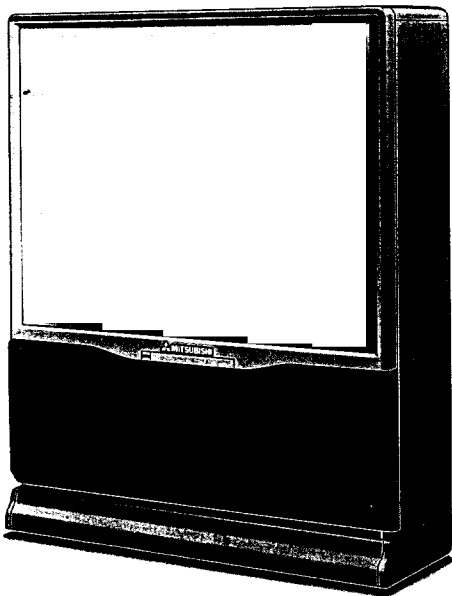
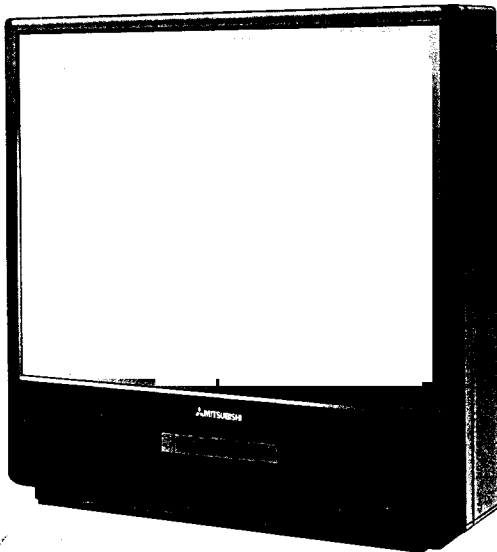
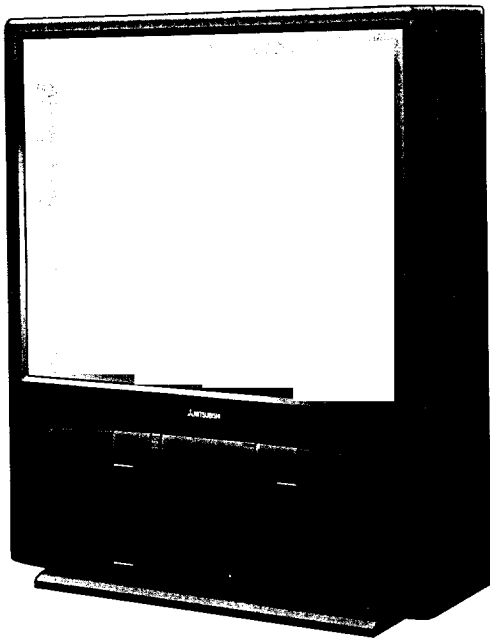




VS-4543
VS-4544
VS-5043
VS-5044
VS-6043
VS-5047
VS-6047
TS-4545
TS-5045
TS-5545



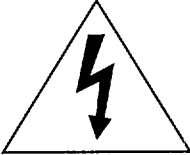

Projection

TV

Owner's

Guide



	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>		



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.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

► **Warning:** Don't leave stationary images, such as stock market reports, video games, station logos, or the TV's displays, on-screen for more than 10 minutes. Still patterns such as these can scar the TV, causing permanent damage to the picture tubes.

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:

TO PREVENT ELECTRIC SHOCK HAZARD, DO NOT USE THIS UNIT'S (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 ARTICLE 820-40 OF THE NEC THAT PROVIDES GUIDELINES FOR PROPER GROUNDING AND, IN PARTICULAR, SPECIFIES THAT THE CABLE GROUND SHALL BE CONNECTED TO THE GROUNDING SYSTEM OF THE BUILDING, AS CLOSE TO THE POINT OF CABLE ENTRY AS PRACTICAL.



Table of Contents

Important Safeguards	3
Preface: Welcome to Mitsubishi	5
Summary of Special Features	6
Unpacking Your TV	7
What's in Each Chapter	8
Some Conventions Used in this Guide	9
Chapter 1: Getting to Know Your TV	11
Overview of the Control Panel	12
Overview of the Remote Control	15
Getting ready to use the remote control	15
Remote control buttons and functions	17
Chapter 2: Connecting Your TV	21
Overview of the Back Panel	22
Basic Connections	24
TV + antenna or cable without a cable box	25
TV + cable with a cable box	26
TV + separate UHF and VHF antennas	28
TV + VCR + antenna or cable without a cable box	29
TV + VCR + cable with a cable box	32
TV + stereo audio system	35
TV + Mitsubishi products that have A/V Network terminals	36
Chapter 3: Operating Your TV	39
Getting Started	40
Using the remote control to operate VCRs, cable boxes and other equipment	41
Turning the TV on/off	46
Selecting the input source to watch your VCR or other equipment	47
Changing channels	48
Understanding the ViewPoint® on-screen menus	52
Setting the clock	53
Memorizing channels	55
Adding and deleting channels	56
Setting the A/V Network	57
Aligning the colors	58
Selecting the menu type	59
Naming the input	61
Naming the channels	62
Using video mute	63
Selecting the menu language	64

Table of Contents (cont.)

Getting Started (cont.)	
Selecting the A/V memory position	65
Customizing the A/V memory position	67
Adjusting the video settings	68
Using the closed caption decoder	70
Adjusting the sound	72
Using the Advanced Features	76
Setting the timer	77
Using the parental lock	78
Using SuperQuickView™	82
Adjusting the convergence	84
Chapter 4: Using the Special Features	87
Understanding the On-Screen Displays	88
Using the Sleep Timer	89
Setting the sleep timer	90
Changing or canceling the sleep timer	91
Using the Picture-in-Picture (PIP) Modes	92
Activating the PIP image	93
Selecting the source of the PIP image	94
Changing channels while using the PIP modes	95
Exchanging the picture of the PIP image and the main image	96
Moving the PIP image	96
Freezing the PIP image	97
Using the active A/V Network Feature	98
Chapter 5: Troubleshooting	101
Caution and Care	105
Cleaning	105
Calling for Service	106
Appendix: Procedure for Bypassing the Parental Lock	107
Index	109
Warranty	Inside Back Cover

IMPORTANT SAFEGUARDS

PLEASE READ ALL THESE INSTRUCTIONS REGARDING YOUR TELEVISION SET AND RETAIN FOR FUTURE REFERENCE. FOLLOW ALL WARNINGS AND INSTRUCTIONS MARKED ON THE TV RECEIVER.

1. Read Instructions

Read all safety and operating instructions before operating the appliance.

2. Retain Instructions

Retain the safety and operating instructions for future reference.

3. Heed Warnings

Adhere to all warnings on the appliance and in the operating instructions.

4. Follow Instructions

Follow all operating and use instructions.

► Warning:

5. Cleaning

Unplug this TV receiver from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Cleaners can permanently damage the cabinet or screen. Use a damp cloth for cleaning.

6. Attachments and Equipment

Never add any attachments and/or equipment without approval of the manufacturer as such additions may result in the risk of fire, electric shock or other personal injury.

7. Water and Moisture

Do not use this TV receiver where contact with or immersion in water is possible. Do not use near bath tubs, wash bowls, kitchen sinks, laundry tubs, swimming pools, etc.

8. Accessories

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

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.



9. Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the TV receiver and to protect it from overheating. Do not block these openings or allow them to be blocked by placing the TV receiver on a bed, sofa, rug, or other similar surface. Nor should it be placed over a radiator or heat register. If the TV receiver is to be placed in a rack or bookcase, ensure that there is adequate ventilation and that the manufacturer's instructions have been adhered to.

10. Power Sources

This TV receiver 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 supplied to your home, consult your appliance dealer or local power company.

11. Grounding or Polarization

This TV receiver is equipped with a polarized alternating current line plug having one blade wider than the other. This plug will fit into the power outlet only one way. 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.

12. Power-Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on 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 appliance.

13. Lightning

For added protection for this TV receiver 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 TV receiver due to lightning and power-line surges.

Important Safeguards (cont.)

14. 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.

15. Overloading

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

16. Object and Liquid Entry

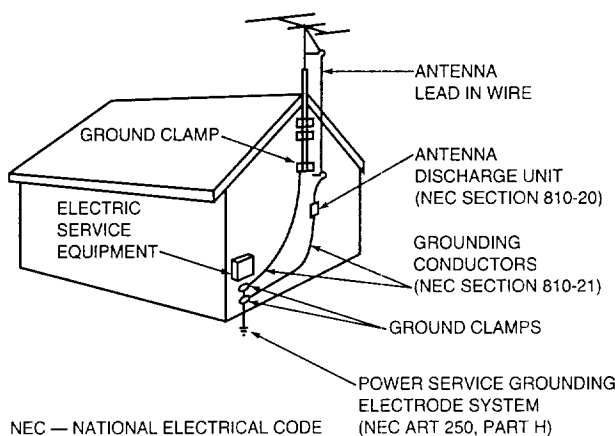
Never push objects of any kind into this TV receiver through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the TV receiver.

17. Outdoor Antenna Grounding

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

Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

EXAMPLE OF ANTENNA GROUNDING



18. Servicing

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

19. Damage Requiring Service

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

- When the power-supply cord or plug is damaged.
- If liquid has been spilled, or objects have fallen into the TV receiver.
- If the TV receiver has been exposed to rain or water.
- If the TV receiver 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 TV receiver to its normal operation.
- If the TV receiver has been dropped or the cabinet has been damaged.
- If the TV receiver exhibits a distinct change in performance — this indicates a need for service.

20. 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.

21. Safety Check

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

►Warning:

Do not leave stationary images, such as stock market reports, video games, station logos, or the TV's displays, on-screen for more than 10 minutes. Still patterns such as these can scar the TV, causing permanent damage to the picture tubes.



Congratulations on your purchase of this Mitsubishi TV. Your TV is designed for superb viewing pleasure as well as continued reliability.

To familiarize you with your TV and owner's guide, we suggest that you read through the preface, which provides the following important information:

- ◆ **Summary of Special Features**
- ◆ **Unpacking Your TV**
- ◆ **What's in Each Chapter**
- ◆ **Some Conventions Used in this Guide**

Mitsubishi has strived to create your TV so that it will bring you years of viewing enjoyment. Similarly, your owner's guide is designed with a "user friendly" philosophy that will help you take advantage of all of your equipment's features.

Once again, thank you for selecting our product and welcome to Mitsubishi!

◆ Summary of Special Features

Your top rated Mitsubishi TV delivers:

- **181-Channel Capacity** --- programs up to 181 channels, ensuring your continued viewing pleasure as cable services continue to expand.
- **Two-Speaker Sound System** --- a special speaker system that produces clear stereo sound.
- **Expanded Sound Capability** --- allows you to connect the TV to an external audio system for enhanced listening pleasure.

In addition to the standard features found on most advanced TVs, Mitsubishi is proud to offer the following distinctive features:

- **Remote Control with TV/VCR/CABLE Function** --- uses a single remote control transmitter to operate the TV, certain Mitsubishi VCRs, some Mitsubishi audio components, and also some VCRs and cable boxes from other manufacturers.
- **On-Screen Displays** --- appear whenever you adjust your TV, showing you the status of its various functions.
- **ViewPoint® On-Screen Operating System** --- simplifies the TV's features with easy-to-follow instructions.
- **Closed Caption Decoder** --- decodes hidden text information included with TV programs and displays the text on-screen.
- **Extended Data Services** --- (also known as "XDS,") allows broadcasters to supply you with channel information, program information, and the time of day. You can display this information on-screen.
- **Picture-in-Picture Mode** --- allows you to view two different live pictures at the same time.
- **Active A/V Network** --- allows you to perform many of the commonly used features of your TV and selected Mitsubishi VCRs by pressing a single button.

Each of these features will be explained in more detail in Chapter 3, "Operating Your TV," and in Chapter 4, "Using the Special Features."

◆ Unpacking Your TV

What you will find

As you unpack your new TV, please check to be sure that the following items are included:

- an owner's guide containing a warranty,
- a registration card,
- a remote control transmitter,
- a set of two AAA size batteries for the remote control, and
- an Active A/V Network cable.

A few suggestions

Before you hook up your new TV, please take a few minutes to:

- ❶ Complete the registration card. The registration card asks for the TV's serial number, which you will find on the back of the unit.
- ❷ Keep the box and packing materials for future use.
- ❸ File your sales receipt.
- ❹ Place the TV on a stable surface with sufficient lighting to do the hook-up.

◆ What's in Each Chapter

Here's what you will find in this owner's guide:

Chapter 1, "Getting to Know Your TV," introduces you to the location and functions of the buttons and controls of your TV.

Chapter 2, "Connecting Your TV," explains how to connect a VCR, antenna, cable box and other equipment to your TV.

Chapter 3, "Operating Your TV," provides the step-by-step instructions you need in order to use your TV.

Chapter 4, "Using the Special Features," explains how to use the special features of the TV.

Chapter 5, "Troubleshooting," summarizes the problems you may have, and provides suggestions for remedying these problems.

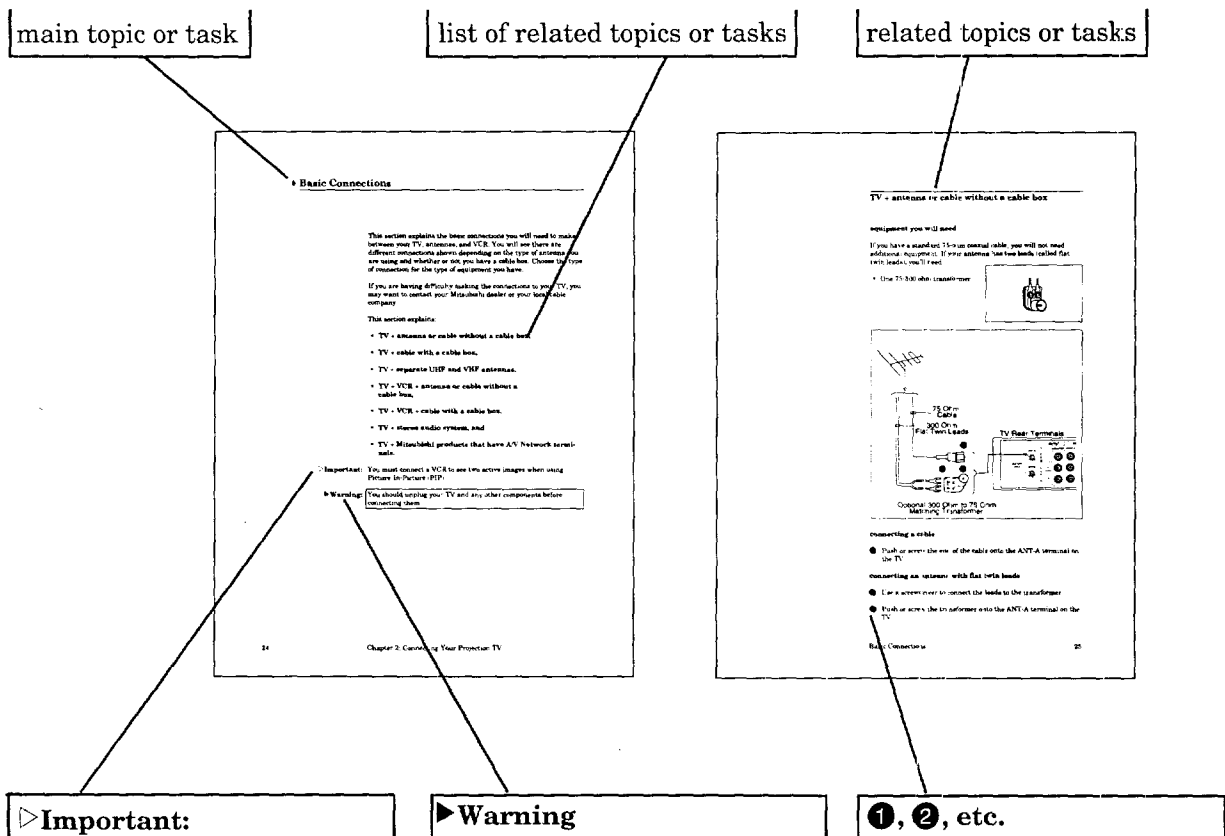
The appendix explains a procedure for bypassing the parental lock.

You will also find a detailed index at the back of the book.

◆ Some Conventions Used in this Guide

Mitsubishi has gone to great effort to provide you with an easy-to-follow, useful owner's guide. You will find that different types of information are treated in different ways.

You should read information labeled **Important** and information that is boxed and labeled **Warning**. The owner's guide uses these terms sparingly, and you should carefully read all information highlighted in this manner.



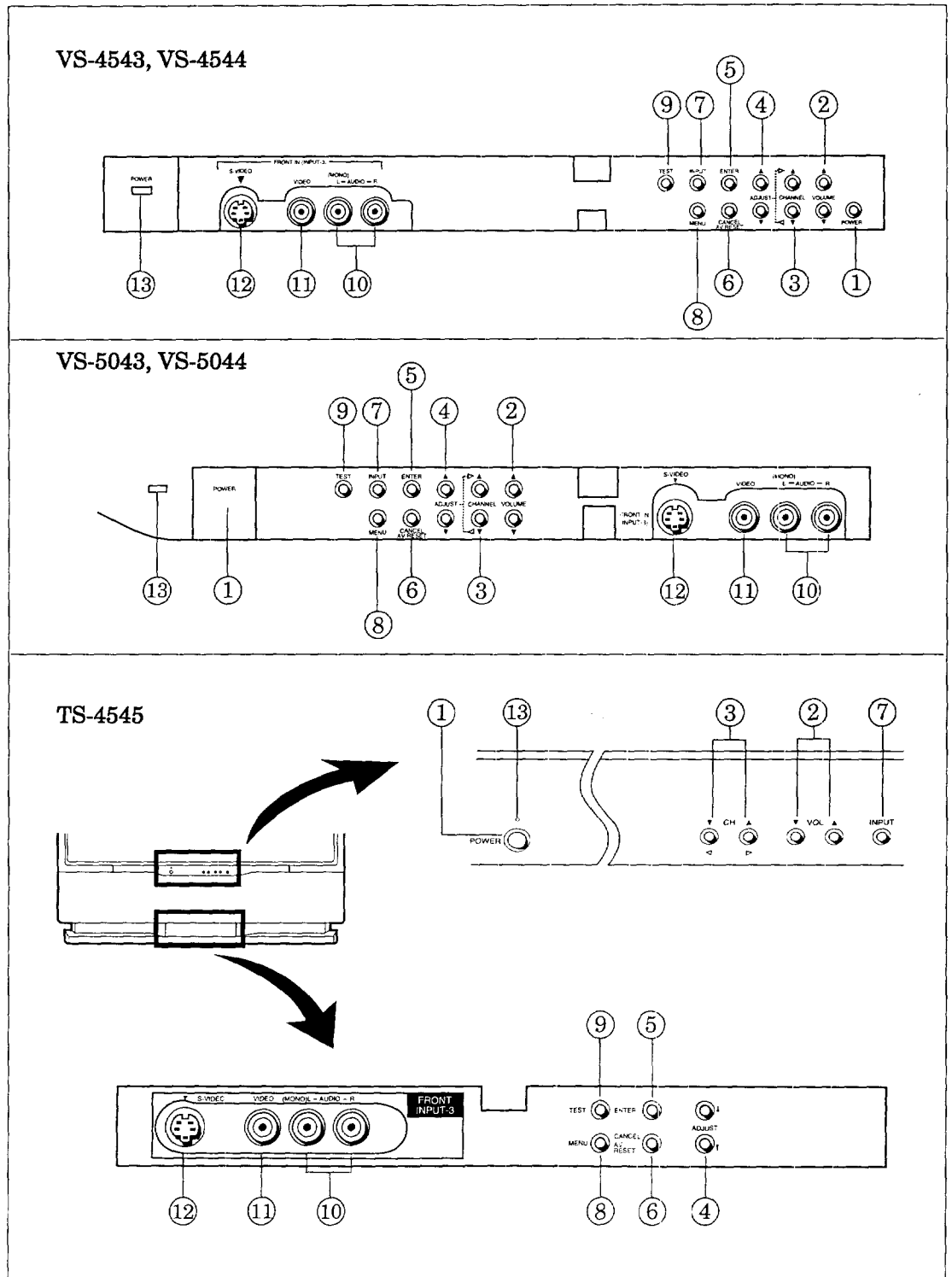


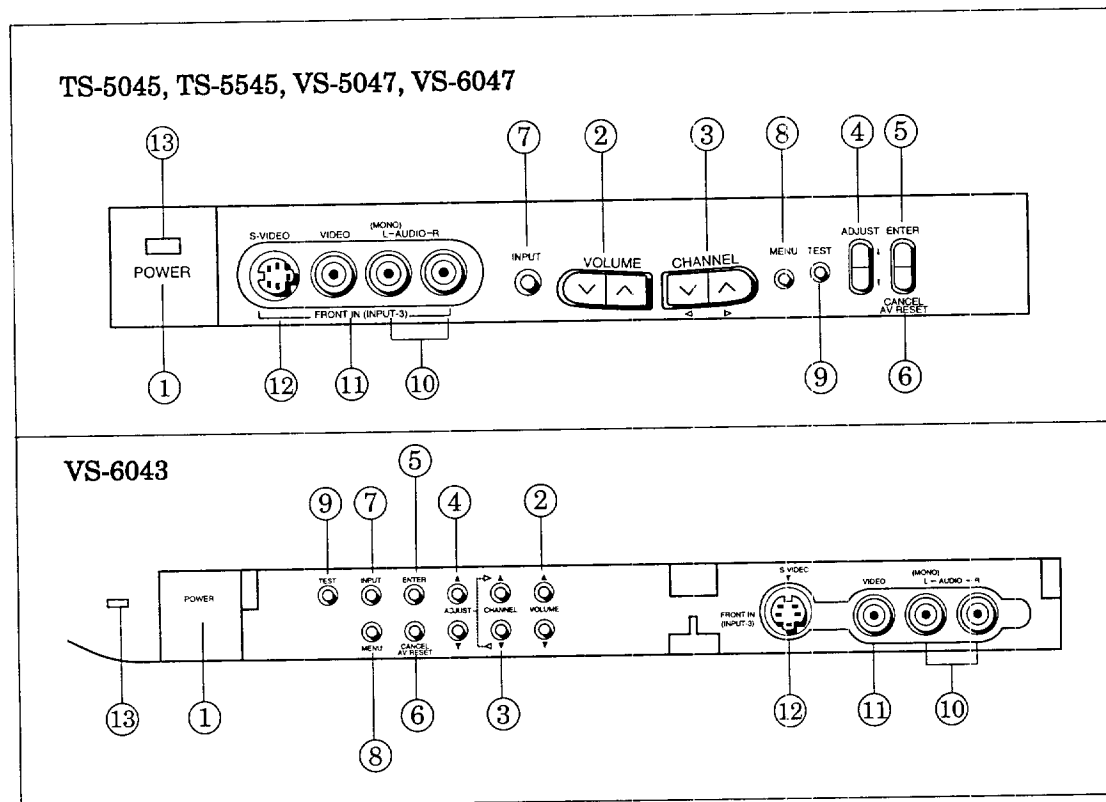
Now that you have unpacked your TV, read through the safety information, and glanced at the overview explaining how this owner's guide is organized, it's time to become familiar with the buttons and controls you will be using when you operate the TV. This chapter will introduce the range of options available when using the buttons on the remote control or on the TV's control panel. It also offers some general guidelines for using the remote control.

Most functions can be controlled by using either the control panel or the remote control, but certain specialized functions require the use of one or the other. This chapter, which will familiarize you with the full range of button functions, contains the following sections:

- ◆ **Overview of the Control Panel**
- ◆ **Overview of the Remote Control**

◆ Overview of the Control Panel





- ① **power button (POWER)**
Use to turn the TV on or off. When the TV is on, the power indicator is green.
- ② **volume controls (VOLUME)**
Press the ▲ button to turn up the volume and the ▼ button to turn down the volume.
- ③ **channel controls (CHANNEL ▲, ▼)**
Use the ▲ button to switch to a channel with a higher number and the ▼ button to switch to a channel with a lower number. Also use this button to adjust the alignment in “Align Colors” menu.
- ④ **adjust button (▲, ▼)**
After selecting an audio or video setting, use this button to adjust it. This button can be used to:
 - increase or decrease the function (e.g., color),
 - shift from one end of a scale to the other (e.g., balance), or
 - change a setting (e.g., stereo).

Also use this button to select items from the on-screen menu or to adjust the alignment in “Align Colors” menu.

Overview of the Control Panel (cont.)

