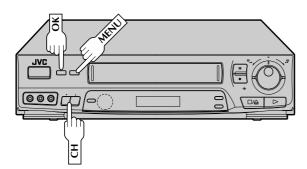
AV COMPU-LINK

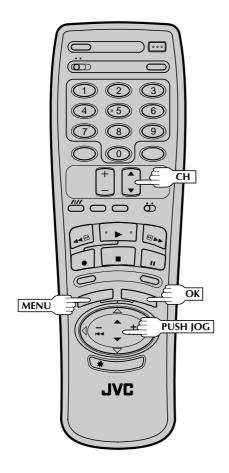
PRESS (▲,▼) TO SELECT PRESS (MENU) TO END

RETURN TO FUNCTION SET SCREEN

Press **MENU**.







ACCESS AUX INPUT SCREEN

Press **CH**▲▼ or **PUSH JOG**▲▼ to place the arrow next to "AUX INPUT", then press OK.

If you are connecting the AV cable to the AV connectors on the front of the VCR, place the arrow next to "FRONT" by

JOG▲▼. If you are

back of the VCR, place the arrow next to "REAR" by pressing CH▲▼ or PUSH JOG▲▼.

PRESS (▲,▼) TO SELECT PRESS (MENU) TO END

RETURN TO NORMAL

Press MENU as many times as necessary.

Set the camcorder to its play mode.

START RECORDER

Set your VCR to its record mode.

• If you are using a Master Edit Control-equipped JVC camcorder, it can put the recorder automatically into Record mode. (Refer to camcorder's instruction manual.)

SELECT INPUT

AUX INPUT → FRONT REAR

pressing CH▲▼ or PUSH

connecting the AV cable to the AV connectors on the

SCREEN

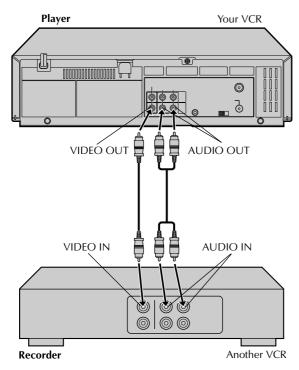
START PLAYER

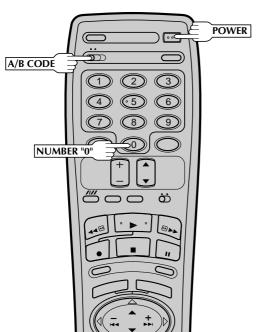




40 EDITING (cont.)

Edit To Or From Another VCR





You can use your VCR as the player or the recorder.

MAKE CONNECTIONS

Connect an AV cable (not supplied) between the player's VIDEO OUT and AUDIO OUT connectors and the recorder's VIDEO IN and AUDIO IN connectors.

 When using your VCR as the recorder and a monaural VCR as the player, connect the player's AUDIO OUT connector to the AUDIO IN L connector on the recorder.

LOAD CASSETTES

Insert the playback cassette into the player and the cassette to be recorded on into the recorder.

SET RECORDER'S INPUT MODE

Set to AUX. With this VCR, press **NUMBER** key "0" (AU appears on the front display panel in place of a channel number)

NOTE:

When using this VCR as the recorder, make sure to select "FRONT" or "REAR" (depending on which input connectors you use) at the Aux Input Screen. (To select the correct AUX input connector, follow steps **4**, **5**, **9** – **11** from the "Edit From A Camcorder" section, \$\mathbb{L}^{\mathbb{T}}\$ pg. 38.)

START PLAYER

Set to its play mode.

START RECORDER

Set to its record mode.

Control Two JVC VCRs

The supplied remote control is capable of controlling two JVC VCRs independently using the **A/B CODE** switch. You can set this VCR so it responds to remote commands only when the switch is set to **B**, and another VCR so it responds to commands when the switch is set to **A**. The switch is preset to **A** because this VCR normally responds to A-code signals. You can easily modify this VCR to accept B-code commands.

