

SONY®

3-754-970-21 (1)

Trinitron® Color TV

KV-27EXR95

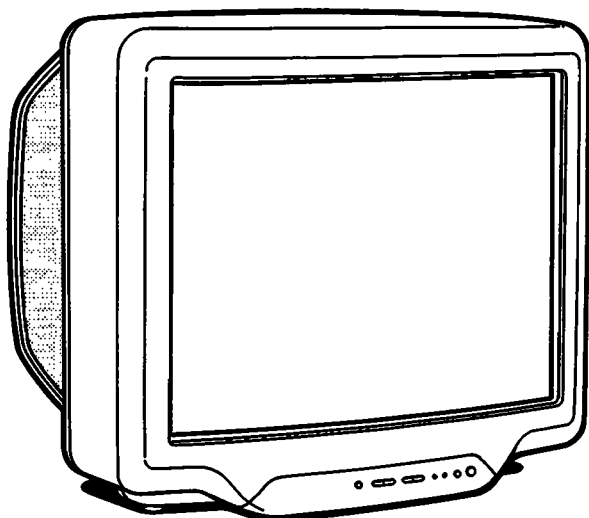
Operating Instructions

Before operating your TV, please read this manual thoroughly and retain it for future reference.

Owner's Record

The model and serial numbers are located at the rear of the TV. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. KV-27EXR95 Serial No. _____



Contents

Preface

This section tells you about special features, safety information, and preparatory information for using this manual.

Chapter 1: Set up

This section shows you the steps necessary for installing and presetting your TV.

Chapter 2: Basic Operation

This section gives you basic information about operating and adjusting your TV.

Chapter 3: Advanced Operation

This section shows you how to use the GUIDE on-screen menu and other useful features, and the Remote Commander.

Chapter 4: Other Connections

This section shows you how to connect optional video and audio equipment.

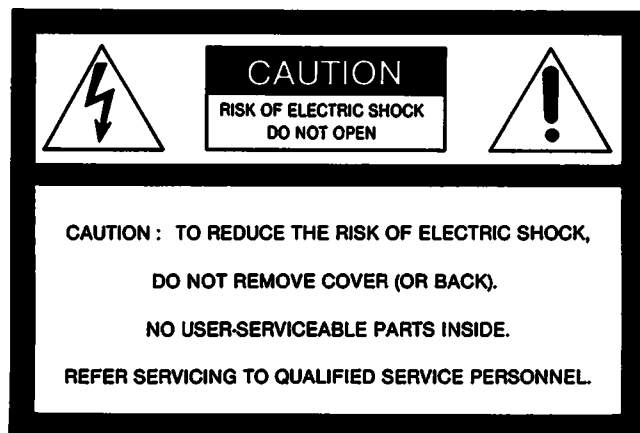
Appendix

This section gives you the specifications and troubleshooting information.

- For a detailed table of contents, see page 3.

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION:

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC 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 in the U.S.A

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.

Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

Precautions

Safety

- Operate the TV only on 120 V AC.
- One blade of the plug is wider than the other for safety purposes and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the TV and have it checked by qualified personnel before operating it any further.
- Unplug the TV from the wall outlet if you are not going to use it for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- Never remove the speakers from the TV.
- Do not pull on the speaker cords.

Installing

- To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the TV in a hot or humid place, or in a place subject to excessive dust or mechanical vibration.
- Do not place objects on top of the TV.

Cleaning

Clean the TV with a soft dry cloth. Never use strong solvents such as thinner or benzine, which might damage the finish of the cabinet.

Repacking

Keep the original carton and packing materials to use for safe transport of your TV in the future.

When repacking, wind the power cord under and over the TV; leaving the cord in contact with the sides may damage the coated finish.

If you have any questions or problems concerning your TV, please contact your nearest Sony dealer.

For details concerning safety precautions, see the supplied leaflet "IMPORTANT SAFEGUARDS."

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Appendix

Specifications and Troubleshooting	Back cover
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Features

With the following features, you can:

- Watch two screens at one time using the **Picture-in-Picture** feature.
- Receive up to 125 cable channels for a total of 181 possible off-air and cable channels with the **multi-band VHF/UHF/CATV** tuner.
- Receive the picture and sound of your VCR through the **VIDEO IN** jacks.
- Watch superior VCR playback pictures when you connect a VCR equipped with an S video output jack to the **S VIDEO IN** jack.
- Receive stereo programs and Second Audio Program (SAP) broadcasts with the built-in **Multichannel TV Sound (MTS)** decoder.
- Listen to TV or video sound through an audio system, by connecting to the **variable audio output** jacks.
- Record images and sound through the **VIDEO 2 OUT** jacks, by means of VCR equipment connected to the **VIDEO 2 IN** jacks.
- Reproduce the dynamics of a live performance, with the **(●) Sound Retrieval System (SRS)**.
- Call up an on-screen menu to set the **CURRENT TIME, ON/OFF TIMER, CHANNEL BLOCK, VIDEO I.D.** and **CHANNEL CAPTION**.