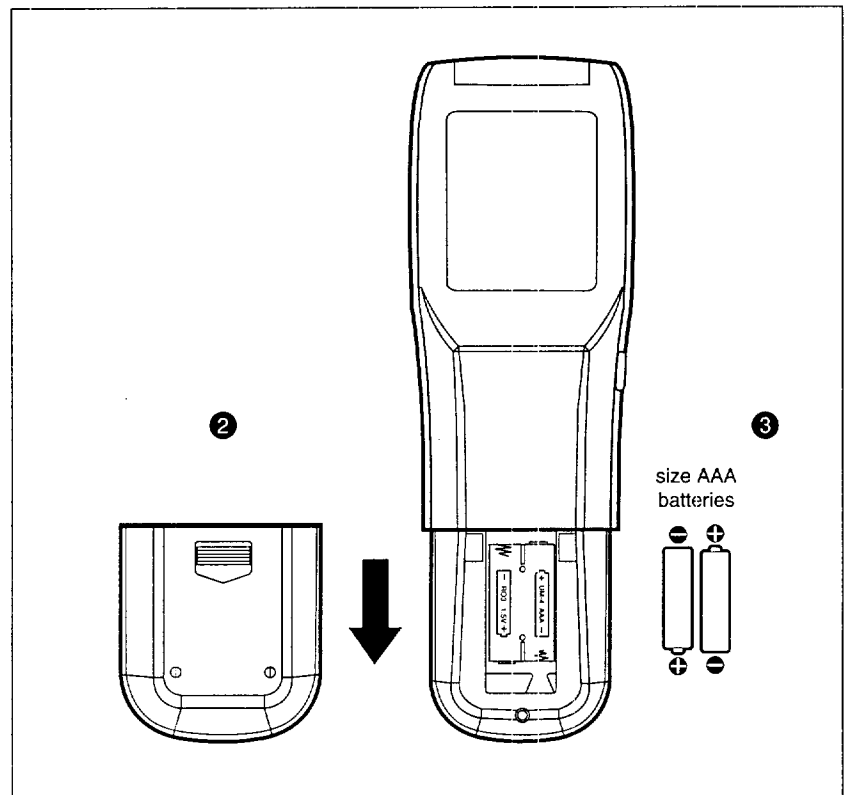
- ⑤ **enter button (ENTER)**
Use this button after selecting an item from the on-screen menu system. It is also used with the PIP button.
- ⑥ **cancel button (CANCEL), AV reset button (AV RESET)**
Can be used as the CANCEL in the on-screen menu and as the AV RESET in the normal TV viewing.
- (CANCEL) This button is used to clear the settings of some on-screen menus.
- (AV RESET) Press to reset all audio and video functions to their normal level or setting except for volume, the "Listen to:" function (Stereo/SAP/Mono), speaker (off/on), monitor out (variable/fixed), back ground (black/gray), and closed captioning.
- ⑦ **input button (INPUT)**
Use to select the input source you wish to watch:
- TV channels on Antenna A or Antenna B, or
 - Other equipment connected to Input 1, 2 or 3.
- ⑧ **menu button (MENU)**
Use this button to display the on-screen menu system, which contains additional instructions for special functions.
- ⑨ **test button**
Can be used with the ADJUST (▲, ▼, ◀, ▶) to test and align the colors of your TV's. (See Chapter 3 for information on aligning colors.)
- ⑩ **audio input terminals**
Use to connect the audio output from a camcorder or other equipment.
- ⑪ **video input terminal**
Use to connect the video output from a standard camcorder or another component to the TV.
- ⑫ **S-VIDEO input terminal**
Use to connect the S-video output of a camcorder to the TV. If you connect an S-video cable to this terminal, the adjacent video input cannot be used.
- ⑬ **power/program timer indicator**
This indicator lights up in green when you turn the TV on; it blinks in green when the timer is set and the TV's power is off.

◆ Overview of the Remote Control

Getting ready to use the remote control

installing the batteries

- 1 Take the box containing two AAA size batteries from the packing bag.
- 2 Remove the back cover of the remote control by pushing the tab in the direction of the arrow and lifting off the cover.
- 3 Load the batteries as indicated in the illustration, making sure that they are positioned correctly (+ to +, and - to -).
- 4 Replace the back cover of the remote control.



For best results, use Duracell AAA (MN2400) batteries.

Getting ready to use the remote control (cont.)

some do's and don'ts

To ensure that your remote control will continue working properly, follow these guidelines:

- Don't press two or more buttons at the same time, unless you are specifically instructed to do so in this owner's guide.
- Don't allow the remote control to get wet or become heated.
- Avoid dropping the remote control on a hard surface.
- When cleaning the remote control, don't use any harsh chemicals. Use only a soft, slightly moistened cloth.

general instructions

When using the remote control to operate the TV, VCR, or cable box, follow these procedures:

- ❶ Be within 20 feet of the equipment.
- ❷ Point the tip of the remote control toward the equipment.
- ❸ Press the appropriate button or sequence of buttons.

guidelines for using batteries

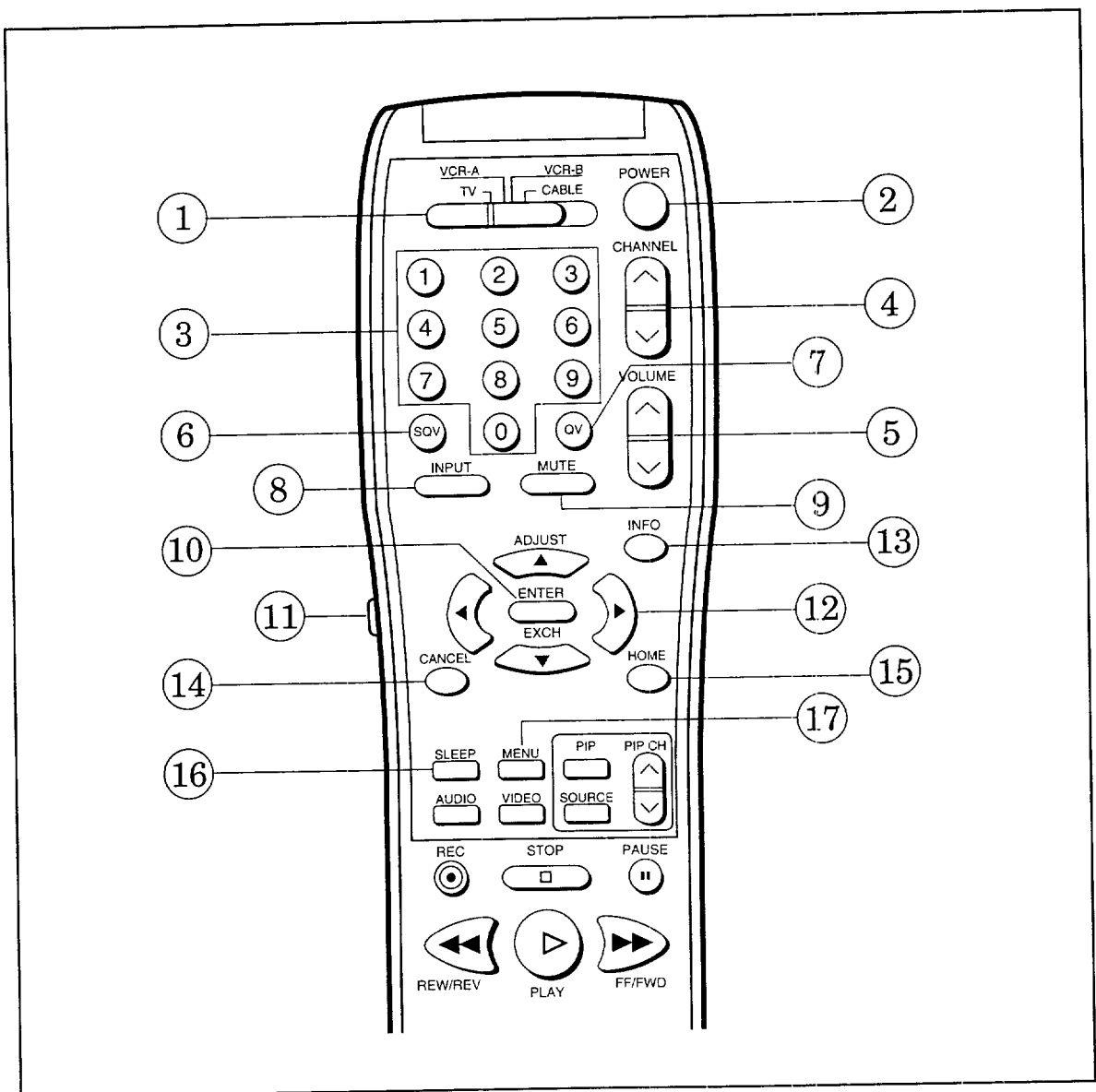
- Don't use a new battery with an old one.
- Don't heat, take apart, or throw batteries into a fire.

Remote control buttons and functions

This section provides you with an overview of the remote control's buttons and the features that they control.

This section does not provide detailed explanations on the use of these buttons. To determine which buttons are used with a particular feature, refer to the instructions for that feature.

The instructions for individual features are found in Chapter 3, "Operating Your TV," and Chapter 4, "Using the Special Features."



Overview of the Remote Control

Remote control buttons and functions (cont.)

- ① **select switch**

Your remote control has four layers: the TV layer, the VCR-A layer, the VCR-B layer, and the CABLE layer. You can set up each of these layers to operate a different piece of equipment. Use this switch to select the layer you want to set up or use.
- ② **power button (POWER)**

Use to turn the TV on or off. When you turn the TV on, the power indicator will light in green. (The select switch must be set to the TV layer.)
- ③ **number buttons (0-9)**

Use to select a channel number or to enter a parental lock code.
- ④ **channel control (CHANNEL)**

Press the top part of the button to change to a channel with a higher number; press the bottom part to change to a channel with a lower number.
- ⑤ **volume control (VOLUME)**

Press the top part of the button to turn up the volume; press the bottom part of the button to turn down the volume.
- ⑥ **SuperQuickView™ button (SQV)**

Press to view channels you have programmed into SuperQuickView memory.
- ⑦ **QuikView™ button (QV)**

Press this button to instantly switch to the channel that you designated as the Quick View channel. Press again to return to the last channel viewed.
- ⑧ **input button (INPUT)**

Use to select the input source you wish to watch:

 - TV channels on Antenna A or Antenna B
 - Other equipment connected to Input 1, 2, or 3
- ⑨ **mute control (MUTE)**

Use to turn the sound off completely or to restore it to its original volume.
- ⑩ **enter button (ENTER)**

Use this button after selecting a channel number, after selecting an item from the on-screen menu system, or with the picture-in-picture mode.
- ⑪ **light button (only for TS-4545/5045/5545, VS-5047/6047)**

Use to light up the remote (for 3 seconds).
- ⑫ **adjust buttons (▲, ▼, ◀, ▶)**

After selecting an audio or video function, use these buttons to adjust the sound or picture. Also use these with the picture-in-picture mode and to select items in the menus.
- ⑬ **information button (INFO)**

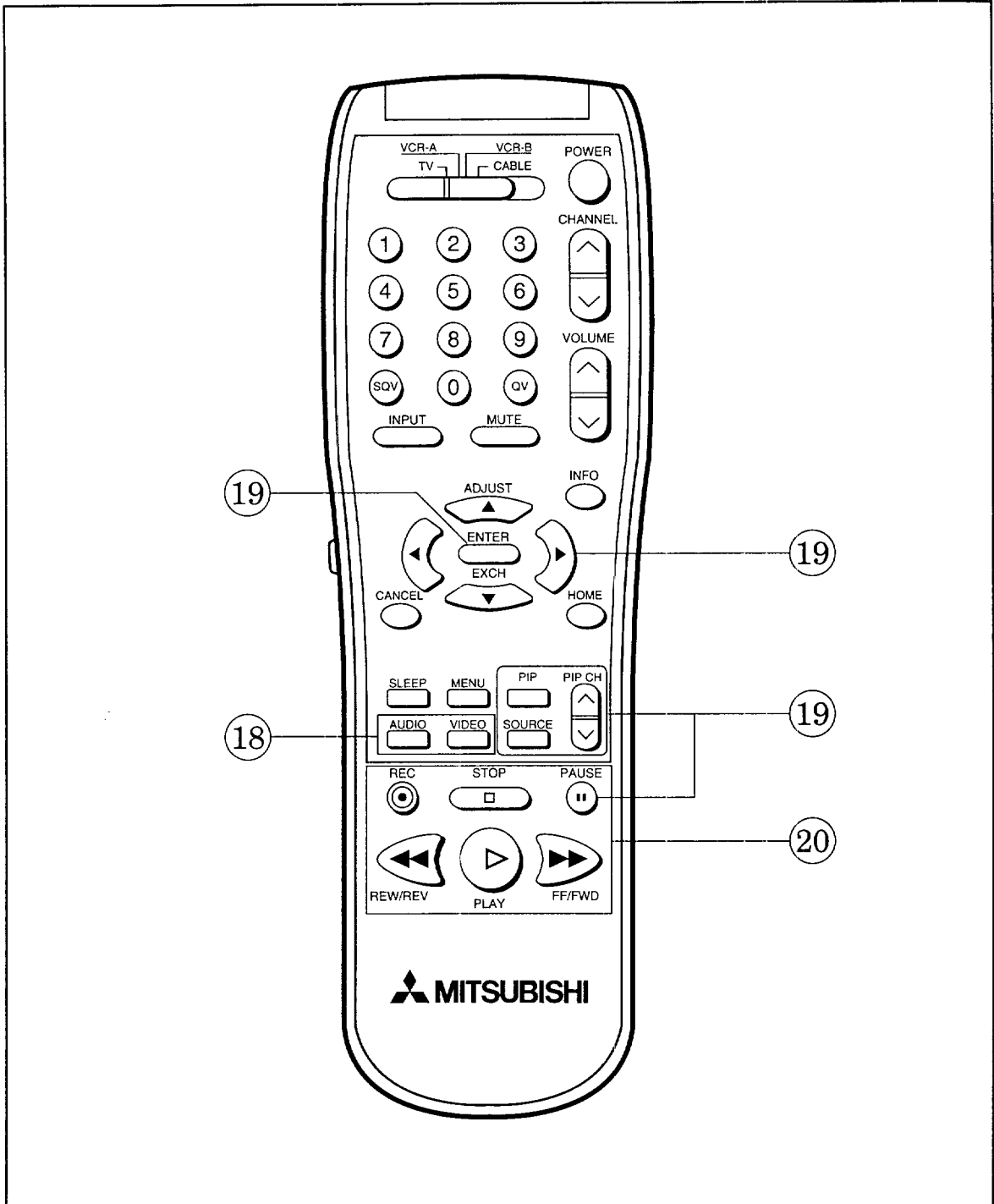
Use to view an on-screen summary of the current settings for the TV or cable functions and the display related to Extended Data Services (XDS).
- ⑭ **cancel button (CANCEL)**

This button is used to cancel a channel number, to clear a channel programmed into SuperQuickView memory, and to clear the settings of some on-screen menus.
- ⑮ **home button (HOME)**

Press to return to regular TV viewing from the on-screen menus, to turn off the on-screen displays, and to cancel the closed captioning.
- ⑯ **sleep timer button (SLEEP)**

Use to program the TV to turn off automatically at a later time.
- ⑰ **menu button (MENU)**

Use this button to display the on-screen menu system, which contains additional instructions for special functions.



Overview of the Remote Control

Remote control buttons and functions (cont.)

⑱ audio and video controls

Use these buttons to select the audio and video settings the AUDIO button or VIDEO button to select one of the settings listed below.

- **audio function button (AUDIO)**

- stereo/SAP/mono
- bass
- treble
- balance
- surround off/simulate/hall
- speaker off/on
- monitor out variable/fixed

- **video function button (VIDEO)**

- tint
- color
- contrast
- brightness
- sharpness
- color temperature low/middle/high
- background black/gray
- closed captioning

⑲ picture-in-picture controls

Use to control the special picture-in-picture (PIP) function. (See "Using the Picture-In-Picture (PIP) Modes" in Chapter 4.)

- **PIP button (PIP)** -- Press to turn on the reduced PIP image, to change its size, or to cancel it. The button is also used with the Active A/V Network feature (See "Using the Active A/V Network Feature" in Chapter 4.)
- **PIP channel button (PIP CH)** -- Press to change the channel of the reduced PIP image.
- **source button (SOURCE)** -- Press repeatedly to switch the source of the reduced PIP image between the TV and the external inputs.
- **pause button (PAUSE)** -- Press to freeze the reduced PIP image, and to return to a "live" image.

- **exchange button (EXCH)** -- Press to exchange the pictures of the PIP image and the main image.

- **adjust buttons (▲, ▼, ◀, ▶)** -- Press to move the PIP image on-screen.

⑳ VCR and audio product buttons

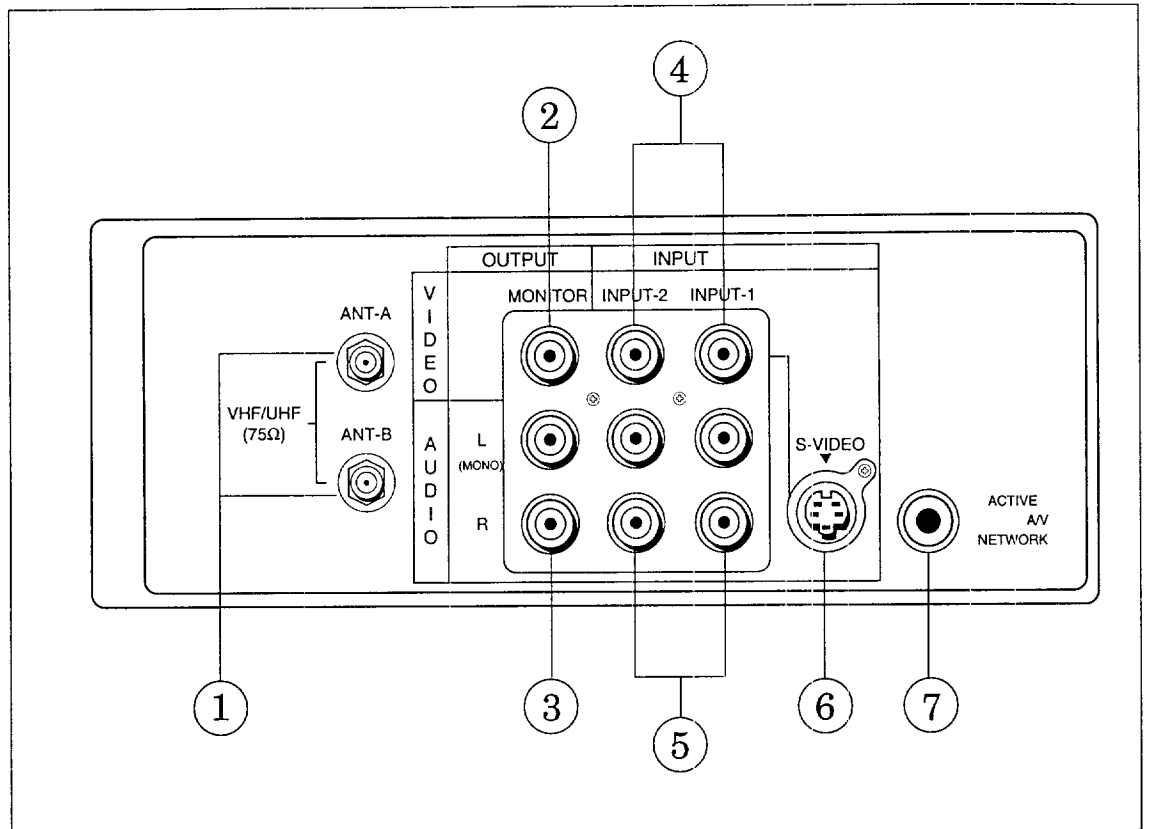
Use these buttons to control VCRs, cassette decks, CD players, etc. These are pre-programmed to operate select Mitsubishi components. The PLAY button is also used with the Active A/V Network (See "Using the Active A/V Network Feature" in Chapter 4.)



This chapter offers step-by-step instructions for completing the most common hook-ups. It contains the following sections:

- ◆ **Overview of the Back Panel**
- ◆ **Basic Connections**

◆ Overview of the Back Panel



- ① **antenna terminals (ANT-A, ANT-B)**
Connect cable antennas or VHF/UHF antennas here.
- ② **video monitor/tuner output terminal**
Use these terminals to “send out” the TV’s video signal to a VCR or other equipment.
- ③ **audio monitor/tuner output terminals**
Use these terminals to “send out” the TV’s audio signal to a VCR, audio system, or other equipment.

▷**Important:** Never connect one piece of equipment to both the TV’s input terminals and the TV’s output terminals.

Overview of the back panel (cont.)

④ **video input terminals**

Use these terminals to “bring in” a video signal from a VCR or another component to the TV.

⑤ **audio input terminals**

Use these terminals to “bring in” an audio signal from a VCR or other equipment to your TV.

⑥ **S-VIDEO input terminal**

Use these terminals to “bring in” a Super VHS (S-VHS) signal from a VCR or disc player to the TV.

▷ **Important:** If you connect to the S-Video input, you cannot use the regular video connection for Input-1.

⑦ **Active A/V Network terminal**

Use this terminal to connect Mitsubishi products that have A/V network terminals.

◆ Basic Connections

This section explains the basic connections you will need to make between your TV, antennas, and VCR. You will see there are different connections shown depending on the type of antenna you are using and whether or not you have a cable box. Choose the type of connection for the type of equipment you have.

If you are having difficulty making the connections to your TV, you may want to contact your Mitsubishi dealer or your local cable company.

This section explains the following connections:

- **TV + antenna or cable without a cable box,**
- **TV + cable with a cable box,**
- **TV + separate UHF and VHF antennas,**
- **TV + VCR + antenna or cable without a cable box,**
- **TV + VCR + cable with a cable box,**
- **TV + stereo audio system, and**
- **TV + Mitsubishi products that have A/V Network terminals.**

▷ **Important:** You must connect a VCR to see two active images when using Picture-In-Picture (PIP).

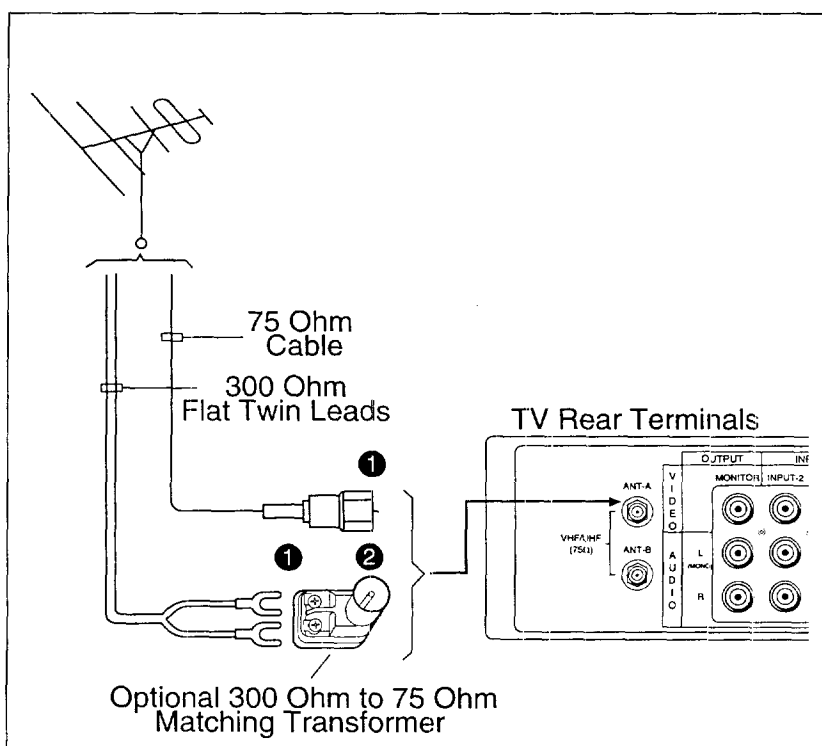
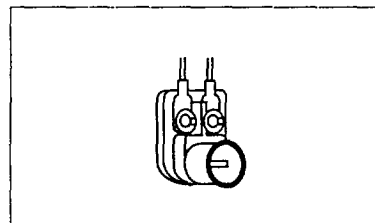
▶ **Warning:** You should unplug your TV and any other components before connecting them.

TV + antenna or cable without a cable box

equipment you will need

If you have a standard 75-ohm coaxial cable, you will not need additional equipment. If your antenna has two leads (called flat twin leads), you'll need:

- One 75-300 ohm transformer.



connecting a cable

- 1 Push or screw the end of the cable onto the ANT-A terminal on the TV.

connecting an antenna with flat twin leads

- 1 Use a screwdriver to connect the leads to the transformer.
- 2 Push or screw the transformer onto the ANT-A terminal on the TV.

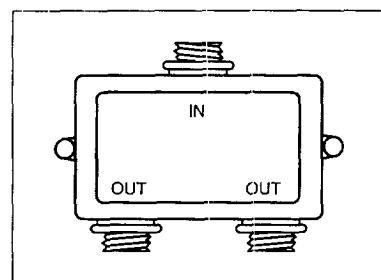
TV + cable with a cable box

equipment you will need

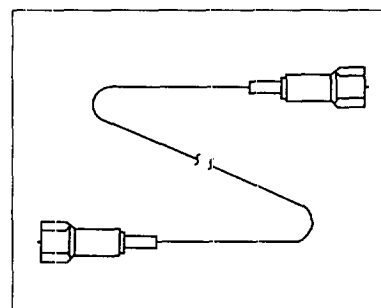
Use this hook-up if you do not need a cable box to descramble basic cable channels, but you do need a cable box to descramble premium cable channels. This hook-up will allow you to use your TV's advanced channel changing features, such as SuperQuickView, while watching basic cable channels on Antenna-A.