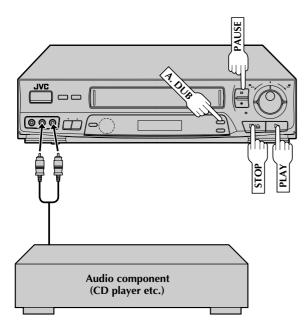
- 1 Unplug the VCR's power cord from the AC outlet.
- 2 Set the **A/B CODE** switch on the remote control to **B**.
- 3 Plug the VCR's power cord back into the AC outlet.
- 4 Turn the VCR's power back on by pressing **POWER** on the remote.

The VCR will now respond only to B-code commands.





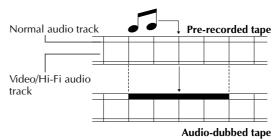
Audio Dubbing



NOTES:

- When monitoring the sound during Audio Dubbing, the normal soundtrack is automatically selected. If you wish to hear the Hi-Fi or mixed sound (Hi-Fi + Normal soundtracks), refer to the "Select The Soundtrack" section (□ pg. 17) and select the soundtrack you wish to hear.
- Audio dubbing stops automatically when the counter reaches "0+00м00s", and the VCR enters the Play mode. Check the counter reading before dubbing.
- Audio dubbing is also possible using the rear AUDIO IN connectors. When using these connectors, make sure to select "REAR" at the Aux Input screen. To select the correct Aux Input connector, follow steps 4, 5, 9 11 from the "Edit From A Camcorder" section □ pg. 38.
- Audio dubbing cannot be performed on a cassette that has had its record safety tab removed.
- When playing back an audio-dubbed tape, refer to the "Select The Soundtrack" section (□ pg. 17) to select the soundtrack you wish to hear.
- It may be unlawful to record or play back copyrighted material without the consent of the copyright owner.

Audio dubbing replaces the normal audio sound of a previously recorded tape with a new soundtrack. Use your VCR as the recorder.



MAKE CONNECTIONS

Connect an audio component to the AUDIO IN L + R connectors on the VCR's front panel. *When connecting monaural equipment, use only the VCR's AUDIO IN L connector.

SET INPUT MODE

Press **NUMBER** key "0" on the remote control. "AU" appears in place of a channel number.

• Be sure to select "FRONT" at the AUX Input Screen. (To select the correct AUX Input connector, follow steps **4**, **5**, **9** – **11** from the "Edit From A Camcorder" section, Fig. 38.)

LOCATE START POINT

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

ENGAGE AUDIO DUBBING

Press A. DUB.

 Your VCR enters the Audio Dubbing Pause mode. (REC blinks, PLAY and PAUSE light up on the front display panel.)

START DUBBING

Engage the audio component's Play mode, then press **PLAY** to start the tape in your VCR. Audio dubbing begins at this point.

- REC blinks and PLAY is displayed on the front display panel.
- To stop dubbing temporarily, press PAUSE. Press PLAY to resume dubbing.

END AUDIO DUBBING

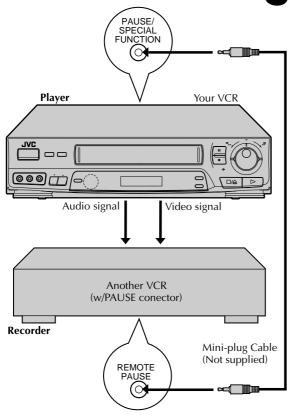
Press **STOP** to stop the tape in your VCR, and engage the audio component's Stop mode.

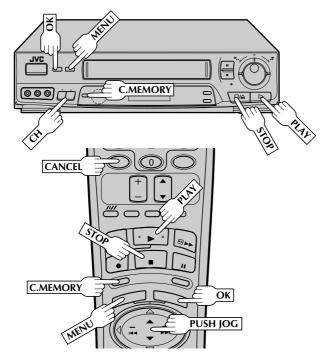






Random Assemble Editing





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

MAKE CONNECTIONS

Connect your VCR's VIDEO OUT and AUDIO OUT connectors to the VIDEO IN and AUDIO IN connectors on the recording deck, and connect your VCR's PAUSE/ SPECIAL FUNCTION 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

Perform steps 2-8 on page 38, "Edit From A Camcorder".