With the supplied Remote Commander, you can:

- Operate the TV, plus Sony and other makers' video equipment, a cable converter box, and Sony multi disc player with the **Pre-Programmed** feature.
- Automatically preset all receivable channels with **AUTO PROGRAM**.
- Switch quickly between two channels, using **JUMP**.
- Set the TV to automatically shut off after approximately one hour, using the **SLEEP** timer.
- Set the internal clock and display the current time on-screen, using **TIME**.

And enjoy other features giving you a high quality picture...

- **New Dynamic picture™** system adjusts picture contrast automatically, producing more detail in the bright and dark areas of every scene.
- **Trinitone™** control assures accurate, life-like skin tones and pure whites.
- **Colorpure Filter™** produces fine picture detail without color spill or color noise.

(●) SOUND RETRIEVAL SYSTEM

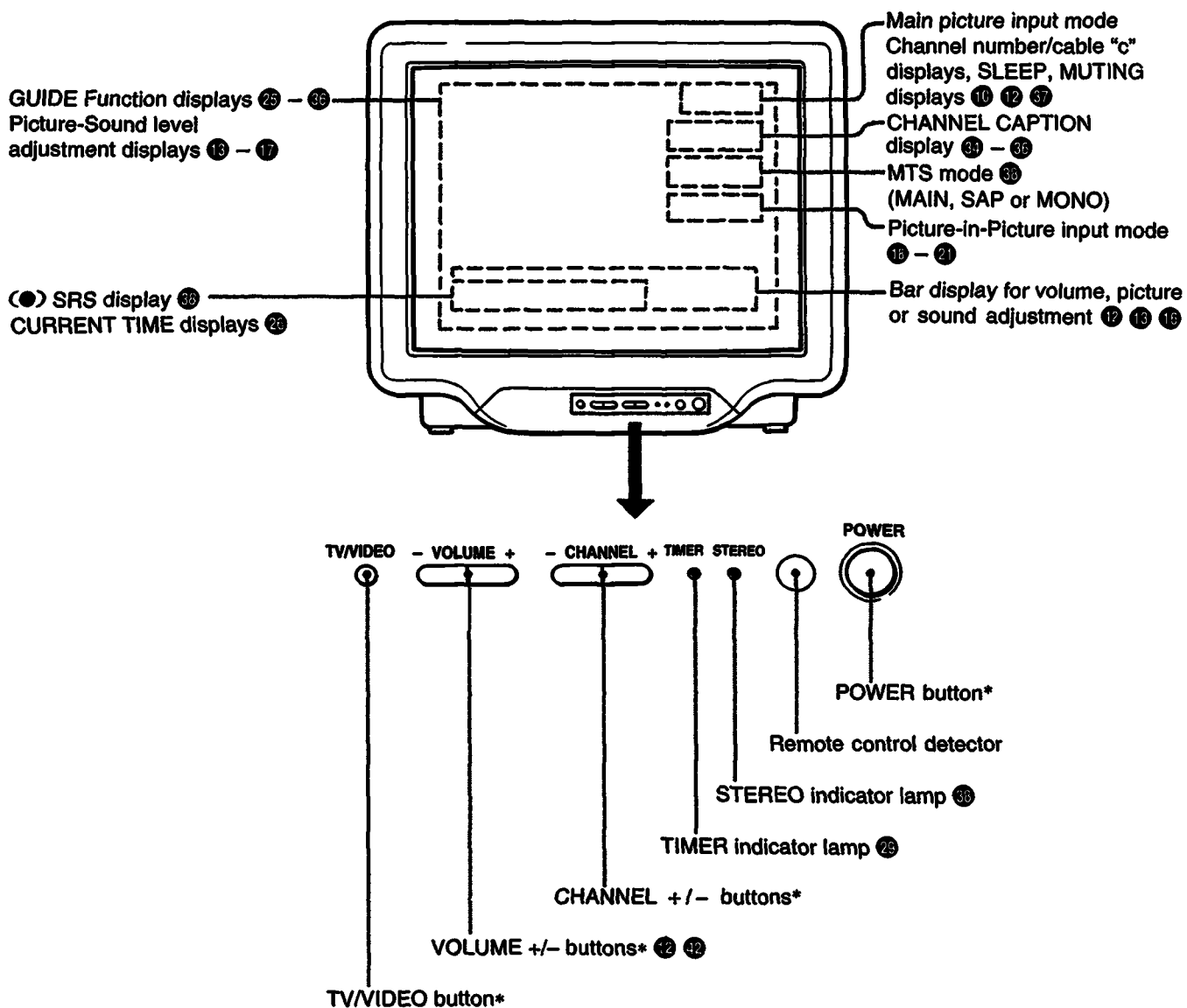
The (●)Sound Retrieval System is manufactured by Sony Corporation under license from the Hughes Aircraft Company, a subsidiary of GM Hughes Electronics. It is covered by U.S. Patent No. 4,748,669. Other U.S. and foreign patents pending.

(●), SOUND RETRIEVAL SYSTEM and SRS® are trademarks of the Hughes Aircraft Company, a subsidiary of GM Hughes Electronics.