To complete the hook-up, you'll need:

- one two-way splitter, and



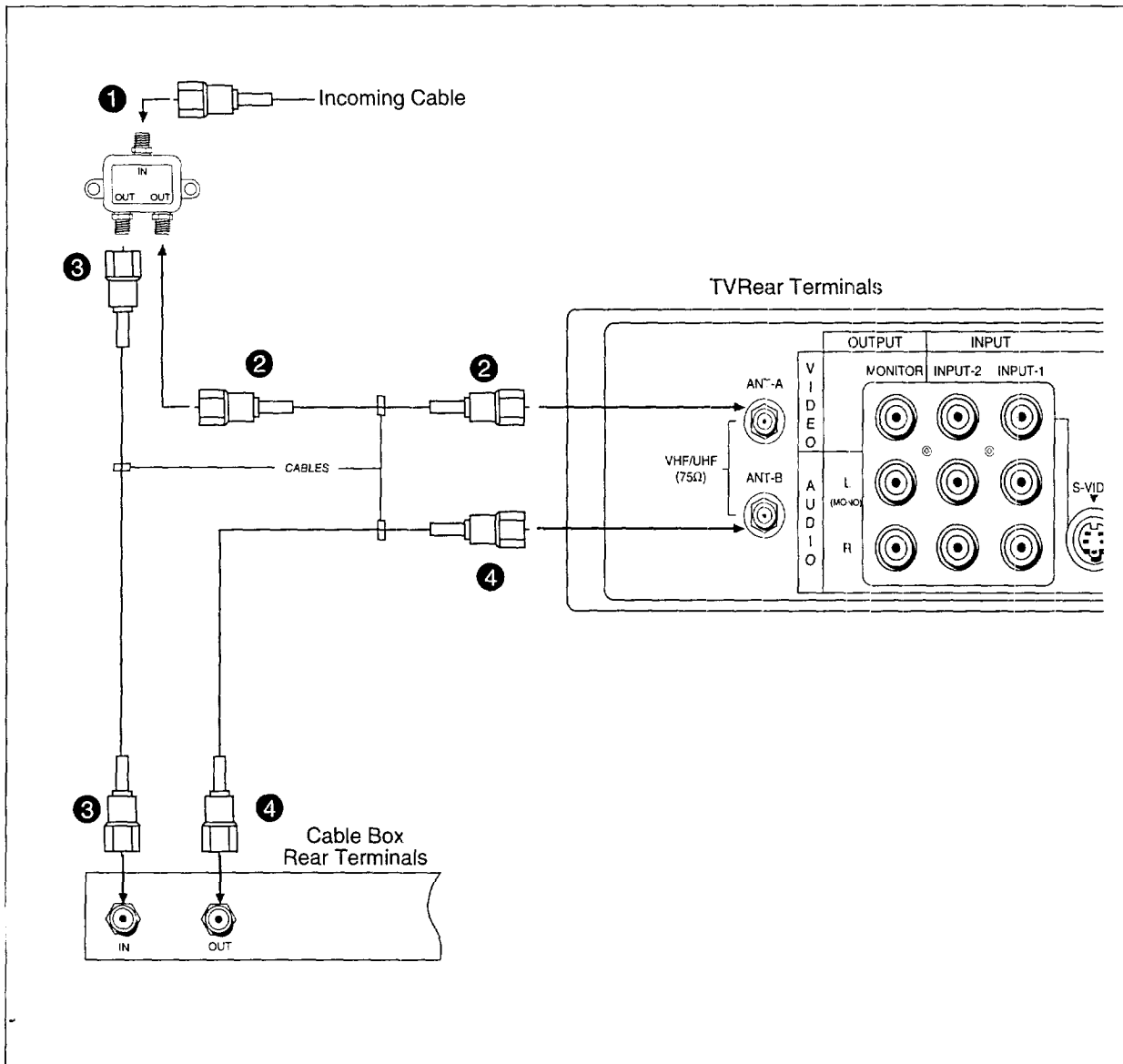
- three lengths of 75 ohm coaxial cables.



procedure

- 1 Connect the incoming cable to the IN terminal on the two-way splitter.
- 2 Connect a coaxial cable to one of the OUT terminals on the splitter; connect the other end of this cable to the ANT-A terminal on the back of the TV.
- 3 Connect the second coaxial cable to the second OUT terminal on the same splitter; connect the other end of this cable to the IN terminal on the cable box.
- 4 Connect the third coaxial cable to the OUT terminal on the back of the cable box, and the other end of this cable to the ANT-B terminal on the back of the TV.

TV + cable with a cable box (cont.)

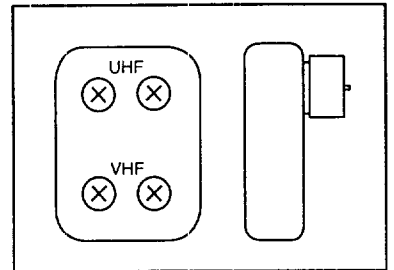


TV + separate UHF and VHF antennas

equipment you will need

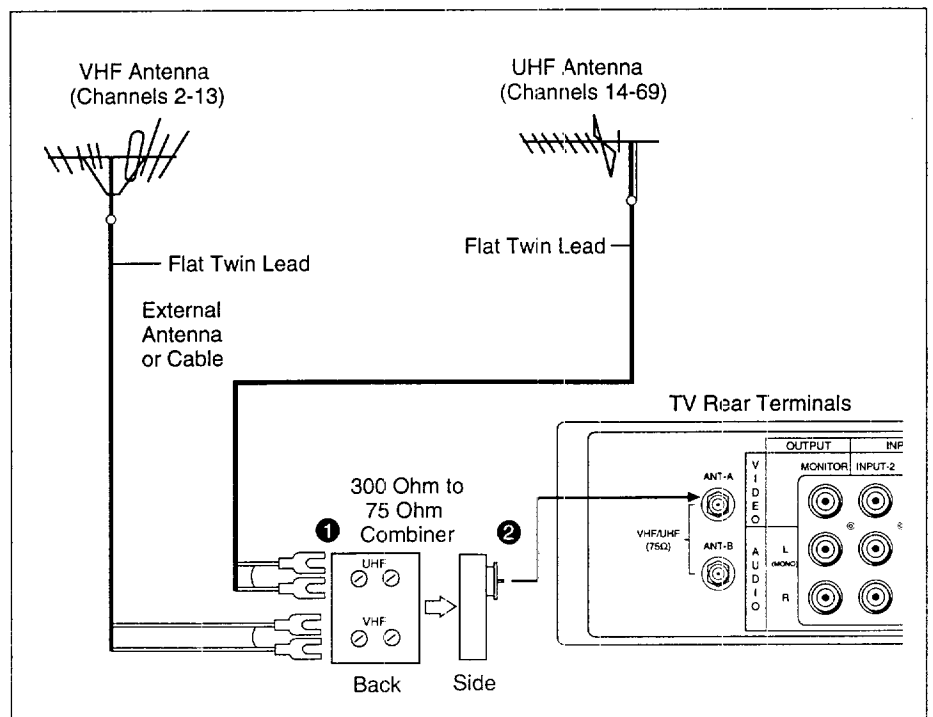
If UHF and VHF signals are brought into your home with two separate antennas, you'll need to combine the antennas in order to connect them to the TV. To do this you will need a UHF/VHF combiner. (There are different combiners for different kinds of wires. Check with your local electronics store for the kind of combiner you need.)

- Pictured to the right is a standard combiner.



To connect separate UHF and VHF antennas to your TV:

- 1 Connect the UHF and VHF antenna leads to the appropriate terminals on the UHF/VHF combiner.
- 2 Press the combiner onto the ANT-A terminal on the rear of the TV.

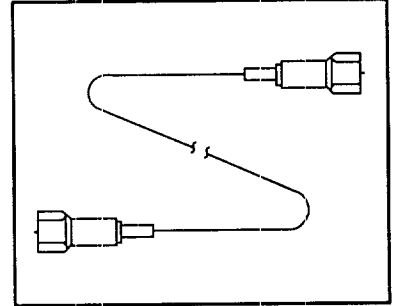


TV + VCR + antenna or cable without a cable box

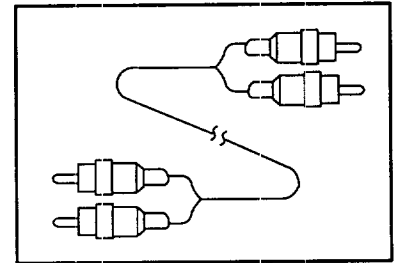
equipment you will need

You may want to connect a VCR along with your antennas or cable. To complete this hook-up, you may need the following equipment:

- One 75 ohm coaxial cable,



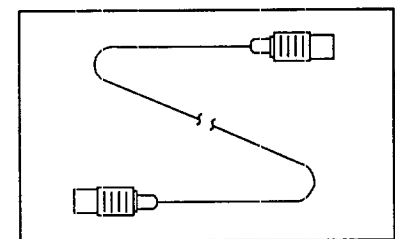
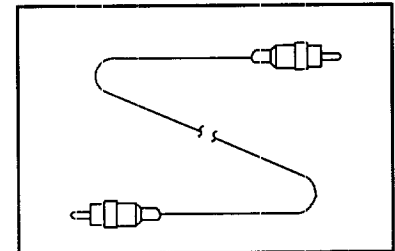
- One set of RCA pin-type audio cables,



- One RCA pin-type video cable, (if connecting a standard VCR),

OR

- One S-Video cable for Super VHS VCRs.



▷ **Important:** If you are using an indoor/outdoor antenna, please review the connections shown in the sections "TV+antenna or cable without a cable box" and "TV+separate UHF and VHF antennas" in this chapter. You may need to use the transformer or combiner, as shown in the diagrams.

TV + VCR + antenna or cable without a cable box (cont.)

procedure

- ❶ Connect the incoming cable or antenna to the ANTENNA IN terminal on the VCR.
- ❷ Connect one end of a coaxial cable to the ANTENNA OUT terminal on the VCR.
- ❸ Connect the other end of the coaxial cable to the ANT-A terminal on the TV.
- ❹ Connect an RCA pin-type video cable to the VIDEO OUT terminal on the back of the VCR. Connect the other end of this cable to the VIDEO INPUT terminal on the back of the television.

▷**Important:** If you are connecting a Super VHS (S-VHS) VCR, use an S-Video cable instead of an RCA pin-type video cable. Connect this S-Video cable to the S-VIDEO OUT terminal on the VCR. Connect the other end of this cable to the S-VIDEO INPUT terminal on the back of the TV.

- ❺ Connect a set of RCA pin-type audio cables to the AUDIO OUT terminals on the back of the VCR. Use the red cable to connect the right (R) channel and the white cable for connecting the left (L) channel.
- ❻ Connect the other ends of this cable to the AUDIO INPUT terminals on the back of the TV.

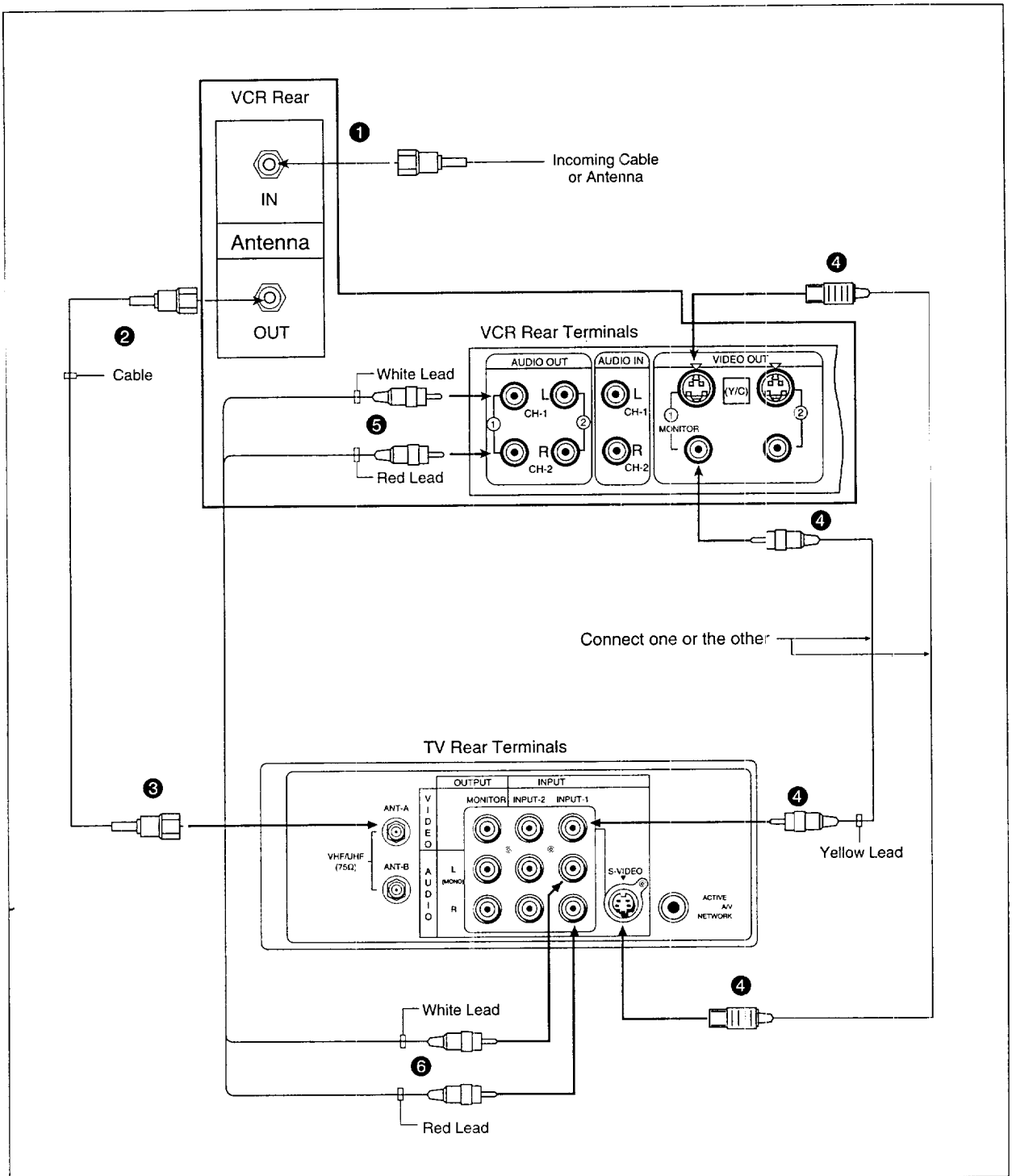
▷**Important:** If your VCR is monaural (non-stereo), you only need to connect a single RCA pin-type audio cable. Connect the cable to the VCR, then connect the other end to the L (LEFT) audio input on the back of the TV.

▷**Important:** If your VCR has a video channel switch, set it to "OFF/AV." See your VCR's owner's guide for details.

- ❼ Start playing a tape on your VCR.
- ❽ Use the INPUT button on your TV's remote control to select the correct input. If you connected the VCR to INPUT-1, select Input-1; if you connected the VCR to INPUT-2, select Input-2.

▷**Important:** When playing a tape in your VCR, you will not be able to view two independent live pictures using the PIP function when selecting channel 3 or 4.

TV + VCR + antenna or cable without a cable box (cont.)



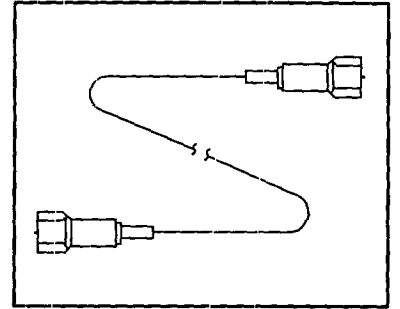
TV + VCR + cable with a cable box

equipment you will need

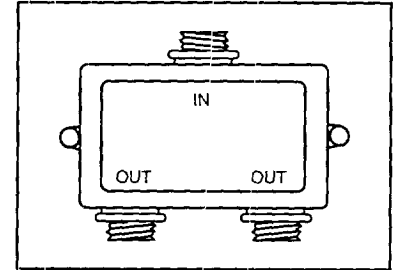
This hook-up will allow you to record scrambled channels while viewing another channel.

To complete the hook-up, you will need:

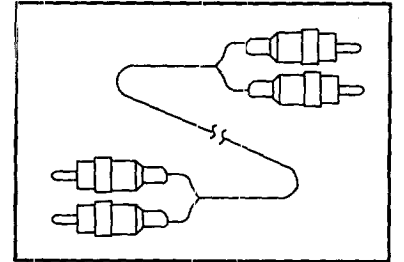
- Four lengths of 75 ohm coaxial cable,



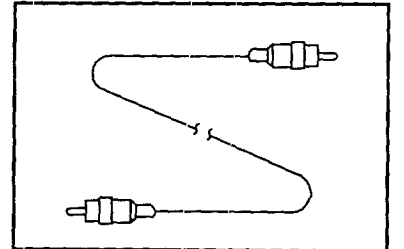
- One two-way splitter,



- One set of RCA pin-type audio cables,

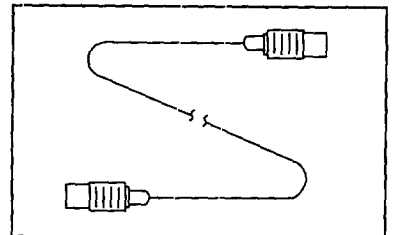


- One RCA pin-type video cable, (if connecting a standard VCR),



OR

- One S-Video cable for Super VHS VCRs.



TV + VCR + cable with a cable box (cont.)

procedure

(See illustration on the following page.)

- ❶ Connect the incoming cable to the IN terminal on the two-way splitter.
- ❷ Connect a coaxial cable to one of the OUT terminals on the splitter, connect the other end of this cable to the ANT-A terminal on the back of the TV.
- ❸ Connect a second coaxial cable to the other OUT terminal on the splitter; connect the other end of this cable to the IN terminal on the cable box.
- ❹ Connect the third coaxial cable to the OUT terminal on the back of the cable box; connect the other end of this cable to the ANTENNA-IN terminal on the back of the VCR.
- ❺ Connect the fourth coaxial cable to one of the ANTENNA-OUT terminals on the back of the VCR. Connect the other end of this cable to the ANT-B terminal on the back of the TV.
- ❻ Connect an RCA pin video cable to the VIDEO OUT terminal on the back of the VCR. Connect the other end of this cable to the VIDEO INPUT terminal on the back of the TV.

▷ **Important:** If you are connecting a Super VHS (S-VHS) VCR, use an S-Video cable instead of an RCA pin-type video cable. Connect this S-Video cable to the S-VIDEO OUT terminal on the VCR. Connect the other end of this cable to the S-VIDEO INPUT terminal on the back of the TV.

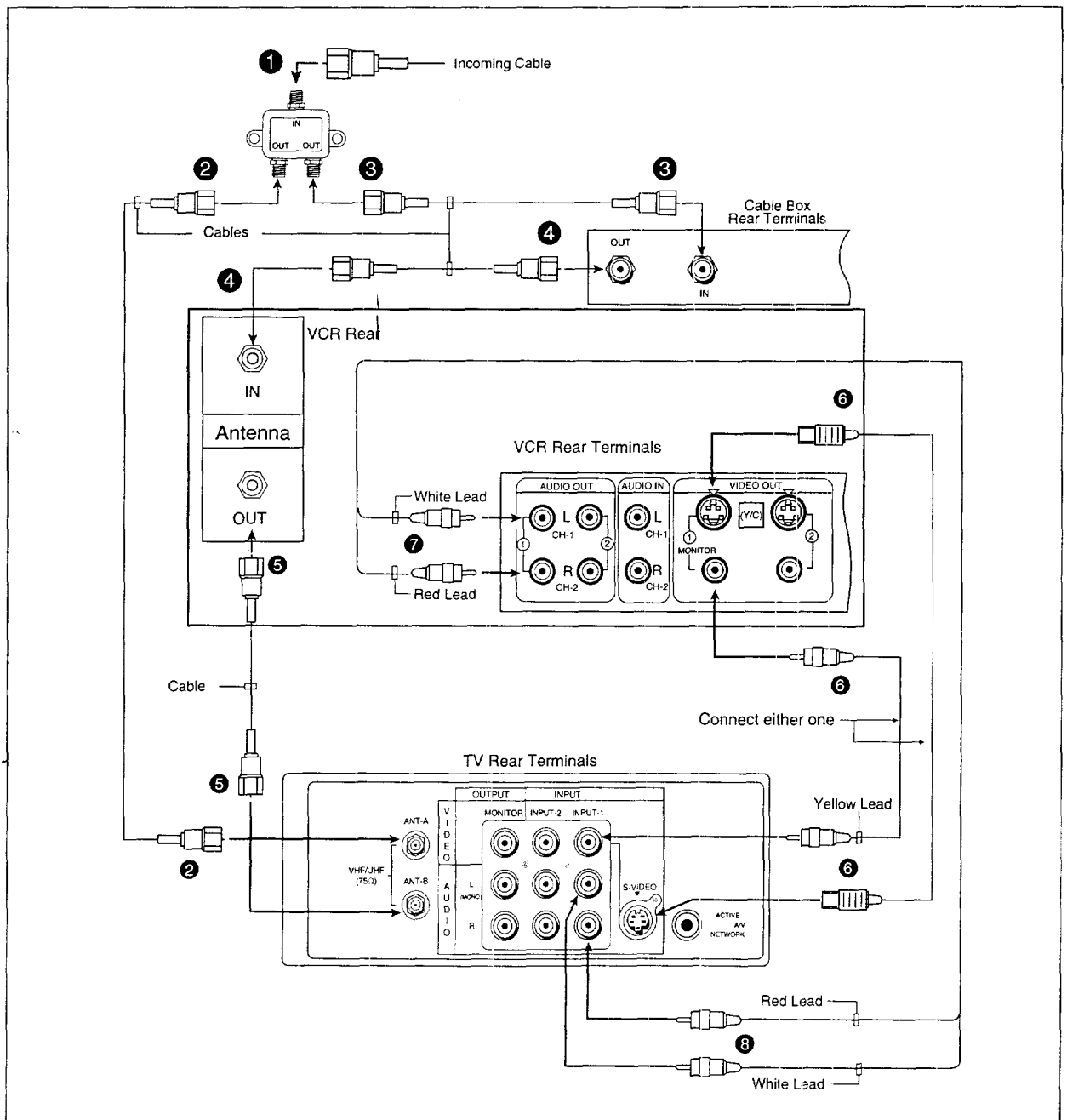
- ❼ Connect a set of RCA pin-type audio cables to the AUDIO OUT terminals on the back of the VCR. Use the red cable to connect the right (R) channel and the white cable for connecting the left (L) channel.
- ❽ Connect the other ends of this cable to the AUDIO INPUT terminals on the back of the TV.

▷ **Important:** If your VCR is monaural (non-stereo), you will only connect a single RCA pin-type audio cable. Connect the cable to the VCR, then connect the other end to the L (LEFT) audio input on the back of the TV.

▷ **Important:** If your VCR has a video channel switch, set it to "OFF/AV." See your VCR's owner's guide for details.

TV + VCR + cable with a cable box (cont.)

- 9 Start playing a tape on your VCR.
- 10 Use the INPUT button on your TV's remote control to select the correct input. If you connected the VCR to INPUT-1, select Input-1; if you connected the VCR to INPUT-2, select Input-2.



TV + stereo audio system

You may want to hear the sound from your TV and/or VCR through your home audio system. To do this, complete the necessary connections shown on previous pages of this chapter and use the following instructions.

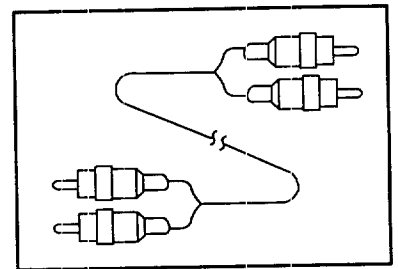
equipment you will need

To hook up an audio system, you will need:

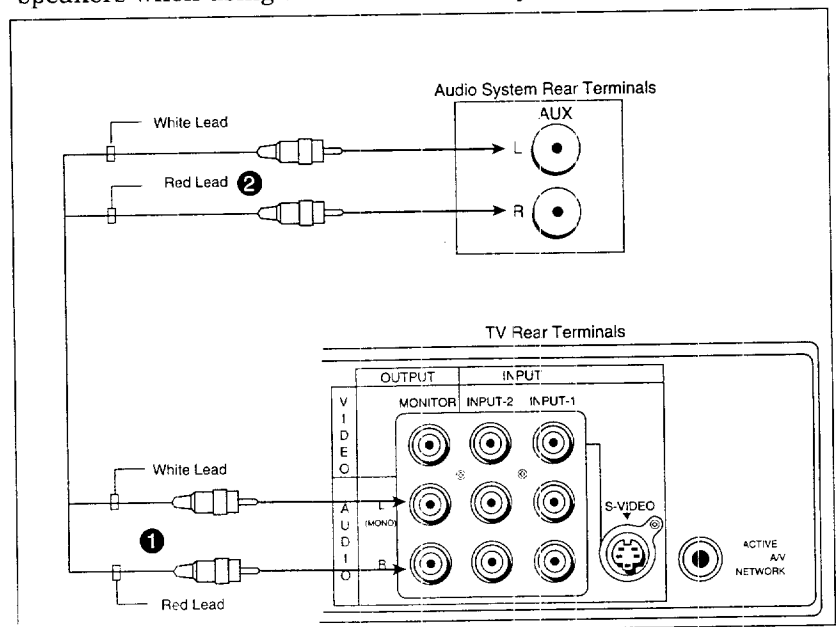
- One set of RCA pin audio cables.

procedure

- 1 Connect the audio cables to the AUDIO MONITOR OUTPUT terminals on the back of the TV. Use the red cable to connect the right (R) channel and the white cable to connect the left (L) channel.
- 2 Connect the other ends of these cables to the AUX IN terminals on the back of the audio system.
- 3 Turn off the television's speakers. To do this, press the AUDIO function button on the remote control until you see the SPEAKER display. Set the speakers to "Off" by pressing the adjust (right/left) button. See "Adjusting the sound," in Chapter 3.
- 4 Set the audio system's input to the AUX position.