NOTE:

If you mistakenly select "ÁV COMPU LÍNK" in step 7 on page 38, an error message appears when

you finish step 6. Make sure "R.A. EDIT/PAUSE" is selected before you continue.

-ERROR-CHOOSE SPECIAL FUNCTION ON MAIN MENU AND SELECT R.A. EDIT/PAUSE **BEFORE YOU BEGIN** R.A. EDIT

PRESS (MENU) TO MAIN MENU

LOAD SOURCE CASSETTE

Insert the source cassette into your VCR.

• To return to the normal screen from the Function screen, press MENU.

START SOURCE PLAYBACK Press PLAY.

ACCESS MAIN MENU SCREEN

Press MENU to bring up the Main Menu screen.

ACCESS R.A. EDIT SCREEN

Place the arrow next to "R.A. EDIT" by pressing CH▲▼ or PUSH JOG▲▼ then press OK.

• The screen is superimposed on the video playback in step 7.

PROGRAM SET FUNCTION SET TUNER SET
INITIAL SET
B.E.S.T.PICTURE SYSTEM
R.A. EDIT PRESS (▲,▼), THEN (OK) PRESS (MENU) TO END

MAIN MENU



EDIT MODE

Refer to the illustrations on page 42.

7

LOCATE EDIT-IN POINT

Find the point on the source tape from where you want the edited scene to begin by pressing **PUSH JOG**

Idd ▶▶I, then press **OK**.

 The edit-in point is registered in memory and appears on the screen.

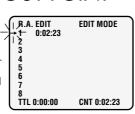
TTL 0:00:00

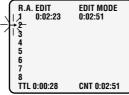
LOCATE EDIT-OUT POINT

 The edit-out point is registered in memory and appears on the screen.

 The total time of the edited scenes is displayed to the right of "TTL".

• Repeat steps **7** and **8** for each additional scene.





PREPARE RECORDING DECK

Engage its Record-Standby mode.

9

START R.A. EDIT

Press C.MEMORY.

- 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 VCR 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. "SEARCHING" appears on the screen.
- When all registered scenes have been edited, your VCR 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 **MENU** as many times as necessary to return to the normal screen, and engage the Stop mode for the recording deck.

NOTES:

- You can also monitor the sound when searching for scenes you want to edit in steps 7 – 8. 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 the VCR 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 VCR 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.

To Make Corrections . . .

. . . during step **7** or **8**, you can cancel registered in and out points by pressing **CANCEL**. 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 VCR'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.

R.A. EDIT	EDIT MODE	
PROGRAM FULL		
TTL 0:00:00	CNT 0:00:00	

- When all 8 programs are full, "PROGRAM FULL" appears on the R.A. EDIT screen.
- To cancel a program, see page 34.

RM-V403U Multi-Brand R.A. Edit Controller (Not supplied)

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









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 VCR off for repair.

POWER			
SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION	
1. The power won't come on.	• The power cord is disconnected.	Connect the power cord.	
2. The clock works, but the VCR's power won't come on.	• The TIMER mode is engaged with Auto Timer set to "OFF" (CF pg. 36).	Press TIMER to disengage.	
3. The remote control won't function.	 The batteries are discharged. The A/B CODE switch is in the wrong position. The TV/VCR switch is in the wrong position. 	Replace the dead batteries with new ones. Re-perform the A/B Code setting (IF) pg. 40). Set the switch to the position corresponding with the unit you want to operate.	
TAPE TRANSPORT			
SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION	
The cassette gets stuck partway during loading, and is ejected.	• The cassette was inserted incorrectly.	Make sure the window side is up, the rear label side is facing you and the arrow on the front of the cassette is pointing towards the VCR. Then insert the cassette	
The tape stops during rewind or fast forward.	 The Counter Memory indicator ("M") is lit on the front display panel. 	Press C.MEMORY to disengage the Counter Memory mode and extinguish the indicator.	
PLAYBACK			
SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION	
The tape is running but the picture won't appear.	 If you're using the RF OUT connection (IF) pg. 4), the channel selector on the TV is set incorrectly. If you're using the AV connection (IF) pg. 4), the TV receiver is set to the wrong mode. 	Set the channel selector to channel 3 or 4. Set the TV receiver to its AV mode.	
2. Noise appears during visual search.	• This is normal.		
3. Breaks are noticeable in Hi-Fi soundtrack.	Automatic tracking is engaged.	Engage and adjust tracking manually (F) pg. 16).	
 The playback picture is blurred or interrupted, even though TV broadcasts are clear. 	• The video heads may be dirty.	The heads must be cleaned. Consult your JVC dealer.	
5. The Hi-Fi soundtrack cannot be heard.	 The AUDIO MONITOR option at the Function Set screen was set incorrectly. 	Set AUDIO MONITOR to "HI-FI" (IF pg. 17).	
RECORDING			
SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION	
1. Recording won't start.	 There's no cassette loaded. The loaded cassette has had its record safety tab removed. 	Insert a cassette. Remove the cassette and cover the hole with adhesive tape, or load a cassette on which the record safety tab is intact.	
TV broadcasts won't record properly.	 The VCR has been set to its AUX mode by mistake. 	Set the VCR to the appropriate channel.	