Location of Controls

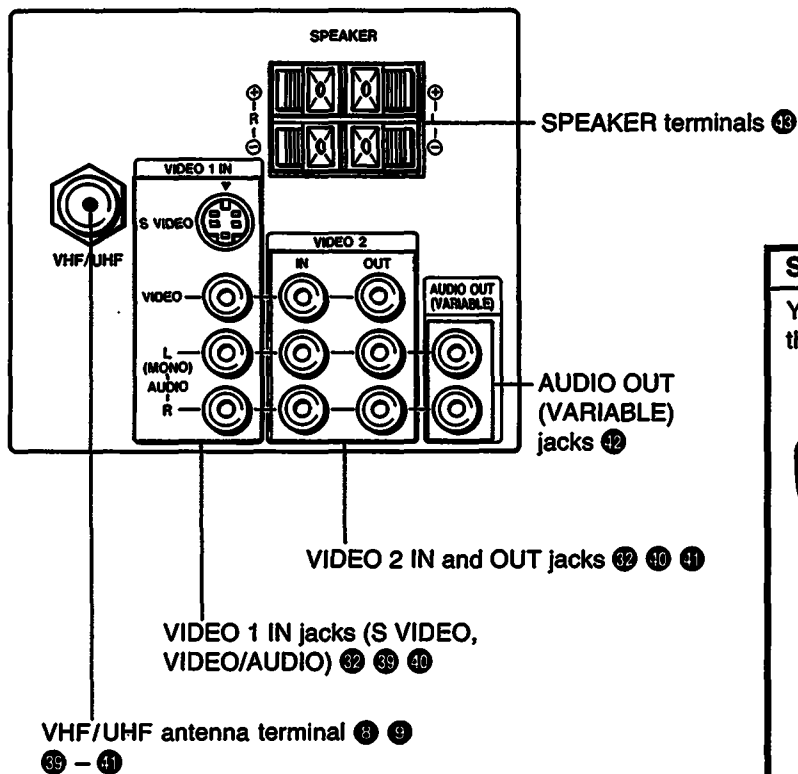
Front panel

For details, refer to the pages indicated by the numbered black circles ●.



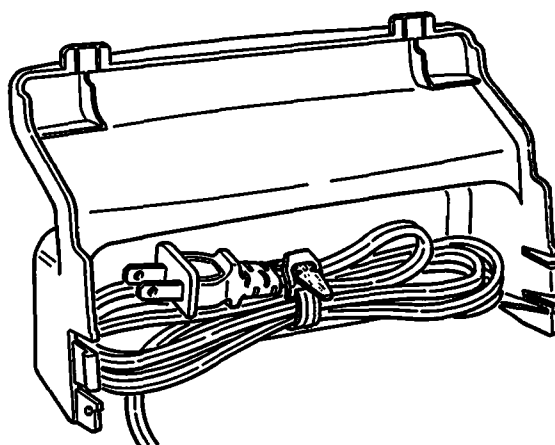
* Buttons with the same function are also located on the Remote Commander (p. 7).

Rear panel



Storing the AC power cord

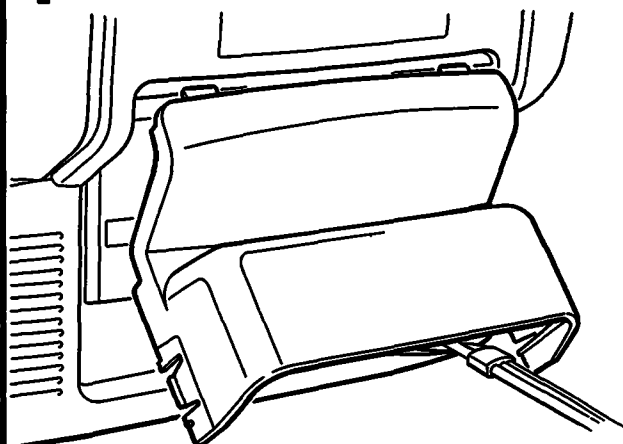
You can store the AC power cord at the rear of the terminal cover, as illustrated here.



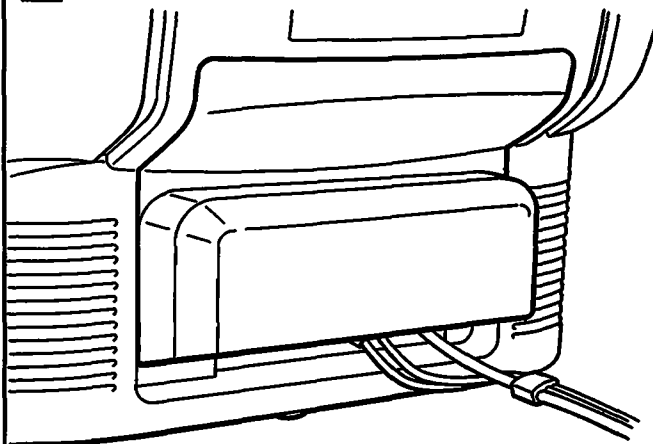
Attaching the terminal cover

The terminal cover comes packed separately from the TV. First connect any optional equipment you want to use with your TV (pp. 39 - 43), then attach the cover as shown below.

- 1 Insert the two tabs at the top of the terminal cover into the rear panel as shown below.

