



VIDEO CASSETTE RECORDER



INSTRUCTIONS

 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-J420/220U

 Serial No.

PU30425-1555-2

Safety Precautions



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.

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.

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 120V \sim , 60 Hz 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.



- Cassettes marked "VHS" (or "S-VHS") can be used with this video cassette recorder.
- HQ VHS is compatible with existing VHS equipment.

NOTE:

- When you are not using the video recorder for a long period of time, it is recommended that you disconnect the power cord from the AC outlet.
- Changes or modifications not approved by JVC could void user's authority to operate the equipment.
- The rating plate and the safety caution are on the rear of the unit.
- Please read the "Precautions" section of this instruction manual and the "Video Products Safety Guide" enclosed with this manual before installing or operating the VCR.
- This instruction manual, and the other reference materials enclosed with it, contain important information on VCR operation and proper usage. Please keep them near your VCR in a place where you can easily access them for reference.
- It should be noted that it may be unlawful to re-record prerecorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable program and in any literary, dramatic, musical, or artistic work embodied therein.



How To Use This Instruction Manual

This instruction manual begins with an introductory section, "Getting To Know Your VCR", followed by necessary set-up procedures in "Setting Up Your VCR". The next four sections — "Playback", "Recording", "Timer-Recording" and "Special Features" — take you step-by-step through these operations of your VCR. "Editing" introduces you to your VCR's editing features. "If You Have Any Questions" is the section you should refer to if you experience any problems in VCR operation or if you need additional information regarding a feature or terminology. At the end of the book you will find "Warranty" information and the locations you can contact "For Servicing".

Throughout the book, if you ever need to refer to another page for instructions or information, you will be told so by a IF mark pointing to the page number.

Unless otherwise specified, operation buttons mentioned in the instructions refer to those located on the remote control, not those duplicated on the VCR.

Remember, you must use your VCR correctly to fully enjoy it. Please use this manual effectively. It's the surest and quickest way to unlock the full potential of your new JVC VCR.

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TV and Cable Box Multi-Brand Remote Control IP p.23



Compatible with most major brands of televisions and Cable Boxes for basic control functions. Puts an end to two-handed remote control.

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Getting To Know Your VCR

Front Panel



WARNING

- Do not insert fingers or foreign objects into the cassette loading slot since this could lead to injury or damage to the mechanism. Be especially careful with children.
- Do not try to pull out a cassette once automatic loading has started. This could cause injury or damage the mechanism.





Pressing DISPLAY lets you change the type of display: Counter, Channel*, or Clock.
 Whenever the VCR is turned off, the FDP's brightness is automatically dimmed.
 *Channel is not displayed during playback.

Usable cassettes



Getting To Know Your VCR (cont'd)

Back Panel



Wireless Remote Control





Installing Batteries

Slide the battery compartment cover in the direction of the arrow.
 Insert 2 "AAA"-size batteries (provided) in the correct directions.
 Replace the cover.

How To Use

This remote control can operate most of your VCR's functions.

- Set the TV/CABLE/VCR switch to the VCR position.
- 1 Point the remote control toward the VCR's sensor window.
- 2 Press the appropriate operation button.
 - The maximum operating distance of the remote control is about 8 m (26 ft).

This remote control can also operate various brand of TVs and Cable Boxes . For instructions, $\epsilon r p$, 23.

Getting To Know Your VCR (cont'd)

On-Screen Menus And Displays



Tuned-in channel or AUX(iliary) mode

When the channel is changed, the new channel is displayed on the screen for 5 seconds.

Operation mode

When the operation mode is changed, the new mode is displayed — RECORD (5 sec.), PLAY (5 sec.), FF/REW (5 sec., when engaged from Stop mode), RECORD PAUSE (for as long as Pause is engaged), and ITR *:** (5 sec.).



To recall an indication

1 Press ENTER/OSD.

 All indications corresponding to the current status are displayed for 5 seconds, leaving the counter information on the screen. (No indication during still and search).

2 Press ENTER/OSD again to clear the display.

To stop the on-screen indications from being shown



You can set the clock, tuner, timer, and other functions using the on-screen menu. For this, the MENU, SET+/- and SELECT buttons on the VCR or remote control are used.

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Setting Up Your VCR

Making the right connections

It's essential that your VCR be properly hooked up for proper results. Follow these steps carefully. THESE STEPS MUST BE COMPLETED BEFORE ANY VCR OPERATION CAN BE PERFORMED.