▷ **Important:** For proper tone and volume balance, you should turn off the TV's speakers when using an external audio system.

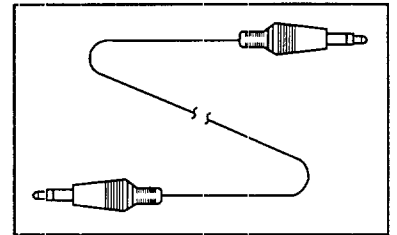


TV + Mitsubishi products that have A/V Network terminals

The A/V Network is a special system that Mitsubishi developed to make it easier to use many products with only one remote control. When the supplied cable is connected between two Mitsubishi products with the A/V Network, you can point the remote control at one product and it will “pass” the remote control command to the other.

equipment you will need

- One A/V network cable (included with the TV).

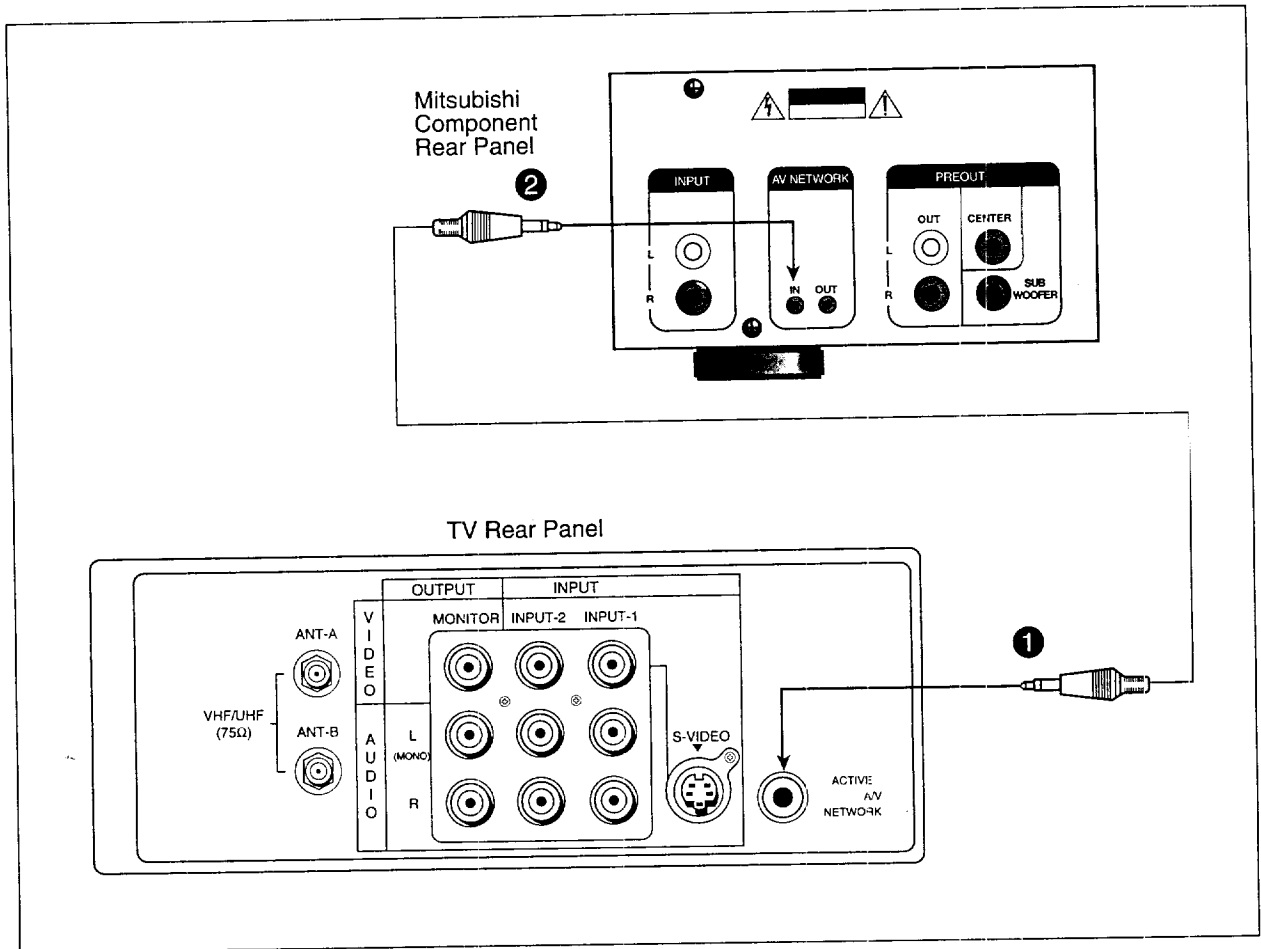


procedure

- ❶ Connect one end of the A/V network cable to the ACTIVE A/V NETWORK terminal on the back of the TV.
- ❷ Connect the other end of this cable to the A/V NETWORK IN terminal on the back of a Mitsubishi component that has A/V network terminals.
- ❸ You can now use the television remote to control your VCR or Laser Disc Player. Point the remote directly at the television. The A/V cable will “pass” the remote commands to the component.

▷ **Important:** The method of connecting the A/V network can change, depending on which components you have and the way you plan to use your equipment. More detailed information is contained in the owner’s guide of each particular Mitsubishi component.

TV + Mitsubishi products that have A/V Network terminals (cont.)





Now that your TV is connected to a cable system, an antenna, and possibly some external components, it's time to enjoy your equipment. This chapter will explain how to operate the TV, first focusing on functions that are basic and easy and then explaining some advanced features.

This chapter explains:

- ◆ **Getting Started**
- ◆ **Using the Advanced Features**

◆ Getting Started

This section is designed to get you started enjoying your new TV. If you follow these procedures one by one, you will soon begin discovering everything your television can do.

You'll find information on:

- **Using the remote control to operate VCRs, cable boxes, and other equipment,**
- **Turning the TV on/off,**
- **Selecting the input source to watch your VCR or other equipment,**
- **Changing channels,**
- **Understanding the ViewPoint® on-screen menus,**
- **Setting the clock,**
- **Memorizing channels,**
- **Adding and deleting channels,**
- **Setting the A/V network,**
- **Aligning the colors,**
- **Selecting the menu type,**
- **Naming the input,**
- **Naming the channels,**
- **Using video mute,**
- **Selecting the menu language,**
- **Customizing A/V memory,**
- **Adjusting the picture,**
- **Using the closed caption decoder, and**
- **Adjusting the sound.**

Using the remote control to operate VCRs, cable boxes and other equipment

about your remote control

This TV's remote control has four "layers": the TV layer, the VCR-A layer, the VCR-B layer, and the CABLE layer. Each layer can be used to operate a different component in your A/V system. You select the layer you want to use by setting the "select" switch across the top of the remote control.

When you first receive your remote control, the TV layer is set up to operate your Mitsubishi TV, the VCR-A and VCR-B layers are programmed to operate Mitsubishi VCRs, and the CABLE layer is set to operate your cable box or satellite receiver.

You can use the following buttons to operate your TV.

- power button
- pause button
- mute control
- SuperQuickView button
- QuickView button
- volume control
- input button
- channel control
- enter button
- audio and video controls
- menu button
- cancel button
- information button
- home button
- sleep timer button
- number buttons
- PIP controls
- play button

If you have a cable box (including the digital satellite box), a non-Mitsubishi VCR, a Mitsubishi laserdisc player, an A/V receiver, or a compact disc player, you can set up the layers in the remote control to operate these components.

The VCR-A layer can be set up to operate a non-Mitsubishi VCR; the VCR-B layer can be set to operate a VCR, cable box, or a Mitsubishi laserdisc player; the CABLE layer can be set up to operate a cable box, laserdisc player, or A/V receiver; and the TV layer can be set up to operate an A/V receiver.

setting up the remote control to operate your VCR

- ❶ Turn off your VCR.
- ❷ Set the select switch on the remote to choose the layer you want to set up: VCR-A or VCR-B.
- ❸ While holding in the POWER button on the remote control, enter the code number listed in the chart on the following page for your brand of VCR. Be sure to enter both digits of the code number. If more than one number is listed, try the first one.

Using the remote control to operate VCRs, cable boxes and other components (cont.)

If your VCR is this brand...	...enter this code	If your VCR is this brand...	...enter this code	If your VCR is this brand...	...enter this code
Mitsubishi (A)	01	Magnavox	03, 10, 11	Scot	15
Mitsubishi (B)	02	Multitech	06	Sharp	16
Canon	03	NEC	12	Sony	17, 18
Emerson	04, 05	Panasonic	03	Sylvania	03, 10, 11
Funai	06	Philco	03, 10	Symphonic	06
General Electric	03	Philips	03, 10, 11	Teknika	04, 06
Goldstar	07	Quasar	03	Toshiba	15
Hitachi	08	RCA	08, 13, 20	Totevision	07
JVC	09	Sanyo	14	Zenith	19

- 4 Release the POWER button.
- 5 Press the POWER button again. Your VCR should turn on. If the VCR turns on, your remote control is now set up to operate your VCR. (See "using your remote control to operate your VCR" in this chapter for remote control VCR functions.)

If your VCR does not turn on, repeat the instructions, trying each code number listed for your brand of VCR. If none of these code numbers work, try each number, 01 through 20.

using your remote control to operate your VCR

After you have set up your remote control for your particular brand of VCR, you can use the remote to operate your VCR.

- 1 Use the select switch on the remote control to choose the layer that you set up to operate your VCR: VCR-A or VCR-B.
- 2 Point the remote control at the VCR and press the desired buttons.

If you are using a Mitsubishi VCR, you will be able to use all of the buttons on the remote control to operate your VCR except for MUTE, VOLUME and the PIP function buttons, which will always operate the TV itself.

If you are using another brand of VCR, you can use the POWER, CHANNEL, REC, STOP, PAUSE, REW, PLAY, and FF buttons to operate your VCR.

Using the remote control to operate VCRs, cable boxes and other components (cont.)

setting up the remote control to operate your cable box

- ① Turn on your cable box.
- ② Set the select switch on the top of the remote to choose the layer you want to set up: CABLE or VCR-B.
- ③ While holding in the POWER button on the remote control, enter the code number listed in the chart below for your brand of cable box. Be sure to enter both digits of the code number. If more than one number is listed, try the first one.
- ④ Release the POWER button. (See “using your remote control to operate your cable box” in this chapter for remote control cable box functions.)

If your cable/satellite box is this brand...	...enter this code	If your cable box is this brand...	...enter this code	If your cable/satellite box is this brand...	...enter this code
ABC	57, 59, 62, 67, 89	Oak	61, 62, 82	Scientific Atlantic	66, 88, 89, 91, 92
Color Voice	73, 74, 98	Panasonic	63, 70	Signature	57
Comtronics	93	Paragon	51	Sony DSS	47
Gemini	55	Philips	73, 74, 75, 76, 77	Sprucar	63
General Electric	66		93, 94, 98, 99	Starcom	54, 55, 56, 87
General Instruments	55, 56, 57	Pioneer	64, 65, 84	Stargate	55
Hamlin	52, 53, 69	Prime Star	48	Tocom	67, 68, 72
Hitachi	57	Pulsar	51	Toshiba	51
Jerrold	54, 55, 56, 57, 58 59, 60, 85, 87	RCA	63	Untied Artists	62
Macom	71	RCA DSS	49	United Cable	54
Magnavox	94	Regal	53	Viewstar	93, 94
Memorex	51	Regency	79	Zenith	51
		Samsung	65, 84		

- ⑤ Press the POWER button again. Your cable box should turn off. If the cable box turns off, your remote control is now set up to operate your cable box. If your cable box does not turn off, repeat the instructions above, trying each code number listed for your brand of cable box. If none of these numbers work, try each number, 51 through 99.

▷ **Important:** After setting up your remote, be sure that your cable box can be turned on with the POWER button. Some of the cable boxes can be turned on with the CHANNEL buttons or the number buttons.

Using the remote control to operate VCRs, cable boxes and other components (cont.)

using your remote control to operate your cable box

After you have set up your remote control for your particular brand of cable box, you can use the remote to operate your cable box.

- 1 Use the select switch on the remote control to choose the layer that you set up to operate your cable box: CABLE or VCR-B.
- 2 Point the remote control at the cable box and press the desired buttons.

You can use the POWER, CHANNEL, numbers (0–9), and ENTER buttons to operate your cable box. If you are using an RCA DSS or PRIMESTAR® receiver, you may be able to use additional buttons.

setting up the remote control to operate your Mitsubishi audio component (laserdisc player or A/V receiver)

- 1 Turn off your audio component.
- 2 Set the select switch on the top of the remote to choose the layer you want to set up. For a laserdisc player, choose CABLE or VCR-B. For an A/V receiver, or CD player, choose CABLE.
- 3 While holding in the POWER button on the remote control, enter one of these code numbers:
 - For a Mitsubishi A/V receiver, compact disc player: 30, 31 or 35
 - For a Mitsubishi laserdisc player: 32 or 33
 - For a Yamaha A/V receiver, compact disc player: 36 or 37

Be sure to enter both digits of the code number. If more than one number is listed, try the first one.

- 4 Release the POWER button.
- 5 Press the POWER button again. Your audio component should turn on. If it does, your remote control is now set up to operate your audio component. If it does not turn on, repeat the instructions above, trying the other code number listed for your component.

(See “using your remote control to operate your Mitsubishi laserdisc player” and “using your remote control to operate your Mitsubishi audio products” in this chapter for information on using the remote to operate your A/V components.)

Using the remote control to operate VCRs, cable boxes and other components (cont.)

notes about your remote control

- ▷ **Important:** Sometimes manufacturers will change their products, or they may use more than one code. If this is the case, your remote may not be able to operate your VCR or cable box.
- ▷ **Important:** When you replace the batteries in your remote control, the remote will usually return to its initial setting. You may need to set up your remote again.

using your remote control to operate your Mitsubishi laserdisc player

After you have set up your remote control for your laserdisc player, you can use the remote to operate the player.

- ❶ Use the select switch on the remote control to choose the cable layer.
- ❷ Point the remote control at the laserdisc player and press the desired buttons.

You can use the POWER, CHANNEL, numbers (0–9), INFO, MENU, CANCEL, STOP, PAUSE, REW, PLAY, and FF buttons to operate your laserdisc player.

using your remote control to operate your Mitsubishi audio products

After you have set up your remote control for your A/V receiver, you can use the remote to operate it.

- ❶ Use the select switch on the remote control to choose the layer that you set up to operate your receiver: TV or CABLE.
- ❷ Point the remote control at the A/V receiver and press the desired buttons.

If you are using a Mitsubishi HTS-100, you can use the POWER, VOLUME, and MUTE buttons to operate the receiver.

If you are using a Mitsubishi HTS-300, you can use the POWER, CHANNEL, INPUT, VOLUME, ENTER, numbers (0–9), INFO, MENU, CANCEL, AUDIO, VIDEO, ADJUST, and MUTE buttons to operate the receiver.

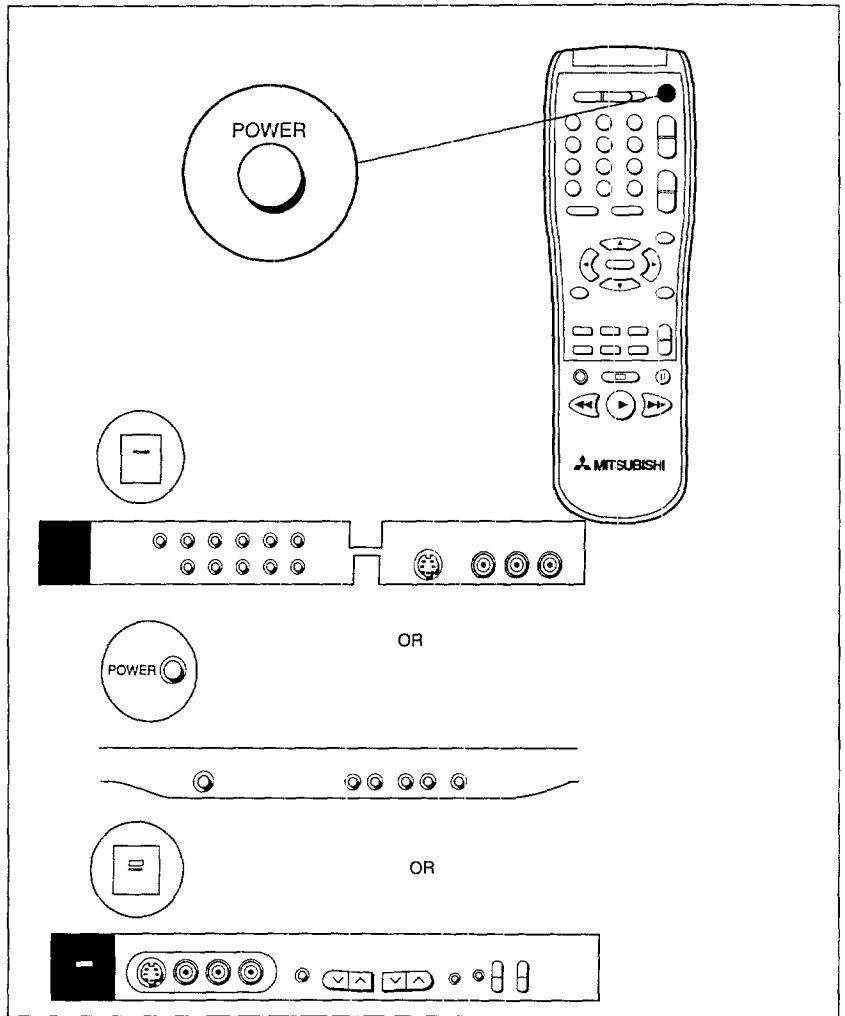
If you are using a Mitsubishi M-VR400 or M-VR600, you can use the POWER, VOLUME, numbers (0-9), and MUTE buttons to operate the receiver.

If you are using the Mitsubishi M-CD500 CD changer, you can use the PLAY, PAUSE, STOP, FF, and REW buttons to operate the changer.

Turning the TV on/off

▷ **Important:** Before using the remote control to operate the TV, set the select switch on the top of the remote control to TV.

Use the POWER button on either the control panel or the remote control to turn the TV on and off. The power indicator will light up in green when you turn the TV on.



▷ **Important:** There is always a small amount of current flowing into the TV, even when the power is turned off. This maintains any changes to the TV's settings and operates the built-in clock and timing functions. Unplugging the set will erase these settings, requiring you to set them again. Unplug the TV only when it won't be used for a long time.

Changing channels

Your TV offers you four ways of changing channels once their numbers have been programmed into channel memory:

- selecting channels one-by-one with the channel controls,
- directly accessing a channel by pressing the number buttons,
- using the QuickView option to recall the last channel,
- using the special QuickView option to switch to a particular memorized channel, and
- using the SuperQuickView function to alternate between channels on a user-chosen list.

▷ **Important:** To change channels faster, use either of the following procedures:

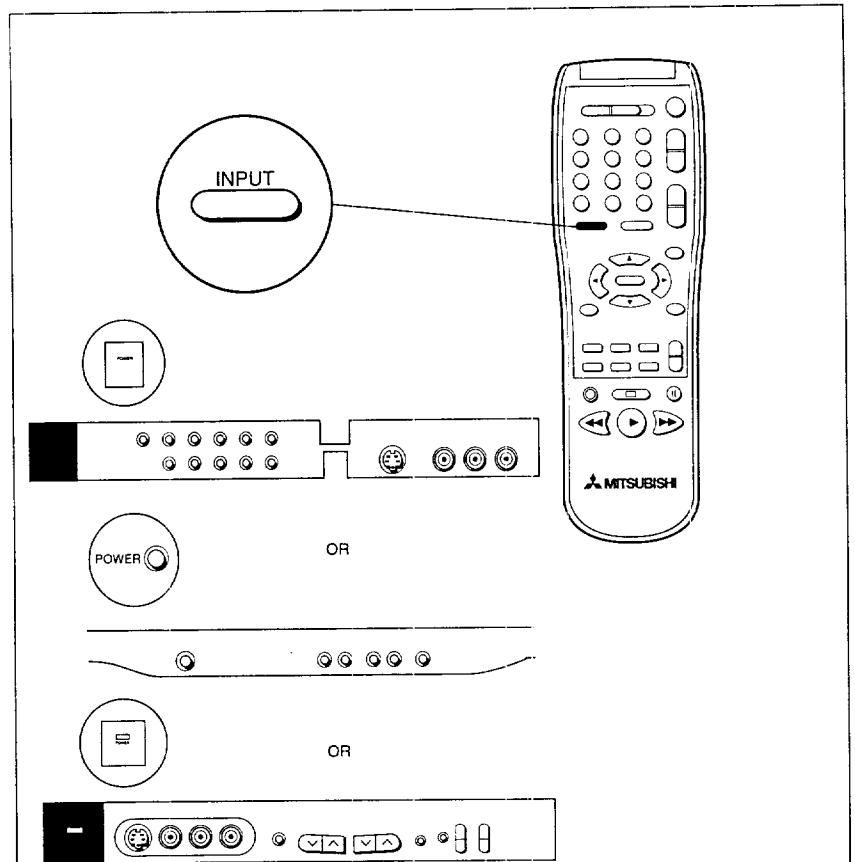
- Enter three digits for every channel number, using zeros where needed. For example, enter 004 to view channel 4 and 028 to view channel 28 or,
- Press the ENTER button after selecting the number of the channel. For example, press 4 and ENTER to view channel 4.

▷ **Important:** If you memorized channels using the Indoor/Outdoor Antenna, your TV can receive antenna channels 2-13 (VHF) and 14-69 (UHF). If you memorized channels using the Cable Antenna, your TV can receive cable channels 1-125. If you select a channel outside of the memorized range, your TV will not change channels.

Selecting the input source to watch your VCR or other equipment

If you connected components such as VCRs, camcorders, or laserdisc players to your TV, you will need to change the input source to view the signals from these components.

To select an input source, press the input button (INPUT) on the



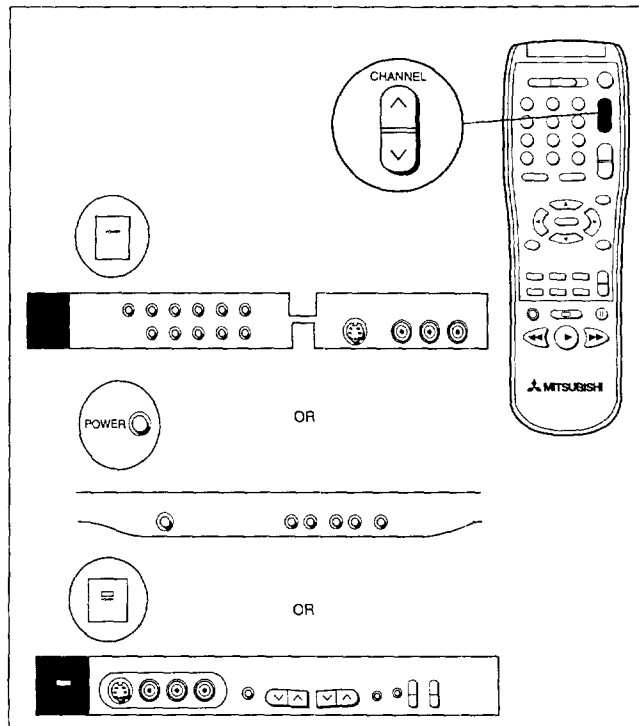
control panel or on the remote control.

You can choose between the following input sources:

- Ant-A or Ant-B (antennas or cable systems connected to the antenna terminals),
- Input 1 or Input 2 (components connected to the terminals on the back of your TV), or
- Input 3 (a component connected to the terminals on the front panel of your TV).

The name of the input you have selected will display briefly in the corner of the screen.

Changing channels (cont.)

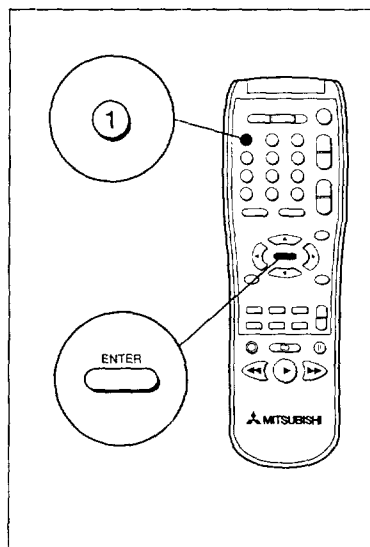


changing channels one-by-one

To change channels:

- 1 Press one of the channel scan controls (CHANNEL) on the control panel or on the remote control. The TV will automatically tune to the next memorized channel.