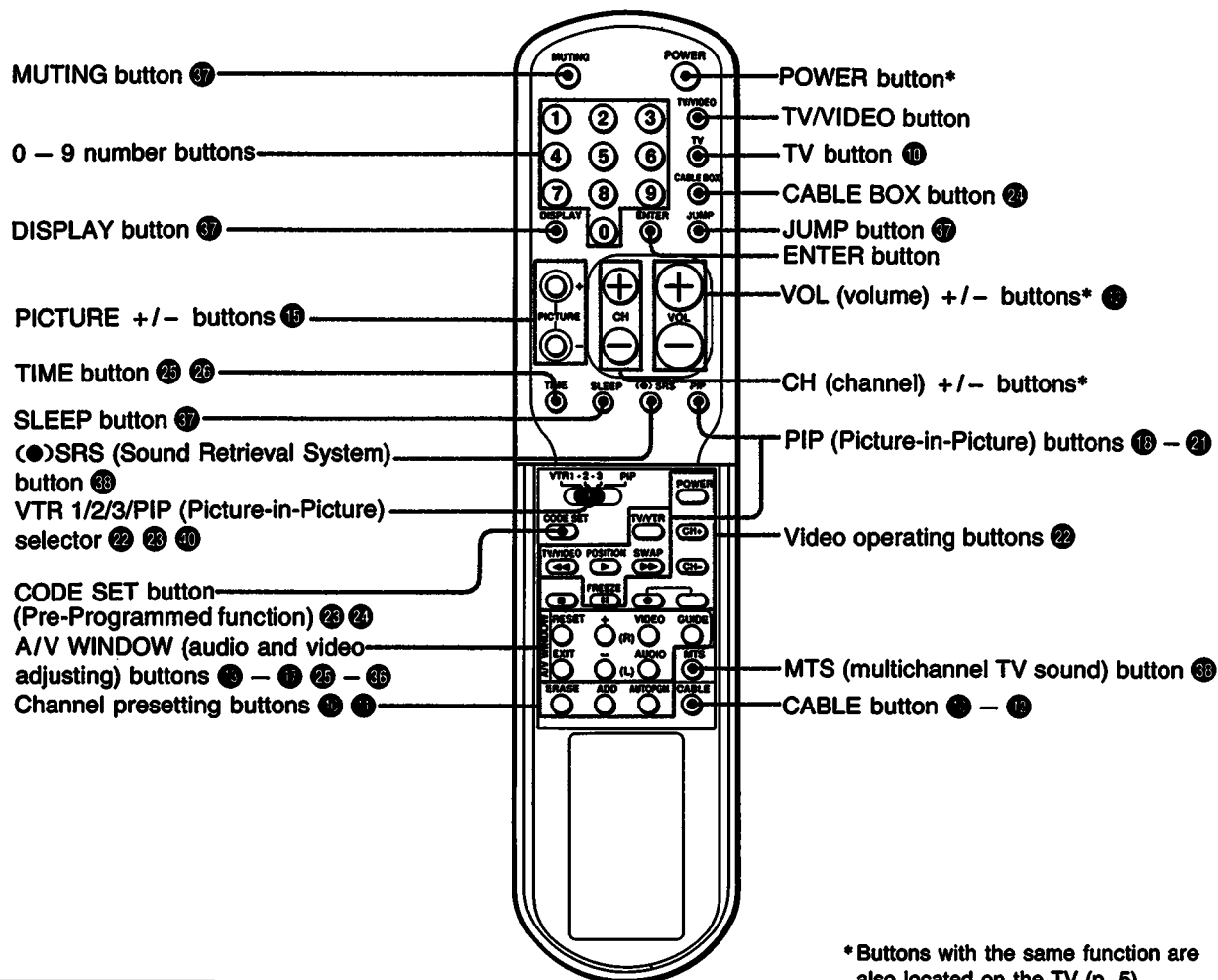


- 2 Push the cover onto the rear panel so that the connected cords extend out from the opening at the bottom.



To remove the terminal cover

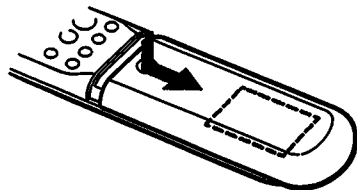
Pull the cover away from the rear panel to the angle shown in step 1, then pull down to release the cover from the rear panel.



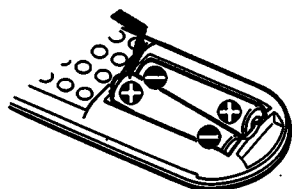
*Buttons with the same function are also located on the TV (p. 5).

Installing Batteries

- 1 Remove the battery compartment cover.



- 2 Insert two size AA (R6) batteries in correct polarity.



Battery life

With normal operation, batteries will last up to half a year. If the Remote Commander does not operate properly, the batteries might be exhausted. Replace both with new ones.

To avoid damage from possible battery leakage

Remove the batteries when the Remote Commander will not be used for a long time.

Connecting TV Antenna/Cable

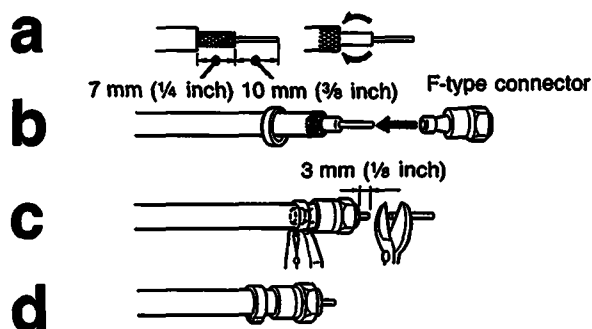
You can use either an indoor or outdoor antenna with your TV. We recommend using an outdoor antenna for better picture quality. You can receive cable TV by connecting a cable supplied by your local cable company.

