

SHARP®

MODEL
VC-H998U

EZ SET UP

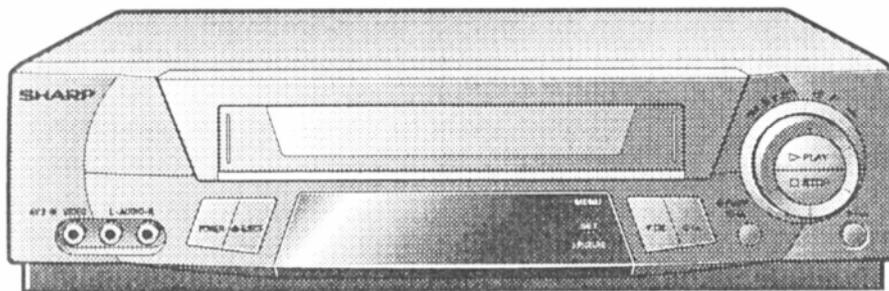
It's as easy as 1 2 3 4 5

1. Connect Cable to VCR.
2. Plug into AC Power Outlet.
3. Wait until completion of auto tuner channel setting and auto clock setting, and then press **POWER**.
4. Press **MENU** on the Remote Control, select Channels, and press **SET**.
5. Select Channel Preset and press **SET**, then choose:
(AIR) outdoor antenna or **(CATV)** Cable System.

VIDEO CASSETTE RECORDER OPERATION MANUAL

Please read this operation manual carefully
before using the VCR.

VCR^{plus}TM
3 Cable Box
Control
Easy Taping.



MID-DRIVE

VHS HQ HIGH QUALITY

General
Information

Setting Up

Basic
Operations

Recording

Special
Functions

Helpful
Hints

This video cassette recorder (VCR) uses "ONLY" **VHS** cassette tapes, NTSC video signals (standard in US), and 120 V AC, 60 Hz (standard US household current).
For future reference, record the model and serial number (located on the rear of the VCR) in the space provided.

Model No.:	_____
Serial No.:	_____

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN		CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
	This symbol warns the user of uninsulated voltage within the unit that can cause dangerous electric shocks.		This symbol alerts the user that there are important operating and maintenance instructions in the literature accompanying this unit.

"WARNING—FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authority to operate this equipment."

Note to CATV system installer:
This reminder is provided to call the CATV system installer's attention to Article 820-40 of the National Electrical Code 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—Keep your VCR away from electrical and magnetic appliances which could impair performance. Be sure to position your VCR away from your TV or video monitor by at least 8".

WARNING OF DEW FORMATION

Whenever your VCR is moved from a cold to a warm environment, it is important that you plug the unit in, turn the power on and allow it to sit for about 2 hours before attempting to play a tape. This period will allow any dew formation to evaporate. Failure to do so may result in tape and/or video head damage. After the 2 hour evaporation period, you may witness a "snowy" picture for the first few minutes of VCR operation. This picture noise will disappear shortly thereafter.

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IMPORTANT SAFEGUARDS AND PRECAUTIONS

CAUTION

READ THE SAFETY AND OPERATING INSTRUCTIONS before operating your VCR.
FOLLOW INSTRUCTIONS AND HEED ALL WARNINGS on your VCR and in this manual.

INSTALLATION

1. Operate only from a power source indicated on your VCR or in this manual. If you are unsure of your power supply, ask your local power company.

2. As a safety feature, your VCR is equipped with either a 2-wire polarized plug (one plug blade bigger than the other) or a 3-wire grounded plug (a third pin for grounding). The 2-wire polarized plug will fit only one way into the power outlet. The 3-wire grounded plug will fit only into a grounding-type power outlet.

If the plug does not fit, ask your electrician to replace your obsolete outlet. Do not modify the plug. To do so will void the safety feature.

3. Protect and route power cords so they will not be stepped on or pinched by anything placed on or against them. Be especially careful at plug-ins, convenience receptacles, or cord exit points from the VCR. Frayed power cords or damaged plugs are hazardous. Have them replaced by a qualified service technician.

Overloaded wall outlets and extension cords may cause fire or electrical shock hazards.

