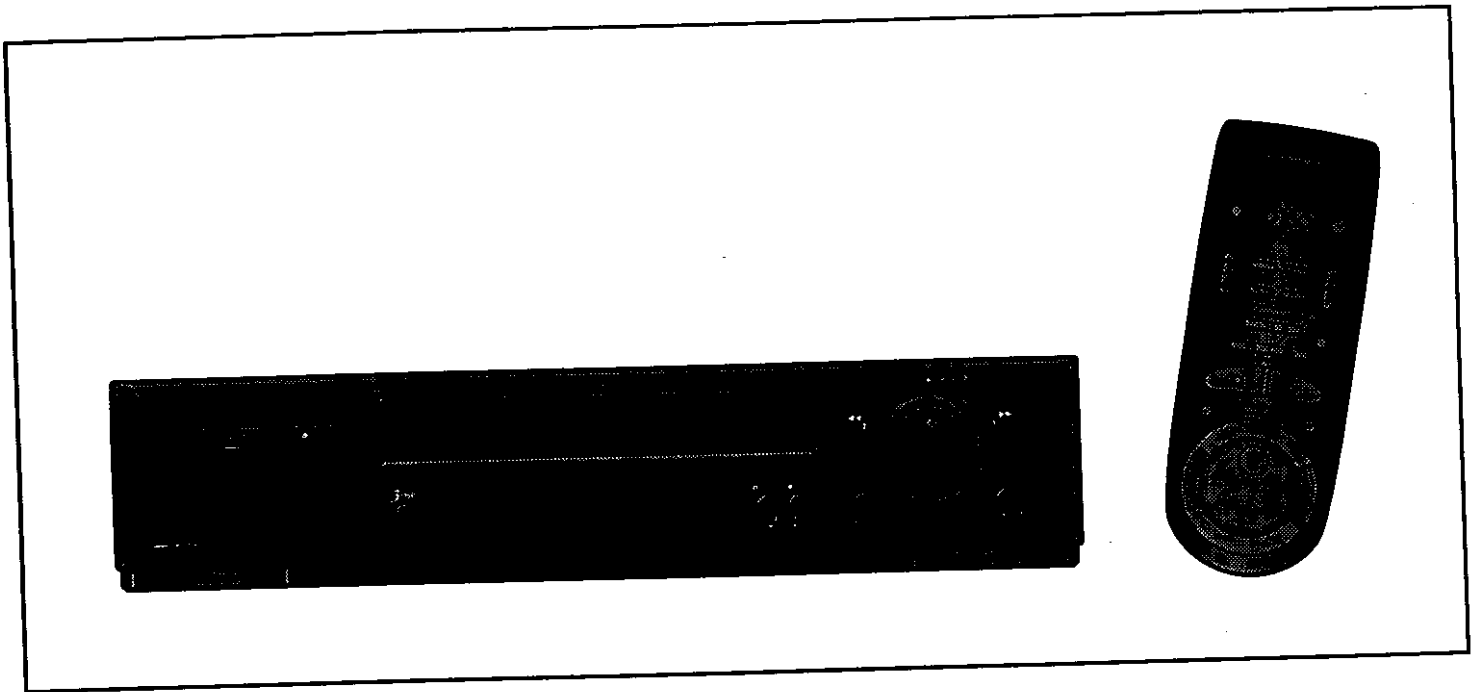


 **MITSUBISHI**  
THE BIG SCREEN COMPANY™

# VIDEO CASSETTE RECORDER OWNER'S GUIDE



**MODEL HS-U795**



As an ENERGY STAR® Partner, Mitsubishi Digital Electronics America, Inc. has determined that this product or product model meets the ENERGY STAR® guidelines for energy efficiency.



VCR Plus+, C<sup>2</sup>, ALLSET and PlusCode are trademarks of Gemstar Development Corporation. The VCR Plus+ system is manufactured under license from Gemstar Development Corporation.

With the VCR Plus+ GOLD system, this video cassette recorder can automatically select the appropriate channel on your compatible cable box or satellite receiver.



This Video Cassette Recorder is based on the S-VHS and VHS formats. Only video cassette tapes with the **S-VHS** mark or the **VHS** mark may be used with this model.

## Special Features HS-U795

### SMART:

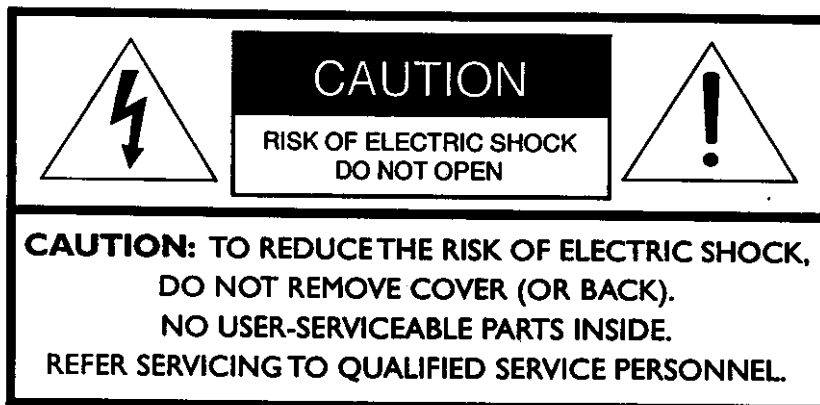
- ◆ Self Diagnostic System
- ◆ Program Conflict Warning
- ◆ S-VHS Record/Playback
- ◆ VHS Hi-Fi audio record/playback
- ◆ VCR Plus+® GOLD with cable converter control (C3) and ALLSET™
- ◆ Satellite Receiver Control

### FAST:

- ◆ Alfa 400 Precision High Speed Mechanism with 400x rewind/fast forward speed

### EASY:

- ◆ View Point™ Menu Operating System
- ◆ VCR Plus+® easy programming system
- ◆ OTR2 Advanced One Touch Recording with delayed start time
- ◆ Auto Clock Set
- ◆ Multi-brand remote control with jog shuttle



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 product.

### IMPORTANT:

RECORDING OF COPYRIGHTED TELEVISION PROGRAMS MAY VIOLATE COPYRIGHT LAW.

### WARNING:

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

### CAUTION:

TO PREVENT ELECTRIC SHOCK HAZARD, DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

### NOTE TO CATV SYSTEM INSTALLER:

THIS REMINDER IS PROVIDED TO CALL THE CATV SYSTEM INSTALLER'S ATTENTION TO SECTION 820-40 OF THE NEC WHICH 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.



# IMPORTANT SAFEGUARDS

Please read all these instructions carefully regarding your VCR before you begin operating it. Follow all warnings and instructions marked on the VCR. Thank you.

## 1 Read Instructions

All the safety and operating instructions should be read before the product is operated.

## 2 Retain Instructions

The safety and operating instructions should be retained for future reference.

## 3 Heed Warnings

All warnings on the product and in the operating instructions should be adhered to.

## 4 Follow Instructions

All operating and use instructions should be followed.

## 5 Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

## 6 Attachments

Do not use attachments not recommended by the product manufacturer as they may cause hazards.

## 7 Water and Moisture

Do not use this product near water — for example, near a bath tub, wash bowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.

## 8 Accessories

Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

9 A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.



## 10 Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

## 11 Power Sources

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

## 12 Grounding or Polarization

This product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

## 13 Power-Cord Protection

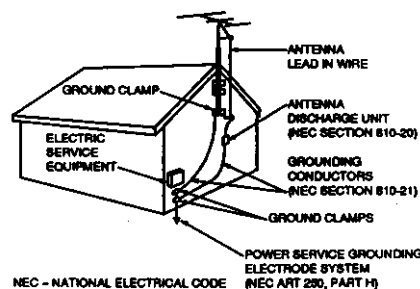
Power-supply cords should be routed so that they are not likely to be walked upon or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

## 14 Outdoor Antenna Grounding

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

Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard 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.

EXAMPLE OF ANTENNA GROUNDING



NEC - NATIONAL ELECTRICAL CODE

## 15 Lightning

For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

## 16 Power Lines

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 fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

### 17 Overloading

Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in fire risk or electric shock.

### 18 Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

### 19 Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

### 20 Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- (a) When the power-supply cord or plug is damaged.
- (b) If liquid has been spilled, or objects have fallen into the product.
- (c) If the product has been exposed to rain or water.

(d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.

(e) If the product has been dropped or damaged in any way.

(f) When the product exhibits a distinct change in performance – this indicates a need for service.

### 21 Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

### 22 Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

### 23 Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

### CONDENSATION

Leave the VCR on, without a tape in it, for 2 hours if the VCR has been exposed to sudden changes in temperature. Sudden temperature changes cause moisture to form on the metal parts inside the VCR. This moisture can cause the tape to stick and damage the head. Leaving the VCR on for a 2 hour period will dry the inside of the VCR.

### PROTECT THE POWER CORD

Do not damage the power cord. Damage to the power cord may cause a fire or shock hazard. When unplugging the power cord, please hold it by the plug and remove it carefully.

### DO NOT PLACE HEAVY OBJECTS ON THE RECORDER

Heavy objects placed on the recorder will cause damage.

### WHEN NOT IN USE

When you finish operating the recorder, always unload the cassette and turn OFF the VCR POWER.

### CARE OF THE VIDEO CASSETTE TAPES

- Avoid violent vibration or shock.
- Do not place in a location where strong magnetic fields exist (near a motor, transformer or magnet).
- Never place or store in direct sunlight.
- Avoid dusty places.
- Place the cassette in the cassette case and store vertically.
- Never store tape in a high humidity location.

### INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of these measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a different circuit than the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

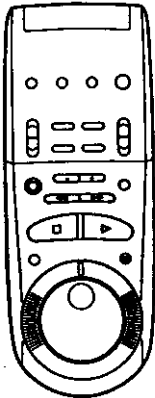
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. If necessary, consult the dealer or an experienced radio/TV technician for additional suggestions. You may find this booklet prepared by the Federal Communications Commission helpful: How to Identify and Resolve Radio-TV Interference Problems. This booklet is available from the US Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4.

# Hooking Up Your VCR

## Unpacking Your VCR

As you unpack your new VCR, please make sure the following items are included:

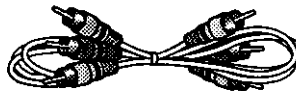
- Remote control



- 2 "AA" size batteries



- 1 Audio/Video cable



- 1 IR emitter



- Registration card



- 1 S-Video cable



- 1 Coaxial cable



### IMPORTANT

Never place any heavy objects on top of the VCR. Do not place the VCR on top of the television because of its instability.

## Choosing a Hookup

The connections shown in this book are general. Individual televisions, stereo systems and satellite receivers can vary from those shown here. The first diagrams show connections for common equipment. Then, if you are connecting equipment such as a satellite receiver or a Home Theater receiver, you will also use those diagrams after you have connected the common equipment.

### IMPORTANT

To maximize your system for its best performance, your dealer can help you customize these hookups and sell you any additional connection accessories that may be necessary to match your particular equipment and antennas.

- 1 Make a list of each piece of equipment that you want to hook up.
- 2 If you are connecting several pieces of equipment, you may be using more than one of these diagrams. Using your list, find EACH of the diagrams you will need to connect all of your equipment. For example, to hook up this VCR, a TV, a cable box, and a Home Theater receiver, you will use Cable System with Cable Box, and Connecting a Home Theater receiver.
- 3 If your TV has audio and video inputs, use the diagrams on page 6 in addition to the connections on the next page.

## Hooking Up Your VCR

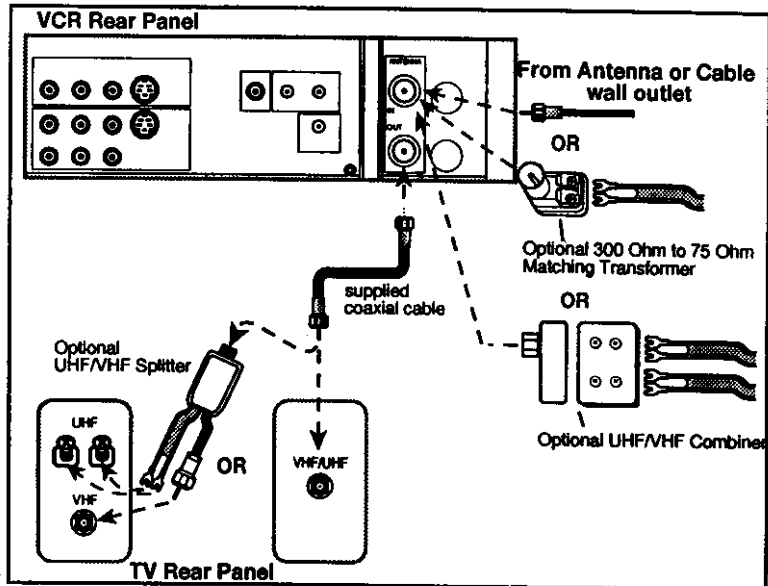
### IMPORTANT

You must use one of the connections shown on this page in order to record television or cable programs.