Connecting VHF, UHF or VHF/UHF Combination Antenna*, or CATV Cable

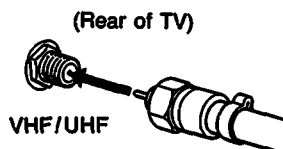
75-ohm coaxial cable (round)

- 1 Check your antenna cable type and prepare the end of the cable using the F-type connector.

Attach an F-type connector (not supplied).



- 2 Plug the connector into the VHF/UHF terminal at the rear of the TV.

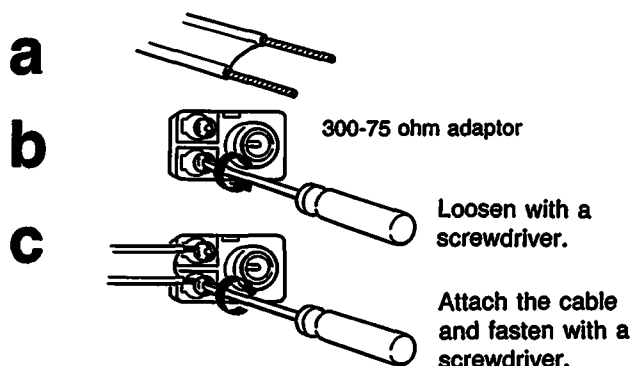


* Most combination antennas are equipped with a signal splitter. Remove the splitter and attach the appropriate connector.

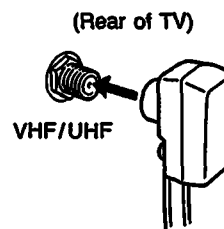
300-ohm twin-lead cable (flat)

- 1 Check your antenna cable type and prepare the end of the cable using the 300-75 ohm adaptor.

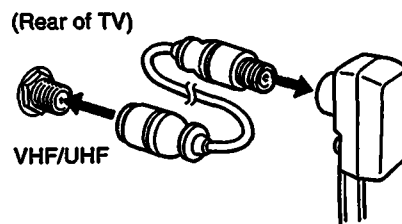
Attach a 300-75 ohm adaptor (not supplied).



- 2 Plug the connector into the VHF/UHF terminal at the rear of the TV.

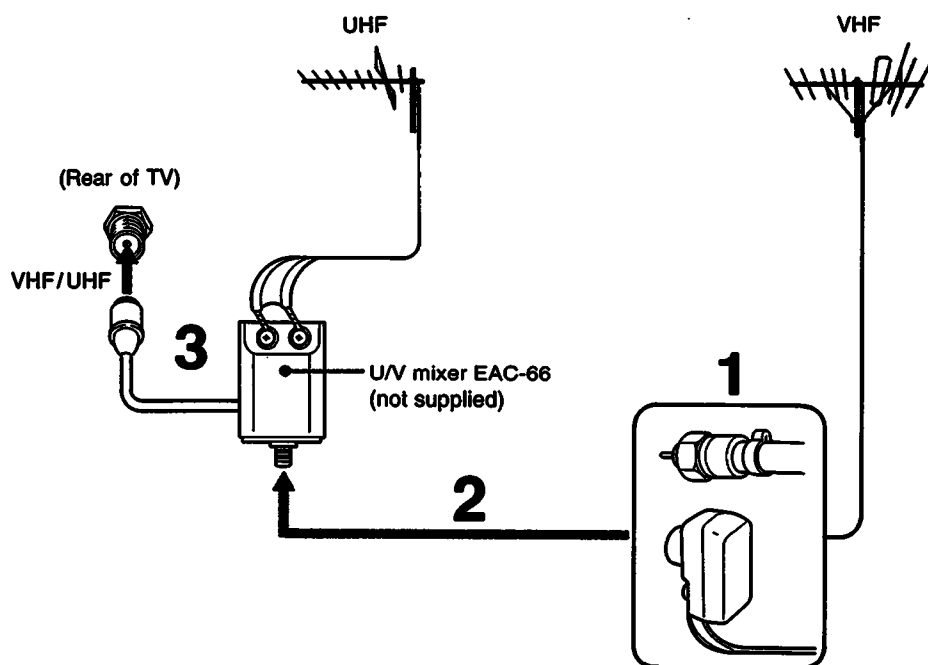


For better picture quality, connect optional antenna cable so that the 300-ohm twin-lead cable can be separated a distance from the TV.



Use the EAC-66 U/V mixer (not supplied).

- 1** Prepare the VHF antenna end using the appropriate connector (p. 8).
- 2** Connect the cables to the U/V mixer.
- 3** Attach the mixer to the VHF/UHF terminal.