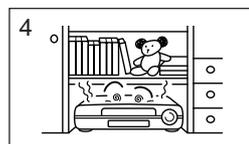
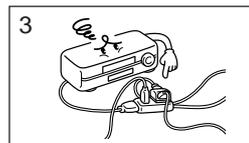
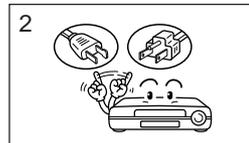
4. Do not cover or block ventilation holes in the VCR cabinet. Doing so may damage the VCR or cassette, or cause fire.

Do not place your VCR on a soft surface which could block ventilation holes on the bottom. Avoid enclosed installations such as bookshelves or racks unless ventilation is adequate.

5. Avoid excessive humidity, sudden temperature changes, or temperature extremes. Dew may form inside your VCR or on the cassette.

6. To avoid costly damage or injury, place your VCR flat on a solid, stable surface free from vibrations; do not place any heavy objects on top of it. Use only a cart, stand, tripod, bracket, or table recommended by the manufacturer; follow all instructions regarding their use exactly.

7. 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.



OPERATION/CLEANING

1. Keep your VCR away from electrical and magnetic appliances which could impair performance. Be sure to position your VCR away from your TV or video monitor by at least 8".

2. Keep your VCR away from wet locations such as bathtubs, sinks, laundries, wet basements, and swimming pools.

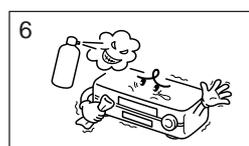
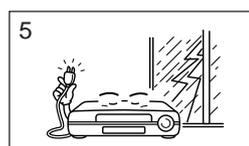
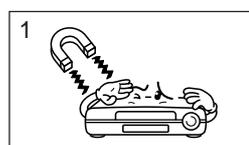
3. Use only accessories recommended by the manufacturer to avoid fire, shock or other hazards.

4. If your VCR has been exposed to rain, moisture or strong impact, unplug it and have it inspected by a qualified service technician before resuming use.

5. Unplug your VCR and disconnect it from the antenna and/or cable system during a lightning storm or an extended period of discontinued use.

6. Unplug your VCR before cleaning. Use a damp cloth for cleaning. Do not use cleaning fluids or aerosols which could enter the unit and cause damage, fire, or electrical shock. These substances may also mar the finish of your VCR.

7. Never open or remove covers or make any adjustments not described in this manual. Attempting to do so could expose you to dangerous electrical shock or other hazards. It may also cause serious damage to your VCR.





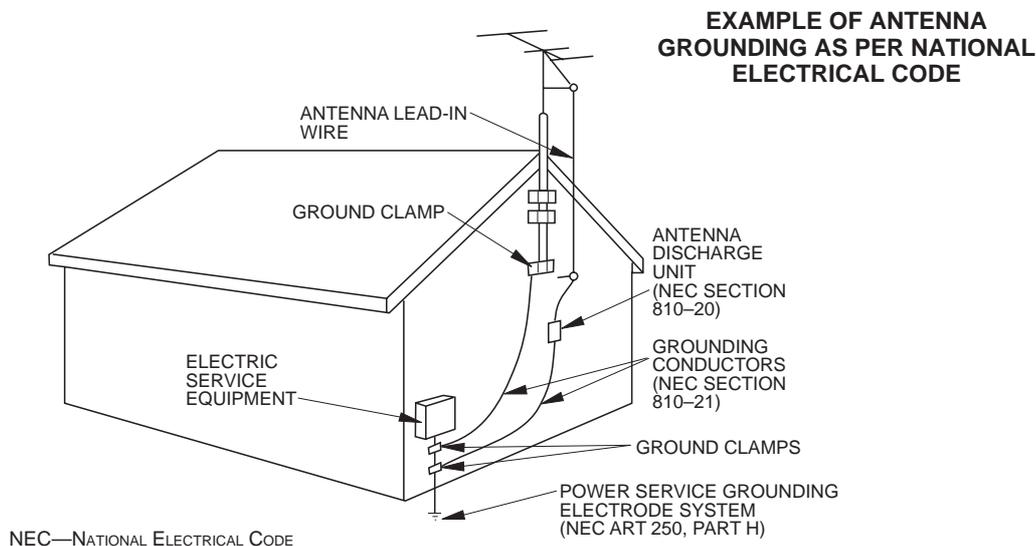
IMPORTANT SAFEGUARDS AND PRECAUTIONS

8. Keep liquids and foreign objects away from your VCR. Never operate your VCR if any liquid or foreign object has entered it. Electrical shorts could result and possibly cause fire or shock hazards. Unplug your VCR immediately and have it inspected by a qualified service technician.