### Antenna or Cable System without Cable Box

#### Connecting Antenna or Cable

- 1 Connect antenna or cable from wall outlet to ANTENNA IN of the VCR.
- 2 Connect VCR ANTENNA OUT to the TV's Antenna jacks (varies by TV).
- 3 If your TV has audio video inputs, continue with the connections on the next page. If not, plug in power cords of VCR and TV.



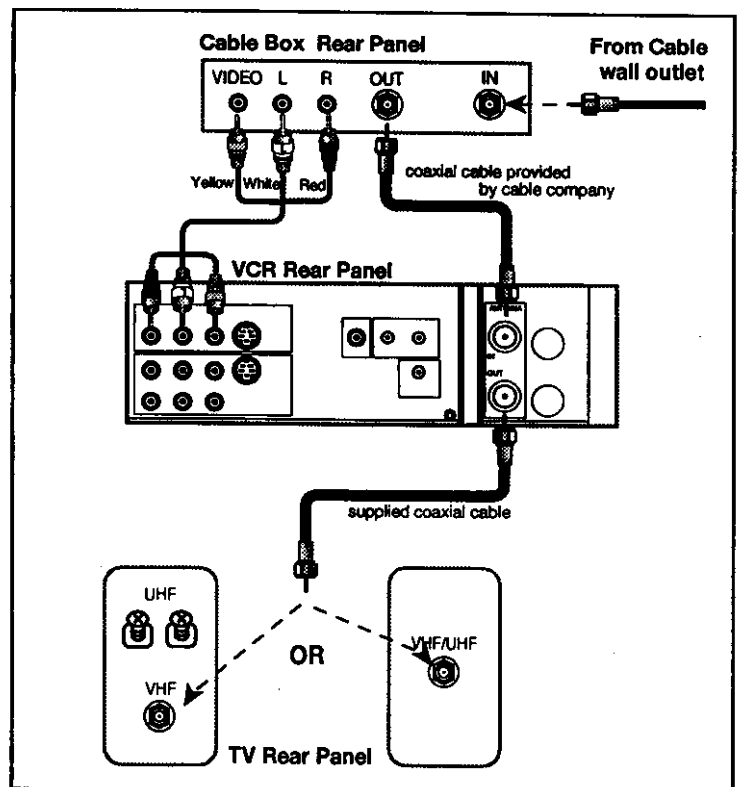
### Cable System with Cable Box

#### Connecting Cable and Cable box

- 1 Connect cable from wall outlet to CABLE IN on the cable box.
- 2 Connect OUT (or OUT TO TV) on the cable box to ANTENNA IN on the VCR.
- 3 Connect ANTENNA OUT on the VCR to the TV's antenna jacks (varies by TV).
- 4 If your TV has audio video inputs, continue with the connections on the next page. If not, plug in power cords of VCR, TV, and cable box.
- 5 See page 9 for IR Emitter connection.

If your cable box has audio and video outputs, follow the additional directions below. You may need to purchase additional sets of audio/video cables for this hookup.

- 6 Connect the red and white cable to the AUDIO IN R (right) and AUDIO IN L (left) on the VCR. Connect the other end to the cable box's AUDIO OUT RIGHT and AUDIO OUT LEFT.
- 7 Connect the yellow video cable to VIDEO IN on VCR. Connect the other end to VIDEO OUT on the cable box.



### IMPORTANT

Your TV Owner's Guide may have additional suggestions for antenna/cable hookups.

If your TV has more than one antenna jack, ask your Mitsubishi dealer for advice on additional accessories.

## Hooking Up Your VCR

### Connections to TV with Audio Video Inputs

Because you purchased a Hi-Fi VCR, you will want to take advantage of its superior sound capability and connect it to a stereo TV system with audio and video inputs. This connection also helps maintain the best picture quality.

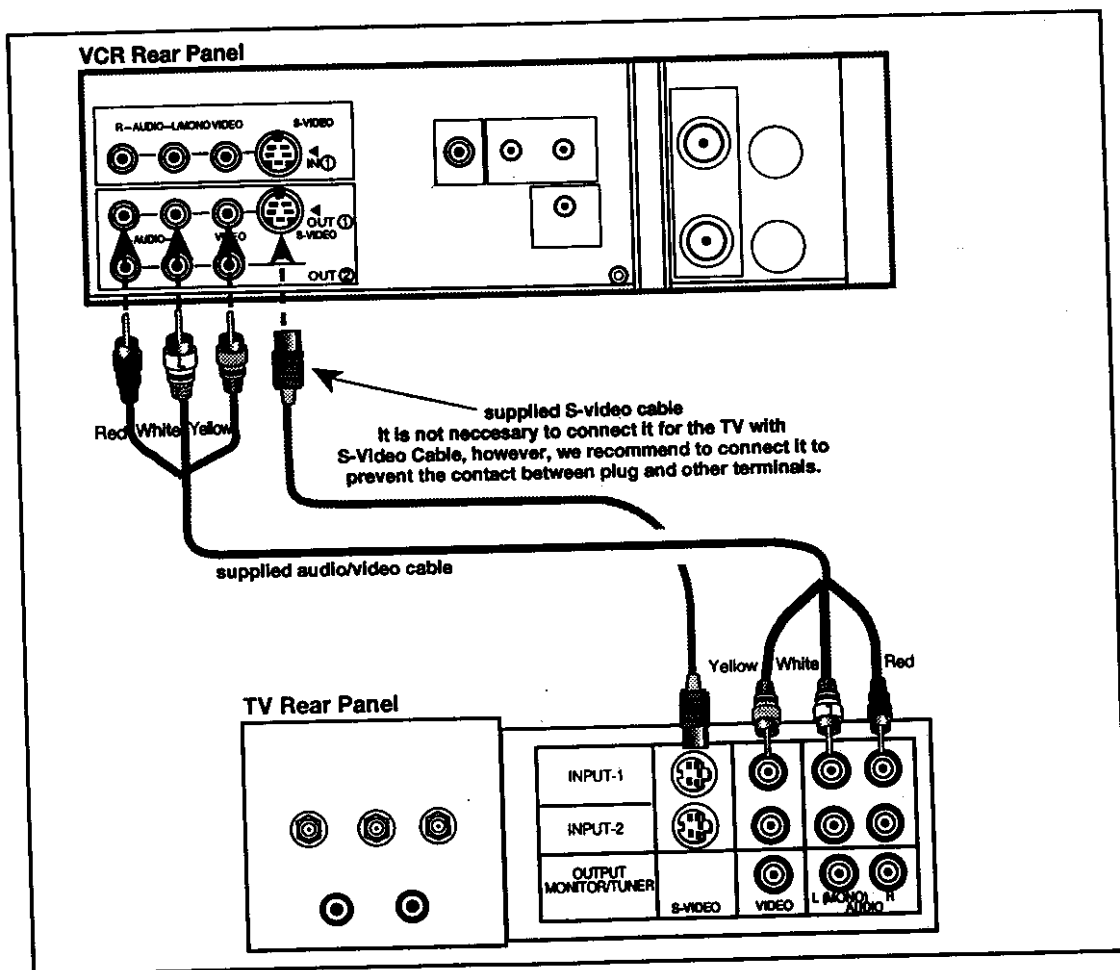
- 1 Connect the red and white audio cable to AUDIO OUT R (right) and AUDIO OUT L (left) on the VCR. Connect the other end to the TV's AUDIO IN RIGHT and AUDIO IN LEFT. Match the colors of the connectors to the cables.
- 2 Connect the yellow video cable to VIDEO OUT on the VCR. Connect the other end to VIDEO IN on the TV.
- 3 Set the RF Converter to OFF. See page 43 for instructions on this setting, which can be done at a later time.
- 4 To use S-video cable, connect it as shown. Then set the RF Converter to OFF.

#### IMPORTANT

Your TV Owner's Guide may have additional suggestions for audio video hookups.

To connect your VCR to a mono (non-stereo) TV, connect only the white AUDIO OUT L of the VCR and the white AUDIO INPUT of the TV. Since the TV is not stereo, you cannot take advantage of your VCR's Hi-Fi stereo sound.

If you have an older TV without audio video inputs, simply connect only the antenna or cable as shown on the previous page.





## Hooking Up Your VCR

### Connections to Satellite Receiver

If you have an RCA DSS®, Sony DSS®, Toshiba DSS®, Panasonic DSS® or Hughes DSS®, PRIMESTAR®, or DISH Network™ satellite system, you can connect the satellite receiver to your VCR and then set up the VCR to change the channels of the satellite receiver. This will allow you to program your VCR to make unattended recordings from several different satellite channels.

- 1 Connect the red and white audio cable to AUDIO OUT R and AUDIO OUT L on the satellite receiver. Connect the other end to the AUDIO IN R and AUDIO IN L on the back of the VCR. Match the colors of the connectors to the cables.
- 2 Connect the S-video cable to S-VIDEO OUTPUT on the satellite receiver. Connect the other end to the S-VIDEO IN on the back of the VCR.
- 3 See page 9 for IR Emitter connection.

**connecting both a satellite receiver and a cable box with audio video outputs**

- 1 Connect the satellite receiver to the audio video inputs on the back of the VCR as shown.
- 2 Connect the cable box to the audio video inputs on the front of the VCR.

#### IMPORTANT

You may need to purchase an audio video cable and an S-video cable for this hookup.

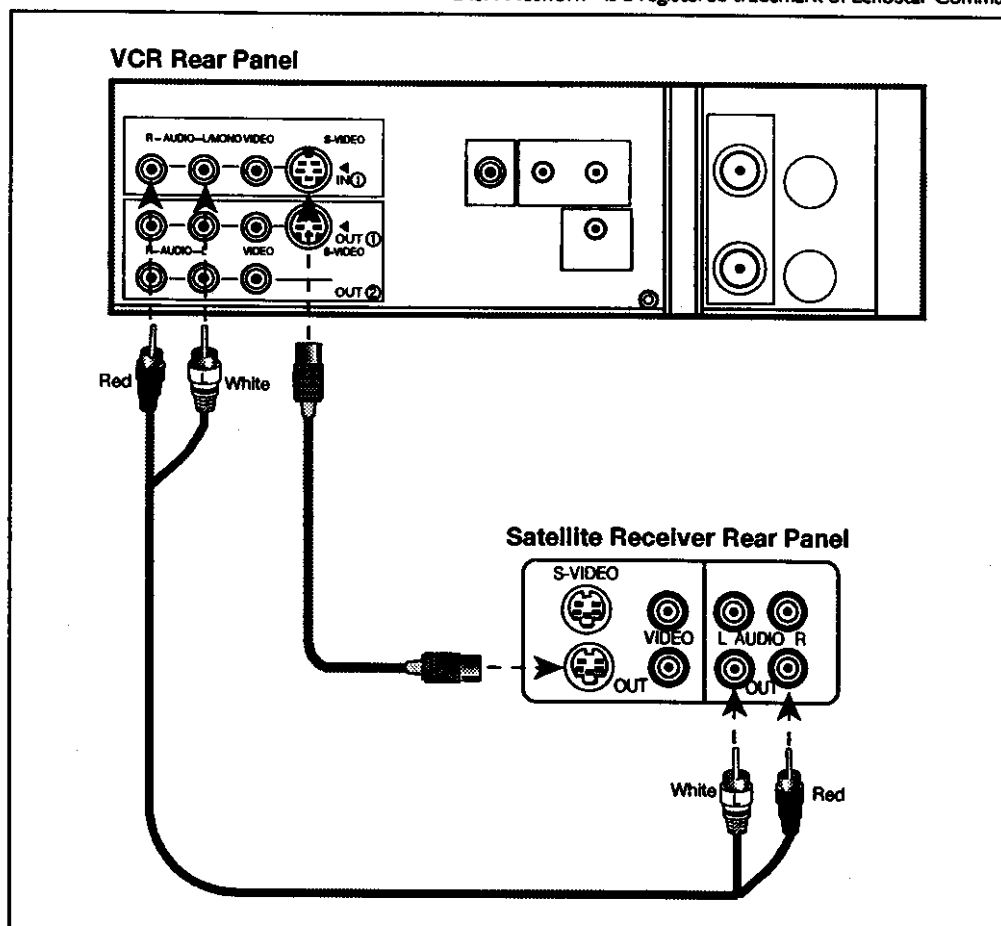
You will have to turn on your VCR to watch the video or hear the audio from the satellite receiver.