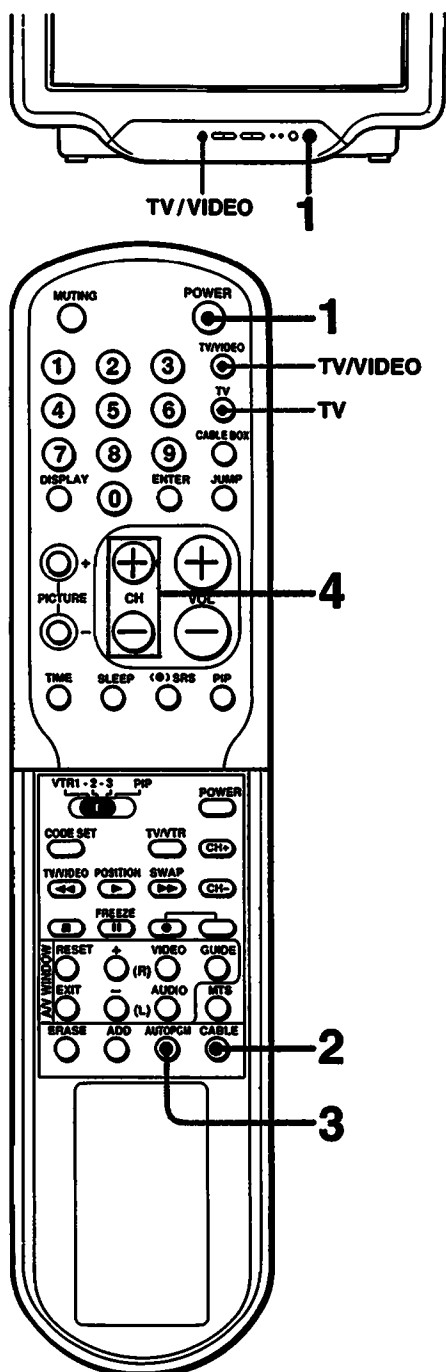
When the U/V mixer is used

Snow or noise may appear in the pictures of the cable TV channels over 37 (W+1).

Presetting TV Channels

VHF channels (2 – 13) have been preset on your TV. You can watch those TV channels without further preparation by following the steps under "Watching TV Programs" on p.12. For UHF and cable channels, you must first preset channels to your TV.

Presetting TV Channels Automatically

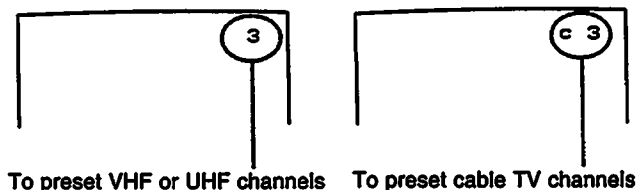


If you have previously pressed the CABLE BOX button, the Remote Commander is set to control the cable converter box, not the TV. Press the TV button in order to control the TV with the Remote Commander.

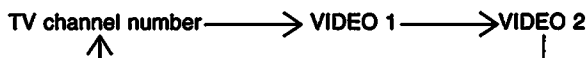
- 1** Press POWER on the TV or the Remote Commander to turn the TV on.



- 2** Press CABLE so that a channel number appears in the mode that you want to preset, TV or cable.



If "VIDEO 1" or "VIDEO 2" is displayed on the screen, press the TV/VIDEO button on the TV or on the Remote Commander so that a channel number appears. Each time you press TV/VIDEO, the display will change as follows:

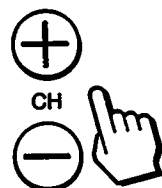


- 3** Press AUTO PGM.



"AUTO PROGRAM" is displayed on the screen and receivable channels (other than the channels already preset) will be preset in numerical sequence. The channels previously preset remain in the TV's memory. When no more channels can be found, the programming stops and the lowest numbered channel is displayed.

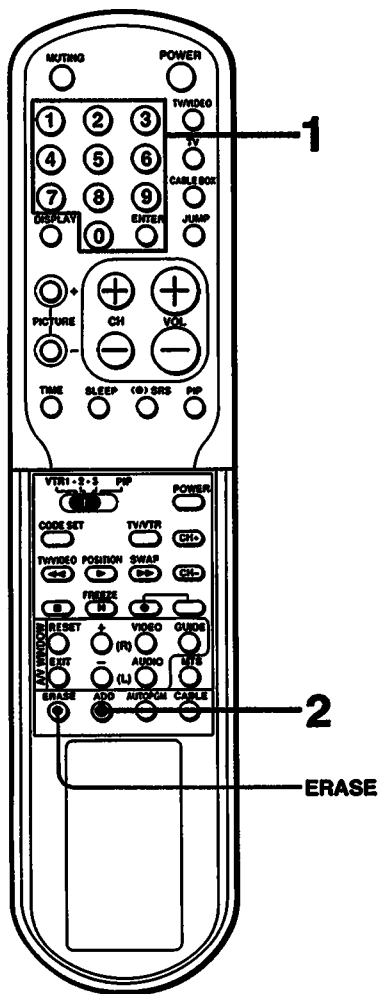
- 4** Press CH+/- to check or view preset channels.



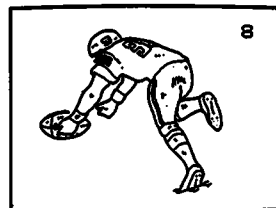
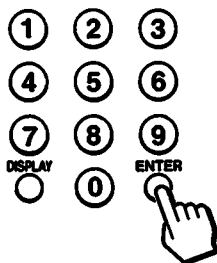
Channels that can be received on this TV:

VHF: 2 – 13 UHF: 14 – 69 Cable: 1 – 125

To add channels that could not be preset automatically because their signal strength was too weak, or to erase unnecessary channels, follow the steps in "Presetting Desired Channels or Erasing Unnecessary Channels" on the next page.



