

—TENTATIVE— **Quasar®**

Omnivision **VHS**

Video Cassette Recorder
Operating Instructions

Models No. **VHQ-401/VHQ-451**

EXHIBIT # 6
FIG NO. _____
FCC ID: ACJ927139AH
MODEL NO. VHQ-451
OUR REF.: MkES00-F012

Initial Setup and Connection Procedures
shown on pages 6 to 9.

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

Spanish Quick Use Guide is included. (Guía para rápida consulta en español está incluida.)

LSQTXXXXA

For assistance, please call : 1-800-211-PANA(7262) or send e-mail to : consumerproducts@panasonic.com

Initial Setup
(Connection)

Basic
Operation

Timer
Recording

Advanced
Operation

For Your
Information

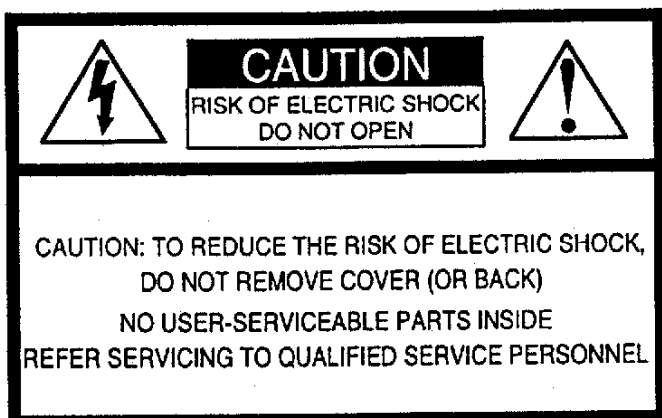
Safety Precautions

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

CAUTION: To prevent electric shock, match wide blade of plug to wide slot, fully insert.

Avertissement: Afin de prévenir tout risque d'incendie ou de chocs électriques, ne pas exposer cet appareil à la pluie ou à une humidité excessive.

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.



This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause 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 has been included. Therefore, it should be read carefully in order to avoid any problems.

Note to CABLE system installer:

This reminder is provided to call the CABLE system installer's attention to Article 820-40 of the NEC in USA (and to the Canadian Electrical Code in Canada) 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.

FCC Warning: Any unauthorized changes or modifications to this equipment would void the user's authority to operate.

Before Using

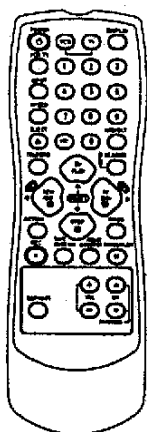
Congratulations

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. _____

Accessories

- ☐ Remote Control LSSQXXXX (VHQ-401)
- ☐ Batteries 2 "AA" LSSQXXXX (VHQ-451)



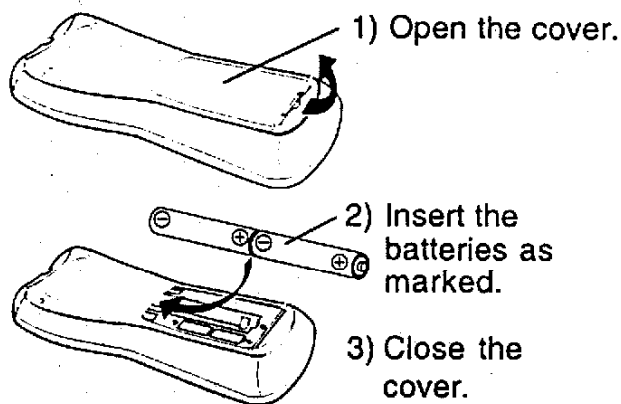
Model VHQ-451 remote is shown here.

- ☐ RF Coaxial Cable VJAS0196



To order accessories, call toll free 1-800-332-5368.