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3. Tape-to-tape editing won't work.	 The VCRs or the camcorder and the VCR have been incorrectly connected. The power to one or more of the units has not been turned on. The recorder's input mode has been set incorrectly. 	Refer to the directions and the illustration under "Edit To Or From Another VCR" (\$\mathbb{T}\$ pg. 40) or "Edit From A Camcorder" (\$\mathbb{T}\$ pg. 38) and properly connect the units. Make sure the power to all units is on. Set the recorder's input mode to AUX and select "FRONT" or "REAR" at the Aux Input Screen (\$\mathbb{T}\$ pg. 39).			
TIMER RECORDING	TIMER RECORDING				
SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION			
Timer recording won't work.	 The clock and/or the timer have been set incorrectly. The timer is not engaged. The VCR has not been set up properly. 	Check or re-perform the clock/timer settings to ensure correctness. Press TIMER and check to make sure that TIMER appears on the front display panel. Re-perform the set-up procedures.			
On-screen timer programming won't work.	• Timer recording is in progress.	Timer programming can't be performed when timer recording is in progress. Wait until it finishes.			
3. TIMER and on the front 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 with the hole covered with adhesive tape.			
4. The cassette is automatically ejected, and TIMER and oo on the front display panel won't stop blinking.	 The loaded cassette has had its record safety tab removed. 	Remove the cassette and cover its hole with adhesive tape, or replace it with a cassette on which the safety tab is 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 program information has not been programmed correctly. 	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 OO won't stop blinking.	 The end of tape was reached during timer recording. 	The program may not have been recorded in its entirety. Next time make sure you have enough time on the tape to record the entire program.			
7. We moved, and now G-Code doesn't work properly.	 The receivable stations in the new area are received on different channels than those in the previous area. 	Re-perform the G-Code setup procedure (pg. 9).			
8. "PROGRAM FULL" is displayed on the G-Code screen.	 All 8 programs of the VCR's timer memory are used. 	Wait until a space in memory clears, or cancel unnecessary program information (pg. 34).			
OTHER PROBLEMS					
SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION			
When scanning channels, some of them are skipped over.	 Those channels have been preset to be skipped. 	If you need the skipped channels, restore them (F) pg. 8).			
2. The channel can't be changed.	• Recording is in progress.	Press PAUSE to pause the recording, change channels, then press PLAY to resume recording.			
The remote control won't operate my TV.	• The TV/VCR switch is set to a position other than TV.	Set the switch to TV.			

ATTENTION:

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



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 VCR indefinitely remain in the still mode? 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. During search, still and frame-by-frame playback, the picture is intermittent. What's the cause? **A.** Picture loss occurs when these types of playback are attempted with a tape recorded in LP mode. Pressing PLAY to return to normal playback will restore the picture. 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 safety tab have? **A.** It disables marking of index codes.

Q. Sometimes, during Index Search, the VCR can't find

Q. During playback, on-screen operational indicators sometimes jitter. Why does this happen?A. If the condition of the tape being played back is not good, jittering of the video (including on-screen

the program I want to see. Why not?