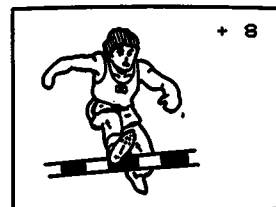
- Press the 0 – 9 number button(s) and then press ENTER to select the channel you want to add or erase.



Note

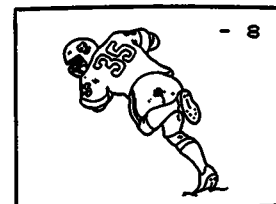
When you erase channels, you can also use CH +/- to select the channel.

- To add channels
Press ADD.



A "+" appears before the number for a moment.
This channel has now been added to the channel scan memory.

To erase channels
Press ERASE.



A "-" appears before the number for a moment.
This channel has now been erased from the channel scan memory.
The next time you press the CH +/- button, this channel will be skipped.

Repeat steps 1 and 2 to add or erase other channels.

CAUTION

When a VHF or UHF channel is erased

The cable TV channel with the same number is also erased, and vice versa.

Cable TV channel chart*

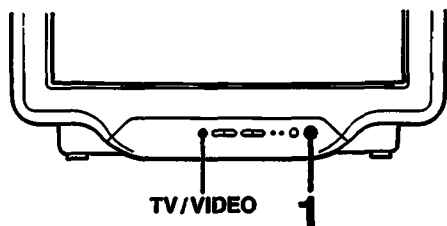
Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to the chart below.

Number on this TV					1	5	6	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
Corresponding CATV channel					A-8	A-7	A-6	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q					
31	32	33	34	35	36	37	38	39	.....					93	94	95	96	97	98	99	100	101	102	.....			123	124	125
R	S	T	U	V	W	W+1	W+2	W+3	.....					W+57	W+58	A-5	A-4	A-3	A-2	A-1	W+59	W+60	W+61	.....			W+82	W+83	W+84

Check with your local cable TV company for more complete information on the available channels.

*This designation of cable TV channels conforms to the EIA/NCTA recommendation.

Watching TV Programs

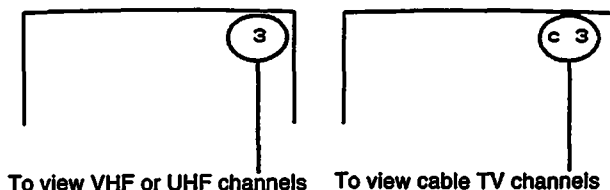


If you have previously pressed the CABLE BOX button, the Remote Commander is set to control the cable converter box, not the TV. Press the TV button in order to control the TV with the Remote Commander.

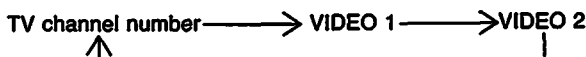
1 Press POWER on the TV or the Remote Commander to turn the TV on.



2 Press CABLE so that the desired mode (air or cable signal) appears.

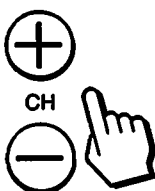


If "VIDEO 1" or "VIDEO 2" is displayed on the screen, press the TV/VIDEO button on the TV or on the Remote Commander so that a channel number appears. Each time you press TV/VIDEO, the display will change as follows:



3 Select a channel in one of the following two ways:

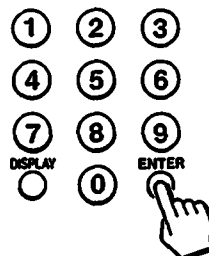
To scan the preset channels* in numerical sequence, press CH +/-.



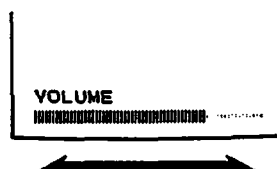
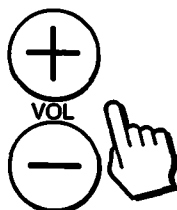
* For more on presetting channels, see pp. 10 – 11.

To select a channel directly, press the 0 – 9 number button(s) and then ENTER.

For example, to select channel 10, press 1, 0 and ENTER.



4 Press VOL + or – to adjust the volume.



Press + to increase volume.
Press – to decrease volume.

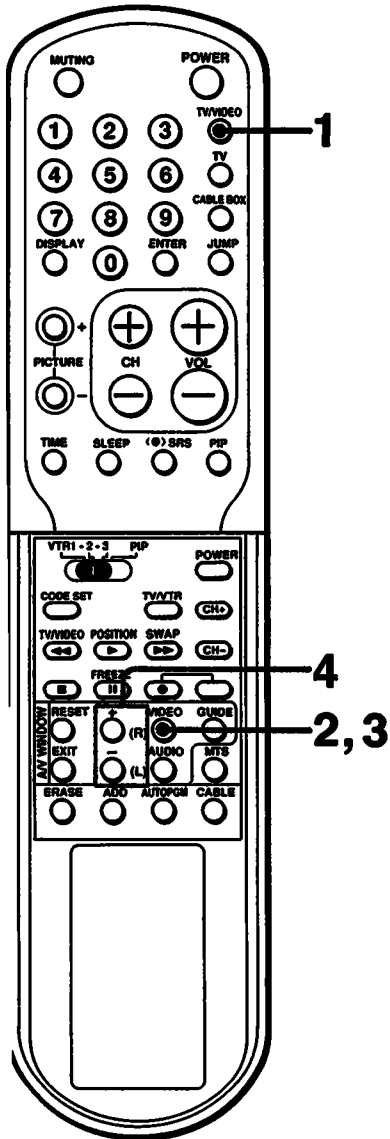
To turn off the TV
Press POWER on the TV or the Remote Commander again.