Loading the Batteries

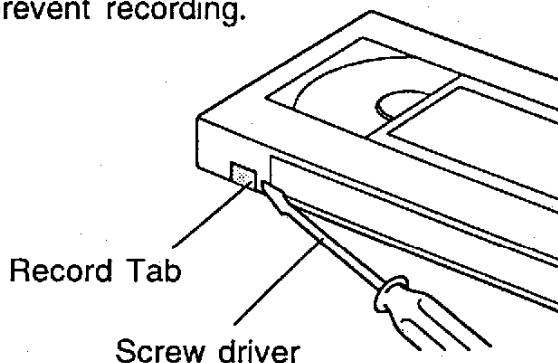


☐ Battery replacement caution

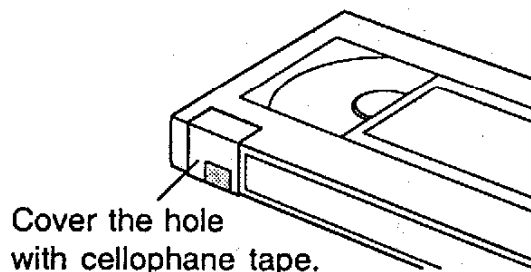
- Do not mix old and new batteries.
- Do not mix alkaline with manganese batteries.

Prevent Accidental Tape Erasure

Break off the tab to prevent recording.



To record again



Record/Playback Time

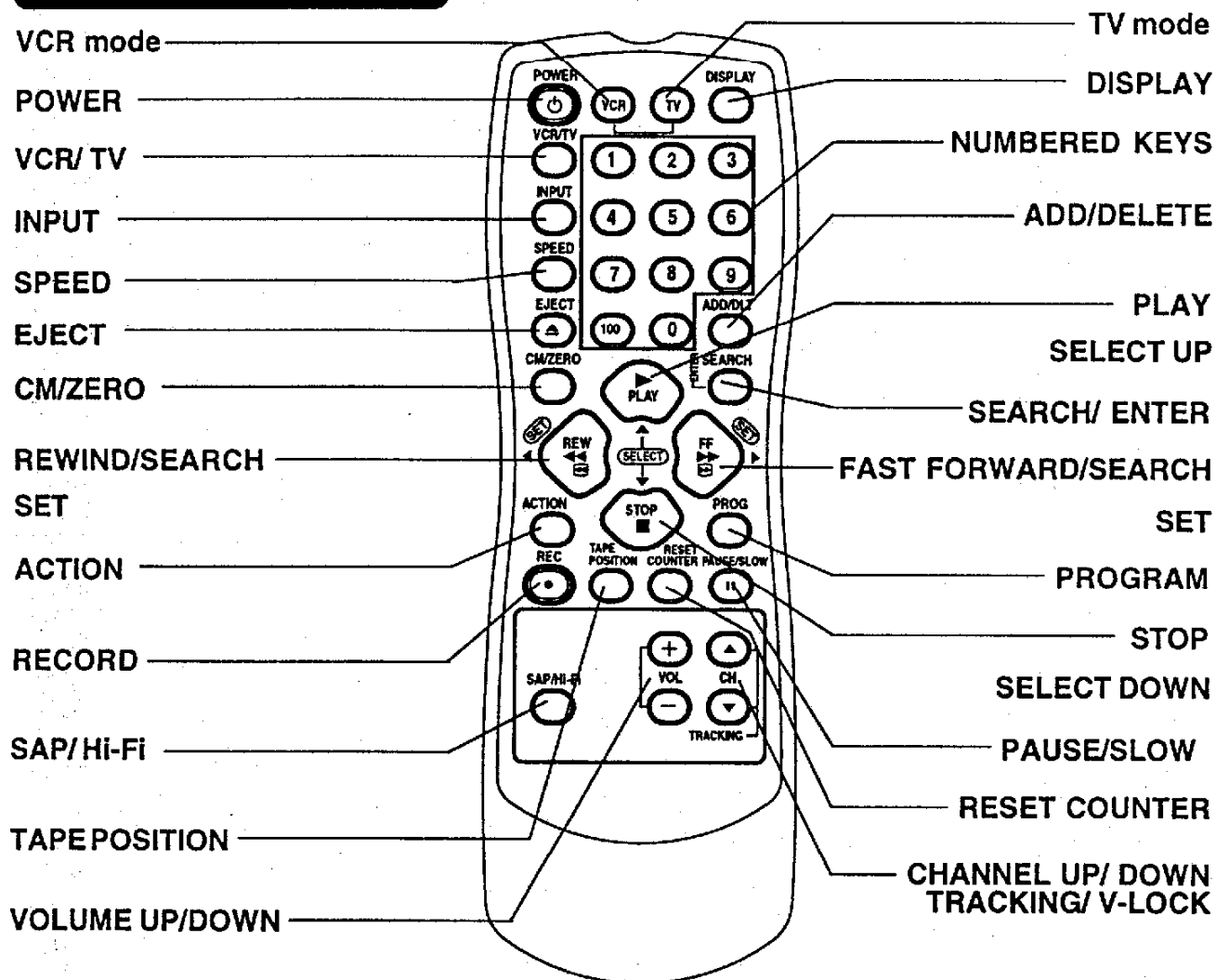
Only use tapes with the **VHS** mark in this unit.