► **Important:** You cannot change channels one-by-one until available channels have been programmed into memory. (See “Memorizing channels” in this chapter.)



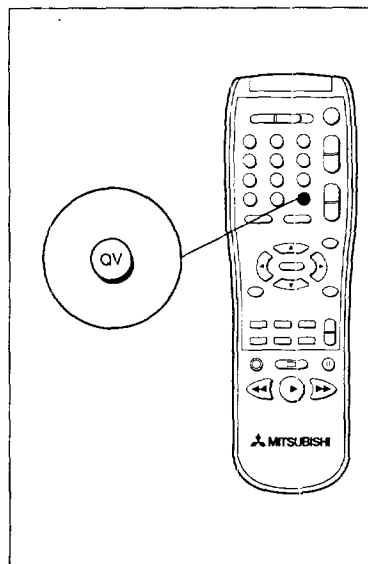
changing channels directly

To move directly to a particular channel without going through the programmed channels in between:

- 1 Use the number buttons on the remote control to select the number of the channel you want to view.
- 2 Press the ENTER button.

Changing channels (cont.)

using the QuickView™ option



The **QuickView** feature can work in two ways: to recall the last channel viewed (**Last Channel Recall**), or to recall a channel you put into QuickView memory.

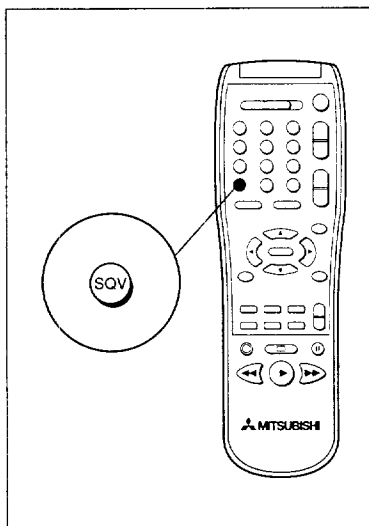
- If you have not memorized any channels into QuickView Memory, **Last Channel Recall** allows you to use the QV button to switch back and forth between the last two channels viewed.
- **QuickView Memory** allows you to use the QV button to switch back and forth between the last channel you were watching and the channel you put into QuickView memory.

Setting the QuickView memory

- ❶ Tune to the channel you wish to memorize.
- ❷ Press and hold the QV button for about 2 seconds. The channel numbers will appear on the screen, indicating that you have memorized that channel.
- ❸ After changing to another channel, press the QV button to immediately return to the memorized channel.
- ❹ If you press the QV button while watching the memorized channel, you will return to the last channel viewed.

▷ **Important:** The memorized QV channel will remain in memory until you replace it with a new channel using the procedure above.

Changing channels (cont.)



using the SuperQuickView™ option

To view selected channels programmed into SuperQuickView memory:

- 1 Enter the desired channel into SuperQuickView memory. (See “Using SuperQuickView,” in this chapter.)
- 2 Press the SQV button repeatedly to view the SQV channels in sequence.

Understanding the ViewPoint® on-screen menus

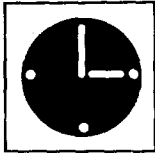
One of the distinctive features of this TV is Mitsubishi's exclusive ViewPoint On-Screen Operating System.

Unlike other television menus systems, ViewPoint includes a special Picture-in-Picture screen to let you view the TV picture while you are using the menu.

ViewPoint also provides step-by-step instructions for using some of the TV's special capabilities.

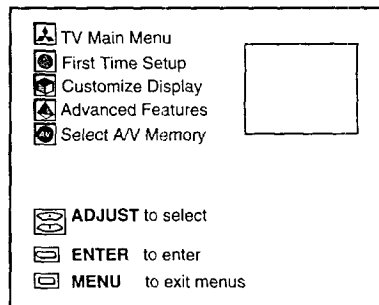
When using the ViewPoint system, please keep the following in mind:

- The selected menu item is indicated in yellow.
- The on-screen menus will turn off if no item is selected within 5 minutes.
- Some on-screen menu items must be set before other items are available. For example, "Set the Timer" will only be available if "Set the Clock" has been set.
- You can exit the on-screen menus any time by pressing the MENU button repeatedly. You will then return to regular TV viewing.
- You can also exit the on-screen menus by pressing the HOME button on the remote control.



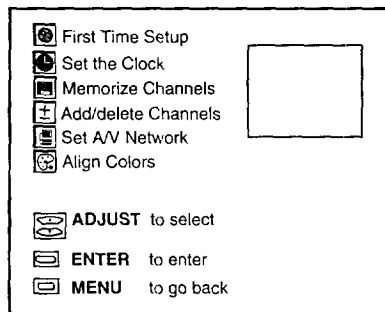
Setting the clock

Your TV contains an internal clock. If there is a broadcaster in your area that is sending the current time along with its regular broadcast signal, then your TV can automatically set its clock with this signal. Otherwise, you can set the clock yourself.

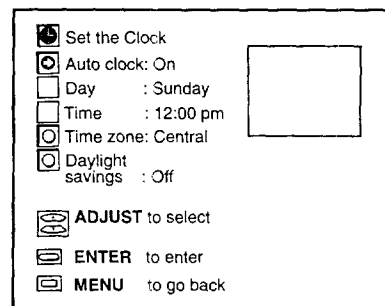


1 Press the MENU button on the remote control. The Main Menu will appear on the screen.

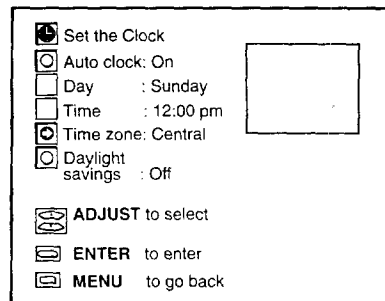
2 Use the ADJUST buttons to select "First Time Setup." Press ENTER.



3 You will see the "First Time Setup" screen. Use the ADJUST buttons to select "Set the Clock." Press ENTER.

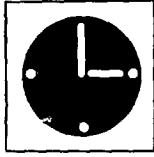


4 If you want your TV to set its clock automatically, use the ADJUST buttons to set "Auto clock" to "On"; if you want to set the clock yourself, set "Auto clock" to "Off," and see the section "setting the clock yourself," in this chapter.

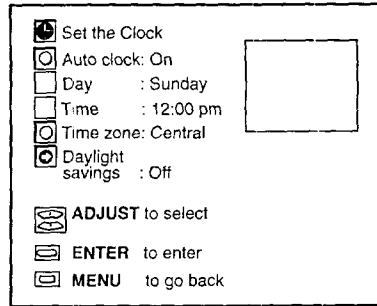


using automatic clock setting

- Use the ADJUST buttons to select the time zone you live in. The available time zones are: Central, Mountain, Pacific, Alaska, Hawaii, Atlantic and Eastern.
- Press the ENTER button.



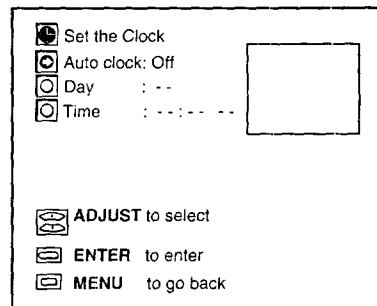
Setting the clock (cont.)



- If you follow daylight savings, use the ADJUST buttons to answer the question with “On.” Otherwise, answer “Off.” Press ENTER.
- The automatic clock set up is completed. The screen will return to the “First Time Setup” menu.

▷ **Important:** The TV’s clock will not be set until you tune your TV to a channel that broadcasts the time via Extended Data Services (XDS). If your TV loses power, you will need to tune to that channel again to reset your clock. Most PBS stations broadcast the time setting signal.

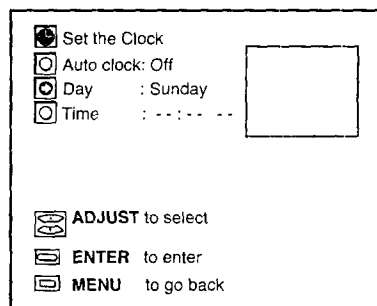
▷ **Important:** If you set “Daylight savings” to “On,” your TV will adjust the clock by one hour when daylight savings begins and ends.



setting the clock yourself

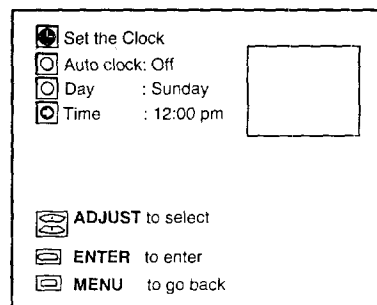
- Use the ADJUST buttons or the key pad to set “Auto clock” to “Off.” Press ENTER.
- Use the ADJUST buttons to select the “Day.” Press ENTER.
- Use the ADJUST buttons or number buttons to set the “Time.”
- After you have set the “Day” and “Time,” press the ENTER button to start the clock.

The screen will return to the “First Time Setup” menu.

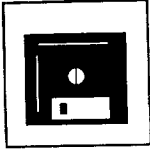


▷ **Important:**

You can clear the time by pressing the CANCEL button when “Auto clock” is highlighted.

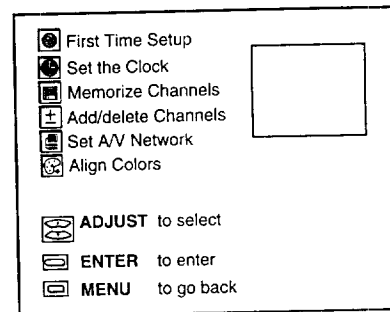


If you are receiving a VCR signal on channel 3 or channel 4, the automatic setting may not work correctly.



Memorizing channels

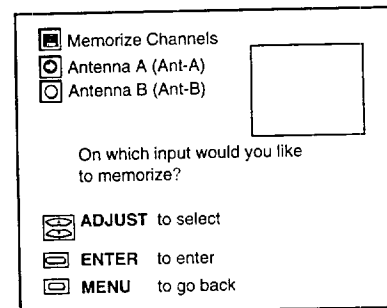
You can use the menus to automatically memorize the channels your TV can receive. Once channels are memorized, you can scan through them using the channel up/down controls on the remote control and control panel.



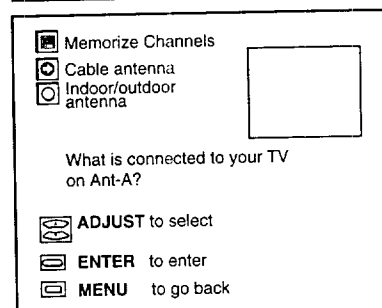
1 Press the MENU button on the remote control. The Main Menu will appear on the screen.

2 Use the ADJUST buttons to select "First Time Setup." Press ENTER.

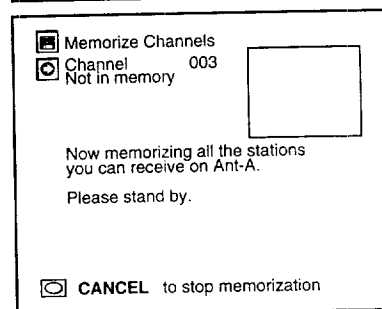
3 You will see the "First Time Setup" screen. Use the ADJUST buttons to select "Memorize Channels." Press ENTER.



4 Use the ADJUST buttons to select the terminal (Ant-A or Ant-B) to which the antenna or cable system is attached. Press ENTER. (If you made a connection to each terminal, you should memorize the channels for *one* of the terminals now).

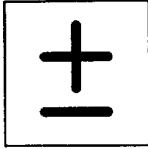


5 Use the ADJUST buttons to choose the type of antenna you connected: Cable antenna or Indoor/outdoor antenna. Press ENTER.



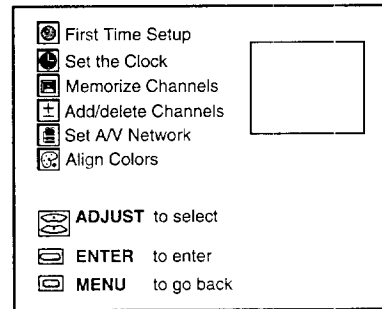
6 You will see a message that channel memorization is in progress. A channel being added to memory will be labeled "In memory." Channels not being added will be labeled "Not in memory." You can stop channel memorization at any time by pressing CANCEL.

> **Important:** CHANNEL up/down controls will work differently after channels have been memorized. After memorizing, use the channel controls (CHANNEL) to advance sequentially to the next memorized channel. Use the number buttons to select individual channels.



Adding and deleting channels

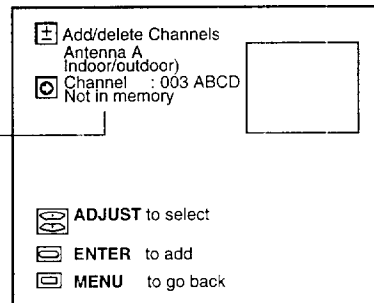
After all available channels have been memorized with the “Memorize Channels” feature, channels with weaker signals can be added or deleted with the following procedure.



❶ Press the MENU button on the remote control. The Main Menu will appear on the screen.

❷ Use the ADJUST buttons to select “First Time Setup.” Press ENTER.

❸ Use the ADJUST buttons to select “Add/delete Channels.” Press ENTER.



Either “In memory” or “Not in memory” will appear.

❹ The “Add/delete Channels” screen will appear. Use the ADJUST buttons to select the channel you would like to add or delete.

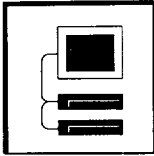
(You can also use the CHANNEL controls to change channels.)

❺ If a channel is labeled “In memory,” use the CANCEL button to remove it from memory. If a channel is labeled “Not in memory,” use the ENTER button to add it to memory.

❻ When you are finished adding and deleting channels, press the HOME button to return to normal TV viewing.

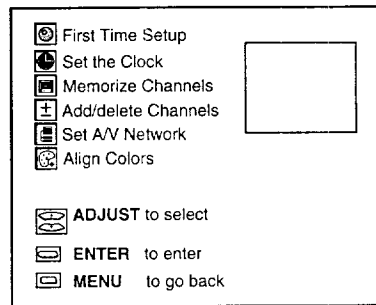
Adding a channel to memory allows you to tune to the channel with the CHANNEL up/down controls. If a channel is not in memory, you can only tune to it with the number buttons.

▷ **Important:** In this menu, you can use the CHANNEL buttons to change channels.



Setting the A/V Network

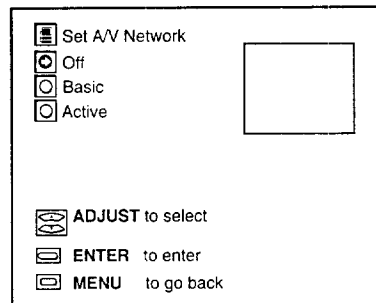
The A/V Network is a system that Mitsubishi developed to make it easier to operate many products with one remote control. When the A/V Network is connected between two Mitsubishi products, you can point the remote control at one product and it will “pass” the remote control command to the other. To set up the A/V Network:



1 Press the MENU button on the remote control. The Main Menu will appear on the screen.

2 Use the ADJUST buttons to select “First Time Setup.” Press ENTER.

3 Use ADJUST to select “Set A/V Network”; then press ENTER.



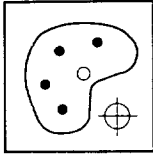
4 Use the ADJUST buttons to select “Active,” “Basic,” or “Off.” Check the rear terminals of your VCR, then use the chart below to determine how you should set your Projection TV.

5 Press the ENTER or MENU

If your VCR has a rear terminal that reads:	...and you have set your VCR to:	...then set your TV to:
A/V Network	–	Basic
Active A/V Network	Off	Basic
Active A/V Network	Active	Active
Does not have an A/V Network rear terminal	–	Off

If you are not sure how to set your VCR's A/V Network setting, refer to your VCR's owner's guide.

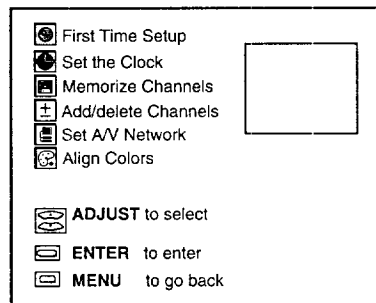
- ▷ **Important:** The A/V Network can still be used to pass remote control signals even when the Projection TV's “A/V Network” setting is “Off.”
- ▷ **Important:** If you do not use the A/V Network system, set “A/V Network” to “Off.” If you don't, channel selection may not work correctly.
- ▷ **Important:** If you select the Active or Basic A/V setting, make sure your Mitsubishi VCR with an A/V Network or Active A/V network connection is connected to Input-1 and the A/V network cable is in place.



Aligning the colors

Your Mitsubishi TV has three picture tubes and large diameter lenses which are aligned to project light beams on the screen. Each picture tube projects only one color; red, green or blue.

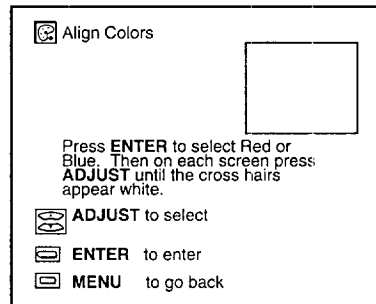
For the best picture, the three colors should be aligned at the center of screen. You should perform the following procedure periodically, or whenever you think that the light beams are out of alignment.



① Press the MENU button on the remote control. The Main Menu will appear on the screen.

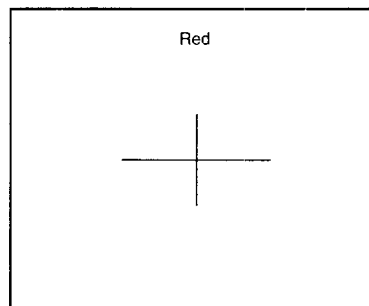
② Use the ADJUST button to select "First Time Setup." Press ENTER.

③ Select "Align Colors" using the ADJUST buttons. Press ENTER.



④ The "Align Colors" screen will appear. Press ENTER to select a color to align: red or blue.

⑤ Use the adjust buttons to align the color you selected (red or blue) with the green lines. When they are aligned, the green line will turn white.

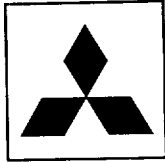


⑥ Next, use the ENTER button to select the other color (red or blue). Use the ADJUST buttons to align these colored lines with the green lines.

⑦ After aligning both the red and blue lines, press the MENU button to return to the "First Time Setup" menu.

▷ **Important:** The cross-bar pattern is intended for use only as an alignment aid. It should not be left on for a long period of time, since it can damage the picture tubes.

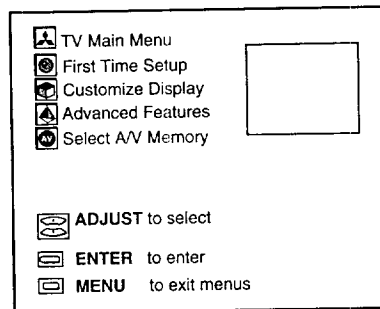
▷ **Important:** The alignment can change over time and may need to be adjusted. If you notice a change in the color quality of the picture, check the alignment and readjust as required.



Selecting the menu type

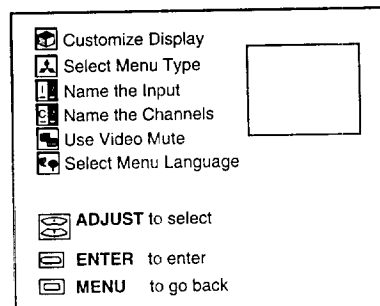
You can display the on-screen menus in one of two ways. The “Standard menu,” which is illustrated in this manual, provides step-by-step instructions for all features. The “Advanced menu” lets you select each feature directly by its name and icon.

Your TV’s normal setting is the “Standard menu.” To switch between the Standard and Advanced menus:

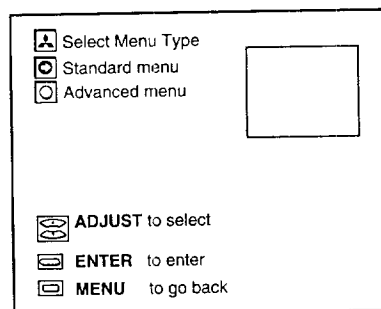


1 Press the MENU button on the remote control. The Main Menu will appear on the screen.

2 Use the ADJUST buttons to select “Customize Display.” Press ENTER.

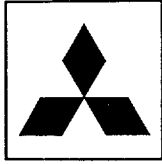


3 You will see the “Customize Display” menu. Use the ADJUST buttons to select “Select Menu Type.” Press ENTER.



4 Use the ADJUST buttons to select “Standard menu” or “Advanced menu.”

5 Press the ENTER or MENU button.

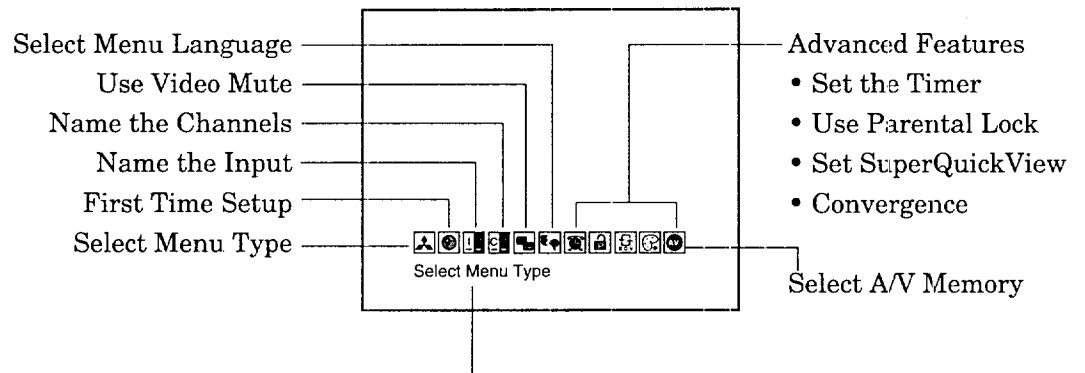


Selecting the menu type (cont.)

If you select the “Standard menu,” the screen will return to the “Customize Display” menu. If you selected the “Advanced menu,” the screen will show the Advanced Main menu (shown below.)

To use the Advanced menu, use the ADJUST buttons to highlight the icon of the feature you want to use, then press ENTER. The name of the highlighted icon appears at the bottom of the screen. This menu disappears if you do not select an item within 1 minute.

The Advanced Menu

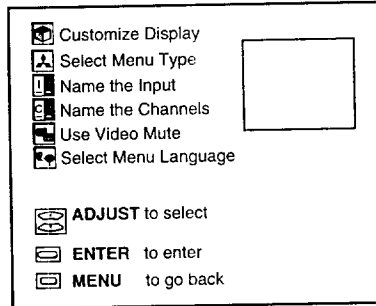


The feature name of the highlighted icon appears here.



Naming the input

This feature allows you to name the inputs so that you can keep track of components you have connected to your TV. For example, you might name one input "VCR," and another one "DISC." After naming, the new name will appear on the screen display. The original names are: "Input-1," "Input-2," and "Input-3".

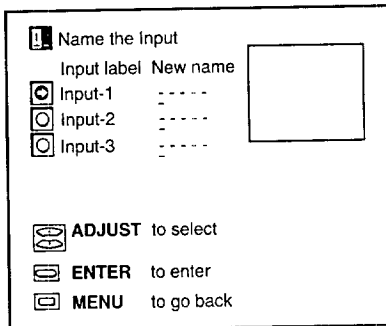


1 Press the MENU button on the remote control. The Main Menu will appear on the screen.

2 Use the ADJUST buttons to select "Customize Display." Press ENTER.

3 You will see the "Customize Display" screen. Use the ADJUST buttons to select "Name the Input." Press ENTER.

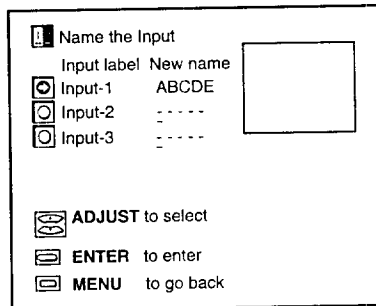
- Use the ADJUST buttons to select the input you want to name (Input-1, Input-2, or Input 3). Press ENTER.



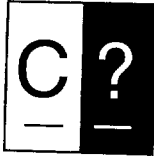
4 Use the ADJUST buttons and the ENTER button to select each letter in the new name.

You can name the inputs using letters (A – Z), numbers (0 – 9), or symbols (: / . , () ! " # \$ % & ' blank + ; < = > ? blank -).

If you press the CANCEL button while setting the name, you will move one position to the left. You can clear the entire name by pressing CANCEL when the left-most position is pointed.