SELECT VCR CHANNEL (3 OR 4)

With a standard RF connection, the VCR sends picture and sound signals through the connecting cable to your TV on channel 3 or 4. The VCR's switch is pre-set to CH3 prior to shipment. Set this switch to CH4 in areas where channel 3 is used for broadcasting.





NOTE:

To operate the VCR with your TV using an RF connection, it is always necessary to set your TV's channel to the one you set the VCR to in this step.

Or...

IF YOU HAVE A TV SET WITH AV INPUT CONNECTORS



ADJUST RF SETTING IF NECESSARY

Even if your TV is connected using AV input connectors, it is necessary to also connect your VCR and TV using the RF cable if you ever wish to watch a program while recording another ($\square p.18$).

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Setting your VCR's clock

Since your VCR bases all of its timer recording start and stop "decisions" on the time kept by its built-in clock, accurate setting of this clock is crucial for proper timer-recording results.



Setting your VCR's tuner

The Auto Set feature introduced here automatically assigns receivable channels in your area to the CHANNEL UP/DOWN buttons and skips the others so you won't have to go through any "blank" channels to get to the one you want.



Setting Up Your VCR (cont'd)



To add a "skipped" channel to your VCR's tuner



To delete an unwanted channel from your VCR's tuner

Press MENU. The Main Menu screen will appear.

- Press SET to move the cursor to "TUNER SET", and then press SELECT.
- Press SET to move the cursor to "MANUAL CHANNEL SET", and then press SELECT.
 (TV) CH 25 SKIP
- Input the channel number using the Digit keys or the CH +/buttons.
- 5 Press CH. SKIP to delete the channel.
- (5) Specify another channel number or press MENU as many times as necessary to exit.

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



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



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For short searches, keep FF or REW pressed for more than 2 seconds. When released, normal playback will continue.



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REVIEW

To adjust tracking manually

This overrides your VCR's automatic tracking.

During Playback...

- Press the VCR's CH(annel) +/- buttons simultaneously to cancel auto tracking.
 - The remote control's CH +/- cannot be used for this purpose.
- 2 Press CH + or to adjust tracking.
 - Press the VCR's CH +/- simultaneously to return to automatic tracking.

During Slow...

1 Simply press CH + or - to adjust tracking.

Index Search

Index codes are electronic "bookmarks" which are automatically placed on the tape whenever recording is started. Index Search automatically seeks out these index codes so you can easily find the beginning of a recording (up to 9 index codes away in either direction).

During Stop...

- 1 Press SHUTTLE PLUS I or ►► . "INDEX -1" or "INDEX 1" will be displayed and search will begin in the corresponding direction.
- 2 If you wish to access index codes 2 through 9, press SHUTTLE PLUS ◄◄ or ►► repeatedly until the correct index number is displayed.
 - When the specified index code is found, playback will start automatically.

Instant Re-View

Programs that have been timer-recorded overnight are easy to access.

1 Press REVIEW.

- The VCR automatically turns on, rewinds to the beginning of the last recording, and starts playback.
- If you timer-recorded 2 programs, press REVIEW twice. For 3 programs, press REVIEW three times, and so on. This is possible up to nine times.
- Re-View does not function when the VCR's Timer mode is engaged. Disengage Timer to use Re-View.

Skip Search

To skip over unwanted sections of a recording.

During Playback...

- 1 Press SKIP SEARCH from 1 to 4 times.
 - This fast-motions through 30-sec. to 2-min. of tape. Playback resumes automatically.
 - Press PLAY to cancel a Skip Search midway.

Repeat Playback

To play the whole tape repeatedly.

During Playback...

- 1 Press PLAY for more than 5 seconds, and release.
 - The "PLAY" indicator on the VCR panel will blink slowly.
 The tape will be played 20 times automatically, and then
 - stop. To stop repeated playback at any time, press STOP.





TV signals being received by the VCR's built-in tuner can be recorded onto a video tape. This is realtime video recording,



TL(DAD A CASSE TE
1	 Insert a cassette with the safety tab present. The VCR power will come on automatically. If watching on channel 3 or 4 be sure that the VIDEO indicator is lit. If the indicator is not lit, press TV/VIDEO so that it lights.
C	HOOSE A PROGRAM
2	 Press CH(annel) +/- (or the digit keys followed by ENTER) to select the channel you wish to record. Even if you don't press ENTER, the channel will automatically change in about 2 seconds.
·SI	ET THE TAPE SPEED
3	Press SP/EP.
T	D START RECORDING
4	Press \bullet (REC) and \blacktriangleright (PLAY) simultaneously.
Y.AC	PAUSE RECORDING
5	Press II (PAUSE).
6	Press \blacktriangleright (PLAY) to resume recording.
тс 7	Press ■ (STOP).