Refer to your Satellite Receiver Owner's Guide for Satellite dish to Satellite receiver connections, as well as other possible video connections to your TV.

DSS® is a registered trademark of DirecTV, Inc.

PRIMESTAR® is a registered servicemark of PRIMESTAR Partners LP.

DISH Network™ is a registered trademark of EchoStar Communications Corp.



## Hooking Up Your VCR

### Connections to Home Theater Receiver

You may wish to connect your VCR to a Home Theater Receiver so that you can take advantage of the Surround Sound audio recordings that are common with many movies. Home Theater Receivers often will control both the sound that is heard from the speakers and the picture shown on your TV. Below is the basic connection between your VCR and Home Theater Receiver. If you use this connection, you will not use **Connections to TV with Audio Video Inputs**.

- 1 Connect the red and white audio cables to AUDIO OUT R and AUDIO OUT L on the VCR. Connect the other end to the VCR I AUDIO INPUT R and AUDIO INPUT L on the Home Theater Receiver.
- 2 Connect an S-video cable to S-VIDEO OUT on the VCR. Connect the other end to the VCR I S-VIDEO INPUT on the Home Theater Receiver.

- 3 Connect an S-video cable to the MONITOR S-VIDEO OUTPUT of the Home Theater Receiver. Connect the other end to the S-VIDEO INPUT on the back of the TV.

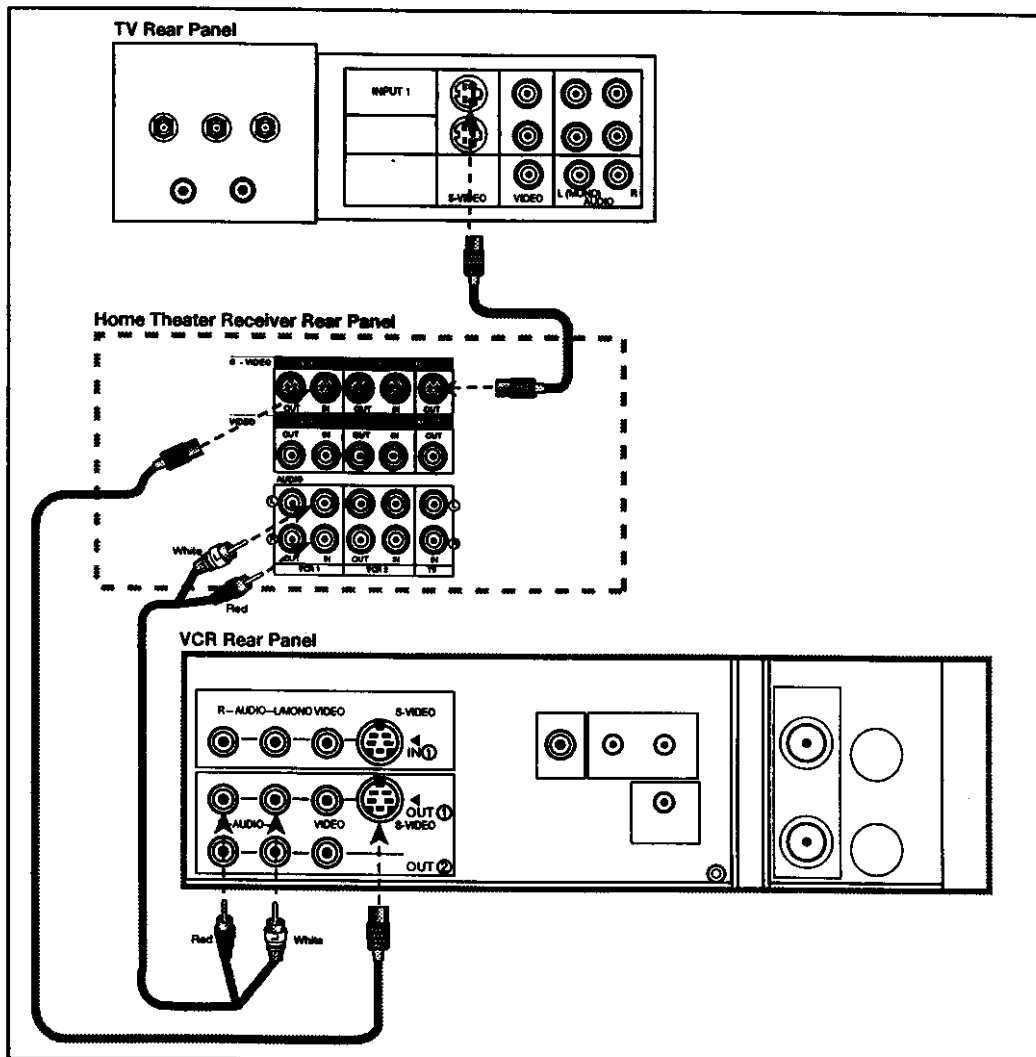
#### IMPORTANT

If either your Home Theater Receiver or TV does not have S-Video connections, use standard yellow video cables in step 2 and 3.

- 4 See your Home Theater Receiver Owner's Guide for information concerning additional hookups and operations.

#### IMPORTANT

You may need to purchase additional sets of audio video cables for this hookup.

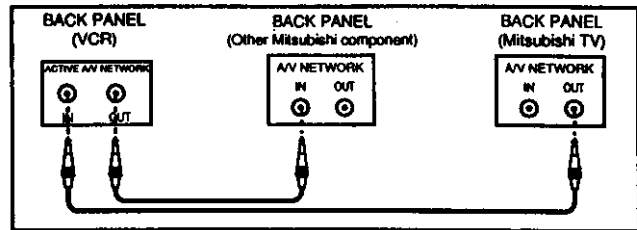


## Hooking Up Your VCR

### Connections to A/V Network

Some Mitsubishi TVs and VCRs have special input and output terminals called the A/V Network. This network "passes" remote control commands between Mitsubishi components. That is, when the A/V Network is connected, you can point your VCR remote control at the TV, and the TV will "pass" the commands onto the VCR.

- 1 You will need a cable with a "mini" jack at both ends. A mini jack is the kind you find on headphones for personal stereos. This cable may be included with your Mitsubishi TV. If not, you can purchase a cable with mini jacks at your Mitsubishi dealer or electronics store.
- 2 Connect ACTIVE A/V NETWORK OUT or A/V NETWORK OUT on the TV to ACTIVE A/V NETWORK IN on the VCR.
- 3 If you have another Mitsubishi component with A/V Network, connect another mini jack cable to ACTIVE A/V NETWORK OUT on the VCR, and connect the other end to (ACTIVE) A/V NETWORK IN on the other component.



#### IMPORTANT

For Active A/V Network to work properly, you must make these connections shown and your VCR must be connected to EXT-1 or INPUT-1 of your Mitsubishi TV.

Never connect your A/V Network in a loop, as shown below.



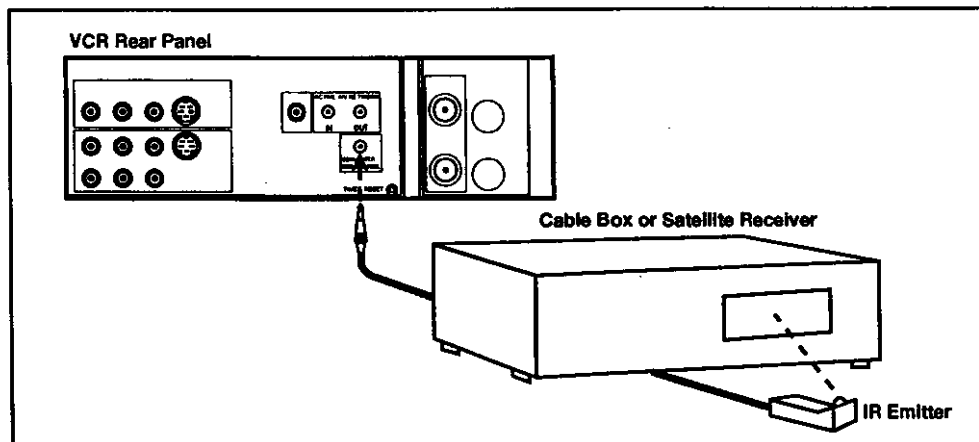
### Connections to IR Emitter

Your VCR will be able to send remote control channel changing commands to your compatible cable box or satellite receiver. The VCR uses the IR Emitter to send these commands in the same way as when you use the hand held remote that came with the cable box or receiver.

- 1 Connect the supplied IR Emitter to CONVERTER BOX CONTROL on back of the VCR.
- 2 Run the wire under or along side the cable box or satellite receiver and place the end in front of the cable box and/or satellite receiver.
- 3 Use the double stick tape to secure the end of the emitter in the proper place.

#### IMPORTANT

If you connect both a cable box and satellite receiver, place the IR Emitter to face the remote control window (sensor) in the front of both. If you cannot place it this way, you can purchase a dual IR Emitter from your Mitsubishi dealer.



# Playback

## Setting Up Your VCR

The first thing you need to do is set up your VCR to see the picture coming from the VCR. It's important to take a few minutes to set up your VCR correctly before you try to use it. Based on your type of TV, choose one of the following:

### TV with Audio/Video Inputs

- 1 Turn on your TV and switch it to the correct external input. For most Mitsubishi TVs, this means pressing the TV's INPUT button until you see the words **Ext-1** or **Input-1** on the screen. If you do not have a Mitsubishi TV, please refer to your TV Owner's Guide for this procedure.
- 2 Turn the VCR on by pressing **POWER**.
- 3 You are now watching the VCR's picture. To go back to viewing the picture from the TV, press the TV's INPUT button to go back to the previous ANTENNA input position.
- 4 Later, you should turn the RF converter **OFF** by following instructions on page 43.

### TV without Audio/Video Inputs

If your TV does not have separate audio/video inputs, then your VCR will need to convert the VCR's picture to channel 3 or 4. This is called the video channel. The factory has already selected channel 3; however, if it is a broadcast channel in your area, then you will need to change this to channel 4. To make this change:

#### set up

- 1 To choose channel 4; with VCR power **OFF**, turn the front panel jog dial clockwise while holding down the SP/EP button on the front panel. **Ant ch4** will display on the front panel and the VCR will send signals on channel 4.

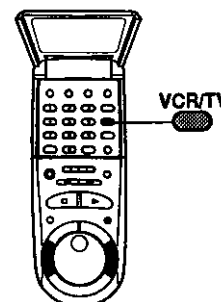
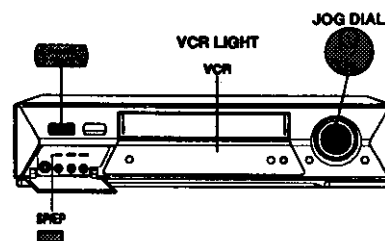
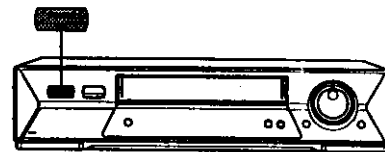
If needed, to return to channel 3; with the VCR turned **OFF**, turn the jog dial counter-clockwise while holding down the SP/EP button on the front panel. **Ant ch3** will display.

- 2 Turn the VCR on by pressing **POWER**.

#### operating

- 3 Check to see if the VCR light on the front panel display is lit. If it is not, press **VCR/TV** on the remote control until the VCR light appears on the front panel. This light must be on when you watch a video tape or use the VCR menus. The VCR light will turn on automatically when you play a tape or use the VCR menus when the RF converter is set to **ON**. See page 43.
- 4 Turn on the TV and change the TV to the video channel (3 or 4). You are now watching the VCR's picture.

To watch a channel that is different than the channel your VCR is recording, the VCR light must be off. The **VCR/TV** button turns this light on and off.

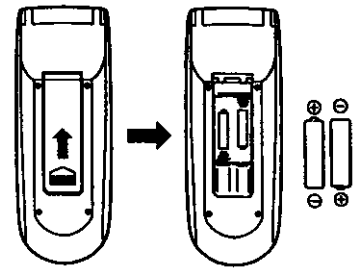


## Playback

### Operating Your Remote Control

#### Installing the Batteries

- 1 To remove the back cover, press the ridged area gently, then push the cover in the direction of the arrow and lift.
- 2 Load the batteries, making sure the polarities (+) and (-) are correct. This is marked inside the battery compartment.

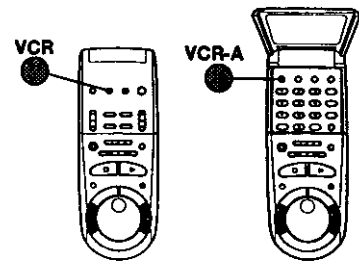


Next, you need to tell the remote control to operate the VCR, not the TV or some other component.