OUTDOOR ANTENNA GROUNDING AND POWER LINES

1. If an outside antenna or cable system is connected to your VCR, be sure the antenna or cable system is grounded, thus providing some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No.70-1984, provides information regarding 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. See diagram below.



2. An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come into contact with power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from coming into contact with power lines or circuits; contact with them might be fatal.

SERVICE

1. Do not attempt to service this VCR yourself. Instead, unplug it and contact a qualified service technician. (See **LIMITED WARRANTY** at the end of this manual.)
2. Be sure the service technician uses authorized replacement parts or their equivalents. Unauthorized parts may cause fire, electrical shock, or other hazards.
3. Following any service or repair, be sure the service technician performs safety checks to certify that your VCR is in safe operating order.

OTHERS

1. It is the intent of Sharp that this product be used in full compliance with the copyright laws of the United States and that prior permission be obtained from copyright owners whenever necessary.
2. Normally, your VCR does not require head cleaning. However, the heads may become clogged when an old or damaged tape is used. If the playback picture becomes blurred, the heads may need cleaning. Head cleaning should be performed by a qualified technician. Contact the nearest Sharp Factory Service Center or Authorized Service Station. Do not use a cleaning tape unless it is new and of high quality. Excessive use of cleaning tapes may also damage the heads.

Features

Common Features

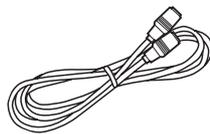
- **VHS Hi-Fi Stereo Sound**
- **Built-in MTS (Multi-channel TV Sound) Decoder** — Lets you record stereo or SAP (Separate Audio Program) broadcasts.
- ***The VCR Plus+ Programming System/Cable Box Channel Control Function/Digital Satellite Receiver Control Function**
- **TURBOWIND** — 360 × Rewind Speed to Fast forward and Rewind.
- **EZ Set Up** — VCR tuner channels and clock are automatically set for both Air and Cable channels.
- **Double-Azimuth 4-Heads**
- **19 μ Clear Picture System (in EP mode)** — For enhanced picture quality in EP (Extended Play) mode.
- **Auto VIEWCAM Dubbing function**
- **HQ System for Better Resolution and Color Reproduction**
- **Multi-Language (English/Spanish/French) OSD (On Screen Display) with Menu Screen Guidance** — On-screen setting and recording instructions.
- **181-channel PLL Quartz Synthesized Random Access Tuner with Automatic Channel Setting**
- **Quick Start with Full Loading Mechanism**
- **1-Year, 8-Event Programmable Timer**
- **Simple Recording Timer**
- **Universal Remote Control** — Operates the VCR and basic functions of various TVs, Cable Boxes, and some Digital Satellite Receivers. — Remote Pager function
- **Sharp Super Picture** — Enhances picture quality during playback.
- **Field-Still/Variable Slow/Frame Advance**
- **Real-Time Counter** — Displays accurate tape time.

- **Automatic Daylight Saving-Time (D.S.T.) Adjustment** — Automatically adjusts VCR clock to daylight saving-time.
- **Blue Screen Noise Elimination**
- **Auto Tracking Control System** — Automatically adjusts tracking during playback.
- **Digital Program Search System (DPSS)** — Quickly locates the beginning of a specific recording.
- **Skip Search** — Quickly operates a forward video search in 30 second intervals, then resumes playback.
- **Instant Replay** — Quickly operates a reverse video search in 20 second intervals, then resumes playback.
- **Auto Zero Back** — Quickly finds "0:00.00" point and stops there.
- **Recorded Section Auto Repeat** — Continually plays back a recorded section of the tape.
- **Full Automatic Playback**
- **Tamper Proof** — Prevents accidental change of the operation mode.
- **Up to 8 Hours of Recording and Playback (with T-160 cassette)**
- **Built-in Shuttle Control System** — Rewind and fast-forward with a single control.
- **Built-in Front AV Jacks** — For easy connection of audio/video equipment such as the Sharp Viewcam.
- **Automatic Head Cleaning System** — Cleans the VCR video heads each time you insert and eject a tape.

