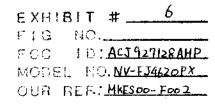


Jmnivision MHS

Panasonic

Video Cassette Recorder Operating Instructions Model No. NV-FJ4620PX

\pm TENTATIVE-



Please read these instructions carefully before attempting to connect, operate or adjust this product. Please save this manual.

Quick Use Guide is on the back cover.

As an ENERGY STAR® Partner, Matsushita Electric Corporation of America has determined that this product or product model meets the ENERGY STAR® guidelines for energy efficiency.





Basic Operation

LSQT0271A

Important Safeguards and Precautions

FOR YOUR SAFETY, READ AND RETAIN ALL SAFETY AND OPERATING **INSTRUCTIONS. HEED ALL WARNINGS** IN THE MANUAL AND ON THE UNIT

INSTALLATION

POWER SOURCE CAUTION

Operate only from a power source indicated on the unit or in this manual. If necessary, have your Electric Utility Service Company or Video Products Dealer verify the power source in your home.

2 POLARIZED OR GROUNDING PLUG As a safety feature, this Video product comes with either a polarized power cord plug (one blade is wider than the other), or a three-wire grounding type plug.

POLARIZED PLUG CAUTION:

This plug will only fit into an outlet one way. If you cannot fully insert the plug, try reversing it. If it still will not fit, have an electrician install the proper wall outlet. Do not defeat the safety feature by tampering with the plug

GROUNDING PLUG CAUTION:

This plug will only fit into a three-hole grounding outlet. If necessary, have an electrician install the proper outlet Do not defeat the safety feature by tampering with the plug.

3 POWER CORD

1

Make sure power cords are routed so that they are not likely way of walking traffic. If an extension cord is used, make sure it also has either a polarized or grounded plug and that the cords can be securely connected. Frayed cords, damaged plugs, and damaged or cracked wire insulation are hazardous and should be replaced by a qualified service technician. Overloaded outlets and extension cords are fire hazards and should be avoided.

DO NOT BLOCK VENTILATION HOLES

Ventilation openings in the cabinet release heat generated during operation. If they are blocked, heat build-up inside the unit can cause failures that may result in a fire hazard or beat damage to cause failures that thay result in a fire has heat damage to cause status.
For protection, follow these rules:
a. Never cover ventilation slots or the unit while in use, or operate the unit when placed on a bed, sofa, rug, or other soft surface.
b. Avoid built-in installation, such as a book case or rock uplace reprort ventilation is reverided.

- or rack, unless proper ventilation is provided.

5 AVOID EXTREMELY HOT LOCATIONS OR SUDDEN TEMPERATURE CHANGES

Do not place the unit over or near any kind of heater or regulator, in direct sunlight, inside a closed vehicle, etc.. Do not move the unit suddenly between areas of extreme temperature variation. If the unit is suddenly moved from a cold place to a warm place, moisture may condense in the unit and the the unit and on the tape

6 TO AVOID PERSONAL INJURY

- Do not place unsecured equipment on a sloping surface.
 Do not place this unit on any support
- that is not firm, level, and adequately strong. The unit could fall causing serious injury to a child or adult and damage to the unit.
- An appliance and cart combination should be moved with care Quick stops, excessive force, and uneven surfaces may cause the
- appliance and cart combination to overturn. Carefully follow all operating instructions and use the manufacturer's recommended accessories when operating this unit or connecting it to any other equipment.

OUTDOOR ANTENNA INSTALLATION SAFE ANTENNA AND CABLE CONNECTION

If an outside antenna or cable system is connected to the equipment, be sure the antenna or cable system is grounded so as to provide some protection against built up static charges and voltage surges. Section 810 of the National

Electrical Code, ANSI/NFPA 70 (in Canada, part 1 of the Canadian Electrical Code) provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit,

size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes and requirements for the grounding electrode.

NATIONAL

GROUNI

ANTENNA LEAD IN WIRE

ELECTRODE SYSTEM (NEC ART 250, PART H)

GROUNDING CONDUC

2 KEEP ANTENNA CLEAR OF HIGH VOLTAGE POWER LINES **OR CIRCUITS**

An outside antenna system should be located well away from power lines, electric light or power circuits and where it will never come into contact with these power sources if it should happen to fall. When installing an outside antenna, extreme care should be taken to avoid touching power lines, circuits or other power sources as this could be fatal. Because of the hazards involved, antenna installation should be left to a professional.