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

Location of Controls

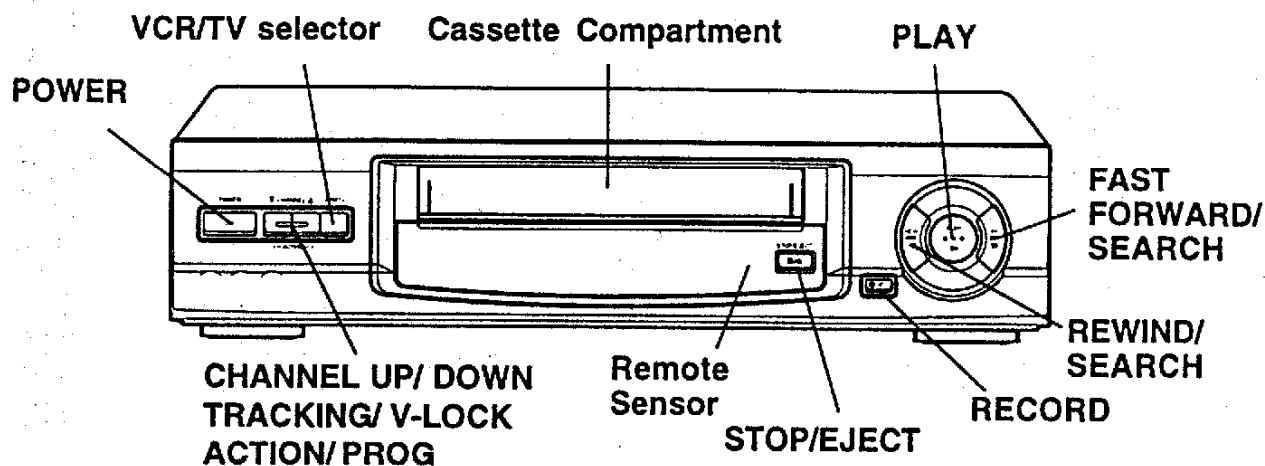
Remote control Buttons

Model VHQ-451 remote is shown here.



EJECT button: Press to eject tape from VCR. If EJECT is pressed during record, VCR will not respond.

Front View of the VCR

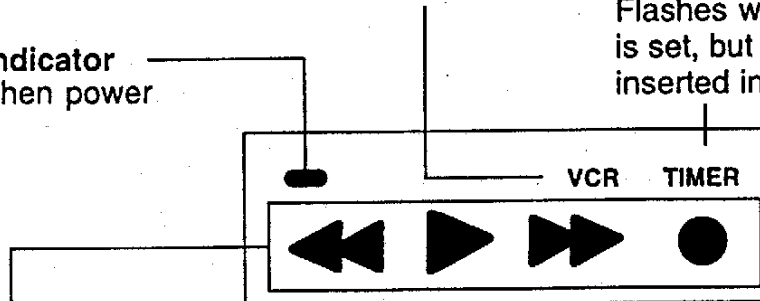


Multi Function Display

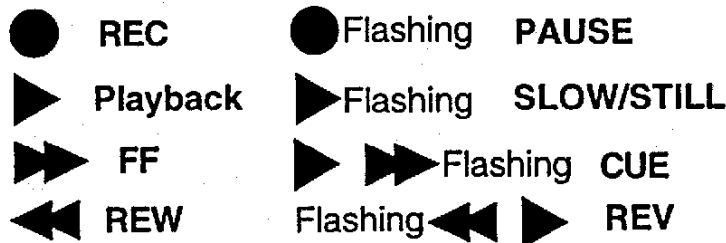
Power Indicator
Lights when power is on.