#### Operating the VCR with the Remote Control

The HS-U795 has two VCR remote control operational settings: VCR-A and VCR-B. The HS-U795 is pre-set to VCR-A setting. See page 47 for information about VCR operational setting.

- 1 Press the VCR button on the remote control. This "tells" the remote that you want to control the VCR.
- 2 Press the VCR-A button under the flip cover on the remote control. Now your remote is ready to operate your HS-U795.



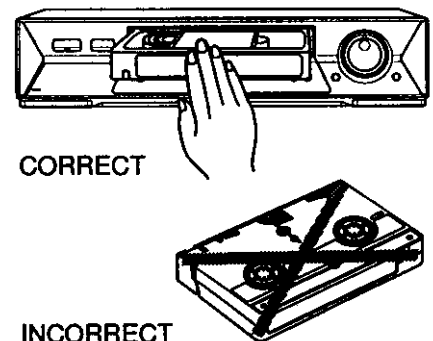
### Loading a Tape

Tapes can be loaded into your VCR as long as the VCR is plugged in. Even when the VCR POWER is off, loading a tape will automatically turn the VCR on. Use only tapes that have a **VHS** or **SVHS** label.

- 1 Hold the tape so that the long narrow edge with the contents label faces you. The other edge is hinged and should face the VCR. The plastic window that shows the videotape should face up.
- 2 Gently insert the tape evenly into the cassette slot until the VCR automatically takes it in.

If the VCR will not automatically take the tape in, press EJECT and try again.

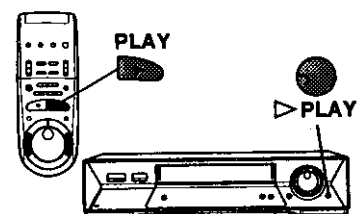
Your VCR will eject the tape if you improperly load it. If the VCR ejects the tape; remove the tape, check to see that the contents label is facing you, that the geared tape reels are facing down, wait a few seconds, and try again.



### Playing a Tape

- 1 Press PLAY on the front panel or the remote control.

The VCR will automatically play the tape at the correct speed. When the VCR reaches the end of the tape, it will automatically rewind the tape and stop. You can stop playing by pressing STOP.



## Playback

### Using Basic Playback Controls

#### Rewinding a tape

While the tape is stopped, press **REW** on the remote control or turn the shuttle ring on the front panel to the left.

#### Fast forwarding a tape

While the tape is stopped, press **FF** on the remote control or turn the shuttle ring on the front panel to the right.

#### Speed Search with picture

While the tape is playing press **FF** on the remote control or turn the shuttle ring on the front panel to the right for forward speed search with picture, or press **REW** on the remote control or turn the shuttle ring on the front panel to the left for reverse speed search. See page 40 for additional information on searching techniques.

#### Pausing a tape

Press **PAUSE** on the remote control or on the front panel to freeze the picture on the screen.

Press **PAUSE** a second time to return to normal play.

If you leave the VCR in pause for more than 5 minutes, the VCR will automatically stop to prevent damage to the tape.

#### Controlling Vibration During Still Frame

If the picture vibrates during still frame, turn the jog dial while holding down **SP/EP** on the front panel until the picture is steady.

### Unloading a Tape

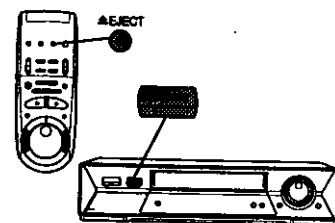
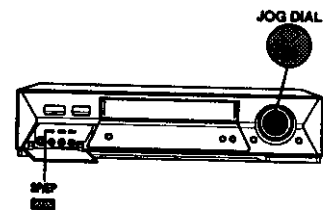
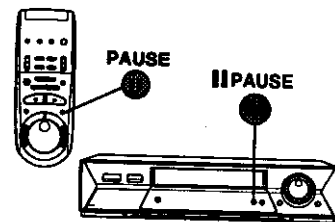
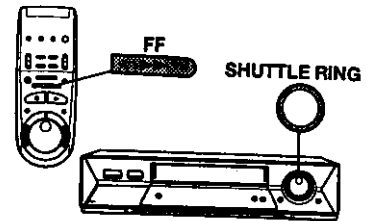
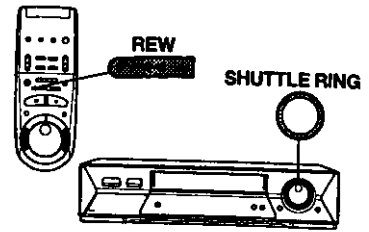
- 1 Press **EJECT** on the front of the VCR or on the remote control. If the VCR **POWER** is off, the VCR will turn on, eject the tape, then turn off.
- 2 Remove the tape.

#### Using repaired tapes

We recommend that you take any broken or torn tapes to a professional for repair. If you repair a torn tape with improper materials, you could damage your VCR when you play the tape.

#### Head cleaning

Your VCR automatically cleans the head and the drum of the VCR whenever you load a tape. If you see "noise" or snow when playing a tape, eject the tape, re-load the tape, then wait 3 or 4 seconds. Repeat this process several times to improve the picture.

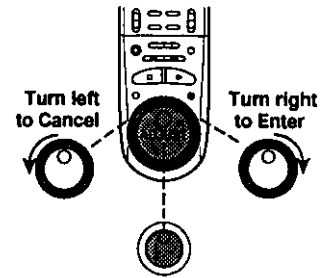


# Setting Up Your VCR

Your VCR comes with Mitsubishi's exclusive **ViewPoint®** on-screen operating system. This system has been developed to simplify the operation of your VCR with clear, understandable language and design.

Before your VCR can receive television channels or you can program your VCR to record, you need to program all of the channels you can receive into your VCR and set the clock. Additionally, if you are using a satellite receiver, you need to do a first time setup to memorizing satellite channels. Fortunately, your VCR makes this an easy process with our menu system.

When using the on-screen menus, use the JOG/SHUTTLE control on the remote control, not the front panel. Use the ADJUST dial to move the highlight bar up or down and to change the setting of selected features. Turn the SHUTTLE ring to the right to enter a selection or adjustment (the ENTER button may also be used for this). Turn the shuttle ring to the left to cancel or clear a setting (the CANCEL button may also be used for this).



## Using AllSet™ to Set Up Your VCR Automatically

AllSet will automatically set the clock, memorize all of the television stations available to you and set the VCR Plus+® guide channel numbers.


You need to manually set the guide channel numbers for the channels from a satellite receiver.

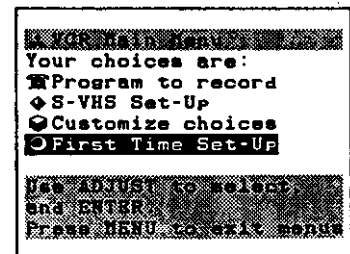
*If your local cable company scrambles some or all stations, and/or requires you to use a cable box, then your ability to program channels would normally be limited. The cable box receives all of your channels, then sends only one to your TV and your VCR, usually on channel 3 or 4.*



*If you are required to use a cable box, you should choose Cable box only option in step 4 on the next page and turn the cable box on. Your HS-U795 will use its Converter Box Control technology to change the channels on the cable box. Make sure you have properly placed the IR Emitter (see page 9).*

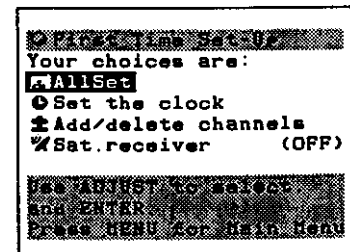
*If your cable box or cable system seems incompatible with your new VCR, call your cable company. They may be able to provide solutions to your problems.*

A special note to cable box subscribers

- 1 Make sure you are viewing the picture coming from your VCR. Press MENU on the remote control. VCR Main Menu comes up. If First Time Set-Up is not highlighted, use the ADJUST dial  on the remote to highlight it.



- 2 Turn the shuttle ring  on the remote control to the right. First Time Set-Up menu will appear. AllSet will be highlighted. Turn .




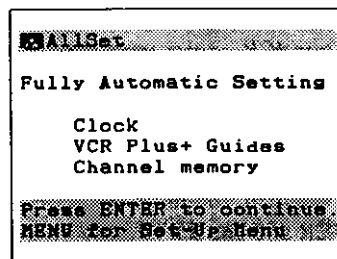
### IMPORTANT


If you are recording or playing back a tape, Not available will flash and an error message will appear. To correct this, stop the tape. Then turn

 again.


## Setting up your VCR

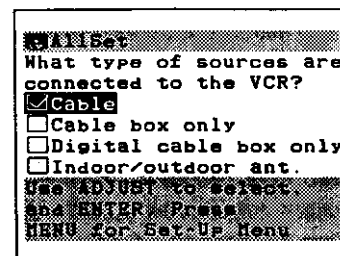
3 You will see the AllSet explanation screen. Turn 



4 You will see the menu for sources connected to the VCR. Using the list below as a reference, turn  to select the kind of antenna you connected.

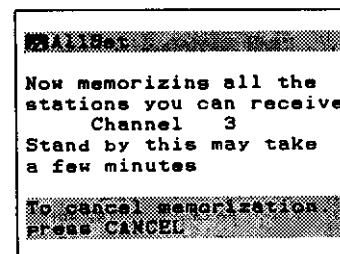
- **Cable** if you have standard cable service without a cable box, use a cable box with an A/B switch, or your cable box is not remote controllable
- **Cable box only** if you use a standard cable box
- **Digital cable box only** if you use a digital cable box
- **Indoor/outdoor ant** if you use rabbit ears type or roof mounted type antennas

After you have selected, turn 




### If you choose Cable or Indoor/outdoor ant

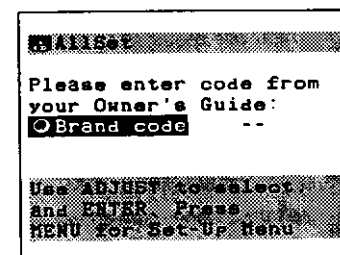
An on-screen message and the front panel display of your VCR will show you that the VCR is memorizing the stations you can receive. After the VCR has programmed all the channels, you will see the screen for entering the zip code. Go to step 10 in this section.



### If you choose Cable box only or Digital cable box only

You need to tell the VCR which manufacturer makes your cable box or digital cable box, and on which channel the cable box or digital cable box sends a signal.

- 5 Brand code will be highlighted. Turn  or press the number buttons to select the manufacturer's code number for your cable box or digital cable box. The codes are listed on the next page.
- 6 To determine if the Brand code is correct, press CHANNEL on the remote. The channel number on the front panel display should change. Then your cable box or digital cable box should change to the exact same number a moment after it appears on your VCR.



If your cable box or digital cable box does not change channels at all, or does not show the exact same number, try the next Brand code, if another is listed for your type of cable box or digital cable box. Also make sure the IR emitter bulb faces the IR window on the cable box.

If no code number is listed for your cable box, or if none of the listed numbers work, try each code from 01 to 94. (For the digital cable box, try each code from 01 to 05.)

If your cable box or digital cable box cannot be operated by a remote control (if it has a mechanical dial or slide), then your VCR will not be able to change channels on the cable box.

If your cable box will not respond to any of the codes, your VCR cannot change channels on the cable box. You will need to change channels yourself, using the cable box's remote control. You should re-program your VCR, choosing Cable in step 4. When programming to record, you will need to leave your cable box ON and tuned to the channel you wish to record.



# Setting up your VCR

## Cable Box Brand Code

Manufacturer	Code Number	Manufacturer	Code Number	Manufacturer	Code Number
ABC	1, 2, 11	Magnavox	59, 61, 67	Sheritech	57
Archer	29, 58, 65	Movietime	30, 31, 51, 54	SL Marx	5, 14, 29
Century	29, 65	NSC	20, 51, 52	Sprucer	14, 21, 25
Citizen	29, 65	OAK	27, 39, 40, 49, 50, 61	Stargate	5, 14, 29, 65
Diamond	54, 58	Panasonic	14, 21, 25	Sylvania	66
Eagle	17, 18, 19, 61, 62, 63	Paragon	6, 7	Teknika	36
Eastern	68	Pioneer	14, 15, 16, 92, 93, 94	Texscan	53, 66
G C Electronic	29, 65	Philips	26, 61, 62, 63, 64	Tocom	1,2,3,4,5,41,42,43,44,69,91
Gemini	5, 60	RCA	14, 21, 25	Toshiba	32, 33, 34
General Electric	35	Realistic	37, 38	Unika	48
General Instrument	1,2,3,4,5,41,42,43,44,69,91	Regal	45, 48	United Cable	2
Hamlin	22, 23, 45, 46, 47	Regency	68	Universal	30, 31, 54, 65
Hitachi	24	Rembrandt	55, 56	Videoway	6, 7
Jerrold	1,2,3,4,5,41,42,43,44,69,91	Samsung	5, 14, 21, 25, 29	Viewstar	17, 18, 19, 61, 62, 63
Macom	28	Scientific Atlanta	10, 11, 12, 13	Zenith	6, 7, 8, 9

## Digital Cable Box Brand Code

Manufacturer	Code Number
GI	1, 2

- When the Brand code is correct, turn . The screen will add a **Channel** selection.
- Use to select the channel on which your cable box or digital cable box sends a signal to the VCR (normally channel 3 or 4). If you connected your cable box or digital cable box with audio/video cables, use INPUT to select L1 (if you used the rear panel jacks), or L2 (if you used the front panel jacks).
- After entering the channel number, turn . The VCR will begin memorizing the available channels. During this process your TV screen, the front panel display, and your cable box or digital cable box should all display each channel number one by one.
- When the VCR is finished memorizing, you will see the screen for entering your zip code. Use the number keys to enter your zip code. For example, if your zip code is 92618, press 9-2-6-1-8.