USING THE VIDEO UNIT

- If the unit has been in storage or moved to a new location, refer first to the INSTALLATION section of these safeguards. 1 KEEP THIS VIDEO UNIT AWAY FROM WATER OR MOISTURE OF ANY KIND.
- 2 IF EQUIPMENT IS EXPOSED TO RAIN, MOISTURE, OR STRONG IMPACT, unplug the unit and have it inspected by a qualified service technician before use.

DURING AN ELECTRICAL STORM

During a lightning storm, whether indoors or outdoors, or before leaving the unit unused for extended periods of time, disconnect all equipment from the power source as well as the antenna and cable system.

- WHEN THE UNIT IS PLUGGED IN WHEN THE UNIT IS PLUGGED IN
 Never expose the unit to rain or water. DO NOT OPERATE
 if liquid has been spilled into the unit. Immediately unplug the unit,
 and have it inspected by a service technician. Fire and shock hazards
 can result from electrical shorts caused by liquid contact inside.
 Never drop or push any object through openings in the unit. Some internal parts
 carry hazardous voltages and contact can cause electric shock or fire hazard.
 Avoid placing the unit directly above or below your TV set as this may cause
 electrical interference. Keen all magnets away from electronic equipment
- electrical interference. Keep all magnets away from electronic equipment.
- USING ACCESSORIES Use only accessories recommended by the manufacturer to avoid risk of fire, shock, or other hazards.
- **CLEANING THE UNIT**

Unplug the unit. Then, use a clean, dry, chemically untreated cloth to gently remove dust or debris. DO NOT USE cleaning fluids, aerosols, or forced air that could over-spray, or seep into the unit and cause electrical shock. Any substance such as wax, adhesive tape, etc. may mar the cabinet surface. Exposure to greasy, humid, or dusty areas may adversely affect internal parts

SERVICE

DO NOT SERVICE THIS PRODUCT YOURSELF

If, after carefully following the detailed operating instructions, this Video product does not operate properly, do not attempt to open or remove covers, or make any adjustments not described in the manual. Unplug the unit and contact a qualified service technician.

IF REPLACEMENT PARTS ARE REQUIRED Make sure the service technician uses only parts specified by the manufacturer, or those having the same safety characteristics as the original parts. The use of unauthorized substitutes may result in fire, electric shock, or other hazards.

HAVE THE SERVICE TECHNICIAN PERFORM A SAFETY CHECK After any service or repairs to the unit, request the service technician to conduct a through safety check as described in the manufacture's service literature to insure that the video unit is in safe operating condition.

Safety Precautions

Warning: To prevent fire or shock hazard, do not expose this equipment to rain or moisture.

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electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this unit. This symbol alerts the user that important literature concerning the operation and maintenance of this unit

This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause

has been included. Therefore, it should be read carefully in order to avoid any problems.

NV-FJ4620PX P01-06.p65

2









Use Now!	Important Safeguards and Precautions2Accessories4Loading the Batteries4Basic Connections (Antenna, VCR, TV)4, 5One Time VCR Setup (Language, VCR's Output Channel, Channel, Clock)6, 7Playback a Tape (Still picture, Frame by Frame picture, Slow Motion)8Record On a Tape9• One Touch Recording9	Basic Operation
Enjoy more!	Advanced Connections (Cable/DSS) 10 Copying Your Tapes (Dubbing) 11 Timer Recording 12, 13 • Timer Recording 12 Using VCR Buttons 12 Timer Recording Using VCR Plus+® System 14 ~ 19 • Choose your connection type 14 • Cable Box Setup 15 • Auto VCR Plus+ System • Manual VCR Plus+ System Channel Setup 16, 17 Multi-Brand Control Feature 20, 21 Tape Operation 22 ~ 29 • Commercial Advance 25 • Search System • Auto Operation Functions • Program End Search, Index Scan 27 MTS Broadcast/ VHS Hi-Fi Stereo System 30, 31 • Stereo/SAP/Mono Broadcast • Select Audio Mode * Time Stamp 34, 35 • Channel Caption 32, 33 • VCR Lock 36 • Weak Signal Display ON/OFF 37 • Auto Shut-Off 37	Advanced Operation
Other Information!	Reset Language, Channels, Clock, VCR's Output Channel 38, 39 VCR & Cassette Information 40, 41 • Reset All VCR Memory Functions 40 • Head Cleaning	For Your Information