To watch a program while recording another

During Recording...

- Press TV/VIDEO. The VCR's VIDEO indicator and the TV broadcast being recorded will disappear.
- 2 Use the channel controls on the TV to select the other channel you wish to view.
 - The program selected with the TV channel controls will appear on the TV screen while the one selected with the VCR channel controls will be recorded on the tape.

To display the elapsed recording time

Before starting recording...

1 Press C. RESET.

- The counter will be reset to "0H 00M 00s", and will show the exact elapsed time as the tape runs.
- 2 After starting recording, press OSD at any time to check the elapsed time on the TV screen.
- 3 Press OSD again to clear it from the screen.

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Instant Timer Recording

To set the VCR to shut-off automatically after recording.

 During Recording...
 Press the VCR's REC button. The "ITR" indication blinks and "0:30" appears indicating the recording will continue for 30 minutes and then power will switch off.



- [2] Press REC again to extend the record time by 30-minute increments (up to 9 hours).
 - This function is available only using the REC button on the VCR.
 - After the off-time is set, the display returns to the previously displayed mode (counter, channel or clock).
 - You can check the time remaining before the VCR shuts off by pressing REC once; the remaining time is displayed for 5 seconds. (Pressing REC more than once will extend the record time.)

Accidental erasure prevention





With the On-Screen Timer Programming function introduced here you can directly program the VCR's timer to record up to 8 TV shows, up to a year ahead. It's especially convenient when you want to timer-record programs while you're away from home for long periods of time (over a week). TIMER PROGRAMMING IS NOT POSSIBLE UNLESS THE CLOCK HAS BEEN SET.



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To re-engage the timer, press TIMER.

When timer-recording cable channels received through a Converter Box, be sure to keep the Converter Box set to ON.





Auto Timer

Set screen).

To cancel the program... 3 Press CANCEL.





Repeat steps 2 and 3 as necessary. 4 Press MENU as many times as necessary to exit.

Make sure the timer mode is disengaged first. Then... 1 Press MENU and then press SELECT (to access the Program

2 Press SET to check through the programs in succession.







The provided remote control is capable of controlling 10 different TV brands including JVC and 13 different Cable Box brands. Follow the instructions below to set the appropriate code for your TV or Cable Box.



TV Multi-Brand Remote Control

If your TV is a JVC, you don't have to set the TV code.
PREPARATION
 Turn the TV's power OFF using the TV's remote control. Set the remote control's TV/CABLE/VCR switch to "TV". While holding down the POWER button, enter your TV's brand code with the Digit keys then press STOP. Brand setting is completed. Once you set the brand, you do not have to reset it until the remote's batteries are replaced. If you set the wrong code, re-enter the right code. Press POWER to turn the TV power on and check to see if the remote control works with the TV.
OPERATION
 Set the remote control's TV/CABLE/VCR switch to "TV". Operate the TV. POWER, TV/VIDEO, CH +/-, VOL. +/- buttons and Digit keys are available.

3 To operate VCR, set the TV/CABLE/VCR switch to "VCR".

TV Brand Name And Code

TV BRAND NAME	BRAND CODE
JVC	01
MAGNAVOX	02
MITSUBISHI	03
PANASONIC	04
RCA	05
SHARP	06
SONY	07
TOSHIBA	08
ZENITH	09
HITACHI	10

Cable Box Brand Name And Code

CABLE BOX BRAND NAME	BRAND CODE
GI	01,02,03,04,05,06,07,08
JERROLD	01,02,03,04,05,06,07,08
SCIENTIFIC ATLANTA	09,10
ZENITH	11,12
PIONEER	13,14
HAMLIN	15,16,17,18
REGAL	15,16,17,18
OAK	19,20,21
SIGMA	19,20,21
TOCOM	22,23
RCA	24,25,26
PANASONIC	24,25,26
SPRUCER	24,25,26

Cable Box Multi-Brand Remote Control

Some Cable Box brands have more than one code. When your Cable Box does not function with a specified code, try other codes. **PREPARATION**Turn the Cable Box power OFF using the Cable Box's remote control.
Set the remote control's TV/CABLE/VCR switch to "CABLE".
While holding down the POWER button, enter your Cable Box's brand code with the Digit keys then press STOP.
Brand setting is completed. Once you set the brand, you do not have to re-set it until the remote's batteries are replaced.
If you set the wrong code, re-enter the right code.