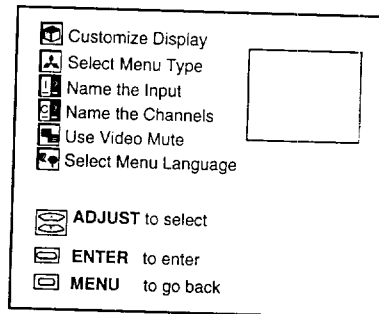


5 When you are finished, press the MENU button; the screen will return to the "Customize Display" menu.



Naming the channels

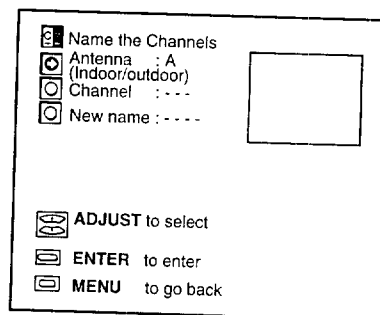
You can name the channels your TV receives, to help you keep track of the many channels available. After you enter a name, it will appear on-screen, next to the channel number.



1 Press the MENU button on the remote control. The Main Menu will appear on the screen.

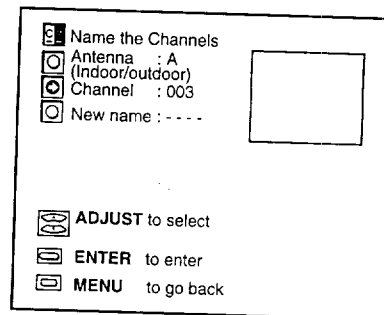
2 Use the ADJUST buttons to select "Customize Display." Press ENTER.

3 You will see the "Customize Display" screen. Use the ADJUST buttons to select "Name the Channels." Press ENTER.



4 Use the ADJUST buttons to select an antenna (A or B). Press ENTER.

5 Use the ADJUST buttons, channel controls or number buttons to select the channel you want to name. Press ENTER.



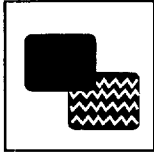
6 Use the ADJUST buttons and the ENTER button to select each letter in the new name. You can use letters (A - Z), numbers (0 - 9), or symbols (: / . , () ! " # \$ % & ' blank + ; < = > ? blank -).

When you are setting the name, you can clear it by pressing the CANCEL button when the left-most position is pointed.

7 When you are finished, press the HOME button to return to normal viewing

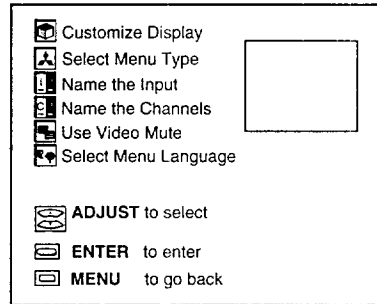
▷ **Important:** The names you set will appear instead of the call letters being supplied by Extended Data Services (XDS).

▷ **Important:** You can name up to thirty channels. If you try to name more, the message "Memory over!" will indicate that the memory is full. If the memory is full and you want to name a channel, you must use the above steps to clear the name for an existing channel. You can then select the new channel to name.



Using video mute

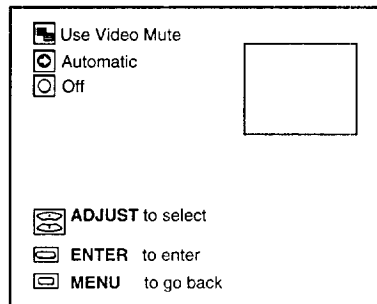
When you use the video mute functions, your TV will display a blue screen whenever it is receiving a weak VCR signal. If you want to try viewing a weak signal, you can turn the video mute off.



1 Press the MENU button on the remote control. The TV Main Menu will appear on the screen.

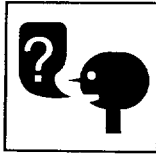
2 Use the ADJUST buttons to select "Customize Display." Press ENTER.

3 Use the ADJUST buttons to select "Use Video Mute." Press ENTER.



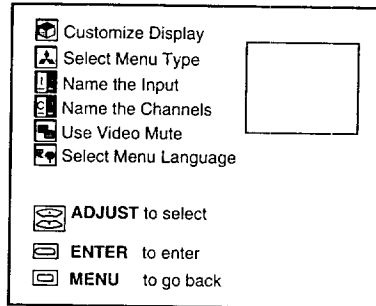
4 Using the ADJUST buttons, select "Automatic" to turn video mute on or "Off" to turn video mute off.

5 Press the ENTER or MENU button to return to the "Customize Display" menu.



Selecting the menu language

This TV allows you to display the on-screen menus in one of three languages: English, Spanish or French.



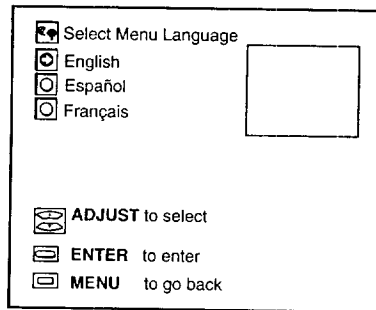
1 Press the MENU button on the remote control. The TV Main Menu will appear on the screen.

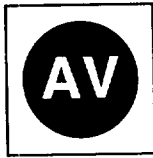
2 Use the ADJUST buttons to select "Customize Display." Press the ENTER button.

3 Use the ADJUST buttons to select "Select Menu Language." Press the ENTER button.

4 Use the ADJUST buttons to select the language for the on-screen menu.

5 Press the ENTER or MENU button to return to the "Customize Display" menu.





Selecting the A/V memory position

Your TV has four A/V memory positions. Each A/V memory position contains preset picture and sound settings to best suit the type of program you are watching. You can adjust the settings for these memories as much as you like.

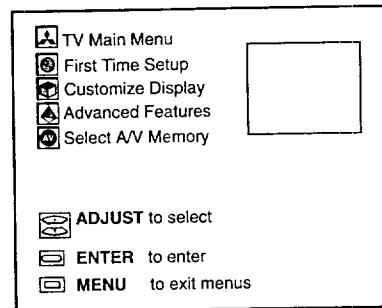
The four memories are:

“Standard” - - - normal picture and sound

“Music” - - - vivid picture and lively sound

“Movie” - - - soft picture and strong sound

“News” - - - optimized for listening to speech in news programs

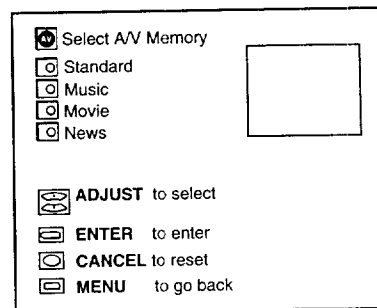


① Press the MENU button on the remote control. The Main Menu will appear on the screen.

② Use the ADJUST buttons to select “Select A/V Memory.” Press ENTER.

③ You will see the Select A/V Memory screen.

④ Use the ADJUST buttons to select the desired A/V memory position.



You can press the CANCEL button to reset many of the audio and video settings for the selected A/V memory position to their factory settings. Pressing CANCEL will not affect changes made to volume, the “Listen to:” function (Stereo/SAP/Mono), speaker (off/on), monitor out (variable/fixed), background (black/gray), and closed captioning.

⑤ Press the MENU button to return to the MAIN MENU.

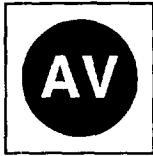
▷ **Important:** A/V memory positions are specific to the currently selected input. When you change your input, the last A/V memory position used with that input is automatically selected. (See “Selecting the input source,” in this chapter for information on choosing your input.)



Selecting the A/V memory position

Although the preset A/V memory positions are designed to optimize the picture and sound quality for different types of programming, you can adjust individual settings (tint, treble, etc.) for any position. (See “Customizing the A/V memory position” in this chapter for information on adjusting individual video and audio settings.)

- ▷ **Important:** The “Listen to:” function, Balance, Speaker, Monitor Out, (volume), background and closed captioning adjustments are independent of A/V memory positions.
- ▷ **Important:** The “Select A/V Memory” menu is not available for locked channels until the channel has been unlocked.



Customizing the A/V memory position

You can adjust the individual video and audio settings for each of the four preset A/V memory positions to select your desired picture and sound qualities. This section provides descriptions of each video and audio setting, and explains how to adjust them for the A/V memory positions. (See “Selecting the A/V memory position,” in this chapter for more information.)

▷ **Important:** You can cancel any adjustments made to an A/V memory position and return it to the factory settings. (See “Selecting the A/V memory position,” in this chapter for more information.)

Adjusting the picture

This section contains descriptions for each video setting and explains how to adjust them for the A/V memory positions.

descriptions of video settings

The **Tint** provides a scale that adjusts the proportion of red to green in the picture. This determines the delicate tones of color.

The **Color** provides a scale that determines the intensity of the color.

The **Contrast** provides a scale that controls the level of white-to-black in the picture. When the contrast is low, you will be able to see the variety of shades in the darker images on the screen. When the contrast is high, the screen’s dark images will appear more uniformly black, but this will also make the colors on the screen seem more vibrant.

The **Brightness** provides a scale that controls the overall brightness of the picture.

The **Sharpness** provides a scale that adjusts the detail and clarity of the picture.

The **Color temp (Color temperature)** allows you to set how the TV will display white images. Your choices are “Low,” “High,” or “Middle.”

- With the “**Low**” setting, white images on-screen will have a yellow cast to them.
- With the “**High**” setting, white images on-screen will have a blue cast to them.
- With the “**Middle**” setting, white images on-screen will be balanced between yellow and blue.



Customizing the A/V memory position (cont.)

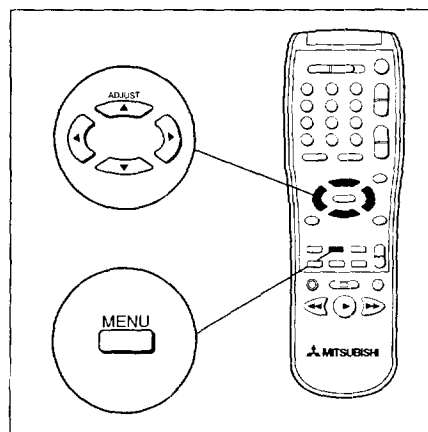
The **Background** allows you to select the background color from choices of “**Black**” or “**Gray**” for the closed caption display and the audio/video functions display.

The **CC** function is used to control the closed caption decoder. For details, see **Using the closed caption decoder** in this chapter.

adjusting the video settings

You can adjust the video settings for any A/V memory position using the MENU or VIDEO buttons on the remote control.

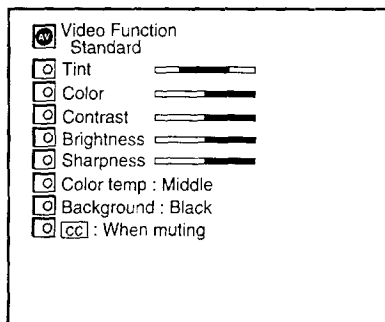
access with the MENU button



1 Press the MENU button on the remote control. The TV Main Menu appears on the screen.

2 Use the ADJUST buttons to select “Select A/V Memory.” Press ENTER.

3 The four A/V memory positions appear. Select the A/V position to adjust by pressing the ADJUST up/down buttons. When the desired position is selected, press ENTER.



4 The video settings for the selected A/V memory position display. Use the ADJUST up/down buttons to select the setting to change and press ENTER.

5 The setting appears at the bottom of the screen.

6 While the setting is still on the screen, use the ADJUST right/left buttons to adjust it.

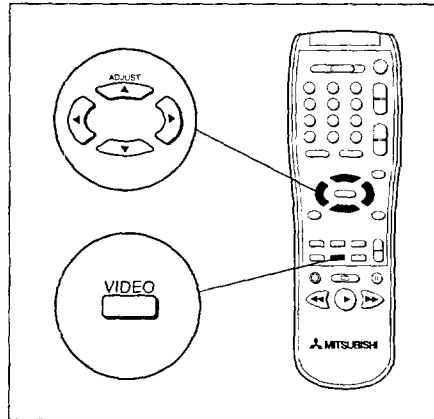
7 The settings will disappear from the screen after a few seconds. (You cannot adjust a setting if it is not on the screen.)



Customizing the A/V memory position (cont.)

access with the VIDEO button

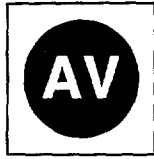
The VIDEO button changes the video settings for *the currently selected A/V memory position*. The currently selected A/V memory position displays on the screen above the video adjustment display when you press the Video button. (See “Selecting the A/V memory position,” in this chapter.)



- ➊ Press the VIDEO button until the desired setting displays at the bottom of the screen.
- ➋ While the setting is still on the screen, use the ADJUST right/left buttons to adjust the function's setting.
- ➌ The setting will disappear from the screen after a few seconds. (You cannot adjust a setting if it is not on the screen.)

▷ **Important:** If you use the VIDEO button, any adjustments made to video settings are memorized into the *currently selected A/V memory position* (Standard, Movie, Music, News). To reset the video settings to their factory settings, see “Selecting the A/V memory position” in this chapter.

▷ **Important:** Pressing the ADJUST button alone in normal picture will select the previous selected video or audio setting menu.



Customizing the A/V memory position (cont.)

Using the closed caption decoder

Many broadcasters now supply closed captioning information along with their regular broadcasts. Your TV can decode that information and display it on the TV screen.

Closed captioning was initially designed so that those with hearing difficulties could more fully enjoy viewing television. However, closed captioning can also be used in other ways, such as:

- helping children learn to read,
- learning a foreign language, and
- using the television without disturbing others.

There are two types of captioning that broadcasters can send: **standard** and **text**.

Standard captioning is related to the program that is being shown. Standard captioning usually follows the dialogue of the characters on-screen and only displays when the broadcaster is sending the closed captioning.

Text captioning often contains information such as weather or news. Text captioning blocks out your view of the program you are watching.

Your TV can decode four different standard captioning signals and four different text captioning signals from each TV station. However, each station may be broadcasting only one or two captioning signals, or none at all.

When setting the decoder you can choose:

- to display one of four standard captioning signals (**CC**:1, **CC**:2, **CC**:3, **CC**:4),
- to display one of four text captioning signals (**CC**: Text 1, **CC**: Text 2, **CC**: Text 3, **CC**: Text 4),
- to display captions when muting (**CC**: When Muting),
- or to turn the captions off (**CC**: Off).

If you select “**CC**: When Muting,” the standard captioning signal (**CC**:1) will appear whenever you use the MUTE button.

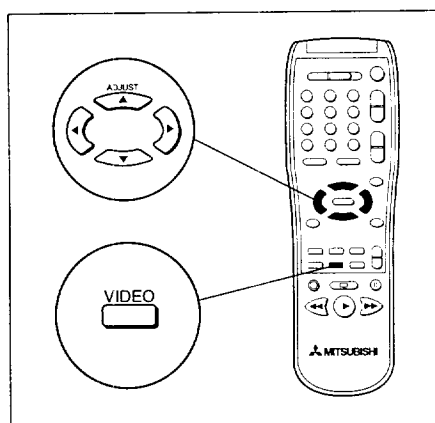
- ▷ **Important:** If you set the decoder to a “standard” caption setting and tune to a broadcaster that is not sending a caption signal, no captions will appear.
- ▷ **Important:** The content of captions are determined by the broadcaster. If your captions show strange characters, misspellings, or odd grammar, it is not a malfunction of the TV



Customizing the A/V memory position (cont.)

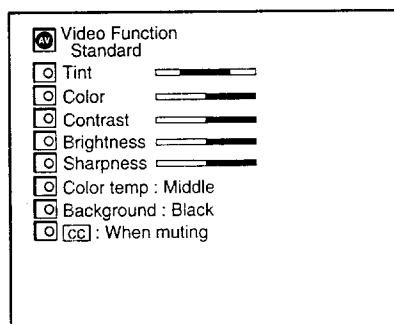
adjusting the closed caption decoder

You can access the closed caption decoder screen using the MENU or VIDEO button. When adjusting the closed caption decoder, you can use the buttons on the remote control.



access with the MENU button

- 1 Press the MENU button on the remote control. The TV Main Menu will appear on the screen.
- 2 Use the ADJUST buttons to select "Select A/V Memory." Press ENTER.
- 3 Select the closed caption display by pressing the ADJUST up/down buttons. Press the adjust right or left button.



access with the VIDEO button

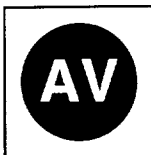
- 1 Press the VIDEO button until the closed caption menu option displays.
- 2 Press the ADJUST right/left buttons to select the desired closed caption signal.

(See the previous page for an explanation of the caption settings.)

- ▷ **Important:** If you set the decoder to a "text" setting and tune to a broadcaster that is not sending a text signal, a large black rectangle will appear on your screen. Press the HOME button to make the rectangle disappear.
- ▷ **Important:** If you cannot display any captions on the screen, please keep in mind that not all broadcasters, video tapes, or laserdiscs supply closed caption signals.

Additionally, captions might not appear:

- if you are playing a video tape that is worn or deteriorated, or
- if you are starting to play a laserdisc or video tape from still or search mode.



Customizing the A/V memory position (cont.)

Adjusting the sound

This section contains descriptions for each audio setting and explains how to adjust them for the A/V memory positions.

descriptions of audio settings

The **Listen to:** function allows you to determine how your TV will receive an audio signal and play back the sound that you hear. You can set this function to “Stereo,” “S.A.P.,” and “Mono.”

- For almost all situations, you should choose **Stereo**. With this setting, the TV will play stereo broadcasts in stereo and mono broadcasts in mono. If a channel is broadcasting in stereo, the word “Stereo” will display when you tune to that channel.
- Some TV stations will broadcast second audio program, or S.A.P. signal. This signal is an additional soundtrack that you can't hear during normal TV viewing. An S.A.P. signal might be related to the program you are watching (e.g., a soundtrack in a foreign language), or it might be unrelated (e.g., a weather report). If a channel is broadcasting an S.A.P. signal, the letters “SAP” will appear on-screen when you tune to that channel. Choose “Listen to: SAP” to hear the S.A.P. signal.
- Use the **Mono** setting if you are receiving a weak audio signal. This setting will reduce background noise. However, with this setting, the TV will only play in mono, even if the program you are watching is in stereo.

The **Bass** setting controls the volume of low frequency sound.

The **Treble** setting controls the volume of high frequency sound.

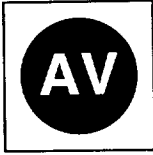
The **Balance** setting adjusts the level of sound between the left and right speakers. Adjust the scale until the sound seems to come equally from both speakers.

The **Surround** setting creates simulated stereo and surround effects. You can set this setting to “Off,” “Simulate,” or “Hall.”

- Select **Off** if you do not want to use any surround effects.
- Select **Simulate** if you are watching a non-stereo program; your TV will create a simulated stereo effect.
- Select **Hall** if you are watching a stereo program; your TV will create a simulated surround effect, making the sound seem to extend around and behind you using the TV's internal speakers.

The **Speaker** function allows you to turn the TV's internal speakers on or off.

- Choose **On** if you want to play the TV's sound through the TV's built-in speakers.
- Choose **Off** if you connected your audio system to your TV and you want to play the sound of your TV through the audio system.



Customizing the A/V memory position (cont.)

The **Monitor Out** function determines how the TV will send an audio signal to an audio system or home theatre receiver. Your choices are “Variable” or “Fixed”.

- If you choose **Fixed**, the TV will send out an audio signal at a fixed volume level. The level will not change when you adjust the TV's volume. Use the controls on your audio system to adjust the volume. The fixed setting is most useful when you can control the audio system's volume with a remote control.
- If you choose **Variable**, the TV's audio output will change when you adjust the TV's volume. If you use this setting with an audio system, turn the TV's volume all the way down, set the audio system's volume to an average setting, and then adjust the TV's volume until you can hear the signal.

▷ **Important:** For proper tone and volume balance, you should turn off the TV's speakers when using an external audio system.

▷ **Important:** If you have connected your TV to a Dolby Prologic Surround receiver, or Dolby Surround receiver using the TV's variable audio output, please set the Audio surround mode to “off”. If your TV's surround setting is “simulate” or “hall”, the surround receiver may not provide the proper surround sound effect.

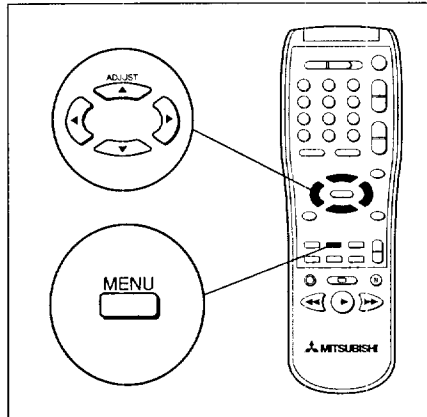


Customizing the A/V memory position (cont.)

adjusting the audio functions

You can adjust the audio settings for any A/V memory position using the MENU or AUDIO buttons on the remote control.

access with the MENU button

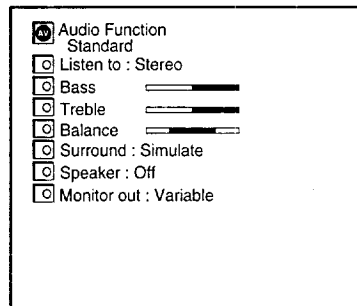


1 Press the MENU button on the remote control. The TV Main Menu will appear on the screen.

2 Use the ADJUST buttons to select "Select A/V Memory." Press ENTER twice to display the settings for the selected audio mode.

3 The four A/V memory positions appear. Select the A/V position to adjust by pressing the ADJUST up/down buttons. When the desired position is selected, press ENTER.

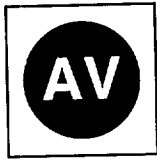
4 The audio settings for the selected A/V memory position display. Use the ADJUST up/down buttons to select the setting to change and press ENTER.



5 The setting appears at the bottom of the screen.

6 While the function is still on the screen, use the ADJUST right/left buttons to adjust the function's setting.

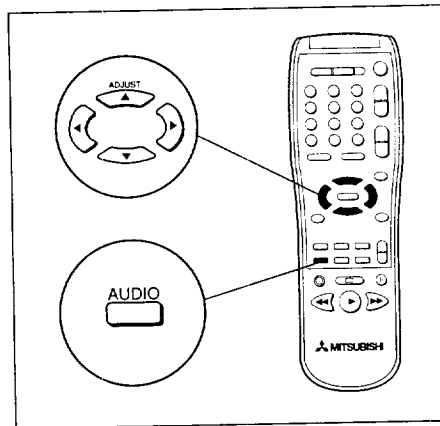
7 The functions will disappear from the screen after a few seconds. (You cannot adjust a function if it is not on the screen.)



Customizing the A/V memory position (cont.)

Access with the AUDIO button

The AUDIO button changes the audio settings for *the currently selected A/V memory position*. The currently selected A/V memory position will display on the screen above the audio adjustment display when the Audio button is pressed. (See “Selecting the A/V memory position,” in this chapter.)



- 1 Press the AUDIO button until the desired function displays on the bottom of the screen.
- 2 While the function is still on the screen, use the ADJUST right/left buttons to adjust the function's setting.
- 3 The functions will disappear from the screen after a few seconds. (You cannot adjust a function if it is not on the screen.)

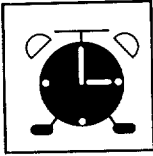
▷ **Important:** If you use the AUDIO button, any adjustments made to audio functions are memorized into the currently selected A/V memory position (Standard, Movie, Music, News). To reset the audio functions to their factory settings, see “Selecting the A/V memory” in this chapter.

▷ **Important:** Pressing the ADJUST button alone in normal picture will select the previous selected video or audio function menu.

◆ **Using the Advanced Features**

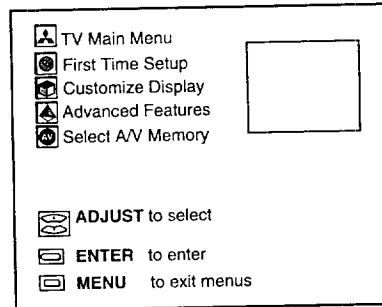
This section explains how to use some of the more advanced features. You'll learn about:

- **Setting the timer**
- **Using the parental lock**
- **Using SuperQuickView™**
- **Adjusting the convergence**



Setting the timer

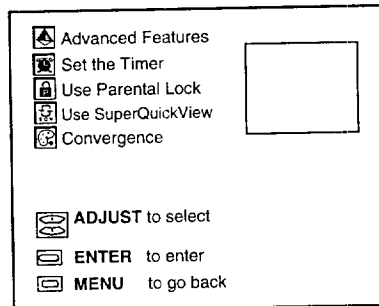
This special feature allows you to program the TV to turn on automatically at a specific time and to the channel that you set. To set the timer:



❶ Press the MENU button on the remote control. The Main Menu will appear on the screen.

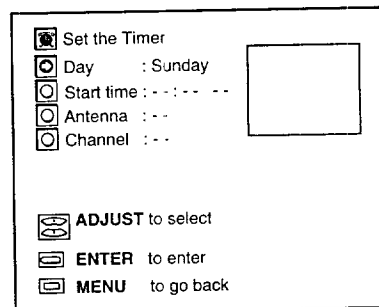
❷ Use the ADJUST buttons to select “Advanced Features.” Press ENTER.

❸ You will see the “Advanced Features” screen. Use the ADJUST buttons to select “Set the Timer.” Press ENTER.



❹ Use the ADJUST buttons and the ENTER button to set Day (Mon-to-Fri, Everyday, Sun ~ Sat), Start time, Antenna, and Channel.

After setting the timer, the indicator will blink in green when the TV is turned off.



If you press the CANCEL button while setting the timer, the arrow will move to the previous item. To clear the timer, press CANCEL with the arrow next to “Day.”