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3

Before Using

Congratulations

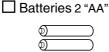
on your purchase of one of the most sophisticated and reliable products on the market today. Used properly, it will bring you and your family years of enjoyment. Please fill in the information below. The serial number is on the tag located on the back of your VCR.

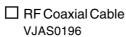
- Date of Purchase _
- Dealer Purchased From ______
- Dealer Address _
- Dealer Phone No. _
- Model No. _
- Serial No.

000

Accessories

Remote Control LSSQ0204



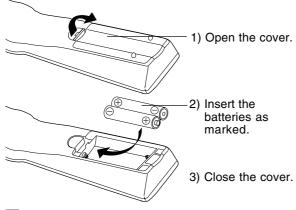




 Power Plug Adaptor VJSS0070



Loading the Batteries



Battery replacement caution

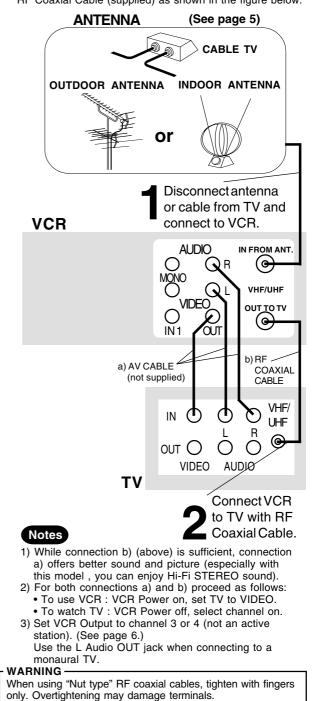
Do not mix old and new batteries.

· Do not mix alkaline with manganese batteries.

Basic Connection

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If your TV has AUDIO and VIDEO IN terminals, connect them to VCR for higher quality picture and sound. You can enjoy stereo sound even if your TV is not stereo by connecting a stereo amplifier to the VCR. Connect VCR and TV with an AV Cable (not supplied) or a RF Coaxial Cable (supplied) as shown in the figure below.

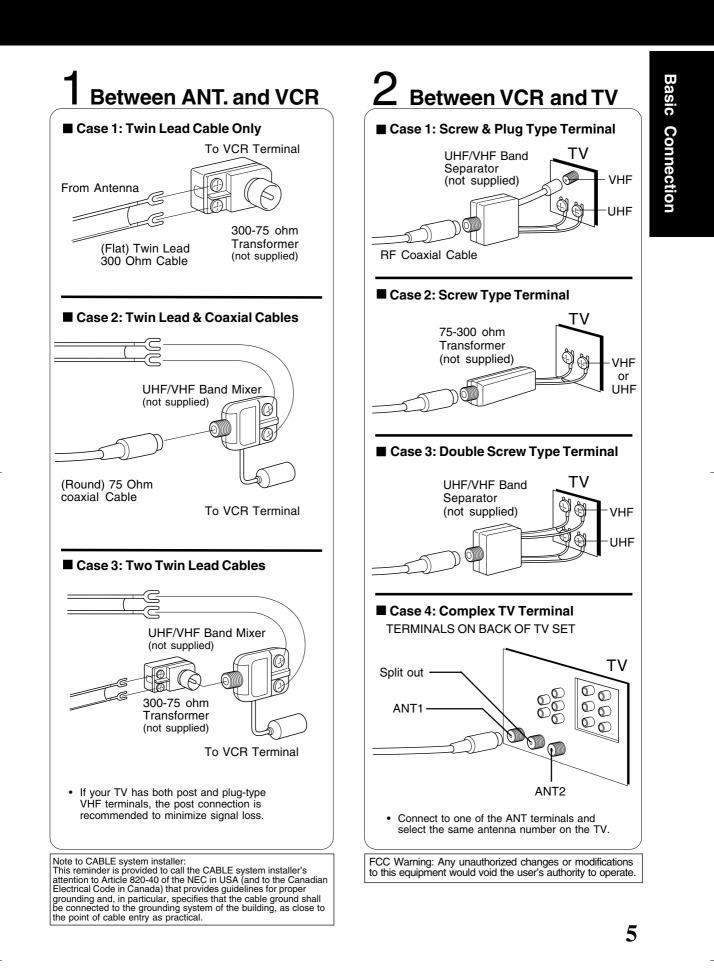


Caution:

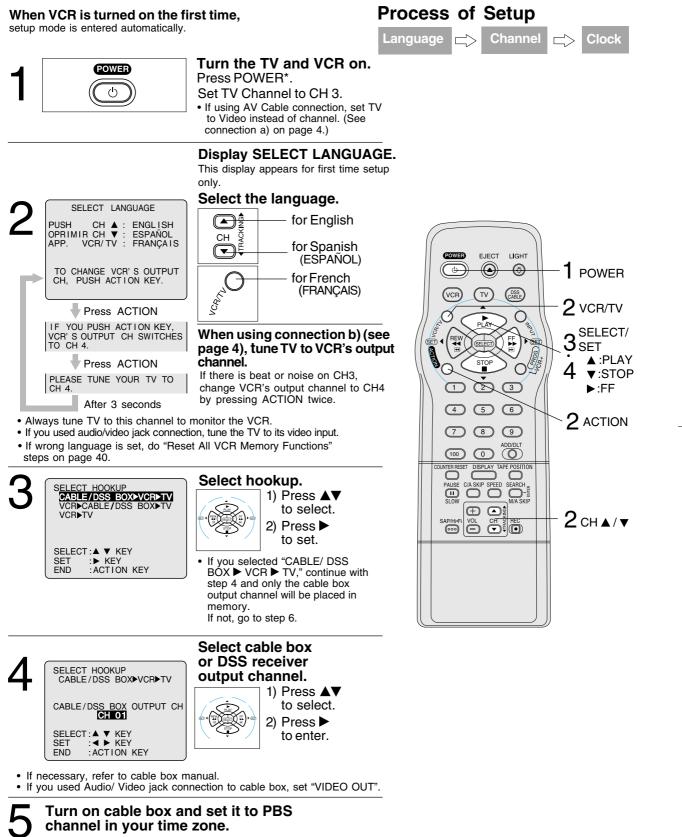
Voltage 110V, 220V and 240V are not for use in USA.

4

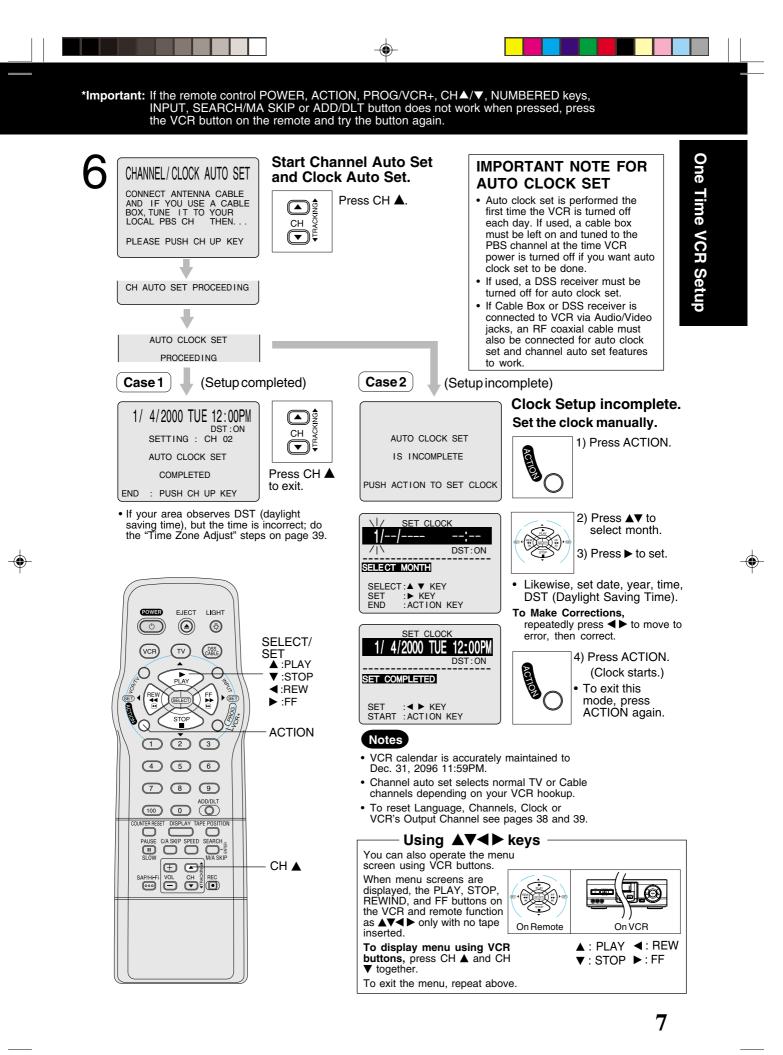
Operation at a voltage higher than 120V AC may require the use of a different AC plug. Please contact either a local or foreign Panasonic Distributor Center for assistance in selecting an alternate plug.