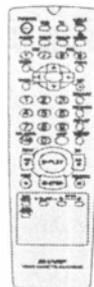
* VCR Plus+ C³ and PlusCode are trademarks of Gemstar Development Corporation. The VCR Plus+ system is manufactured under license from Gemstar Development Corporation.

Accessories

Be sure that the following accessories are all included with your VCR.



Round coaxial cable
(75 Ohm, 1 m [3-1/4 ft.])
QCNW-0262AJZZ
or
QCNW-0298AJZZ



Remote control unit

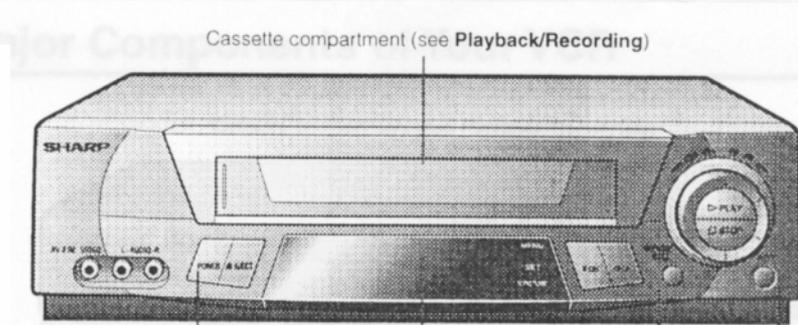


AA batteries for
the remote
control unit



Major Components of Your VCR

[Front]



Cassette compartment (see Playback/Recording)

(VC-H994U)

POWER button
(When pressed to turn on the VCR, some indicators on the Multi-Function display light up, and the Multi-Function display brightens. When the power is turned off, the Multi-Function display dims.)

Basic function controls (see Playback/Recording)

NOTE
• The design may be slightly different depending on the model.

Multi-Function Display (explained throughout the operation instructions)



When the power is on, each time **DISPLAY** is pressed, the Multi-Function display changes as follows:

① Channel setting → ② Tape counter → ③ Clock

NOTE
• Tape counter is displayed during playback, fast forward or rewind operation.
• When the power is turned off, the clock is displayed and the Multi-Function display becomes darker.

Display	Symbol	Function Status	Display	Symbol	Function Status
STOP	—	Stop	FF	—	Fast forward
PLAY	▶	Play	REW	—	Rewind
PLAY	▶	Video Search, Slow, Still, Frame Advance	PAUSE	REC	Rec Pause
REC	REC	Record	—	⏻	Cassette-in
—	🔑	Tamper Proof Active	—	VCR	Unit in VCR mode

NOTE
• The display will return to the original mode (counter or clock display) 3 seconds after the VCR enters the operation mode.

[Rear]