Press POWER to turn the Cable Box's power on and check to see if the remote control works with the Cable Box.

Set the remote control's TV/CABLE/VCR switch to "CABLE".
 Operate the Cable Box.

POWER, CH +/-, ENTER buttons and Digit keys are available.

3 To operate VCR, set the TV/CABLE/VCR switch to "VCR".









To edit to or from another VCR

Your VCR can be used as either the recording deck or the source player when editing tapes.

PREPARATION

1 Connect the player's VIDEO OUT and AUDIO OUT connectors to the recorder's VIDEO IN and AUDIO IN connectors.

OPERATION

- 2 Set the recorder's input mode to AUX.
 With this VCR model, press the digit key "0". "AU" will appear instead of a channel number.
 3 Put the player in the Play mode.
- [4] Put the recorder in the Record mode.

NOTE:

Connections made to the front panel VIDEO and AUDIO inputs automatically override any rear panel VIDEO/AUDIO input connections. If you wish to edit with another machine connected to the rear input connectors, make sure that there is nothing connected to the front connectors. (HR-J420U only)

To control two JVC VCRs

The remote control is capable of controlling two JVC VCRs independently using the A/B CODE switch ($\mathbb{EP}p.7$). You can set this VCR so that it responds to the remote control only when the switch is in the "B" position and set another JVC VCR so that it responds only when the switch is in the "A" position. This way you can control two JVC VCRs independently with a single remote control.

The A/B CODE switch is preset to the "A" position because your VCR is initially set to respond to A code signals. You can easily modify your VCR to respond to B code signals.

- Unplug the VCR's power cord from the AC outlet.
- 2 Set the A/B CODE switch on the remote control unit to "B".
- Plug the VCR's power cord back into the AC outlet. Do not use other remote controls at this stage.
- [4] Turn the VCR power on using the remote control's POWER button. The VCR will now respond only to B code signals.



To edit from a camcorder

Tape-to-tape editing is also possible using a camcorder (equipped with playback facility) as the player and your VCR as the recorder.

PREPARATION

- 1 Connect the camcorder's VIDEO OUT and AUDIO OUT connectors to the VCR's front panel VIDEO IN and AUDIO IN connectors.
 - When a Master Edit Control equipped JVC camcorder is used, the camcorder is capable of controlling your VCR. (HR-J420U only)
 - Refer to camcorder's instruction manual for set-up procedure.

OPERATION

- Set the VCR's input mode to AUX by pressing digit key "0".
 "AU" will appear instead of a channel number.
- 3 Put the camcorder in the Play mode.
- 4 Put the VCR in the Record mode.
 - Refer to the carccorder/recorder's instruction manual for operation instructions.

Before requesting service...

Power or Tape Transport Problems?

Symptoms	Check points
No power is applied to the VCR.	 Is the power cord disconnected? — Connect it.
Remote control does not function.	 Are the batteries discharged? Replace with new ones. Is the A/B code switch set to the appropriate position? Is the TV/CABLE/VCR switch set to the appropriate position? Check once again.
Clock is functioning properly, but the VCR cannot be powered.	 Is "TIMER" displayed on the display panel? — Press the TIMER button to extinguish the display.
Cassette will not load. Gets stuck and is ejected a few seconds later.	 Are you inserting the cassette correctly? Incorrect insertion causes the built-in safety mechanism to automatically eject the cassette. Wait a few seconds and re-insert correctly. Be sure to push the middle of the cassette's label side and be sure the window side is up.
Tape stops during rewind or fast-forward.	 Is the C. MEMORY button pressed? Press again to make "M" disappear from the counter display.
Tape will not rewind or fast-forward.	 Is the tape already fully rewound or fast-forwarded? — Check the cassette.

Playback Problems?