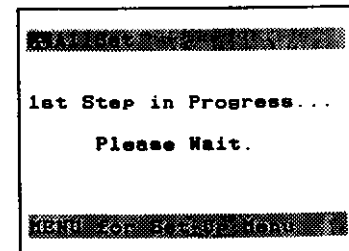
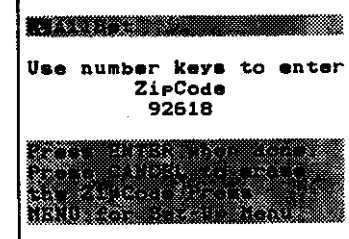
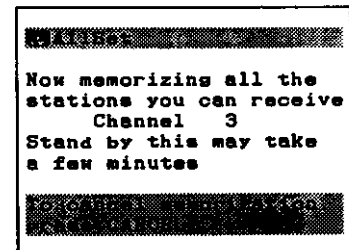
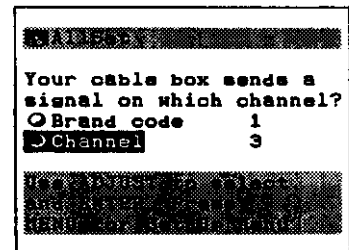
If you enter a number incorrectly, turn or press CANCEL.

When you have finished entering the zip code, turn .

The VCR will begin to search for a channel that carries a time signal to set the clock. If the VCR can find the channel, it will set the clock. You can see if the clock has been set in the display window on the VCR.

The clock setting set up time varies, it may take up to 30 minutes as the VCR searches one by one for a channel that carries a time signal.

If the VCR will not set the clock (the current time display still shows --:--), see **Setting the Clock** on page 20.



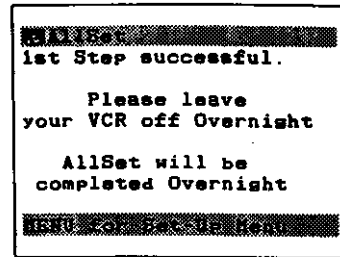
## Setting up your VCR

- 11 Once the VCR has set the clock, it shows the message indicating that the first step is completed. Then, press **POWER** to turn off the VCR and leave the VCR off for the night. The full set-up will be completed overnight (from about Midnight to 7:00AM).

During this time, the VCR will search for a channel that carries data to set the VCR Plus+® guide channel numbers for your area and then check the guide channel number against the channel number you receive in your home and select the correct lineup automatically.

### IMPORTANT

If you use a cable box or digital cable box, you will need to leave your cable box or digital cable box ON at all times.

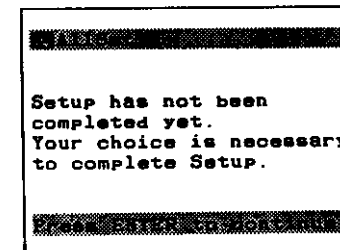
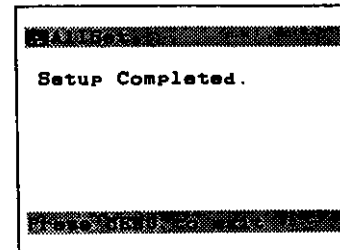


- 12 Turn on the VCR the next day. When you set your TV's input to view the VCR picture, you will see one of the following messages:
- Setup Completed
  - Press **MENU** to see the message of AllSet
  - Setup failed

**Setup Completed** means AllSet has successfully completed the setup procedure and set the VCR Plus+® system for recording. Press **MENU** to clear the screen.

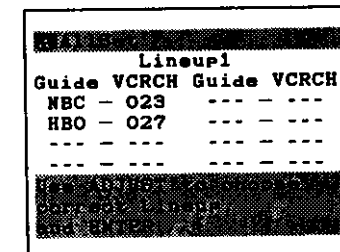
**Press MENU to see the message of AllSet** means that you need to perform one more operation before AllSet can complete the setup procedure. Press **MENU** to see the full message as shown here.

This message is displayed when there is more than one cable company servicing your zip code area. In these situations, there will be more than one channel lineup and your VCR may not be able to identify which is the correct lineup for your home. To select the correct channel lineup:

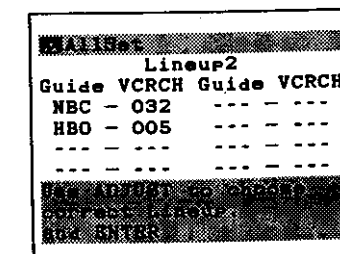


- 1 Turn . You will see the first lineup screen, Lineup1, which will show selected key stations.
  - **Guide** column shows the selected stations' call letters or network name.
  - **VCRCH** column shows the channel numbers used for the selected stations by one of the local cable companies.

Note: As the VCR's memory is limited, the Guide column may not display call letters completely.




- 2 Turn to cycle through the other possible lineups, Lineup2, Lineup3 and so forth, until you find the lineup that matches your cable company.
- 3 Turn . The screen will instruct you to turn the VCR off so that AllSet can complete the setup overnight. Leave the VCR turned off overnight and check it the next morning for the **Setup Completed** display.

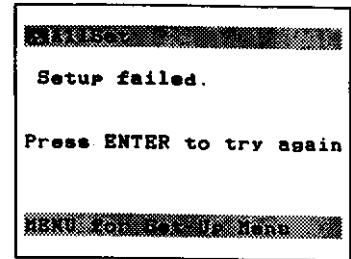


If the correct lineup is not displayed or you see **Setup failed**, the VCR cannot set up the VCR Plus+® guide channel numbers automatically. Set them manually when you program your VCR to record with VCR Plus+® system. (See page 32.)

## Setting up your VCR

**Setup failed** means an error has prevented AllSet from properly setting up the VCR Plus+® Guide channel numbers. This is normally caused by one of the following reasons:

- You entered an invalid zip code for your area. Turn  to return to the zip code screen and re-enter the correct zip code. Try the setup again and do not turn on the VCR until after 7:00 am the next day.
- You entered a new zip code that AllSet is not ready to use. Turn the shuttle ring to the right to return to the zip code screen and re-enter your old zip code. Try the setup again and do not turn on the VCR until after 7:00 am the next day.
- You turned on the VCR and interrupted the AllSet procedure before it was complete. AllSet completes the setup normally between midnight and 7:00 am. Try the setup again and do not turn on the VCR until after 7:00 am the next day.
- AllSet information is not broadcast in your area. You will need to set the VCR Plus+® Guide channel manually when you program your VCR to record with VCR Plus+® system.



### IMPORTANT

Automatic channel programming using AllSet may include vacant channels if there are stray signals or noise on those channels. If this occurs, you can manually delete the channels using the procedure in the section **Adding and deleting channels**.





You do not need to perform this set-up again unless your cable company changes their channel lineup, or you move the VCR to a new address.

After a power failure, if you have set Clock set within the Set the clock menu to AUTO, then AllSet will automatically set the clock again.

Once the VCR has completed the AllSet set-up, it can automatically set the clock, including your time zone and daylight saving time. In order for the auto clock function to work, the Clock set within the Set the clock menu must be set to AUTO. Follow ALL the steps in **Using the auto clock function**.

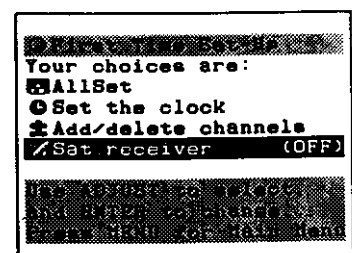
## Satellite Receiver Control

If you are using a satellite receiver, you can set your VCR to change channels on the satellite receiver.

- 1 Make sure you are viewing the picture coming from your VCR. Press MENU on the remote control. VCR Main Menu appears.
- 2 Turn  on the remote control to select First Time Set-Up. Turn .
- 3 You will see the First Time Set-Up menu. Turn  to select Sat receiver.  
Turn .

### IMPORTANT

You cannot select Sat receiver if you select Digital cable box only in step 4 of AllSet (on page 14).



## Setting up your VCR





- 4 Use  to select the correct code for your satellite receiver.

Manufacturer	Code
RCA or GE	1
PRIMESTAR®	2
Sony	3
DISH Network	4
Toshiba	5
Panasonic	6
Hughes	7
none	OFF


- 5 After you have selected, press MENU twice to exit the menus.

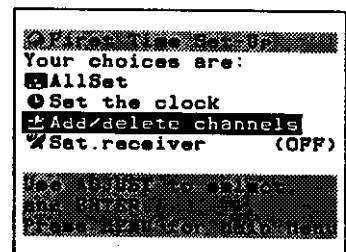
## Adding and Deleting Channels




If necessary, you can manually add or delete channels after you have completed the automatic channel programming by using AllSet. You cannot do this for channels coming from a satellite receiver.

- 1 Make sure that video mute is ON. See page 43.
- 2 Press MENU on the remote control. VCR Main Menu appears.
- 3 Turn  on the remote control to select First Time Set-Up. Turn .
- 4 You will see the First Time Set-Up menu. Turn  to select Add/delete channels. Turn .

### IMPORTANT

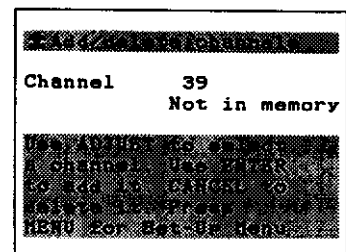
If you are recording, playing back a tape, or watching a satellite receiver channel, then Not available will flash on-screen. To correct this, stop the tape or switch the VCR to a local channel. Then turn  again.



- 5 You will see the screen for adding or deleting channels. Use  to select the channel that you want to add or delete. Press ENTER or turn  to add the channel; press CANCEL or turn  to delete it.
- 6 When you are finished adding or deleting channels, press MENU three times to exit the menus.

### IMPORTANT

If you use AllSet to memorize channels again, you will lose all of the manual changes you made. All of the channels you deleted will be added; all of the channels you added will be deleted. If your cable box receives only one or two digit channels, you cannot add a three-digit channel.



## Setting up your VCR

### Selecting a Channel

Now that you have programmed channels, and added or deleted some, you will want to be able to select channels. If you have not yet programmed channels using AllSet, see page 13. (If you selected digital cable box, you cannot select any satellite channels.)

Antenna/Cable selections

indoor/outdoor antenna  
cable antenna without box  
cable box only  
digital cable box

Your VCR can receive

VHF/UHF channels 2-69  
cable channels 1-125  
cable box channels 0-99  
digital cable box channels 0-999

Satellite Receiver selections

Sony, RCA, GE, Toshiba,  
Panasonic, Hughes, DISH Network™

Your VCR can receive

any channel from 100-999 provided  
by your satellite service  
(cable channels 100-125 cannot be  
selected)

Satellite Receiver selections

PRIMESTAR®

Your VCR can receive

any channel from 1-999 provided  
by your satellite service

If you try to select a channel number that the VCR cannot receive, the VCR will not change channels.

#### selecting antenna, cable or digital cable channels sequentially

Press CHANNEL on the remote control or turn the jog dial on the VCR front panel. This will cycle through the channels in sequential numerical order.

When you select the digital cable channels from 100 to 999, holding down the CHANNEL on the remote will advance the channels in 10 channel increments.

#### selecting antenna, cable or digital cable channels directly

Use the number buttons on the remote control. For example, to choose channel 23, press 2-3. If you select digital cable channels, you can select the three digit channels directly by using the number buttons. For example, to choose digital cable channel 157, press the 1-5-7.

To select a single digit channel, such as channel 5; press 0-5. You can also press 5, then press ENTER.

#### selecting satellite channels sequentially

Press CHANNEL on the remote or turn the jog dial on the VCR front panel.