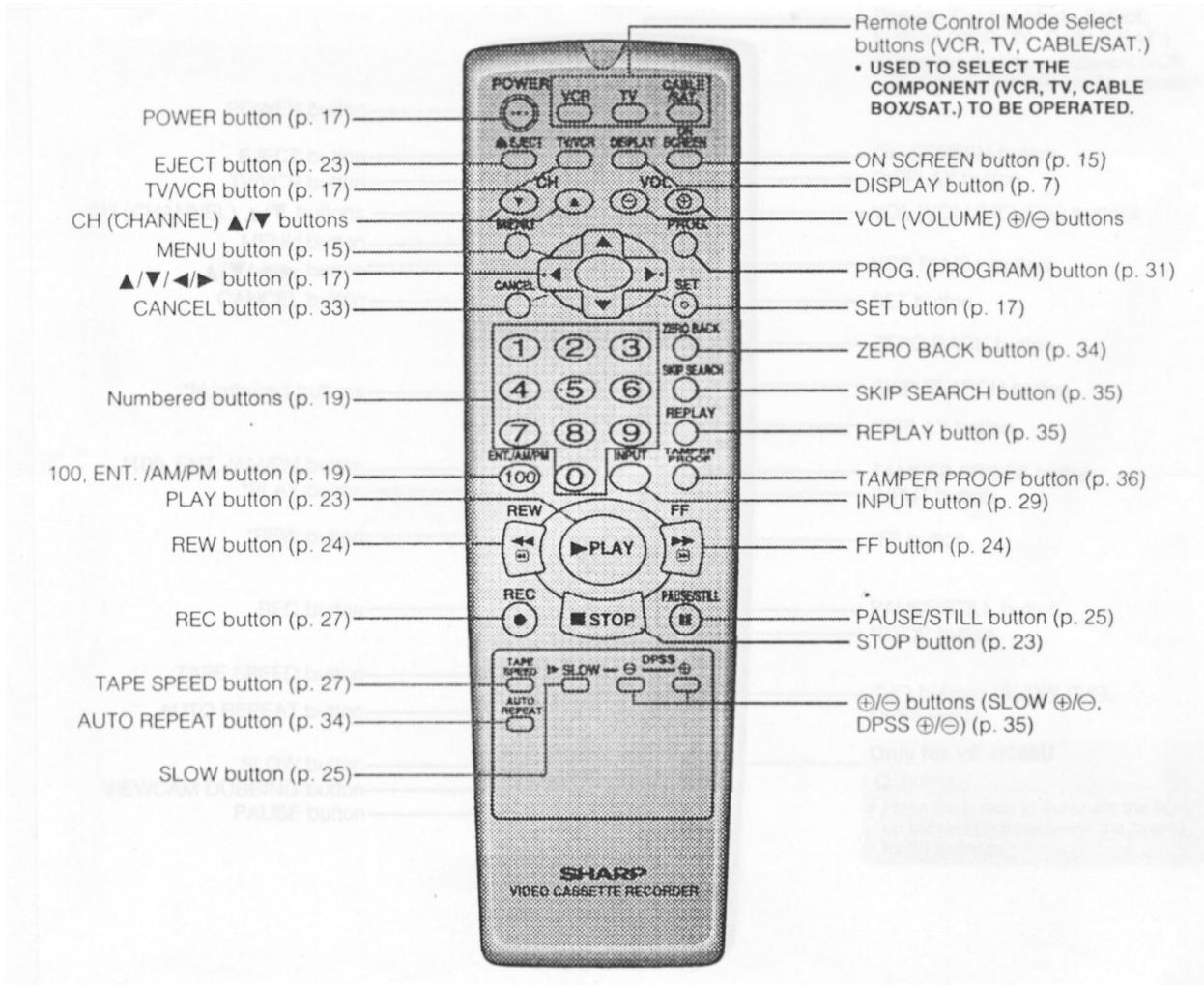
Connection terminals (see **Connecting the VCR** and **Cable TV Connections**)

Connection terminals (see **Tape Dubbing**)



3 ↔ 4 OUTPUT CHANNEL selector (see **Setting the 3 ↔ 4 Output Channel Selector**)

Remote Control



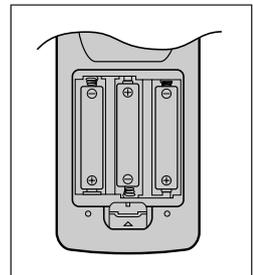
Inserting the Batteries

Make sure that the batteries have been properly installed first. Fit three batteries type "AA". If the remote control stops working, fit new batteries.

Ensure the batteries are fitted correctly, matching the polarities (⊕/⊖) indicated in the remote control.

NOTE

- The operating life of the batteries will shorten if the Remote Pager function is frequently used.
- After changing the batteries in the remote control, the code settings for the TV, cable box and Digital Satellite Receiver must be re-entered.
- Do not subject the remote control to shock, water or excessive humidity.
- The remote control may not function if the VCR sensor is in direct sunlight or any other strong light.
- Incorrect use of batteries may cause them to leak or burst. Read the battery warnings and use the batteries properly.
- Do not mix old and new batteries, or mix brands in use.
- Remove the batteries if the remote control will not be operated for an extended period of time.
- If the remote control does not function properly when new batteries are installed, remove the batteries and wait 5 minutes before re-installing them.