Symptoms	Check points
Playback picture does not appear while the tape is running.	 If you are using RF OUT connection, is the TV receiver's channel selector set to the correct video channel? — Set it to the RF converter channel (3 or 4). (IF p.10) If you are using AV connection, is the TV receiver set to the AV mode? — Set it to the AV mode.
Noise appears during visual search.	This is normal.
Noise appears during normal playback.	 Is the automatic tracking mode engaged? — Try manual tracking. (LF p.16)
Noise appears during slow playback.	 Try manual tracking. (IF p.16) This is normal in the LP mode. This is normal in the SP mode. (HR-J220U)
Playback picture is blurred or interrupted while TV broadcasts are clear.	 Video heads may be dirty. Head cleaning is necessary. Consult your JVC dealer (17 p.29).

Recording Problems?

Symptoms	Check points	
Recording cannot be started.	 Is a cassette loaded? Is the safety tab on the cassette removed? — Cover with adhesive tape (IP p.19) 	
TV broadcasts cannot be recorded.	 Has "AUX" been selected by mistake? — Set to the desired channel. 	
Tape-to-tape editing is not possible.	 Is the camcorder or VCR correctly connected? Are all necessary power switches turned ON? Has "AUX" been selected? Set to "AUX". 	
Camera recording is not possible.	 Is the camcorder correctly connected? Has "AUX" been selected? — Set to "AUX". 	

Timer-Recording Problems?

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Symptoms	Check points
Timer recording is not possible.	 Have you set the clock correctly and programmed the timer correctly? — Check once again. Have you set the VCR's tuner? — Check once again. Is the TIMER indicator displayed on the display panel? — If not, press the TIMER button to display the TIMER indicator.
Timer programming screen does not function properly.	 Is the ITR indicator displayed on the display panel? — Timer programming is not possible while an ITR is in progress.
"TIMER" and "00" on the display panel continue blinking.	 There is no cassette in the VCR. — Insert a cassette with the safety tab intact.
The cassette is automatically ejected. "TIMER" and "00" continue blinking.	 The inserted cassette has its safety tab removed. — Insert a cassette with its safety tab intact. Or cover the safety tab hole of the cassette with adhesive tape and re-insert it. IP p.19.
"TIMER" blinks for 10 seconds and the timer mode is cancelled.	 There are no preset programs in memory, or they have all been incorrectly preset. Check the programmed data and re-program it as necessary. Press TIMER again.
The cassette is ejected, power is shut off and "TIMER" and "OD" are blinking.	This means that the end of the tape was reached while timer-recording was in progress. Therefore, the preset program may not be recorded in its entirety.

Other Problems?

Symptoms	Check points	
Some channels are skipped over when scanning channels.	Those channels are preset to be skipped over. If you need them, restore them. (IF p.14)	
Channel cannot be changed.	 Is recording in progress? Press the PAUSE button, change the channel, and press the PLAY button. 	
Snowy picture on screen when viewing TV programs while recording another program.	 Is the VIDEO indicator lit? — Press the TV/VIDEO button. 	
Remote control does not operate my TV.	 Although the provided remote control unit is compatible with JVC televisions as well as many TV models manufactured by others, it is possible that the provided remote control will not operate your TV, or in some instances, will have limited function capability. (IP p.23) Is the remote control's TV/CABLE/VCR switch set to "TV"? If not, set it to "TV". 	
"12:00 AM" is blinking.	This means the clock must be set. It's displayed when time-keeping is terminated due to a power failure or because the VCR's power plug was pulled from the AC outlet. To set the clock. IF p.12. If power was interrupted, it's also likely that all preset timer programming data has been erased. Please check and re-program as necessary.	

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.

att Standard (1997)

? If You Have Any Questions (cont'd)

Notes regarding...

Tuner Set

■ Since receivable channels differ by locale, it will be necessary to reset your VCR's channels when you move to another location. Auto Channel Set is the easiest way to do this. C p.13

Playback

- If the end of the tape is reached during play or search, it is automatically rewound to the beginning and stops.
- The VCR automatically stops when still continues for more than 5 minutes.
- If the still picture is unstable, use the VCR's CH -/+ buttons to correct the picture.
- During search playback, some noise bars will appear.
- There is no audio during search, slow, still, or frame-by-frame playback.
- When playing back LP recordings in the search, still, or frame by frame playback mode, the picture will be distorted, and there may be a loss of colour.
- When a tape is first inserted, the recorder enters the automatic tracking mode automatically.
- During multi-speed search, some noise bars will appear.
- If adjacent index codes are too close to each other, Index Search may not function properly.