When pressing the up arrow or turning the jog dial to the right, the lowest satellite channel will follow the highest antenna or cable channel. When pressing the down arrow or turning the jog dial to the left, the highest satellite channel will follow the lowest antenna or cable channel. The other satellite channels will follow in numerical order.

Continuously holding down CHANNEL on the remote will advance the channels in 10 channel increments.

#### selecting satellite channels directly

For Sony, RCA, GE, Toshiba, Panasonic, Hughes and DISH Network; press the number buttons on the remote. For example, to go to channel 263, press 2-6-3.

For PRIMESTAR channels, press INPUT until the channel number with the PRIMESTAR light (◆) appears on the front panel display. Then press the number buttons on the remote.

For one or two digit channel numbers, press the number buttons, then press ENTER. For example, to go to channel 29, press 2-9-ENTER.

## Setting up your VCR





### Setting the Clock


If your clock is set correctly, skip this section.

If your VCR cannot set the clock automatically in the AllSet™ procedure, you have to set the clock using either **Setting the auto clock** or **Setting the clock manually**.

#### Setting the auto clock

Your VCR can set the clock automatically by picking up a time signal which some TV and cable channels transmit with their broadcasts. Most PBS stations send this signal; however, this function works only if a channel in your area is broadcasting a time signal. If you don't receive this signal, set the clock manually.

- 1 Press MENU on the remote control. VCR Main Menu will appear.
- 2 Turn  to select First Time Set-Up. Turn . The First Time Set-Up menu will appear. Turn  to select Set the clock. Turn .

- 3 You will see the Set the clock menu. Clock set will be highlighted. Turn  to select AUTO.
- 4 Turn the VCR off to activate the auto clock setting function.

The VCR will search for a channel that carries a time signal, then set your time zone and daylight saving time. If there are only a few channels in your area that carry time signals, it may take about 30 minutes to complete. If you turn the VCR on before the correct time displays, the auto clock setting will be canceled. See if the clock has been set on the front panel display on the VCR.

If the VCR displays the wrong time, the time zone setting may not be correct. To adjust this, follow the steps in **if the VCR displays the wrong time**.

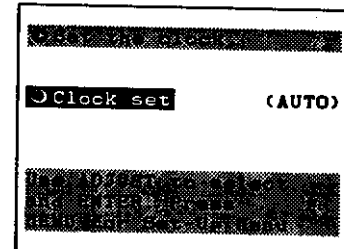
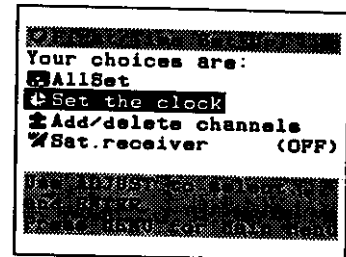
#### IMPORTANT

When you memorized channels, if you chose **Cable box only** or **Digital cable box only**, make sure you leave the cable box or digital cable box on. At 3:00 am, when the VCR power is off, the VCR will begin to automatically change channels on the cable box, one by one, to set the clock. At this time you cannot use the cable box.

If you want to use the cable box at 3:00 am, turn on the VCR or set the Clock set of the Set the clock menu to MANUAL. In both cases, auto clock function will be canceled.







When you memorized channels, if you chose **Cable or Indoor/ outdoor ant**, the VCR will set the clock as soon as you turn off the VCR, and at 3:00 am.

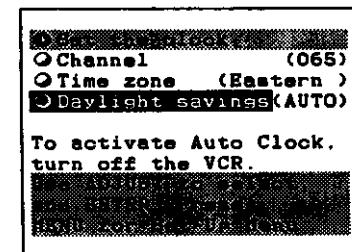
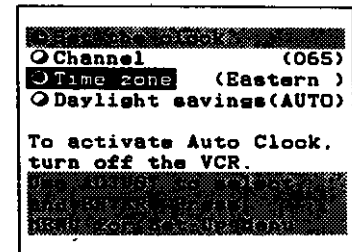
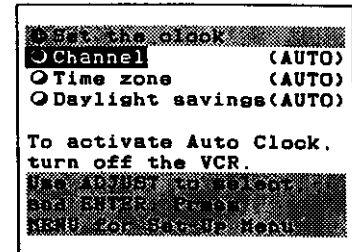
After a power failure, the VCR will automatically set the clock again. (If you have set the Clock set setting of the Set the clock menu to MANUAL, the auto clock function will not work.)



## Setting up your VCR









### If the VCR displays the wrong time

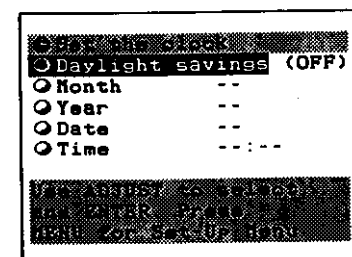
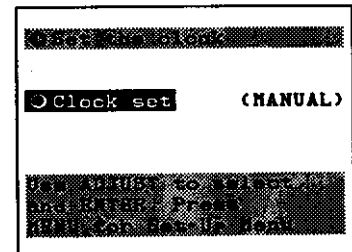
- 1 Follow the procedure on the previous page to step 3. Then turn .
- 2 You will see the Set the clock menu. Channel will be highlighted. If you know the channel that carries a time signal, turn  to enter the channel. Most PBS stations broadcast a time signal. For fastest response, enter your local PBS station. If you don't know it, leave the channel setting at AUTO. Turn .
- 3 Time zone will be highlighted. Turn  to select the time zone of your area. Available time zones are: Atlantic, Eastern, Central, Mountain, Pacific, Alaska, and Hawaii. Turn .
- 4 Daylight savings will be highlighted. Turn  to select AUTO, ON or OFF. If you follow daylight saving time, select ON. If not, select OFF. If you select AUTO, the VCR automatically sets the daylight saving time.
- 5 To activate the auto clock function, turn off the VCR.



### Setting the clock manually

Skip this section if your VCR has set the clock correctly using AllSet.

- 1 Press MENU on the remote control. You will see the VCR Main Menu.
- 2 Turn  to select First Time Set-Up. Turn . First Time Set-Up menu will appear. Turn  to select Set the clock. Turn .
- 3 You will see the Set the clock menu. Clock set will be highlighted. Turn  to select MANUAL. Turn .
- 4 Daylight savings will be highlighted. Turn  to select ON or OFF. If you are currently following daylight savings, select ON. Otherwise, select OFF. Turn .



## Setting up your VCR

- 5 Turn until the correct month appears on screen. Turn .
- 6 Turn to set the current year. Turn .
- 7 Turn to set the date. Turn .
- 8 The hour numbers and the am/pm indicator will be blinking. Turn to set the hour and am/pm at the same time. Turning the dial *right* moves the clock *forward*; turning the dial *left* moves the clock *backward*. Turn .
- 9 Turn to set the minutes. When you have set the correct time, turn . **First Time Set-Up** menu will appear, and the clock will start running.
- 10 Press MENU twice to turn off the menus.

You can adjust the daylight saving time manually. When Daylight savings is highlighted, turn to select ON or OFF.

If you select ON, the VCR will set the clock forward one hour.

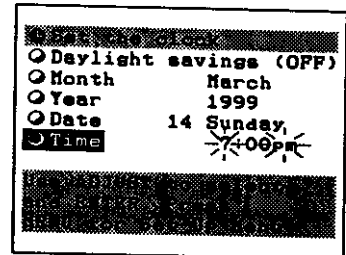
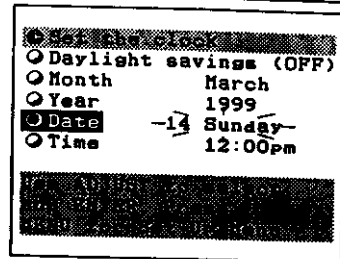
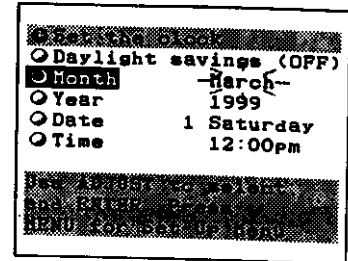
If you select OFF, the VCR will set the clock back one hour.

### IMPORTANT

Any time you adjust this setting, check your programmed recordings to be sure they are set to the correct times.

If you have a Mitsubishi TV with StarSight® feature, the TV can set the time on your VCR. See your TV Owner's Guide for details.

To allow StarSight® to do this, you must set the VCR's Clock set to MANUAL, and the VCR's AV Network setting to ACTIVE.



StarSight® is a registered trademark of StarSight Telecast, Inc.



# Recording

Your new VCR offers a wide variety of recording options that take full advantage of our advanced electronics. First, right now, you can learn how to record a current broadcast. Then, in another section of this book called **Timer Recording**, you can learn how to program your VCR to record at a later time and day.

## Recording a Current Broadcast

To record a TV program that is currently playing:

- 1 Load a tape with its erasure prevention tab intact into the VCR.
- 2 If you have not already done so, set the speed at which you would like to record. See **Selecting and adjusting the audio and video functions** on page 28. Also you can change the recording speed by pressing SP/EP on the front panel.
- 3 Set the VCR's input to tuner. To do this, press INPUT until a channel number shows on-screen or on the front panel display. If L1 or L2 appears instead of a channel number, continue to press INPUT until a channel number appears. To record channels from a PRIMESTAR® receiver, press INPUT until a channel number with the PRIMESTAR light (◆) appears on the front panel display.
- 4 Select the channel you wish to record by pressing CHANNEL or the number buttons on the remote or the jog dial on the front panel. If you are using a cable box that the VCR cannot control, select channel 3 or 4 on the VCR, and change the channel on the cable box, not on the VCR.
- 5 Press REC on the remote or REC/② REC LENGTH on the front panel.

Recording will start. When you reach the end of the tape, the VCR will automatically rewind.

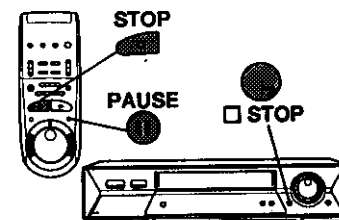
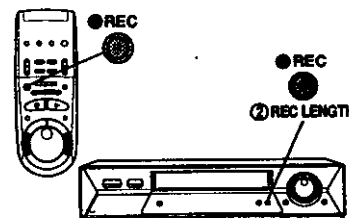
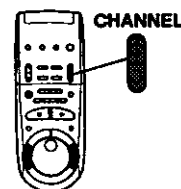
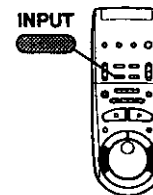
- You can stop recording at any time by pressing STOP or PAUSE on the remote or on the front panel.
  - To resume recording from STOP, press REC.
  - To resume recording from PAUSE, press PAUSE.
- You cannot use REC/② REC LENGTH on the front panel to resume recording from PAUSE.

### IMPORTANT

If you pause the VCR for more than five minutes, recording will stop automatically to protect the tape.

If you record in extended play (EP), you will only be able to play the tape on a VCR equipped for EP play, such as this one.

If you attempt to record on a tape that has had its erasure prevention tab removed, the VCR will eject it. To record over such a tape, simply place a piece of vinyl tape over the opening.



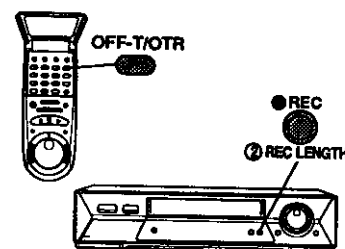
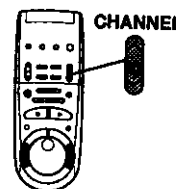
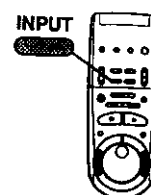
Erasure prevention tab

## Recording

### Using One-Touch Recording (OTR)

One-Touch Recording (OTR) is a way to begin recording immediately, and have your VCR stop recording and turn off automatically after your show is over.

- 1 Load a tape with its erasure prevention tab intact into the VCR.
- 2 If you have not already done so, set the speed at which you would like to record. See **Selecting and adjusting the audio and video functions** on page 28. Also you can change the recording speed by pressing **SP/EP** on the front panel.
- 3 Set the VCR's input to tuner. To do this, press **INPUT** on the remote until a channel number shows on-screen or on the front panel display. If you would like to record channels from a **PRIMESTAR®** receiver, press **INPUT** until a channel number with the **PRIMESTAR** light (◆) appears on the front panel display.
- 4 Press **CHANNEL** or the number buttons on the remote or the front panel jog dial to select the channel to be recorded. If you are using a cable box that the VCR does not control, select channel 3 or 4 on the VCR, and change the channel on the cable box.
- 5 Press **REC/②REC LENGTH** on the front panel twice. The first time you press the key, recording will begin. The second keypress adds 30 minutes to the OTR timer, displayed on the front panel. The **OFF-T/OTR** key on the remote control can also be used. When you first press this key, the VCR will begin recording and 30 minutes is added to the OTR timer.
- 6 Press **REC/②REC LENGTH** or **OFF-T/OTR** for each additional 30 minutes you want to add to the OTR timer, up to 4 hours. If you press the key 10 times, you will see **End** on the front panel display. The VCR will record until the end of the tape. If you press the key an eleventh time, the VCR will resume normal manual recording.