Using the Universal Remote Control

How to set the Universal Remote Control code

The Universal Remote Control can operate the basic functions of 20 different types of TVs, 18 different types of Cable Boxes and 2 different types of Digital Satellite Receivers.

To enter the Universal Remote Control code for your TV, Cable Box or Digital Satellite Receiver, follow the instructions below.

There may be some TVs, Cable Boxes or Digital Satellite Receivers that cannot be operated with this remote control. Use the original remote control in that case.

There is no guarantee that the universal remote control will function with your TV, cable box or digital satellite receiver.

For TV Setting

Setting the Manufacturer's Code Directly

- 1 Press **TV** and **CH ▲** on the remote control simultaneously.
- 2 Enter the 2-digit manufacturer's code with the numbered buttons (Ex. 02 = "0", "2") on the remote control within 10 seconds after releasing **TV** and **CH ▲**.

NOTE

- Refer to the code list for the buttons which work with each brand.

Buttons on the Remote Control		POWER CH ▲/▼ VOL ⊕/⊖ Numbered (0-9)	INPUT	100/ENT.
Brand	Code			
EMERSON	18	X	X	-
FISHER	16	X	X	100
FUNAI	05	X	X	100
GE	06, 08	X	-	100
GOLDSTAR	17	X	-	-
HITACHI	14	X	X	100
JVC	15	X	X	100
MAGNAVOX	08	X	-	100
	10	X	X	-
mitsubishi	13	X	X	-
PANASONIC	12, 20	X	X	-
RCA	06, 08	X	-	100
SAMSUNG	19	X	X	-
SANYO	16	X	X	100
SHARP	01	X	X	100
	02	X	X	-
SONY	09	X	X	100/ENT.
TECHNOL ACE	03	X	X	-
TOSHIBA	11	X	X	100
ZENITH	04	X	X	ENT.
	07	X	-	100/ENT.

For Cable Box or Digital Satellite Receiver Setting

Setting the Manufacturer's Code Directly

- 1 Press **CABLE/SAT.** and **CH ▲** on the remote control simultaneously.
- 2 Enter the 2-digit manufacturer's code with the numbered buttons (Ex. 02 = "0", "2") on the remote control within 10 seconds after releasing **CABLE/SAT.** and **CH ▲**.

NOTE

- Refer to the code list for the buttons which work with each brand.
- SAT. stands for Digital Satellite Receiver.

Buttons on the Remote Control		POWER CH ▲/▼ Numbered (0-9)	100/ENT.
Brand	Code		
JERROLD	01, 04, 05, 06, 07	X	ENT.
	02, 03, 08	X	-
OAK	16	X	ENT.
PANASONIC	13	X	-
	14	X	ENT.
PHILIPS	18	X	-
PIONEER	15	X	ENT.
RCA	13	X	-
	14	X	ENT.
*RCA (SAT.)	19	X	-
REGAL	17	X	-
SCIENTIFIC ATLANTA	09, 10, 11	X	-
SONY (SAT.)	20	X	ENT.
ZENITH	12	X	ENT.

- * Only for RCA (SAT.)
POWER ON-CABLE/SAT. button
POWER OFF-POWER button

How to operate the VCR, TV, Cable Box or Digital Satellite Receiver

To operate the VCR, TV, Cable Box or Digital Satellite Receiver, first press **VCR**, **TV** or **CABLE/SAT.** to switch to the desired mode.

NOTE

- If the batteries in the remote control are changed, the code settings must be re-entered.
- Some brands have more than one remote code listed, due to changes in the remote codes. In such cases, try more than one code to find the code that operates your TV, Cable Box or Digital Satellite Receiver.