Recording

- To start recording with the VCR's Record button, press it once on its own. Pressing Record more than once activates Instant Timer Recording. IF p.19.
- After pause, when recording is resumed, a few frames recorded before the pause may be overlapped by the new recording. This is meant to reduce picture distortion and is not a malfunction.
- The VCR automatically stops when record-pause continues for more than 5 minutes.
- If the end of the tape is reached while recording, it is automatically rewound to the beginning and stops.
- If the Record button does not work, check to see if the cassette's safety tab has been removed.
- The channel cannot be changed while recording is in progress. To change the channel, press Pause, then change the channel.

Timer-Recording

- When timer-recording is successfully completed, the VCR power is automatically switched off.
- If the end of tape is reached while timer-recording, the cassette is automatically ejected.
- Since the timer starts and stops recording based on the time being kept by the VCR's built-in clock, the clock's time must be accurate for correct timer-recording results.
- When you program the timer while viewing a program or a tape, the TV screen will show the on-screen menu but the audio will continue to be heard.
- You can also program the timer while the VCR is recording; the onscreen menu will not be recorded on tape.

Remote TV Operation

- Whenever you replace batteries in the remote control, it is necessary to reset the TV code if your television is not a JVC TV.
- With some televisions, the TV/VIDEO button functions only to switch the TV to the VIDEO(AV) mode.
- Although the provided remote control unit is compatible with JVC televisions as well as many TV models manufactured by others, it is possible that the provided remote control will not work with your TV.

Remote Cable Box Operation

- Whenever you replace batteries in the remote control, it is necessary to reset the Cable Box code.
- Although the provided remote control unit is compatible with many different Cable Box brands, it is possible that the provided remote control will not work with your Cable Box.

Precautions

Please follow these safety precautions. Not doing so may result in damage to the VCR, remote control, or video cassette.

- Avoid extreme heat and direct sunlight.
- Avoid extreme cold.
- Avoid extreme humidity.
- Avoid dust.
- Avoid places subject to vibrations.
- Avoid strong magnetic fields.
- Do not block the VCR's ventilation openings.
- Do not place anything heavy on the VCR or remote control.
- Do not place anything which might spill on top of the VCR or remote control.
- Do not place the VCR on cushions, pillows, or thick carpeting.
- Use the VCR in a stable, horizontal position only.

Beware of 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.

When transporting

- Be sure to remove cassette from VCR before packing.
- Avoid violent shocks to the VCR during packing and transport.

Place cassettes in cassette cases and store vertically.

About head cleaning



- If the picture playback becomes blurred, it does not mean that the recorded program has been erased.
- Dirt accumulated on the video heads after long periods of use can cause a blurred or noisy picture. In this case, head cleaning requiring highly technical care is necessary.
- For head cleaning, consult the nearest JVC dealer.

Specifications

GENERAL

: AC 120 V ∼, 60 Hz	
: 19 W	
: 5°C to 40°C (41°F to 104°F)	
: -20°C to 60°C (-4°F to 140°F)	
: Horizontal only	
: 360 x 94 x 298 mm	
(14-3/16" x 3-3/4" x 11-3/4")	
3.8 kg (8.4 lbs)	
: VHS NTSC standard	
: 160 min. with T-160 video cassette	
: 480 min. with T-160 video cassette	
: NTSC-type color signal and EIA	
monochrome signal, 525 lines/60 fields	
-	
: DA-4 (Double Azimuth) head helical scan	
system	
: Rotary two-head helical scan system	
: 45 dB	
: 240 lines	
: 70 Hz to 10,000 Hz	
: RCA connectors (IN x 2, OUT x 1)	
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Tuning system		: Frequency synthesized tuner
Channel co	overage	
	(VHF)	: Channels 2-13
	(UHF)	: Channels 14-69
	(CATV)	: 113 Channels
RF output		: Channel 3 or 4
		(switchable; preset to Channel 3 when

TIMER

Clock reference	: Quartz	
Program capacity	: 1-year programmable timer/	
	8-programs	
Memory backup time	: Approx. 10 min.	

shipped) 75 ohms, unbalanced

ACCESSORIES

Provided accessories : RF cable (F-type), Infrared remote control unit, "AAA" battery x 2

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

Operaciones básicas en español

Para las conexiones VCR-TV vea la hoja de la "Guía básica para las conexiones del VCR" adjunta a este manual de instrucciones.