One Time VCR Setup



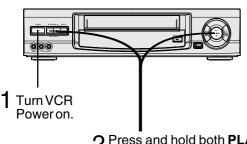
• If you use DSS receiver, it must be turned off.



VCR & Cassette Information

Reset All VCR Memory Functions

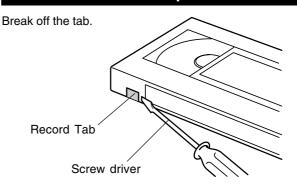
Use when moving VCR to new location, or if a mistake was made in the One Time VCR Setup section. • Make sure a tape is not inserted in the VCR.

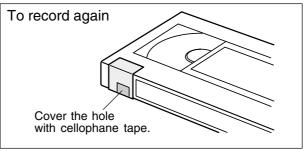


 Press and hold both PLAY and CHANNEL ▲ on the VCR for more than 5 seconds.
 The power will shut off.

3 Do "One Time VCR Setup" steps on page 6.

Prevent Accidental Tape Erasure





DST (Daylight Saving Time)

VCR auto adjusts clock for DST. (Page 7.)

Spring (First Sunday in April)

DST:ON --> sets clock ahead one hour.

Autumn (Last Sunday in October)

DST:ON --> Turns clock back one hour.

- If your area does not observe Daylight Saving Time, select DST:OFF.
- Keep these time changes in mind when programming the VCR for timer recordings.

Record/Playback Time

Only use tapes with the VHS mark in this unit.

Tape Speed	Type of Video Cassette			
Setting	T60	T120	T160	
SP (Standard Play)	1 Hour	2 Hours	2 Hours 40 Minutes	
LP (Long Play)	2 Hours	4 Hours	5Hours 20 Minutes	
SLP (Super Long Play)	3 Hours	6 Hours	8 Hours	

Head Cleaning

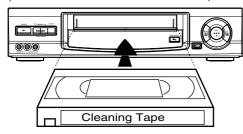
Playing older or damaged tapes may eventually cause video heads to become clogged.

Video Head Clog Sensor

During playback this screen appears if clogging is detected. To remove screen, press PLAY on the remote or VCR.

VIDEO HEADS MAY NEED CLEANING PLEASE INSERT HEAD CLEANING CASSETTE OR REFER TO MANUAL END:PLAY KEY

• Use "dry" type head cleaning cassette only. (Part No. NV-TCL30PT is recommended.)



- Follow cleaning tape instructions carefully. Excessive use of tape can shorten head life.
- If head clog symptoms persist, contact your nearest Factory Service Center or authorized Service Center. (See page 45.)

Built-in Head Cleaner

A clean video head helps produce a clear picture.

So, we have equipped your VCR with a builtin, non-chemical head cleaning system that helps prevent clogging of the video heads. Cleaning is performed each time you load or unload a video cassette.

• This feature is preventative only, If your video heads are seriously clogged, consider the use of a chemical non-abrasive head cleaning kit or take your VCR to a Service Center.