Connecting the VCR

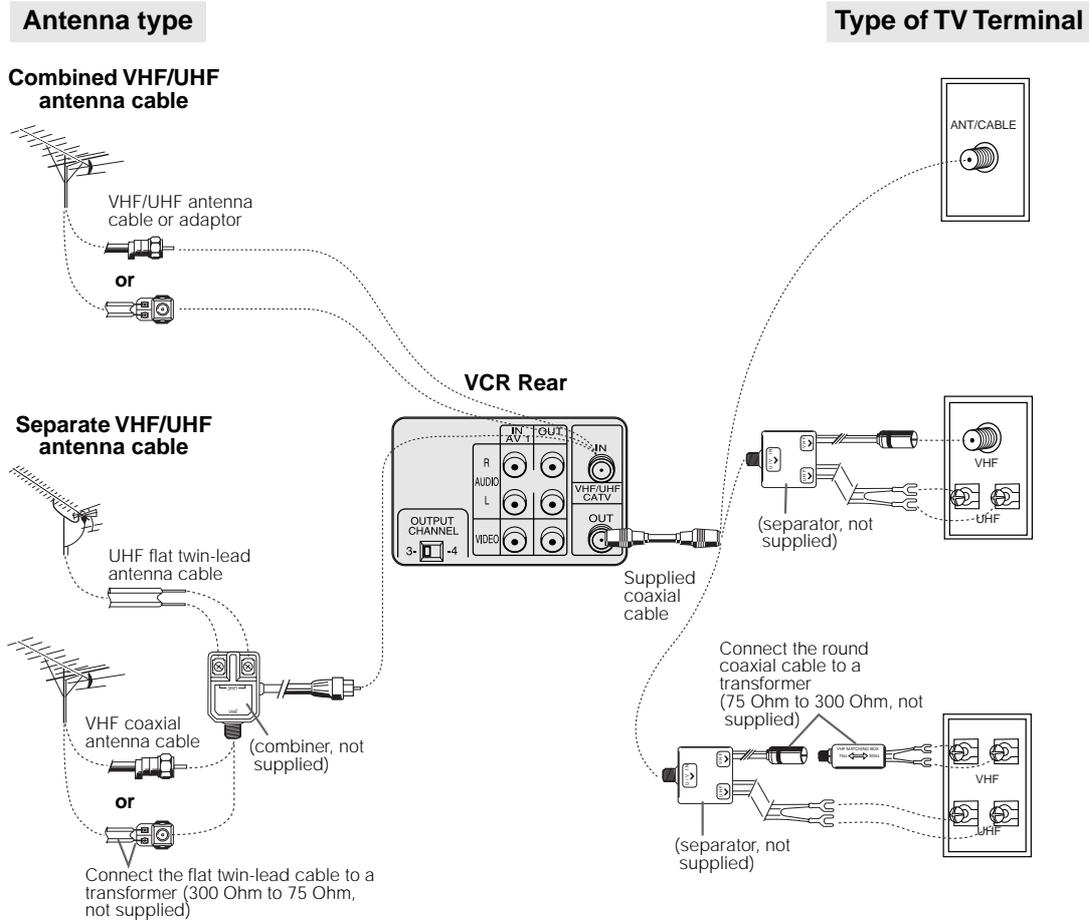
Each type of antenna and TV system requires a different method of connection. If you have cable TV (CATV), see page 43 for Cable TV connection.

PREPARATION >>>

To determine the correct type of connection, first check the type of antenna and TV terminal in use. Make the connections as shown below.

NOTE

- Consult your SHARP Dealer or Service Center for the type of adaptor, separator, transformer or combiner that might be required.

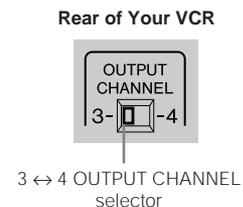


After the Connection

Plug in the power cords of the VCR and TV. Then go to the following **Setting Up** section.

Setting the 3 ↔ 4 Output Channel Selector

The 3 ↔ 4 OUTPUT CHANNEL selector changes the VCR OUTPUT to standard TV broadcasting signals. Both your TV and VCR must be set to the same channel (i.e. TV on channel 3 and VCR OUTPUT CHANNEL selector on 3). Your VCR is set to channel 3 at the factory, so your TV should be tuned to channel 3 as well. If channel 3 is an active broadcast channel in your area, set the VCR 3 ↔ 4 OUTPUT CHANNEL selector to 4 and tune your TV to channel 4.



Selecting the Video Channel on Your TV

To view the output of your VCR on your TV, you must select the video channel (3 or 4) on your TV that corresponds with the output channel set above.