VCR Indicator
Lights when the VCR/TV selector is set to VCR.

Timer Indicator
Lights when the VCR is set for a Timer Recording, or when One Touch Recording (OTR) is used. Flashes when a Timer Recording is set, but a tape has not been inserted into the VCR.



Function Indicator
Shows what the VCR is doing.



Rear View of the VCR

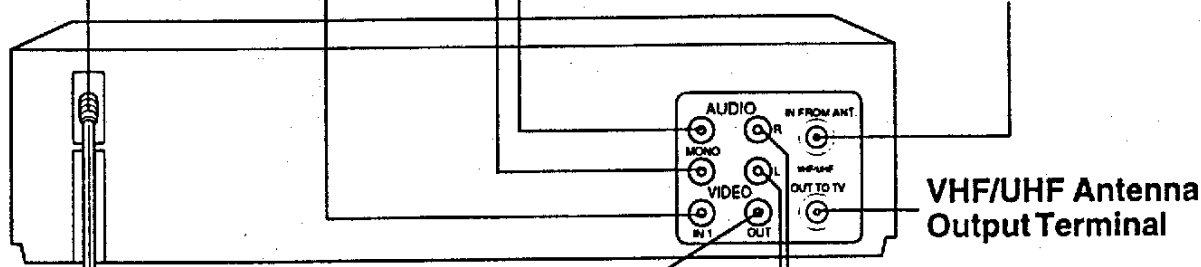
AC Power Plug

While plugged into an AC outlet, the VCR consumes 3.3 W of electrical power in off condition.

Audio Input Connector (L/R)

Video Input Connector

VHF/UHF Antenna Input Terminal



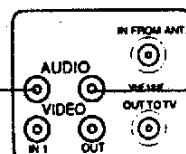
Rear View of Model VHQ-451 VCR only.

Video Output Connector

Audio Output Connector (L/R)

VHF/UHF Antenna Output Terminal

Audio Input Connector



Audio Output Connector

Rear View of Model VHQ-401 VCR only.

**Initial Setup
(Connection)**

VCR & Cassette Information

Head Cleaning

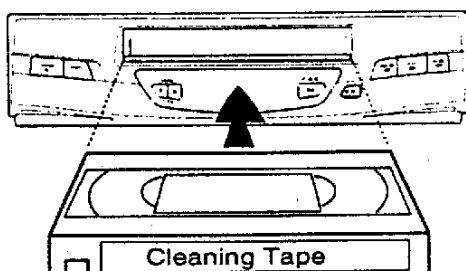
Playing older or damaged tapes may eventually cause video heads to become clogged.

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



- 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 28.)

Cleaning the VCR

Use a soft cloth or dusting attachment of a vacuum cleaner to 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

Power Source:	120 V AC, 60 Hz
Power Consumption:	<u>Power On</u> Approx. 23 watts <u>Power Off</u> Approx. 3.3 watts
Video Signal:	EIA Standard NTSC color
Video Recording System:	4 rotary heads helical scanning system
Audio Track:	1 track (Normal) 2 channel (Hi-Fi Audio Sound) (VHQ-451)
Tuner:	
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) Ultraband 65-94, 100-125
Operating Temperature:	5°C-40°C (41°F-104°F)
Operating Humidity:	10%-75%
Weight:	3.0 kg (6.6 lbs).
Dimensions:	380 (W) x 93 (H) x 250 (D) mm 14-15/16" (W) x 3-11/16" (H) x 9-3/4" (D)

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

Features for a Quality Picture

Digital Auto Picture

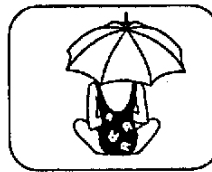
Automatically controls the video output signal for less noise depending on the tape condition.

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.

For Your
Information