A. There may be index codes too close together.

indicators) may occur.

RECORDING

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

TIMER RECORDING

- Q. REC and TIMER 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 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 is present.





SPECIFICATIONS

GENERAL

Power consumption : 18 W

Temperature

 $\begin{array}{ccc} \text{Operating} & : 5^{\circ}\text{C to } 40^{\circ}\text{C} \\ \text{Storage} & : -20^{\circ}\text{C to } 60^{\circ}\text{C} \\ \text{Operating position} & : \text{Horizontal only} \\ \text{Dimensions } (\text{W x H x D}) : 400 \times 94 \times 291 \text{ mm} \end{array}$

Weight : 3.7 kg

Format : VHS NTSC standard

Maximum recording time

SP : 210 min. with ST-210 video

cassette

EP : 630 min. with ST-210 video

cassette

VIDEO/AUDIO

Signal system : NTSC-type color signal and

EIA monochrome signal, 525

lines/60 fields

Recording/

Playback system : DA-4 (Double Azimuth) head

helical scan system

Signal-to-noise ratio : 45 dB Horizontal resolution : 240 lines

Frequency range

Normal audio : 70 Hz to 10,000 Hz Hi-Fi audio : 20 Hz to 20,000 Hz Input/Output : RCA connectors (IN x 2,

OUT x 1)

TUNER

Tuning system Channel coverage

VHF : Channels 2–13 UHF : Channels 14–69 CATV : 113 Channels

RF output : Channel 3 or 4 (switchable; preset to channel 3 when

shipped) 75 ohms, unbalanced

: Frequency-synthesized tuner

TIMER

Clock reference : Quartz

Program capacity : 1-year programmable timer/

8 programs

Memory backup time : Approx. 18 hours

ACCESSORIES

Provided accessories : RF cable,

Infrared remote control unit,

"AA" battery x 2

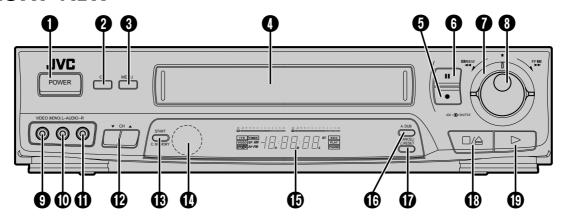
Specifications shown are for SP mode unless otherwise specified. E. & O.E. Design and specifications subject to change without notice.





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FRONT VIEW

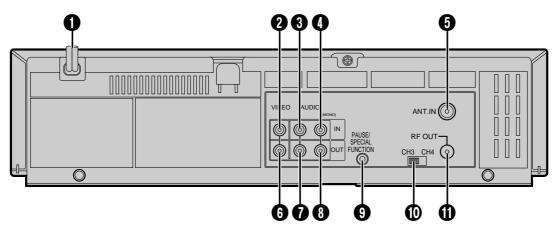


- 1 Power ON/OFF Button (pg. 5)
- **②** OK Button (□ pg. 5)
- 3 Menu Button (₺ pg. 5)
- Cassette Loading Slot
- **⑤** Record [REC] Button (☐ pg. 13)
- 6 Pause Button (pg. 13)

- 7 SHUTTLE Ring (pg. 14)
 3 JOG Dial (pg. 14)
 9 Video Input Connector (pg. 38)
- Mono Audio Input Connector (□ pg. 38) Audio Input Connector [L] (pg. 38)

- **①** Audio Input Connector [R] (☐ pg. 38)
- Channel ▲▼ Buttons (☐ pg. 5)
- **13** START Button (□ pg. 43) Counter [C.] MEMORY Button (F pg. 20)
- Remote Control Sensor
- **ⓑ** Front Display Panel (**☞** pg. 49)
- (Audio Dubbing [A. DUB] Button (pg. 41)
- CANCEL Button (F pg. 34) Counter [C.] RESET (F pg. 20)
- ⊕ Stop/Eject Button (□ pg. 12)
- **19** Play Button (**□** pg. 12)