Disposición básica

Ajuste del reloj de su VCR y de la lengua para indicación en pantalla

- 1. Presione POWER para encender el VCR.
- 2. Presione TV/VIDEO para que aparezca "TV" del display del VCR.
- Presione MENU.
 Presione SET +/- para seleccionar "AJUSTE INICIAL", y luego presione SELECT.
- 5. Presione REW para seleccionar "ESPAÑOL" para indicación en pantalla.
- 6. Presione SET +/- para fijar el mes y luego presione SELECT.
- 7. Repita el paso 6 para ajustar el día, el año y la hora.



8. Presione MENU para comenzar de funcionamiento del reloj.

Asignación de canales al sintonizador de su VCR

- 1. Presione POWER para encender el VCR.
- Presione TV/VIDEO para que aparezca "TV" del display del VCR.
- 3. Presione MENU.
- Presione SET +/- para seleccionar "AJUSTE DE SINTONIZADOR", y luego presione SELECT.



- 5. Presione SET +/- para seleccionar "BANDA", y luego presione SELECT.
- 6. Presione SET +/- para seleccionar "TV" o "CABLE".
 - Ajústelo en TV si su antena recibe sólo canales de UHF y VHF. Ajústelo en CABLE si su sistema de antena es una línea de TV por cable.
- 7. Presione MENU.
- Presione SET +/- para seleccionar "AJUSTE AUTO DE CANAL", y luego presione SELECT.
 - Se inicia la sintonización automática de canales y después de completada la misma aparecerá en la pantalla el mensaje "FIN DE EXPLORACION".



9. Presione MENU tantas veces como sea necesario.

Reproducción básica do 2010

Preparación

Encienda el televisor.

Seleccione el canal 3 o 4 (o modo AV).

1. Inserte un cassette.

- El VCR se encenderá automáticamente y el contador se reposicionará a 0:00:00.
- Si el cassette no tuviera lengüeta de seguridad, comenzará automáticamente la reproducción.
- 2. Presione PLAY para iniciar la reproducción.
- 3. Presione STOP para detener la reproducción.
 - Para rebobinar la cinta, presione REW.
 - Para avanzar rápidamente la cinta, presione FF.
- Para detener el rebobinado o bobinado rápido, presione STOP.

4. Presione STOP/EJECT en el VCR para expulsar el cassette.

Grabación básica

Preparación

- Encienda el televisor.
- Seleccione el canal 3 o 4 (o modo AV).
- 1. Inserte un cassette con lengüeta de seguridad.
- El VCR se encenderá automáticamente y el contador se reposicionará a 0:00:00.
- 2. Presione CH +/- (o las teclas numéricas y luego ENTER) para seleccionar el canal que desea grabar.
- 3. Presione SP/EP para cambiar la velocidad de cinta.
- Presione simultáneamente REC y PLAY para comenzar la grabación.
 - Para efectuar una pausa de grabación, presione PAUSE.
- Para continuar con la grabación, pesione PLAY.
- 5. Presione STOP para detener la grabación.

Para mirar un programa mientras graba otro

Durante la grabación...

- 1. Presione TV/VIDEO para que aparezca "VIDEO" del display del VCR.
- La teledifusión que se está grabando desaparecerán.
- 2. Utilice los controles de canales del televisor para elegir otro canal que desee ver.
 - El programa seleccionado con los controles de canales de TV aparecerá en la pantalla del televisor mientras el programa seleccionado con los controles de canales del VCR se grabará en la cinta.

Grabación por temporizador

Preparación

- Encienda el televisor.
- Seleccione el canal 3 o 4 (o modo AV).
- 1. Inserte un cassette con lengüeta de seguridad.
 - El VCR se encenderá automáticamente y el contador se reposicionará a 0:00:00.
- 2. Presione MENU, y luego presione SELECT.
 Aparecerá el menú "PROGRAMA".



- Presione SET +/- para seleccionar un número de programa vacante, y luego presione SELECT.
- Inicialmente todos los programas están vacantes y el cursor está en el programa 1. Por lo tanto, presione simplemente SELECT.
- 4. Presione SET +/- para fijar el mes y luego presione SELECT.
- 5. Presione SET +/- para fijar el día del mes.
 - Para grabar un programa diario (lunes viernes), presione DAILY (tecla 8). Para grabar un programa semanal, presione WEEKLY (tecla 9).
- 6. Presione SELECT.
- Repita el paso 4 para fijar la hora de inicio, la hora de finalización, el número de canal y la velocidad de cinta.



- 8. Presione MENU tantas veces como sea necesario.
- 9. Presione TIMER.
 - El VCR se establecerá en el modo de grabación programada y se apagará.