The OTR timer will begin to count down backwards. When it reaches zero, the VCR will stop recording and turn off. The OTR light on the front panel display will light up during the OTR recording.

#### If you program too much time into the OTR timer

Continue pressing **REC/②REC LENGTH** or **OFF-T/OTR**. After the **End** point you can start over from zero, adding time in 30 minute intervals.

#### How OTR affects other controls

If you press **PAUSE** during OTR, the VCR will pause recording, but the OTR timer continues to count down.

Press **PAUSE** again to resume recording from the record-pause mode. The **REC/②REC LENGTH** will not resume your recording.

If you press **STOP** during OTR, you erase the OTR programming.

## Recording

### Using Standby One-Touch Recording (OTR<sup>2</sup>)

Standby One-Touch Recording (also called OTR<sup>2</sup>) is a programming method to begin recording within 24 hours and record in 30 minutes intervals.

- 1 Load a tape with its erasure prevention tab intact into the VCR.
- 2 If you have not already done so, set the speed at which you would like to record. See **Selecting and adjusting the audio and video functions** on page 28. Also you can change the recording speed by pressing SP/EP on the front panel.
- 3 Set the VCR's input to tuner. To do this, press INPUT on the remote until the channel number shows on-screen or on the front panel display. To record PRIMESTAR® channels, see Step 3 on previous page.
- 4 Press CHANNEL on the remote control or the front panel jog dial to choose the channel to be recorded. If you are using a cable box that the VCR does not control, select channel 3 or 4 on the VCR, and change the channel on the cable box.
- 5 Press PAUSE/①START TIME on the front panel to set the time when you wish recording to start (within 24 hours). The start time is displayed on the front panel. The first time displayed is the next multiple of 30 minutes. Each time you press the button, the start time is delayed by 30 minutes.
- 6 Press REC/②REC LENGTH for each additional 30 minutes you want to add to the OTR<sup>2</sup> timer, up to 4 hours. If you see **End** on the front panel display, the VCR will record until the end of the tape.

If you have a cable box, a digital cable box, a PRIMESTAR® or a DISH Network™ satellite receiver, leave the cable box or receiver turned ON. If the HS-U595 does not control your cable box, leave the box tuned the station you wish to record.

After 30 seconds, the power will turn off and the programmed recording light will be lit. The VCR will automatically turn on at the OTR<sup>2</sup> start time and recording will begin. When the OTR<sup>2</sup> timer reaches zero, the VCR will stop recording and turn off automatically. If the end of the tape is reached before OTR<sup>2</sup> is finished, the VCR will stop and the power will turn off.

#### IMPORTANT

Other programs you have set to record may be erased if:

- the start times are before the OTR<sup>2</sup> start time
- conflicts with the OTR<sup>2</sup>
- starts within one minute or less after the OTR<sup>2</sup> finishes

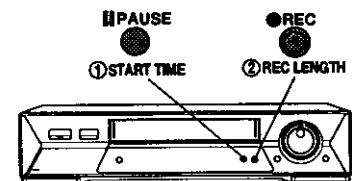
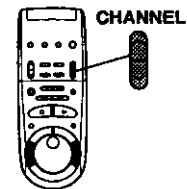
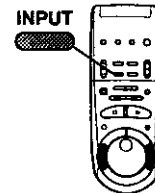
If you turn the power on while your VCR is in stand-by for the OTR<sup>2</sup>, the OTR<sup>2</sup> programming will be erased.

#### To cancel OTR<sup>2</sup>

- Turn the power OFF while you are programming the timer.
- Turn the power ON if you have finished programming the timer.

#### How OTR<sup>2</sup> affects other controls

If you press REC/②REC LENGTH on the front panel during OTR<sup>2</sup>, 30 minutes will be added to the OTR<sup>2</sup> timer. If you press STOP during OTR<sup>2</sup>, you erase the OTR<sup>2</sup> programming.





# Location of Controls

## Remote Control

### TV, VCR

Press VCR to tell your remote to operate the VCR. After setting up your remote to operate your brand of TV, (See Advanced Features) press TV to tell the remote to operate your TV.

**EJECT**  
Ejects a tape.

### POWER

Turns the VCR on or off. If you have programmed the VCR to record, you need to turn the VCR off.

### VOLUME Up and Down

Raises and lowers the sound of the TV. (Operates the TV only)

### MUTE

Turns off the TV sound. Press again to restore the TV sound to its previous volume. (Operates the TV only)

### MA SKIP/Q.V.

Use MOVIE ADVANCE™ feature. Use Mitsubishi TV's QuickView™ feature. See your Mitsubishi TV owner's guide for more details.

### CHANNEL Up and Down

Selects next higher or lower channel in the VCR's or TV's channel memory.

### INPUT

Select between the antenna and any other video equipment that may be connected. Use double speed playback with sound when playing a tape.

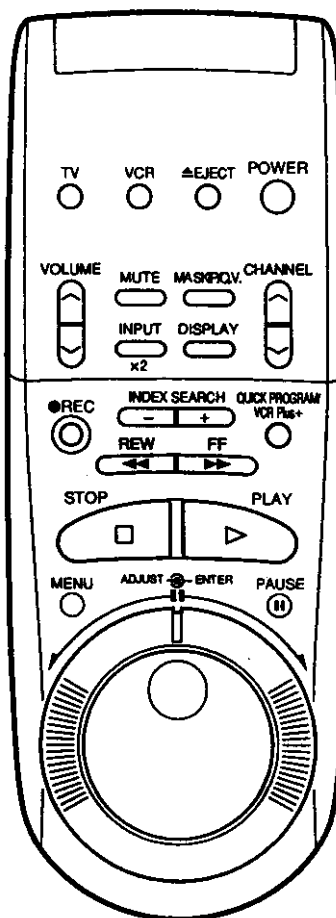
### DISPLAY

Displays on the TV screen:

- Time elapsed on the tape
- Time left on the tape
- Current time
- Channel number and audio reception mode
- Audio channel(s) selected
- Source supplying the VCR with a signal
- If the VCR is stopped, playing, or recording
- Turns on and off Child Lock

### ● REC

Starts recording. While recording, adds manual index mark.



### INDEX SEARCH + and -

Begins index search forward and backward.

### QUICK PROGRAM/VCR Plus+

Goes to VCR Plus+ Program to record screen. Exits the programming screen.

### REW ◀◀

Rewinds a tape or reverse searches.

### FF ▶▶

Fast forwards a tape or fast forward searches.

### STOP □

Stops a tape.

### PLAY ▷

Plays a tape.

### MENU

Displays the menus. Exits the menus.

### PAUSE ||

Pauses a tape when recording. Freezes a frame when playing a tape.

# Location of Controls

## Remote Control -- Flip cover open

### ADJUST dial

Advance the tape frame-by-frame in pause mode.  
Selects and adjusts menu selections.

### Shuttle ring

Adjusts playback speed when a tape is playing.  
Enters or cancels selections when using the menus.

### VCR-A, VCR-B

Selects between two Mitsubishi VCRs while using one remote.

### PIP SOURCE, PIP

Controls the picture-in-picture functions of many Mitsubishi TVs.

### Number keys

Selects TV stations.  
Enters PlusCode numbers.  
Sets quick search (CM skip) time.

### OFF-T/OTR

Sets the TV's off-timer, if the remote is set up to operate a Mitsubishi TV.  
Operates the VCR's One Touch Recording feature.

### VCR/TV

Switches between the VCR's picture and the TV's tuner.

### CANCEL

Cancels selections on the on-screen menus.  
Resets the counter display to "0H00M00S".

### ENTER

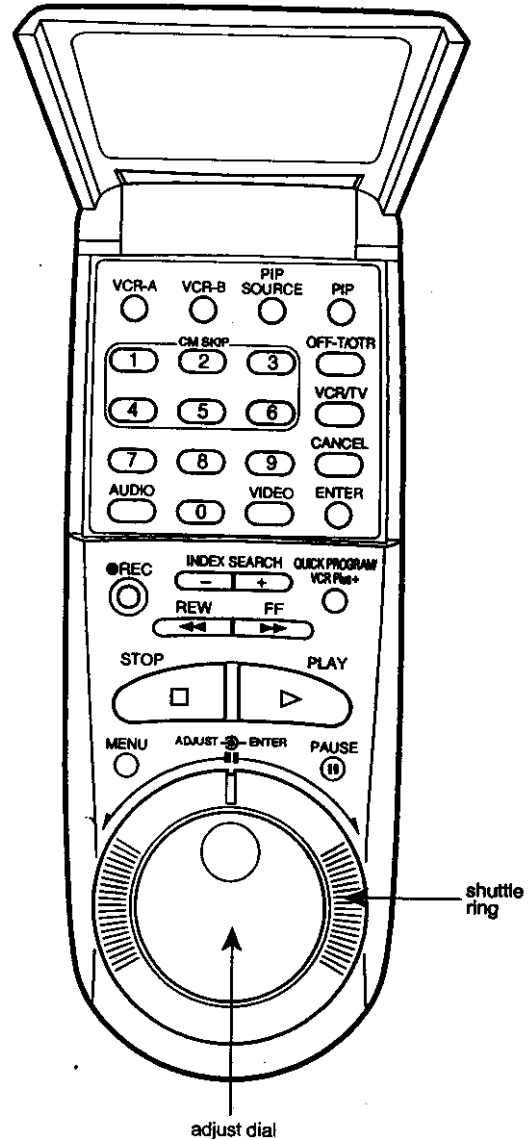
Enters selections on the on-screen menus.

### AUDIO

Selects the VCR's audio settings to be adjusted.

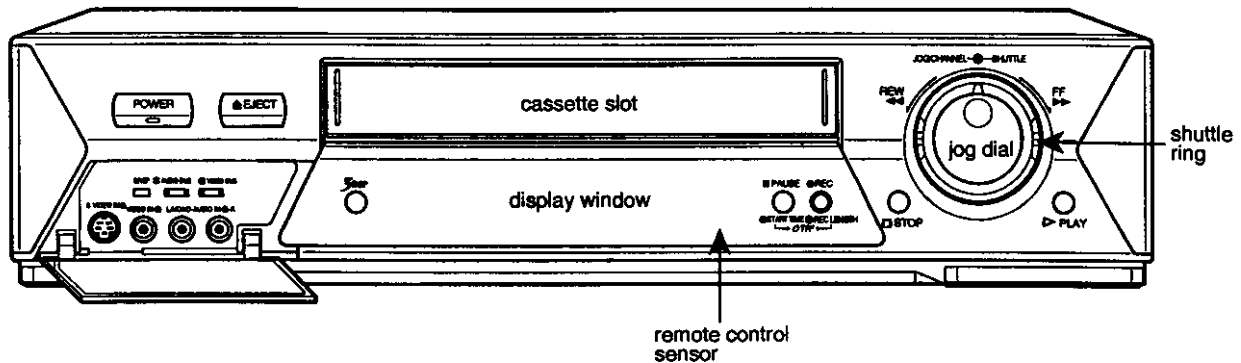
### VIDEO

Selects the VCR's video settings to be adjusted.



# Location of Controls

## Front Panel Keys and Functions



### POWER

Turns the VCR on or off.

If you have programmed your VCR to record, turn off your VCR.

### ▲ EJECT

Ejects a tape.

### SP/EP

Changes the recording speed (SP is standard play; EP is extended play).

### ● AUDIO DUB

Use when editing to add a new soundtrack to a previously recorded tape.

### Ⓜ VIDEO DUB

Use when editing to insert a new portion of video onto a section of a previously recorded tape.

### video input ② jacks

Connect source here, such as a VCR or camcorder, to record or dub video.

### audio input ② jacks

Connect source here, such as a VCR or camcorder, to record or dub audio.

### cassette slot

Insert the video cassette tape here.

### 3DSP

Turns the 3DY/C on or off when the tape is stopped.

Turns the 3D DNR on or off when playing a tape.

### display window

See the next section.

### remote control sensor

Receives signals from the remote control.

Do not block it.

### Ⓜ PAUSE/① START TIME

Pauses a tape when recording.

Freezes a frame when playing a tape.

Sets the start time in OTR<sup>2</sup> recording.

### ● REC/② REC LENGTH

Records to the end of the tape by pressing once.

Sets the recording time for OTR recording by pressing repeatedly.