REAR VIEW

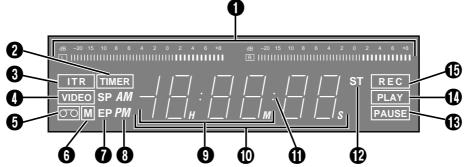


- ① Power Cord (© pg. 4)
- 2 Video Input Connector (pg. 40)
- 3 Audio Input Connector [R] (pg. 40)
- Mono Audio Input Connector (☐ pg. 40) Audio Input Connector [L] (pg. 40)
- **⑤** ANT. IN Connector (□ pg. 4)
- 6 Video Output Connector (pg. 4)
- **7** Hi-Fi Audio Output Connector [R] (☐ pg. 4)
- Hi-Fi Audio Output Connector [L] (☐ pg. 4)
- **9** PAUSE/SPECIAL FUNCTION Connector
 - Remote PAUSE Connector (☐ pg. 38)
 - AV COMPU LINK Connector (pg. 21)
 - Random Assemble Editing Connector (F pg. 42)
- ① Channel 3/4 Switch (☐ pg. 4)
- **1** RF OUT Connector (□ pg. 4)





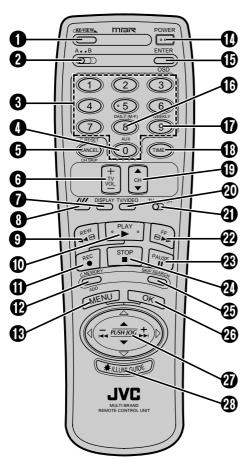
FRONT DISPLAY PANEL



- Audio Level Meter
- 2 Timer Mode Indicator (pg. 31)
- 3 Instant Timer Recording Indicator (pg. 29)
- 6 "Cassette Loaded" Mark
- 6 Counter Memory Mark (☐ pg. 20)
- **7** Tape Speed Indicators (□ pg. 13)
- **8** AM/PM Indicators (☐ pg. 5)

- **9** Clock Display (□ pg. 5)
- (Channel Display ["AU" for AUX mode] (F pg. 38)
- **①** Counter Display (□ pg. 20)
- **1** STEREO Indicator (□ pg. 27)
- 13 Pause Mode Indicator (pg. 13)
- **1** Play Mode Indicator (**□** pg. 12)
- **ⓑ** Recording Mode Indicator (□ pg. 13)

REMOTE CONTROL (Provided)



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

- 1 Instant REVIEW Button (pg. 20)
- 2 A/B Code Select Switch (F pg. 40)
- 3 NUMBER Buttons (☐ pg. 5)
- **⑤** CANCEL Button (☞ pg. 34) Counter [C.] RESET (☞ pg. 20)

Channel [CH.] SKIP Button (pg. 8)

- 6 Volume [VOL] +/− Buttons (☐ pg. 37)
- 7 DISPLAY Button (F pg. 20)
- **8** Recording Speed [SP/EP] Button (pg. 13)
- **9** Rewind [REW] Button (F pg. 12)
- **10** PLAY Button (**□** pg. 12)
- **①** Record [REC] Button (□ pg. 13)
- Counter [C.] MEMORY Button (F pg. 20) ADD Button (F pg. 8)
- **13** MENU Button (□ pg. 5)
- POWER ON/OFF Button (F pg. 5)
- **ⓑ** ENTER Button (☞ pg. 13)

On-Screen Display [OSD] Button (pg. 18)

- **(** DAILY Timer Recording Button (□ pg. 31)
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- 13 TIMER Button (F pg. 31)
- ⊕ Channel [CH]
 ■▼ Buttons (□ pg. 5)
- TV/VIDEO Button (☐ pg. 5)
- ② TV/VCR Switch (© pg. 37)
- **②** Fast-Forward [FF] Button (□ pg. 12)
- **②** PAUSE Button (□ pg. 13)
- 2 STOP Button (F pg. 12)
- SKIP SEARCH Button (pg. 19)
- **26** OK Button (**□** pg. 5)
- **②** PUSH JOG Button (🖙 pg. 5)
- ILLUMI GUIDE Button (□ pg. 30)