For Servicing

HOW TO LOCATE YOUR JVC SERVICE CENTER

TOLL FREE: 1-800-252-5722

Dear customer:

In order to receive the most satisfaction from your purchase, read the instruction booklet before operating the unit. In the event that repair is necessary, or for the address nearest your location, please refer to the factory service center list below or within the Continental United States, call 1-800-252-5722 for your authorized servicer. Remember to retain your Bill of Sale for Warranty Service.

— JVC



If you ship the product... -

Pack your JVC unit in the original carton or one of equivalent size and strength. Enclose, with the unit, a letter stating the problem or symptom that exists and also a copy of the receipt or bill of sale you received when you purchased your JVC unit. Print your home return address on the outside and the inside of the carton. Send to the appropriate JVC Factory Service Center as listed above.

Don't service it yourself.

CAUTION

To prevent electrical shock, do not open the cabinet. No user serviceable parts inside. Refer servicing to qualified service personnel.

ACCESSORIES

To purchase accessories for your JVC product, you may contact your local JVC Dealer. Or from the 48 Continental United States call toll free: 1-800-882-2345.

Warranty

	LIMITED WA		CONSUMER VIDEO 1-90				
JVC COMPANY OF AMERICA warrants this product and all parts thereof, except as set forth below ONLY TO THE ORIGINAL PURCHASER AT RETAIL to be FREE FROM DEFECTIVE MATERIALS AND WORKMANSHIP from the date of original retail purchase for the period as shown below. ("The Warranty Period")							
	PARTS 1 YR	LABOR 90 DAYS					
THIS LIMITED WARRANTY IS VALID ONLY IN THE FIFTY (50) UNITED STATES, THE DISTRICT OF COLUMBIA AND IN COMMONWEALTH OF PUERTO RICO.							
WHAT WE WILL DO: If this product is found to be defective, JVC will repair or replace defective parts at no charge to the original owner. Such repair and replacement services shall be rendered by JVC during normal business hours at JVC authorized service centers. Parts used for replacement are warranted only for the remainder of the Warranty Period. All products and parts thereof may be brought to a JVC authorized service center on a carry-in basis except for Television sets having a screen size 25 inches and above which are covered on an in-home basis.							
WHAT YOU MUST DO FOR WARRANTY SERVICE: Return your product to a JVC authorized service center with a copy of your bill of sale. For your nearest JVC authorized service center, please call toll free: (800) 252-5722.							
If service is not available locally, box the product carefully, preferably in the original carton, and ship, insured, with a copy of your bill of sale plus a letter of explanation of the problem to the nearest JVC Factory Service Center, the name and location of which will be given to you by the toll-free number.							
If you have any questions concerning	g your JVC Product, pleas	e contact our Customer P	lelations Department.				
 WHAT IS NOT COVERED: This limited warranty provided by JVC does not cover: Products which have been subject to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, or if repaired or serviced by anyone other than a service facility authorized by JVC to render such service, or if affixed to any attachment not provided with the products, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation and installation and removal for repair; Operational adjustments covered in the Owner's Manual, normal maintenance, video and audio head cleaning; Damage that occurs in shipment, due to act of God, and cosmetic damage; Signal reception problems and failures due to line power surge; Video Pick-up Tubes/CCD Image Sensor, Cartridge, Stylus (Needle) are covered for 90 days from the date of purchase; Reatteries (except that Rechargeable Batteries are covered for 90 days from the date of purchase); from the date of purchase); 							
There are no other express warranties except as listed above. THE DURATION OF ANY IMPLIED WARRANTIES INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, IS							
LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN. JVC SHALL NOT BE LIABLE FOR THE LOSS OF USE OF THE PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, WHETHER DIRECT, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES, RECORDS OR DISCS) RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE WARRANTY PERIOD SET FORTH ABOVE.							
Some states do not allow the exclusion of incidental or consequential damages or limitations on how long an implied warranty lasts, so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.							
	MPANY OF AMERICA N OF US JVC CORP.	41 Slater Dr Elmwood Park, New J					
EFURBISHED PRODUCTS CARRY A SEPARATE WARRANTY, THIS WARRANTY DOES NOT APPLY. FOR DETAILS O EFURBISHED PRODUCT WARRANTY, PLEASE REFER TO THE REFURBISHED PRODUCT WARRANTY INFORMATION ACKAGED WITH EACH REFURBISHED PRODUCT.							

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

Purchase date:

Name of dealer:

Memo

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