### STOP □

Stops a tape.

### jog dial

Changes channels when tape is stopped.

Advances tape frame-by-frame when the tape is paused.

Adjusts tracking and picture vibration.

### shuttle ring

Fast forwards a tape or fast forward searches by turning right.

Rewinds a tape or reverse searches by turning left.

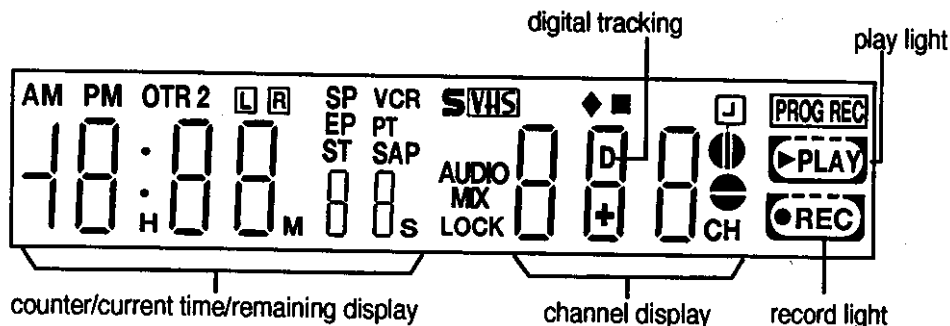
### PLAY ▷

Plays a tape.

Resumes normal playback from special effects.

## Location of Controls

### Display Window



#### OTR light : OTR

Lights up during recording the program with One-Touch Recording.

#### OTR 2 light : OTR 2

Lights up during setting up, the delay time of Standby One-Touch Recording.

#### LR indicator : L R

L indicates that you are listening to the left channel of a stereo track, R indicates that you are listening to the right channel of a stereo track.

#### tape speed lights : SP, EP

Indicates tape speed.

SP is standard play; EP is extended play.

#### stereo indicator : ST

Indicates a stereo TV channel.

#### VCR light : VCR

Indicates that the picture is controlled by the VCR.

#### PerfectTape® light : PT

Flashes when PerfectTape test is in progress.

Stays lit when test is complete.

#### SAP indicator : SAP

Indicates that channel has a Separate Audio Program, or SAP.

#### S-VHS indicator : S-VHS

Lights up when you play or record in Super-VHS (S-VHS).

#### AUDIO MIX light : AUDIO MIX

Lights up when the audio monitor function is set to MIX.

#### lock light : LOCK

Lights up when Child Lock feature is in use.

#### PRIMESTAR® light : ◆

Lights up when VCR has selected channels from a PRIMESTAR receiver.

#### cable tuning light : ■

Lights up when VCR is set to receive cable broadcasts.

#### programmed recording light : □ PROG REC

Lights up when VCR is off and it is programmed to record.

#### video dubbing indicator : ||

Lights up when video dubbing (insert editing).

#### audio dubbing indicator : ⊖

Lights up when audio dubbing.

#### play and record lights : ▶ PLAY ● REC

These light up when the VCR is playing a tape or recording. The symbol (◻) will light up when a tape is in the VCR. The dashes in the center of the symbol simulate the movement of the tape when playing and recording.

#### counter/present time/remaining display

This area displays:

- current time
- time counter showing how long tape has run
- time remaining on the tape
- contents of a programmed recording when you are programming your VCR.

#### channel display

Displays cable channel, broadcast channel, satellite channel, or input.

#### digital tracking light : D

Flashes when VCR is adjusting the tracking.

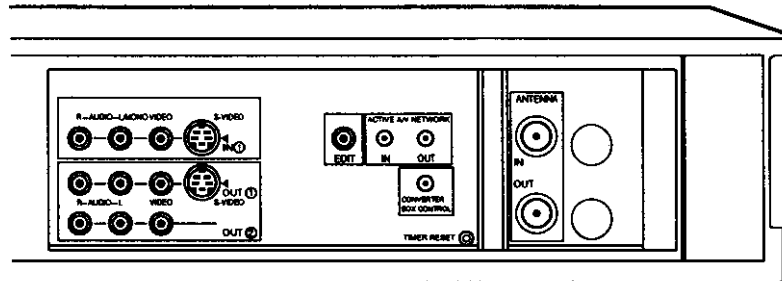
Glow steadily when tracking is finished.

If tracking is adjusted manually, it turns off.



## Location of Controls

### Rear Panel Jacks



#### VIDEO INPUT and OUTPUT jacks

Yellow jacks for receiving (IN) and sending (OUT) video signals to a monitor TV or from another VCR.

The black jacks marked with "S-Video" can be used to connect televisions with S-Video jacks. ("S-Video jack" refers to a Separated Luminance-Chrominance (Y/C) jacks that conforms to the NTSC signal.)

#### AUDIO INPUT and OUTPUT jacks

Red and white jacks for receiving (IN) and sending (OUT) audio signals. Red signifies the right channel, and white signifies the left channel. Stereo audio cables are also color coded red and white. If you are receiving or sending a mono (non-stereo) signal, you should use only the left (white) terminal.

#### EDIT jack

When you use the edit jack to connect two Mitsubishi VCRs, you can synchronize both VCR's pause and record functions, making it easier to edit copies of tapes.

#### ACTIVE A/V NETWORK jacks

Connects the VCR to other Mitsubishi products with Active A/V Network or A/V Network jacks.

#### CONVERTER BOX CONTROL jack

Connects IR Emitter to a cable box and/or satellite receiver.

#### TIMER RESET

Erases all programmed recording settings and resets the clock. Use this button with care.

#### ANTENNA IN jack

Attach an external antenna or cable to bring in an outside signal.

#### ANTENNA OUT jack

Attach a coaxial cable to your TV to send out antenna/cable signals from the VCR to your TV.





For your nearest Mitsubishi Authorized Servicenter  
call 1-800-332-2119

 **mitsubishi**  
THE BIG SCREEN COMPANY™

MITSUBISHI DIGITAL ELECTRONICS AMERICA, INC.  
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14 January 1999

HOME VIDEO CASSETTE RECORDER - HIFI TYPE

\*\*\*\*\*

—HS-U795—

Features(Tentative)

- #. Front loading system
- #. Superb picture quality with advanced 4 video heads -DJ4-
- #. High Quality picture (HQ)
  - \*White clip level up
  - \*Detail enhancer
  - \*Y-Noise Reduction
- #. High Fidelity stereo sound quality with rotating 2 audio heads
  - \*Dynamic range 90 dB with noise reduction system
  - \*Frequency response 20 Hz - 20k Hz
  - \*Total harmonic distortion less than 0.3%
  - \*Wow and flutter less than 0.005%
  - \*CH-separation better than 60 dB
- #. Multi channel sound decoder integrated
- #. SAP(Separate Audio Program system)
- #. Twin digital tracking
- #. Multi mode display
  - \*REC, PLAY
  - \*Cassette-In
  - \*Running Indicator
  - \*Interactive Clock/Tape Counter Display
  - \*Channels
- #. Channel program list on screen (8 program)
- #. Cable TV compatible (181 channels)
- #. Auto Head Cleaning Mechanism



#. Tape position index search system

\*UP to +/- 19 programs

\*By CTL signal

\*400/250 times normal speed (Non ctl signal 75 times normal speed)

#. Linear time counter

By counting CTL signals, it indicates elapsed time (hours, minutes, seconds)

#. TV/VIDEO/AUDIO Unified remote

#. High reliability

- Minimum number of parts used in deck and circuit

- Good resetability

#. Auto functions

\*Auto Power On

\*Power off Eject

\*Auto Clock Set

\*Auto Rewind

\*Auto Canceler

\*Short Pause

\*Power Off Program Record

#. Double Speed Playback

\*With Sound in EP mode only

#. Reverse Play

#. Speed Search

\*10 times normal speed in the EP mode

\*5 times normal speed in the SP mode

\*Noise bar reduced system

#. Hi-speed speed search

\*27 times normal speed in the EP mode

#. Perfect still

\*Without noise nor vibration in the EP/SP mode





#. Variable speed slow motion without noise in the EP/SP mode(1/5 - 1/30)

\*Without noise nor vibration in the EP/SP mode

#. 8 Independent Program Recording Function

#. One-touch Timer Recording

\*Rec time is available for multiple 30 min up to 4 hours

#. Single Time Counter

#. Time back up

\*30 minutes

#. Child Lock

#. Cable box control

#. VCR Plus+

#. Remain

#. System 2

#.One Key Play

#. Quick View

#. 3 Color On-Screen

#. Perfec Tape

#. 3 Color Display

#. Star Sight Ready

#. 1 key D.T.

#. 1 Flying Erase Head for Clear Program Recording

#. Video Dub

#. Audio Dub

#. Front Jog/Shuttle

#. Movie Advance

#. Digital Noise Reduction system



Specifications(tentative)

Tape format	S-VHS/VHS 1/2" width high-density video cassette tape
Power Source	120V : 60Hz
Television System	EIA standard NTSC type color signal (M/NTSC) 525 lines, 60 fields
Video Recording System	4 rotary heads, azimuth helical scanning system
Luminance	Frequency modulation recording
Color Signal	Low frequency conversion, sub-carrier phase shift recording
Audio Recording System	
Hifi Stereo	2 rotary heads, azimuth helical scanning system Frequency modulation, deep layer recording
Linear Audio	1 stationary head, 1 track
Tape Speed	33.35mm/s (standard play) 11.12mm/s (extended play)
Relative Head to Tape Speed	19.03ft./s
Record/Playback Time	160 min. with T-160 cassette 60 min. with T-60 cassette Time is tripled in the EP mode
Fast Forward/Rewind Time	Approx. 1 min. with T-120 cassette
Heads: Video	4 rotary single crystal heads
Hifi Audio	2 rotary single crystal heads
Audio/Control	1 stationary head
Erase	1 full track
Flying Erase	1 rotary head
Video Input	0.5 to 2.0 Vp-p, 75 ohm unbalanced, RCA socket
Audio Input Line	-7 dBs, 50K ohm unbalanced, RCA socket



Video Output	1.0 Vp-p, 75 ohm unbalanced, RCA socket
Audio Output	-7dBs, 1K ohm unbalanced, RCA socket
Aerial Input	UHF input CH 2-13, CH 14-83 VHS CH A-5 — W+10 75 ohm unbalanced, F connector
Aerial Output	Channel 3 or 4, switchable F connector
Horizontal Resolution (monoscope test pattern)	SP: More than 240 lines EP: More than 220 lines Super-VHS more than 400 lines (SP,EP)
Video Signal to Noise Ratio	better than 45 dB
Audio Frequency Response	50Hz - 10KHz (Linear) (SP mode)
Audio Signal to Noise Ratio	better than 40 dB (Linear)
Hifi Sound performance	
Frequency Response	20 Hz - 20K Hz
Harmonic Distortion	less than 0.3%
Dynamic Range	better than 90 dB
Wow and Flutter	less than 0.005%
Channel Separation	better than 60 dB
Operating Temperature	41° F to 104° F (5°C to 40°C)
Weight	approx. 3.8 kg
Dimensions	16.7" (W), 12.4" (D), 3.7" (H)
Timer	8 programmers for any channel in 4 weeks/week day 24 hour digital type
Timer Accuracy	Synchronized with Crystal Oscillator
Channel Selection	125 position frequency synthesized auto tuning system
Recording Band Width (-3dB)	2.2 MHz
Timer for scanning 1 horizontal line	approx. 17 mS
Use in Water	Impossible



## S-VHS Specification

### S-VHS Cassette Tape

Cassette : VHS Cassette with Special ID holes

The ID holes shall be from among those reserved by the VHS standard

Tape : High Performance Tape

A new standard tape to conform to S-VHS

### Recording Modes

SP Mode

Tape speed : 3.3 cm/s

Recording Time : 120min.(using T-120 tape)

EP Mode

Tape speed : 1.1 cm/s

Recording Time : 360min.(using T-120 tape)

### Video Signal Recording Method

Input and Output Video Signals : NTSC signals and a separate YC signal based on NTSC standards

Luminance signal recording : FM recording

FM signal frequencies

FM signal frequency : 7.0 MHz

Sync signal frequency : 5.4 MHz

Frequency Deviation : 1.6 MHz

Clamping level

White Clamp : 210%

Dark Clamp : 70%

Emphasis

Main emphasis : VHS-Standard emphasis

Sub emphasis : Non-linear emphasis

Recording of color-under signals

: Direct recording with low range conversion

Audio recording method

Audio Tracking Method : Based on VHS Audio

recording method

FM recording Method : Based on VHS Audio

recording method

Recording Band width (-3dB)

3.5 MHz

Time for Scanning 1 Horizontal Line

Approx. 17mS

Use in Water

Impossible