Cleaning the VCR

Use a soft cloth or dusting attachment of your vacuum cleaner to dust your VCR. Remove dust from the ventilation holes on the back sides and bottom of the cabinet.

Plastic surfaces are easily scratched and can be marred by alcohol and various solvents. Avoid excessive use of oil-based furniture polishes since the materials used in the cabinet will accumulate more dust. We recommend using a nonabrasive, antistatic cleaner and polisher.

Specifications

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Power Source:	110/120/220 V
	AC Auto, 50/60 Hz
Power Consumption:	Power On
· • · • · • • • • • • • • • • • • • • •	Approx. 23 watts
	Power Off
	Approx. 3.3 watts
Video Signal:	EIA Standard NTSC color
Video Recording System:	4 rotary heads helical
these these thing eyetethin	scanning system
Audio Track:	1 track (Normal)
	2 channel (Hi-Fi Audio Sound)
Tuner: For USA	
TV Tuners:	VHF input ch2~ch13
iv runers.	Cable channels "A"~"EEE",
	"A-5"~"A-1", "5A", 65~94,
	100~125
	UHF input ch14~ch69
For EUROPE	
TV Tuners:	VHF input ch2~ch13 (USA)
	UHF input ch21~ch62 (C.C.I.R.)
Broadcast Channels:	VHF 2~13, UHF 14~69
CABLE Channels:	Midband A through I (14~22)
	Superband J through W (23~36)
	Hyperband AA~EEE (37~64)
	Lowband A-5~A-1 (95~99)
	Special CABLE channel 5 A
	(01)
Operating Temperature	Ultraband 65~94, 100~125
	: 5 °C~40 °C (41 °F~104 °F)
Operating Humidity:	10 %~75 %
Weight:	3.4 kg (7.4 lbs.)
Dimensions:	430 (W) x 98 (H) x 250 (D) mm
	16-15/16" (W) x 3-7/8" (H) x
	9-3/4" (D)

Note: Designs and specifications are subject to change without notice.

Features for a Quality Picture

Digital Auto Picture

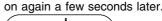
Automatically controls the video output signal for less noise depending on the tape condition.

Digital Auto Tracking

Continuously analyzes the signal and adjusts for optimum picture quality.

Manual Tracking Control (to reduce picture noise)

Use during Playback and Slow Motion mode to reduce picture noise. Press CH (TRACKING) ▲ / ▼ buttons on the remote control or on the VCR until the picture clears up. To return to Auto Tracking, press POWER off, then on again a few seconds later.







V-Lock Control (to reduce picture jitter) In Still mode, CH (TRACKING) ▲ / ▼ buttons operate as a V-Lock control. VCR & Cassette Information

On-Screen Displays (OSD)

Function & Channel Display

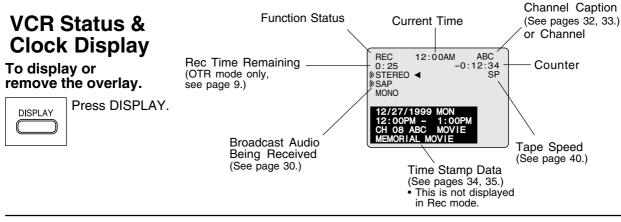
08

ABC

When a function button is pressed, e.g. PLAY, or you change channels, a 4 second display appears first in large and then small characters.(Some Station names may also appear if Channel Caption is set. See page 32, 33.)

Blank Tape/ No Video Signal Indication

Whenever a blank section of a tape comes up in Play mode, or when the selected channel has no broadcast signal with the Weak Signal Display Feature (page 37) set to OFF, the TV screen will turn solid blue.



Warning and Instruction Displays

These displays will alert you of a missed operation or provide further instructions.