▷ **Important:** When the timer turns the TV on, the display will flash. If you do not press any remote control buttons within 5 minutes after the TV turns on, the TV will automatically turn off. Press a function button (such as the display button) to keep the TV on and to turn off the flashing display.



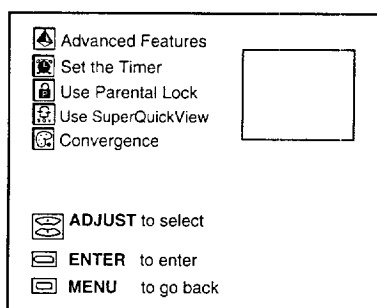
Using the parental lock

This special feature allows you to lock the entire TV during a certain time period or lock up to ten individual channels. (You cannot lock the TV and lock individual channels at the same time.) When you turn on the lock, you enter a 4-digit secret code that will allow you to turn off the lock later.

If you try to turn on a locked TV, view a locked channel, or the locking “time period” begins, you will see a message asking you to enter the secret code. If you don’t enter the code within five minutes, the TV will turn off or tune to an unlocked channel.

If you enter the secret code, the message will disappear and the lock will be turned off temporarily. However, the TV or channels will be locked again after you turn off the TV. This will continue until you turn the lock off permanently. To turn the lock off permanently, follow the procedure later in this section.

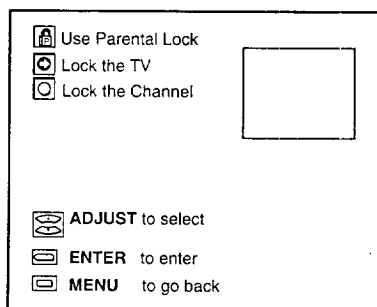
using parental lock



❶ Press the MENU button. The Main Menu will appear.

❷ Use the ADJUST buttons to select “Advanced Features.” Press ENTER.

❸ Use the ADJUST buttons to select “Use Parental Lock.” Press ENTER.



❹ Use the ADJUST buttons to select “Lock the TV” or “Lock the Channel.” Press ENTER.

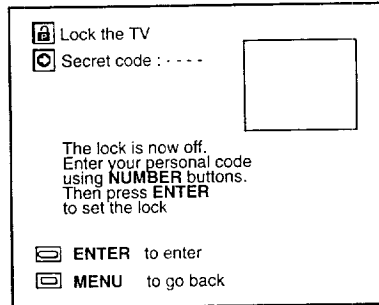
If you selected “Lock the TV,” see “locking the TV” in this chapter.

If you selected “Lock the Channel,” see “locking the channel” in this chapter.

▷ **Important:** If you turn the parental TV lock on, you cannot use the timer.



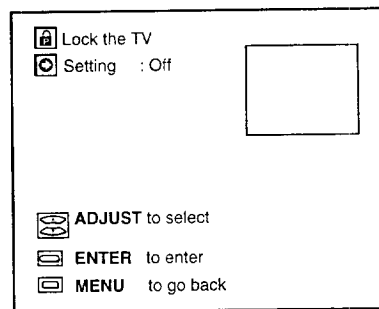
Using the parental lock (cont.)



locking the TV

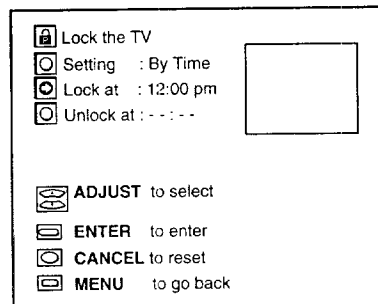
- 1 The message for locking the TV will appear.
- 2 Enter a four-digit secret code using the number buttons (0-9); then, press the ENTER button.

You can cancel the code if you press CANCEL before you press ENTER.



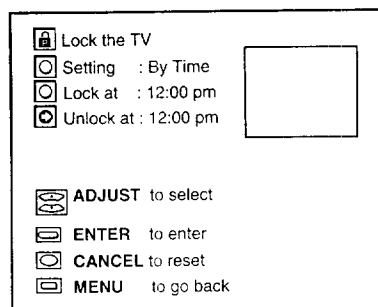
- 3 Use the ADJUST buttons to select a setting: Off, Always On, or By Time. Press ENTER.

If you select a setting: "By Time,"



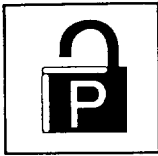
- 1 The cursor will move to "Lock at." Use the ADJUST buttons to set the time at which you want to lock the TV. Press ENTER.
- 2 Use the ADJUST buttons to set the time at which you want to unlock the TV. Press ENTER; the screen will return to the "Advanced Features" menu.

If you want the lock to be in effect all the time, set the same "Lock at" time as you set for the "Unlock at" time, or select "Always On".



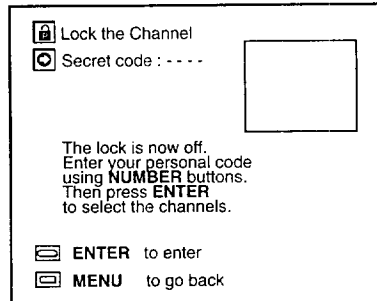
- 3 Press HOME to exit the menus.
- 4 When you turn on a locked TV, or if the lock's "time period" begins, you will be asked to enter your four-digit secret code. Enter the code to temporarily disable the lock. The lock will be enabled again when you turn the TV off.

► **Important:** The TV will be locked at all times if you set the lock by time but do not set the TV's clock.



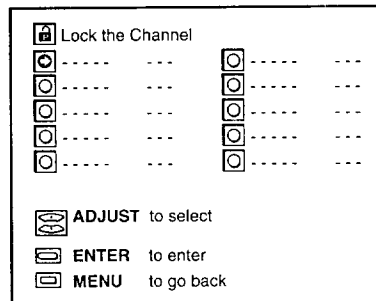
Using the parental lock (cont.)

locking the channel

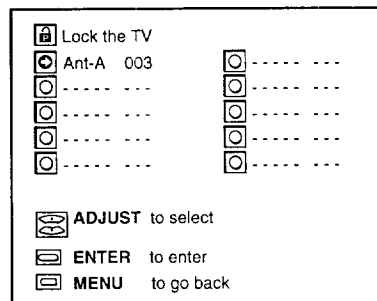


- 1 The message for locking a channel will appear.
- 2 Enter a four-digit secret code using the number buttons (0-9); press ENTER.

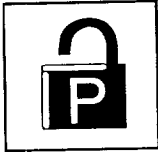
You can cancel the code if you press CANCEL before you press ENTER.



- 3 You will see the channel lock set up screen. Use the ADJUST buttons to select a position. Press ENTER.
- 4 Use the ADJUST buttons to select the antenna (Ant-A or Ant-B) that has the channel you want to lock. Press ENTER.



- 5 Use the CHANNEL buttons to select the channel you want to lock. Press ENTER.
- 6 Repeat the steps above to lock additional channels. When you are finished, press the HOME button to turn off the menus.
- 7 When you try to view a locked channel, you will be asked to enter your four-digit secret code. Enter the code to temporarily disable the lock. The lock will be enabled again when you change channels or turn the TV off.

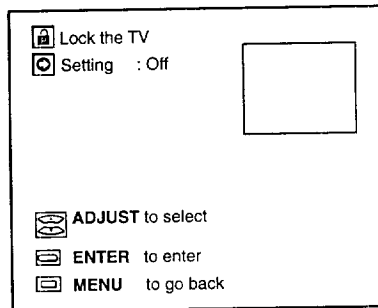


Using the parental lock (cont.)

canceling or changing parental lock

- 1 Press the MENU button. The Main Menu will appear on the screen.
- 2 Select "Advanced Features" using the ADJUST buttons; press ENTER.
- 3 Select "Use Parental Lock" using the ADJUST buttons; press ENTER.
- 4 Enter the four digits of your secret code using the number buttons (0-9); press ENTER.

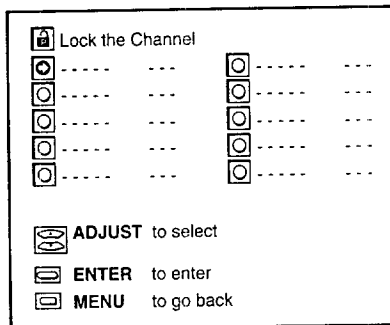
You will see this screen if you locked the TV.



- 5 If you have locked the TV, use the ADJUST button to select the setting "Off" to turn off the lock.

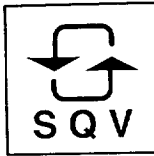
If you have locked the channel, use the ADJUST buttons to place the cursor next to the channel whose lock you want to cancel. Press ENTER.

You will see this screen if you locked the channel.



- 6 Press the CANCEL button to unlock that channel, or use the ADJUST buttons to change the channel to a new one.
- 7 Press the MENU button to return to the "Advanced Features" menu.

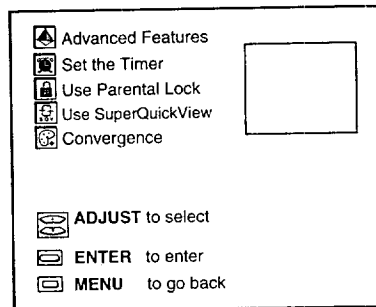
▷ **Important:** If you forget your four-digit secret code, please see the Appendix "Procedure for Bypassing the Parental Lock".



Using SuperQuickView™

SuperQuickView allows you to cycle through a list of up to ten numbers with the SQV button. Use the menus to add channels to the list or to remove channels from the list. You can also add channels directly to the list using only the remote control's SQV button.

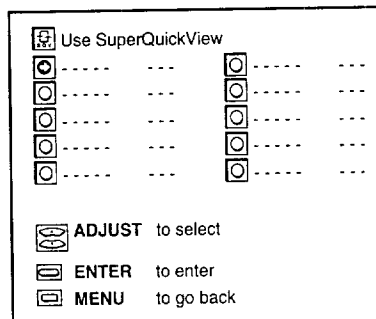
customizing the Super-QuickView list with the menus



1 Press the MENU button on the remote control. The Main Menu will appear on the screen.

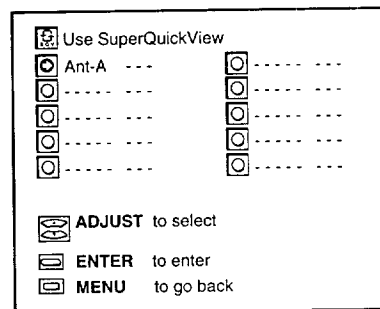
2 Use the ADJUST buttons to select "Advanced Features." Press ENTER.

3 Use the ADJUST buttons to select "Use SuperQuickView." Press ENTER.



4 Use the ADJUST buttons to select a position in the list. Press ENTER.

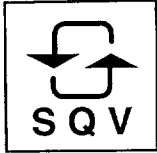
5 Use the ADJUST buttons to select the antenna (Ant-A or Ant-B). Press ENTER. You can clear the antenna by pressing CANCEL.



6 Use the CHANNEL buttons or number buttons to select the channel to add to the list; press ENTER.

7 Repeat steps 4 and 6 to customize the SuperQuickView memory.

8 Press the MENU button to exit this menu.



Using SuperQuickView (cont.)

adding channels directly to the list with the remote control's SQV button

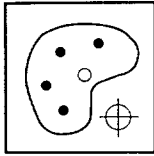
- ① Use the channel controls or number buttons to tune the TV to the channel you want to add to the list.
- ② Press and hold the SQV button for about 2 seconds; the letters "SQV" will appear under the channel number, indicating that the channel has been added to SuperQuickView memory.

▷ **Important:** Once you've added a channel to the SQV memory, the letters "SQV" appear under the channel number any time the channel number is displayed, even if you tune to the channel in another manner.

▷ **Important:** If the SuperQuickView memory is full, the letters "SQV" will flash when you hold the SQV button for about 2 seconds. Use the steps below and on the preceding page to replace a current SuperQuickView channel with a new channel.

removing channels from the list with the remote control's CANCEL button

- ① Use steps ① - ④ from "customizing the SuperQuickView list with the menus" on the preceding page to select the channel position from the SuperQuickView list.
- ② Press the CANCEL button on the remote control to clear the entry. You can now add a SuperQuickView channel to the blank entry.

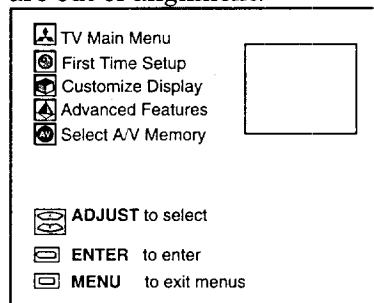


Adjusting the convergence

Your Mitsubishi TV has three picture tubes and large diameter lenses which are aligned to project light beams on the screen. Each picture tube projects only one color; red, green or blue.

This special feature allows you to finely tune the convergence at 5 positions if you think that the red and/or blue light beams are out of alignment even after you align colors using “First Time Setup” menu.

For the best picture, the beams should be aligned at each of the 5 adjustment positions which appear on the screen. You can perform the following procedure whenever you think that the light beams are out of alignment.

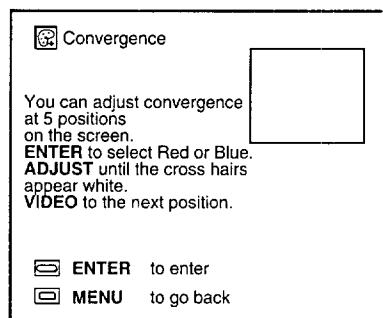
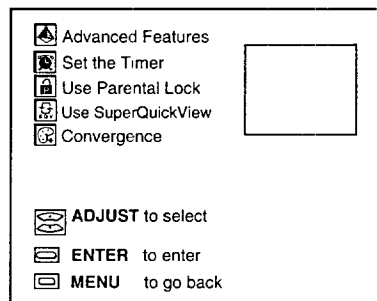


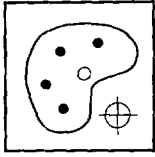
① Press the MENU button on the remote control. The Main Menu will appear on the screen.

② Use the ADJUST buttons to select “Advanced Features.” Press ENTER.

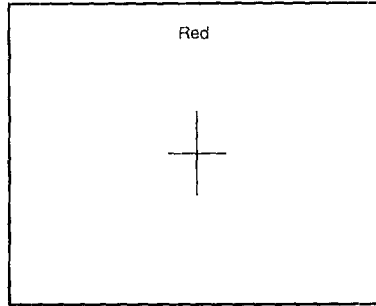
③ You will see the “Advanced Features” screen. Use the ADJUST buttons to select “Convergence.” Press ENTER.

④ You will see the “Convergence” screen. Read the instructions that appear on the screen. Press the enter button to proceed.



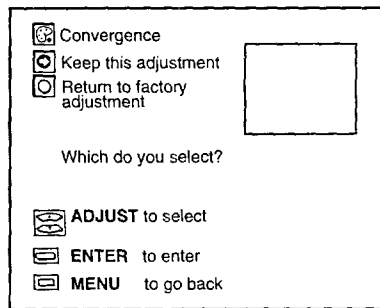


Adjusting the convergence (cont.)



5 Press ENTER to select a color to align and use the ADJUST buttons to align the color you selected (red or blue) with the green lines. When they are aligned, the green line will turn white.

6 Next, use the VIDEO button to select the next position. Use the adjust buttons to align the color. Adjust convergence at 5 positions using VIDEO and adjust buttons.



7 After aligning at 5 positions, press the VIDEO button. Select the item for the current alignment using the ADJUST button.

8 Press the ENTER button to return to the "Advanced Features" menu.

▷ **Important:** After adjustment, if you press the MENU button instead of ENTER button to return to the "Advanced Features" menu, the adjustment will return to the last setting.

▷ **Important:** If you are not happy with your adjustment and would like to reset the TV to the factory adjustment setting, you can repeat steps 1 - 6, use the ADJUST button to select "Return to Factory adjustment", and then press the ENTER button.



In addition to the basic and advanced features explained in the previous chapter, your TV offers some special features that you can use when operating your TV. This chapter contains the following topics:

- ◆ **Understanding the On-Screen Displays**
- ◆ **Using the Sleep Timer**
- ◆ **Using the Picture-in-Picture (PIP) Modes**
- ◆ **Using the Active A/V Network Feature**

◆ Understanding the On-Screen Displays

Your TV provides an on-screen summary of the current settings for the TV or cable channels, as well as the information related to Extended Data Services (XDS). XDS allows broadcasters to supply you with the current time, channel information (such as call letters and the network name), and program information (such as the program name and program description). To view this information, press the information button (INFO) on the remote control.

You will see a display like this if your main source is an antenna:

```
network name    023 ESPN
                Stereo & SAP
                SQV QV

                023
program name    [ ]
program description
                Thursday 10:23 am
```

This setting shows:

- the antenna (A) and the channel number (23),
- this channel's call letters or name,
- stereo and SAP are available,
- this channel is programmed into SuperQuickView memory,
- this channel is the QuickView (QV) channel,
- PIP input source,
- the day of the week and the time.

You will see a display like this if your main source is an input:

```
network name    Input-1
                S-VIDEO

                023
program name    [ ]
program description
                Thursday 10:23 am
```

This setting shows:

- the input name (Input-1),
- an S-video cable is connected,
- PIP input source,
- current day of the week, and
- time.

You will see a display like this if you are using XDS:

```
network name

program name
program description
```

This setting shows where the network name, program name and program description will appear if the broadcaster is supplying the information via XDS.

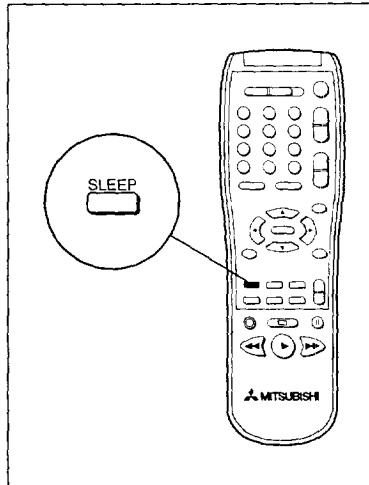
The on-screen displays will automatically disappear after about 5 seconds.

◆ Using the Sleep Timer

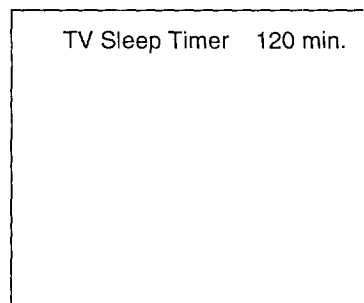
This special feature allows you to set the TV to turn off automatically. You can set the TV to turn off after a period of time ranging from 10 to 120 minutes, in ten minute intervals. In this section you will learn:

- **Setting the sleep timer, and**
- **Changing or canceling the sleep timer.**

Setting the sleep timer



- 1 Press the SLEEP button on the remote control. The sleep timer display will appear on the screen.

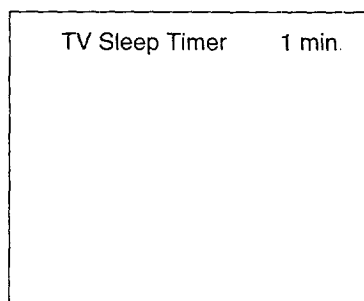


- 2 Select how long you want the TV to stay on by repeatedly pressing the SLEEP button. The time will decrease in 10 minute intervals each time you press the button.

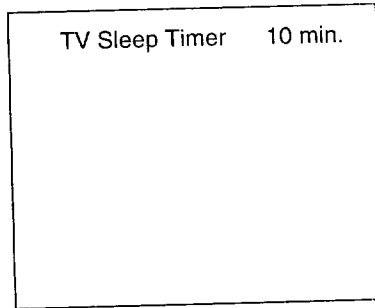
- 3 When you reach the time you want, stop pressing the button. The sleep timer display will disappear after a few seconds.

- 4 To view the amount of time left in the sleep timer press the SLEEP button once. The on-screen display shows the amount of time remaining.

▷ **Important:** During the last minute before the TV turns off, "Sleep Timer 1 min." will flash in red to remind you that the sleep timer is set.



Changing or canceling the sleep timer



- 1 Press the SLEEP button on the remote control. An on-screen display will indicate the amount of time remaining until the TV turns off.
- 2 Repeatedly press the SLEEP button to change the remaining time or to cancel the sleep timer. The sleep timer is canceled when “--” appears instead of the remaining time.

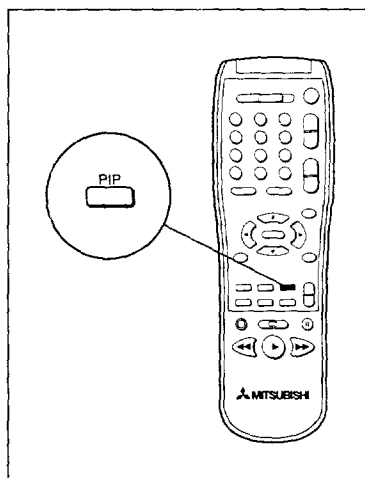
◆ Using the Picture-in-Picture (PIP) Modes

One of the special features of the TV is the picture-in-picture (PIP) mode, which allows you to view two different sources at the same time. In this section you'll learn:

- **Activating the PIP image,**
- **Selecting the source of the PIP image,**
- **Changing channels while using the PIP modes,**
- **Exchanging the picture of the PIP image and the main image,**
- **Moving the PIP image, and**
- **Freezing the PIP image.**

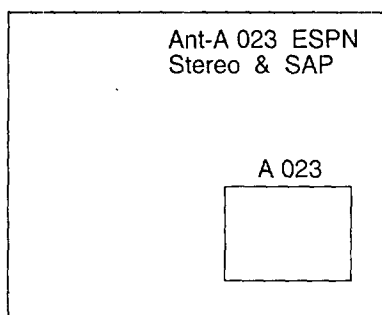
▷ **Important:** You must have a VCR connected to the TV to see two different live action pictures when using PIP.

Activating the PIP image

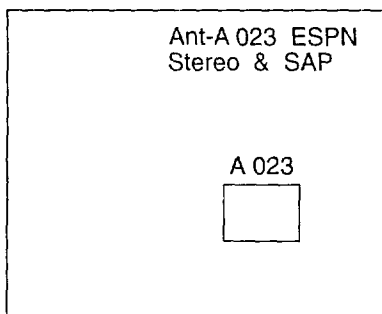


❶ Select the number of the TV channel you want to view with the channel control.

❷ Press the PIP button.



❸ A PIP image will appear in the corner of the screen.



❹ Press PIP again within 10 seconds; the PIP image will reduce to a smaller size.

(If you wait longer than 10 seconds the PIP image will disappear when you press the PIP button.)

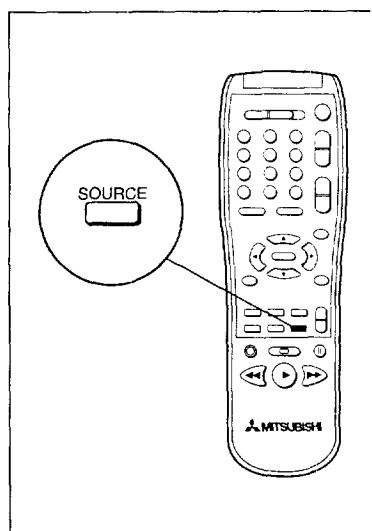
❺ Press the PIP button once again to cancel the PIP image.

▷ **Important:** When the main image is black and white, the PIP image will also appear in black and white.

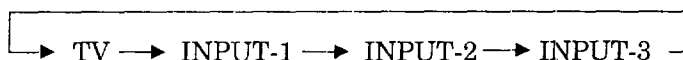
▷ **Important:** If you move the PIP image and then turn it off, it will remain in its new position when you turn it on again.

▷ **Important:** Do not press the PIP button while you are watching a channel that is not receiving broadcasts.

Selecting source of the PIP image



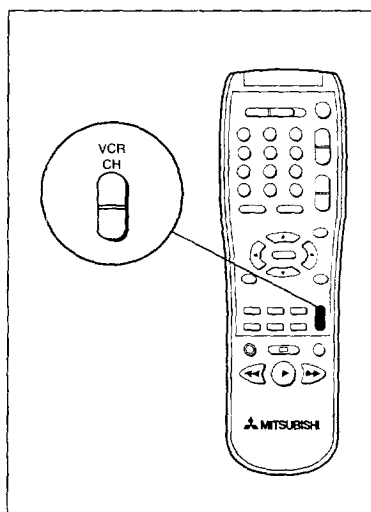
- 1 Turn your VCR on.
- 2 Turn the PIP image on.
- 3 Press the SOURCE button on the remote control repeatedly until the VCR picture appears in the PIP image
- 4 If you want to select a source other than the VCR, continue pressing the SOURCE button. The source will change as follows:



- ▷ **Important:** To change the main image while a PIP image is displayed, press the input button (INPUT) on the control panel or on the remote control.
- ▷ **Important:** To see two different channels at the same time, you must:
- connect a second tuning source (such as a VCR) to an input as shown in the connection diagrams in Chapter 2 of this manual;
 - use the SOURCE button to select the input for the second tuning source.
- ▷ **Important:** You cannot select Antenna B as a PIP source when watching Antenna A as the main image.

Changing channels while using the PIP modes

You can use the buttons on the remote control to change the channels of both the main image and the small PIP image, as if your TV had two tuners.

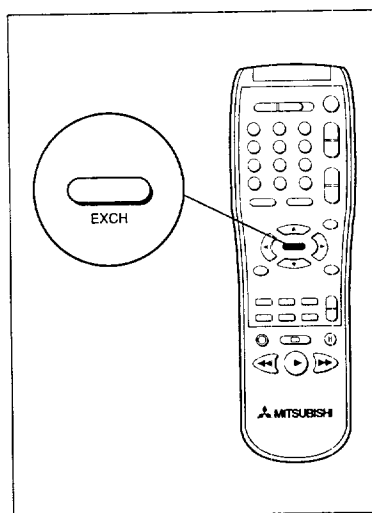


To do this:

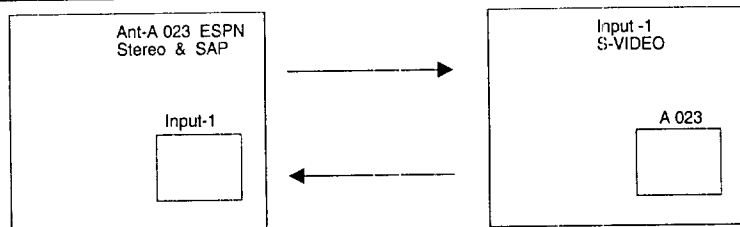
- ➊ Press the PIP channel button (PIP CH) on the remote control to change the channel of the PIP image.
- ➋ Press the CHANNEL button on the remote control to change the channel of the main image.

- ▷ **Important:** When the source of both the main image and the PIP image is the TV, the PIP channel (PIP CH) button will change the channels of the main image and the PIP image.
- ▷ **Important:** You must have set up the "VCR-A" layer of your remote for this button to work correctly. (See "Using the remote control to operate VCRs, cable boxes and other equipment" in Chapter 3.)
- ▷ **Important:** If you use a cable box with your VCR, do not use this button unless your VCR is able to control your cable box. Otherwise, switch the remote to the cable layer and use the main channel buttons.

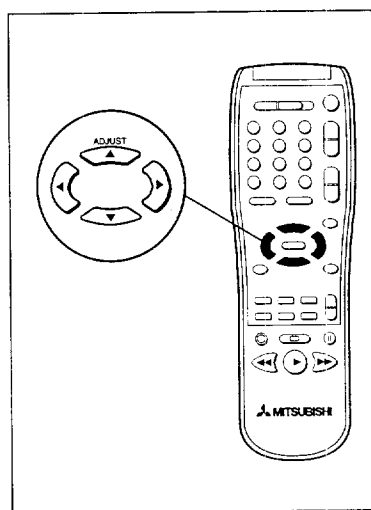
Exchanging the picture of the PIP image and the main image



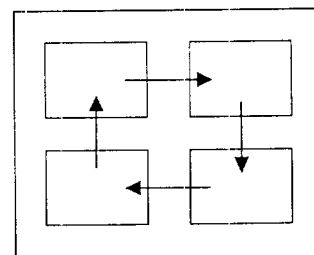
Press the EXCH button to exchange the picture of the main (background) image and the PIP image.



Moving the PIP image

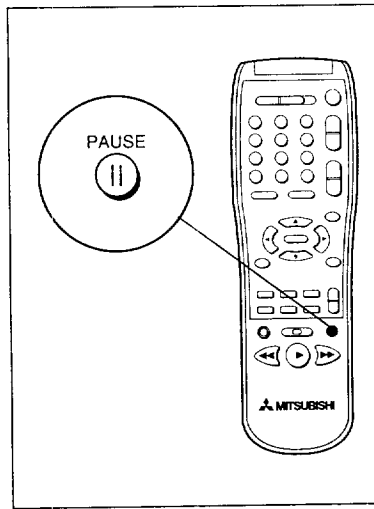


Press the ADJUST buttons to move the PIP image.



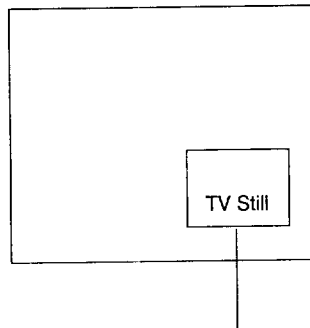
▷ **Important:** If you move the PIP image and then turn it off, it will remain in its new position when you turn it on again.

Freezing the PIP image



- 1 Press the PAUSE button to freeze the PIP image on the screen.
- 2 Press PAUSE again to return to a live picture.

▷ **Important:** If you press the pause button while viewing a picture without a PIP image, a PIP image will appear and be frozen.



disappears after a few seconds

◆ Using the Active A/V Network Feature

This A/V Network is a special feature that makes it easier to use your television and your other A/V components together. When you connect the A/V Network, you can point the remote control at the television, and it will "pass" the remote control command to the other components.

Additionally, you will gain even more benefits if you have a Mitsubishi VCR equipped for the Active A/V Network. The Active A/V Network allows you to perform many of the commonly used features of your system at the press of just one button.

This section will explain the various features of the Active A/V Network.

before you begin

- You must have connected an A/V Network cable from the Active A/V Network terminal of your TV to the A/V Network IN terminal of your VCR. See "TV+Mitsubishi products that have A/V Network terminals," in Chapter 2.
- You must have connected your VCR to External 1 (EXT-1) of your TV.
- You must have set your TV's "A/V Network" setting to "Active" or "Basic". See "Setting the A/V Network," in Chapter 3.
- Your VCR's remote control switch (if any) should be set to "VCR-A."
- Your VCR's video mute setting should be turned ON.

what the Active A/V Network does

The Active A/V Network makes it easier and faster to use the VCR's Quick Program and Play commands and the TV's PIP commands.

▷ **Important:** When using the Active A/V Network, you should always point your remote control at your television.

Using the active A/V Network feature (cont.)

using the PLAY button (AUTO PLAY)

When you press PLAY on the remote:

- Active A/V Network will turn your VCR on and begin playing the tape (if any).
- Active A/V Network will turn your TV on and switch it to EXT-1.

When you turn your TV off:

- Your VCR will turn off, unless it is playing or recording.

using the PIP button (TWO TUNER PIP)

▷**Important:** You must be watching a broadcast channel on Antenna-A or Antenna-B to use the Active A/V Network PIP function correctly.

When you press the PIP button on the remote to bring up a PIP image:

- Your VCR will automatically turn on.
- You can see the VCR's picture in the small PIP image.

While the PIP image is on the screen:

- The PIP function buttons (SOURCE, CHANNEL, ENTER, right/left, adjust up/down, PAUSE) will all work in the same manner.
- Use the PIP Channel Selector to scan the PIP channels. To access a channel directly, you must select VCR-A on the remote control, then use the number pad.

▷**Important:** If you leave the TV turned on, set to EXT-1, but the TV is not receiving a signal on EXT-1, it will automatically turn off after five minutes. (If you use a TV menu during this time, the TV will turn off five minutes after you stop using the menus.)

▷**Important:** You should not press the PIP button while you are watching a channel that is not receiving any broadcasts. You will not be able to see the small PIP image, and you will not be able to change channels on the main image. You may need to turn off the TV and turn it back on, change to a channel that is receiving a broadcast, and begin again.



CHAPTER FIVE
Troubleshooting

Even though you're now familiar with the basic and advanced operations of the TV, you may run into trouble from time to time as you become accustomed to the TV. This chapter offers solutions to some of the common problems you may encounter. We suggest that you consult this chart before contacting a Mitsubishi service representative.

Troubleshooting (cont.)

Problems	Possible Solutions	For More Information
<ul style="list-style-type: none">• The remote control doesn't work.	<ul style="list-style-type: none">• Check that the batteries are installed correctly.• Check that the select switch is set to "TV."• Be sure that you are pointing the tip of the remote control toward the TV from a distance of no more than 20 feet.	<ul style="list-style-type: none">• See "Getting ready to use the remote control" in Chapter 1 for an explanation of how to install batteries in the remote control.• See "Remote control buttons and functions" in Chapter 1, which explains where the select switch is located.• See "Getting ready to use the remote control" in Chapter 1, which contains pointers for using the remote control.
<ul style="list-style-type: none">• The TV takes several seconds to respond to button commands.	<ul style="list-style-type: none">• Use the ENTER button to avoid delays.	<ul style="list-style-type: none">• See "Changing channels" in Chapter 3, which explains the function of the ENTER button.
<ul style="list-style-type: none">• You can't access a channel.	<ul style="list-style-type: none">• Be sure that the channel you want to view is programmed into memory.• Check that the TV is tuned to the correct input source (antenna) for that channel.	<ul style="list-style-type: none">• See "Memorizing channels" in Chapter 3, which explains how to program channels into the TV's memory.• See "Selecting the input source" in Chapter 3, which explains how to change the input source.
<ul style="list-style-type: none">• You can't see a different channel in the reduced PIP image.	<ul style="list-style-type: none">• Use the SOURCE button to change the source of the PIP image.• Make sure you have a second source, such as a VCR, turned on and connected to your TV.	<ul style="list-style-type: none">• See "Using the Picture-in-Picture (PIP) Modes" in Chapter 4.

Troubleshooting (cont.)

Problems	Possible Solutions	For More Information
<ul style="list-style-type: none"> On-screen displays appear each time you adjust a function. 	<ul style="list-style-type: none"> This is part of the normal operation of the TV. 	<ul style="list-style-type: none"> See "Understanding the On-Screen Displays" in Chapter 4 for a full explanation of the on-screen displays.
<ul style="list-style-type: none"> There's no sound even when the volume is turned up. 	<ul style="list-style-type: none"> Check that the MUTE button isn't on. The TV's "Listen to:" setting may be set to "second audio program" (S.A.P.). Check that "Speaker" function is set to "On." 	<ul style="list-style-type: none"> See "Remote control buttons and functions" in Chapter 1, which explains the location and function of the MUTE button. See "Adjusting the sound" in Chapter 3, which explains how to adjust the "Listen to:" setting.
<ul style="list-style-type: none"> You forget the code you used to set the parental lock. 	<ul style="list-style-type: none"> Use the alternate procedure that doesn't require the use of the code. 	<ul style="list-style-type: none"> See the Appendix, "Procedure for Bypassing the Parental Lock."
<ul style="list-style-type: none"> You can't program the TV to turn on automatically. 	<ul style="list-style-type: none"> The TV may be locked. 	<ul style="list-style-type: none"> See "Using the parental lock" under "Using the Advanced Features" in Chapter 3.
<p>The sound doesn't match the image on screen.</p>	<ul style="list-style-type: none"> The TV's "Listen to:" setting may be set to "second audio program" (S.A.P.). 	<ul style="list-style-type: none"> See "Adjusting the sound" in Chapter 3, which explains how to adjust the "Listen to:" setting.
<ul style="list-style-type: none"> There is a large black rectangle on the screen. 	<ul style="list-style-type: none"> The TV has been set to "text" mode, but there is no text information being broadcast. 	<ul style="list-style-type: none"> See "Using the closed caption decoder" under "Getting started" in Chapter 3, or press the HOME button to make the rectangle disappear.
<ul style="list-style-type: none"> You cannot see a picture when you play a tape in the VCR. 	<ul style="list-style-type: none"> If you connected your VCR with A/V cables, use the INPUT button to select the input source (Input 1, 2, or 3) that the VCR is connected to. 	<ul style="list-style-type: none"> See "Selecting the input source" for an explanation about changing the input.

Troubleshooting (cont.)

Problems	Possible Solutions	For More Information
<ul style="list-style-type: none">• Antenna-B does not appear as a PIP source.	<ul style="list-style-type: none">• Antenna B is not available as a PIP source when you are watching Antenna A.	<ul style="list-style-type: none">• See “Using the Picture-in-Picture (PIP) Modes” in Chapter 4.
<ul style="list-style-type: none">• The colors in the TV's picture are not aligned.	<ul style="list-style-type: none">• The colors in the TV's picture tubes may have become misaligned. You will need to adjust the colors yourself.	<ul style="list-style-type: none">• See “Aligning the colors” in Chapter 3, which explains how to align the colors. Also see “Adjusting the convergence” in Chapter 3.

Caution and care

► **Warning:** Don't leave stationary images on-screen for more than 10 minutes. These images can scar the TV, causing permanent damage to the picture tube. Some examples of stationary images are:

- stock-market reports,
- station logos (especially bright ones),
- video game displays,
- shopping channel displays,
- the television's own on-screen displays.

▷ **Important:** If you plan to place speakers next to the TV, make sure they are magnetically shielded. Ordinary speakers will cause distortion in the picture due to their strong magnets. This distortion, however, will not harm the picture tubes.

For maximum enjoyment and safe operation of your Mitsubishi TV, please read the "IMPORTANT SAFEGUARDS" carefully and apply them properly.

Cleaning

Normally, light dusting with a non-scratching duster will keep your TV clean.

If you want to wipe down your TV, turn it off and unplug it. Then, wipe it gently with a soft cloth slightly moistened with water. You can add a few drops of mild liquid detergent to the water for oily dirt.

DO NOT allow liquid to enter the TV through the ventilation slots.

DO NOT use strong or abrasive cleaners.

DO NOT use spray liquids or cleaners directly on the TV's surface.

DO NOT scrub or rub the TV harshly. Wipe gently.

Calling for service

If you are unable to correct a problem with your TV, consult your Mitsubishi dealer or Mitsubishi Authorized Warranty Service Center.

Do not adjust any controls not described in this owner's guide.

Do not remove the protective back cover of this unit.

If you see one of the following displays on your screen, you should not change any settings. These are special displays used by the factory.

Initial		3dia	: On
E2RESET		CCD	: On
Hotel	: Off	Auto clock	: On
Power Res	: Off		
Ant	: 2		
Input	: 3		
When mute	: On		

Initial			
Hotel	: Off		
Power Res	: Off		
Ant	: 2		
Input	: 3		
When mute	: On		

If these displays appear, make sure that all of the on/off settings are the same as the illustrations above and then turn the TV off. If any of the settings are different from the illustrations above, turn the TV off and consult your Mitsubishi dealer or Mitsubishi Authorized Warranty Service Center.

**For further assistance, please call Mitsubishi
Consumer Relations: 800-332-2119**



Procedure for Bypassing the Parental Lock

Cut along dotted line and file after reading.

After you set the lock, you will need the secret code in order to:

- view a locked channel,
- view the locked TV, or
- cancel the lock.

If you forget the code, you can view the locked TV without entering the code. To do this, simply press the buttons on your remote labeled “QV” and “9” at the same time whenever your secret code is requested.

▷ **Important:** Unlocking with this procedure is only temporary. To cancel the lock completely, follow the procedure below:

- ➊ Turn on your TV. If the TV requests your secret code, press the “QV” button and the “9” button on the remote control at the same time.
- ➋ Press the MENU button to view the main menu. Use the ADJUST button to select “Advanced Features.” Press ENTER.
- ➌ Use the ADJUST button to select “Use Parental Lock.” Press ENTER.
- ➍ Press the “QV” button and the “9” button on the remote control at the same time, instead of entering the code.
- ➎ If you were using “Lock the TV,” select a setting “Off” using the ADJUST button to turn off the lock.
- ➏ If you were using “Lock the Channel,” use the ADJUST button to place the cursor next to the channel whose lock you want to turn off. Press ENTER.
- ➐ Press the CANCEL button to unlock that channel, or use the ADJUST buttons to change the channel to a new one.
- ➑ Press the MENU button to return to the “Advanced Features” menu.

▷ **Important:** You must use the remote control included with this TV. You cannot use a remote control from another Mitsubishi component, and you cannot use any “Universal” remotes from other manufacturers.

A		Audio Products	TV+separate UHF and VHF
A/V Components		Using remote control with..... 20	antennas..... 28
Using the remote with..... 44		AV Reset Button 14	TV+stereo audio system 35
A/V Memory Positions		B	TV+VCR+antenna or cable
Adjusting the picture 67		Background 68	without a cable box 29
Adjusting the sound..... 72		Balance 72	TV+VCR+cable with a cable
Customizing 67		Basic Connections	box 32
Selecting 65		Overview 24	Consumer Relations 106
A/V Network		Bass 72	Contrast 67
Description 57		C	Controls 20
Setting 57		Cable TV	Audio 20
Using 57		Using remote with 43	Channel 18
A/V Network Terminals		Using with a cable box ... 26, 32	Locking the TV 79
Using Mitsubishi products		Using without a cable	Picture-in-picture (PIP) 20
with..... 36		box 25, 29	Remote control 17
A/V System		Calling For Service 106	Selecting the language 64
Adjusting the convergence 84		Cancel Button 14, 18	Seleting the menu type .. 59, 60
Adjusting the picture 67		Caution and Care..... 105	Turning your TV on/off 46
Adjusting the sound..... 72		Cleaning your TV..... 105	Understanding the on-screen
Adjusting video functions 68		Channel Controls 13, 18	displays 88
Aligning the colors 57		Channels	Using the on-screen menus ... 52
Customizing the memory		Adding 56	Video 20
position 67		Changing 48	Volume 18
Memory positions 65		Changing with PIP 95	Customizing the A/V Memory
Selecting the A/V memory		Deleting 56	Position 67
position 65		Locking 80	E
Using external audio compo-		Memorizing 55	Enter Button 14, 18
nents 35, 36		Using QuickView 50	Español 64
Using video mute 63		Using SuperQuickView .. 51, 82	Exchange Button 20
Active A/V Network Terminal... 23		Using the SQV button 83	Extended Data Services 88
Using 36		Cleaning Your TV 105	F
Adjust Buttons 13, 18, 20		Clock	Français..... 64
Adjusting the Convergence 84		Setting 53	French Language 64
Advanced Features		Setting the timer 77	H
Using 76		Closed Caption Decoder	Home Button 18
Aligning the Colors 58		Adjusting 71	I
ANT-A Terminal 22		Closed Captioning 70	Important Safeguards 3
ANT-B Terminal 22		Adjusting the closed caption	Information Button..... 18
Antennas		decoder 71	Input Button (Front Panel) 14
Antenna terminals..... 22		Standard captioning 70	Input Button (Remote) 18
- Using separate UHF and VHF		Text captioning 70	Inputs
antennas 28		Color Temperature 67	Naming 61
Audio Controls 20		Colors	Selecting PIP source 94
Audio Settings		Adjusting the Convergence ... 84	Selecting the input source 47
Adjusting 72		Aligning 58	
Balance 72		Connections	
Bass 72		TV+Antenna or cable without a	
Descriptions 72		cable box 25	
Listen to 72		TV+cable with a cable box..... 26	
Speaker 72		TV+Mitsubishi products that	
Surround 72		have A/V network	
Treble 72		terminals 36	
Audio Input Terminals 14, 23			
Audio Monitor Terminals 22			

L		Q		T
Language		QuickView		Terminals
Selecting	64	Description	50	Active A/V Network
Light Button	18	Setting QuickView memory ..	50	Antenna
Listen-To: Function	72	QV Button	18	Audio input
Locking Channels	80	R		Audio monitor
Using the parental lock	76	Remote Control		S-Video input
Locking Your TV	79	Buttons	17	Tuner output
M		Description	41	Video Input
Memorizing Channels	55	Functions	17	Video monitor
Menu		General Instructions	16	Test Button
Selecting the menu language	64	Installing batteries	15	Timer
Selecting the menu type .	59, 60	Using to adjust video		Setting
Menu Button	14, 18	functions	68	Using the sleep timer
Mute		Using with a cable		Tint
Using video mute	63	box	41, 43, 45	Treble
Mute Button	18	Using with Mitsubishi audio		Troubleshooting
N		components	44	Calling for service
Naming the Input	61	Using with Mitsubishi laserdisc		U
Number Buttons (0-9)	18	players	42	UHF Antenna Terminal
O		Using with VCRs	41, 44	Unpacking Your TV
On-Screen Displays		Using with Mitsubishi A/V		V
Understanding	88	receivers	45	VCR
On-Screen Menus		VCR Buttons	20	Using remote with
Using	52	S		Using with a cable box
Operating Your TV	39	S-Video Input Terminal	14, 23	Using without a cable box
P		S.A.P.	72	VCR Buttons
Parental Lock		Select Switch	18	Remote Control
Canceling	81	Service	106	VHF Antenna Terminal
Changing	81	Setting the A/V Network	57	Video Controls
Using	76	Sharpness	67	Adjusting
Pause Button	20	Sleep Button	18, 90	Adjusting the convergence
Picture-in-Picture (PIP)		Sleep Timer		Aligning the colors
Modes. <i>See PIP</i>		Changing or canceling	91	Background
Picture-In-Picture Controls	20	Setting	90	Brightness
PIP		Using	89	Color
Activating the PIP image	93	Sound		Color temperature
Changing channels while		Adjusting	72	Contrast
using	95	Source Button	20	Notch filter
Freezing the image	97	Spanish Language	64	Sharpness
Selecting the source	94	Speaker Function	72	Tint
Using	92, 98	Special Features	6, 87	Video Input Terminals
PIP Button	20	SQV Button	18, 83	Video Monitor Terminal
PIP CH Button	20	Stereo Audio		Video Mute
Power Button (Front Panel)	13	Using external audio compo-		Using
Power Button (Remote)	18	nents	35	ViewPoint Menus
Power Indicator	14	SuperQuickView		Using
Problems and Solutions	102	Customizing	82	Volume Controls
Program Timer Indicator	14	Using	82	X
		Using the SQV button	83	XDS. <i>See Extended Data Services</i>
		Surround	72	

**MITSUBISHI
PROJECTION TELEVISION
LIMITED WARRANTY**

MITSUBISHI ELECTRONICS AMERICA, INC. ("MELA") warrants to the original purchaser of this television that if purchased from an authorized MITSUBISHI Audio/Video Dealer, should it prove defective by reason of improper workmanship and/or material:

a. **Parts.** The lenticular (i.e. front picture) screen is warranted against defects in materials and workmanship for a period of 30 days. All other parts are warranted for a period of one year from the date of the original purchase at retail. We will repair or replace, at our option, any defective part without charge for the part. Parts used for replacement are warranted for the remainder of the original warranty period.

b. **Labor.** For 30 days after the original purchase at retail, we will repair or replace, at our option, the lenticular screen if it proves defective. For all other parts, we will provide the labor for a warranty repair by an authorized MITSUBISHI service center without charge for one year from the date of original purchase at retail.

c. **Notice.** To obtain warranty service, you must notify an authorized MITSUBISHI service center of any defect within the applicable warranty time period.

1. TO OBTAIN WARRANTY SERVICE:

a. Contact your nearest authorized MITSUBISHI service center whose name and address can be obtained from your MITSUBISHI dealer or by writing or calling MELA at the address and telephone number provided below.

b. Warranty service will be provided in your home or, if required, at an authorized service shop, provided that your television is located within the geographic territory customarily covered by an authorized MITSUBISHI service center. If not, you must either deliver your television to an authorized service location at your own expense, or pay for any travel and/or transportation costs the service center may charge to and from your home. Actual service labor will be provided without charge.

c. Proof of purchase date from an authorized MITSUBISHI dealer is required when requesting warranty service. Present your sales receipt or other document which establishes proof and date of purchase. **THE RETURN OF THE OWNER REGISTRATION CARD IS NOT A CONDITION OF WARRANTY COVERAGE.** However, please return the Owner Registration Card so that we can contact you should a question of safety arise which could affect you.

2. **THIS WARRANTY DOES NOT COVER** damage caused by: modification, alteration, repair or service of the product by anyone other than an authorized MITSUBISHI service center; physical abuse to, or misuse of, the product; operation in a manner contrary to the instructions which accompany the product; freight damage; or any damage caused by acts of God such as lightning or fluctuation in electrical power. This warranty also excludes all costs arising from installation, adjustment of user controls, external antenna systems, service of products purchased or serviced outside the U.S.A., initial technical adjustments (set-up) and user-required maintenance. Consult the operating instructions furnished with the product for information regarding user controls.

3. **ANY EXPRESS WARRANTY NOT PROVIDED HEREIN, AND ANY REMEDY WHICH, BUT FOR THIS PROVISION, MIGHT ARISE BY IMPLICATION OR OPERATION OF LAW, IS HEREBY EXCLUDED AND DISCLAIMED. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR ANY PARTICULAR PURPOSE ARE EXPRESSLY LIMITED TO A TERM OF ONE YEAR.**

4. **UNDER NO CIRCUMSTANCES SHALL MELA BE LIABLE TO PURCHASER OR ANY OTHER PERSON FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, WHETHER ARISING OUT OF BREACH OF WARRANTY, BREACH OF CONTRACT, OR OTHERWISE.**

5. Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental, special, or consequential damages, so the above limitations or exclusions may not apply to you.

6. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

7. **BEFORE REQUESTING SERVICE,** please review the instruction booklet to insure proper installation and correct customer control adjustment. If the problem persists, contact your nearest MITSUBISHI Dealer for name(s) of authorized MITSUBISHI Service Center(s). If you are unable to obtain this information, please call 800-332-2119, or write us at the address below.

MITSUBISHI ELECTRONICS AMERICA, INC.

P.O. Box 5025

Norcross, GA 30091-5025



RETAIN THIS PORTION FOR YOUR RECORDS

SERIAL NO. _____

CUSTOMER NAME _____

STREET ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE () _____ PURCHASE DATE: _____ / _____ / _____

MO DAY YR

PLACE OF PURCHASE _____