OSD	Caution	Pg	OSD	Caution	Pg
NO CH FOUND PLEASE CHECK ANTENNA CABLE CONNECTION THEN PUSH VCR CH UP KEY AGAIN	If no active channels are found for CHANNEL MEMORY	6	TO CANCEL TIMER REC PUSH POWER THEN STOP KEY	If you press POWER or STOP during a Timer Recording (visible in VCR mode only)	12
PLEASE SET CLOCK BEFORE PROGRAMMING	If you attempt to set or review a Timer Recording and the Clock is not set	12	VIDEO HEADS MAY NEED CLEANING PLEASE INSERT HEAD CLEANING CASSETTE OR REFER TO MANUAL END: PLAY KEY	If head cleaning becomes necessary while playing back a tape	41
TURN VCR OFF FOR TIMER RECORDING	After a Timer Program has been set	13	VCR LOCK ACTIVATED	If you press a function button other than STOP/ EJECT or POWER while the VCR is in VCR Lock mode	36
CHECK CASSETTE RECORD TAB	If you press REC on the remote control or VCR, and a cassette is inserted with no record tab	40	REMOTE CONTROL IS SET TO CABLE/DSS MODE USE VCR : VCR KEY USE TV : TV KEY	If you press any invalid keys on the remote while in CABLE/DSS mode	20 21 36
NO CASSETTE PLEASE INSERT A CASSETTE	If you press PLAY, FF, REW, or REC on the remote control or VCR without a cassette inserted	8 9	REMOTE CONTROL IS SET TO TV MODE USE VCR : VCR KEY USE CABLE/DSS : CABLE/DSS	If you press any invalid keys on the remote while in TV mode	20 21 36

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Before Requesting Service

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Check the following points once again if you are having trouble with your VCR.

Power	Correction		
No power	 Completely insert Power Plug into an AC outlet. Set POWER button to on. Make sure power source is active. 		
Recording & Playback	Correction		
TV program cannot be recorded	 Check connections between VCR, external antenna, and TV. Check hook up selection. (P.4~5) Make sure your antenna system (CABLE or TV) is correctly set. (Channels [P.38]) Make sure cassette record tab is intact. (P.40) 		
Timer recording cannot be performed	 Check clock is set to current time and date. Make sure Cable/DSS box (if used) is left on and tuned to channel to be recorded. Set recording start/stop times correctly. (P.12) Make sure POWER button is set to off. (P.12, 13) Timer recording may not be performed or continued if a power interruption of more than 1 minute occurs before or during, a Timer Recording, even after power is restored. 		
There is no playback picture, or the playback picture is noisy or contains streaks	 Select channel 3 or 4 on TV to match VCR output channel (3 or 4) (P.6) or select LINE. Set VCR/TV selector to "VCR." Adjust TRACKING control in either direction. (P.41) Try Head Cleaning. (P.41) 		
Special effects playback, picture may contain some vertical jitter when using a TV with an Automatic Vertical Hold Control	Set TV's Vertical Hold Control to MANUAL, then adjust.		
VCR cannot be controlled	 Make sure VCR LOCK is set to off. (P.36) Make sure remote is in proper mode. (P.20) Make sure unit is not in a Timer Record operation. 		
Remote Control	Correction		
VCR cannot be remote controlled	 Aim Remote Control directly at remote sensor on VCR. (P.50) Avoid any object blocking signal path. Check remote batteries. (P.4) Make sure VCR LOCK is set to off. (P.36) Exposing VCR remote sensor to direct fluorescent or outdoor light may cause signal interference. 		
ACTION and PROG/VCR+ buttons cannot be used	 Press VCR button for VCR mode. (P.20) Check remote Batteries. (P.4) 		
Miscellaneous	Correction		
Programs cannot be viewed on TV	 Set VCR/TV selector to "TV." (P.9) Make sure proper signal source is selected. 		
Video cassette cannot be inserted	 Insert the cassette with window side up; record tab facing you. Insure no other tape is inside unit. 		
Video cassette cannot be removed	Completely insert Power Plug into AC outlet.		
Video cassette ejects when a recording is started or the power is turned off for timer recording	Make sure cassette record tab is intact. (P.40)		
In Stop mode, the motor (CYLINDER) continues to rotate	 To enable Quick play mechanism, the cylinder will rotate for about 5 minutes. This reduces response time from Stop to Play mode and from Play to Rewind Search mode. 		
The top of the playback picture waves back and forth excessively	 Because VCR playback signal is not as stable as off-the-air TV signal, top of TV screen may be bent or unstable during playback. Slowly turn TV horizontal Hold control to correct. If your TV has no horizontal Hold control or adjusting control is ineffective, contact your nearest TV service center. 		

OSD & Before Requesting Service

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00/02/29, 0:40