When you want to watch the connected VCR
Press TV/VIDEO until "VIDEO 1" or "VIDEO 2" appears on the screen. To return to the TV, press TV/VIDEO until the channel number appears on the screen.

Adjusting Picture and Sound Levels

You can set different picture and sound quality levels for each input mode by changing the input mode (TV/VIDEO) before setting. These settings will be retained even when you turn the TV off.

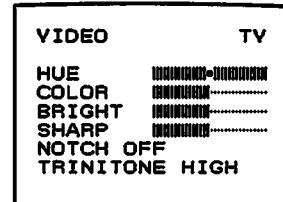
Adjusting the Picture



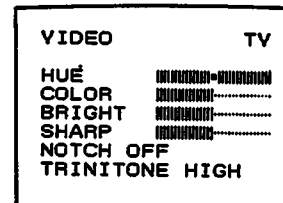
- 1 Select the input mode you want to adjust with the TV/VIDEO button.



- 2 Press VIDEO.
The VIDEO menu appears on the screen.



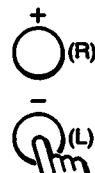
- 3 Press VIDEO repeatedly until the item you want to adjust turns red.



- 4 Press the A/V WINDOW +/- buttons to make the adjustment.



Press + to increase picture sharpness



Press - to decrease picture sharpness

Picture quality	Press - (L) button	Press + (R) button
HUE	Skin tones become purplish	Skin tones become greenish
COLOR	For less color intensity	For more color intensity
BRIGHT	For less brightness	For more brightness
SHARP	For less sharpness	For more sharpness

The display will disappear automatically after a few seconds.

Choosing the NOTCH filter setting

Under normal conditions, set NOTCH OFF.

If dots or stripes appear while you are watching an image from a computer, computer game software or video source, set to NOTCH ON.

- 1 Press VIDEO.
Press VIDEO repeatedly until the NOTCH setting turns red.

VIDEO



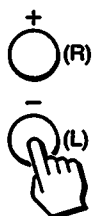
VIDEO	TV
HUE
COLOR
BRIGHT
SHARP
NOTCH OFF
TRINITONE	HIGH

- 2 Press the A/V WINDOW +/- buttons to select ON or OFF.
Press + to select ON.

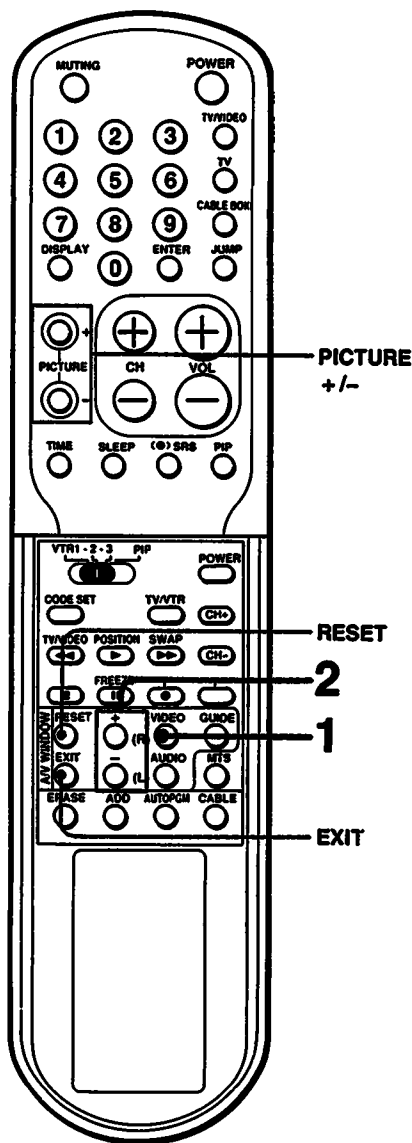


NOTCH ON

Press - to select OFF.



NOTCH OFF

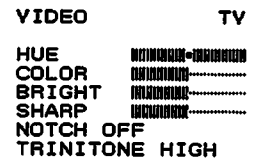
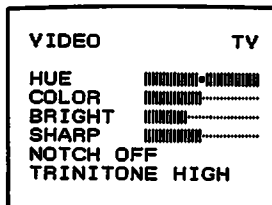


Making the TRINITONE adjustment

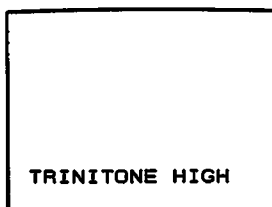
Color picture tubes are usually manufactured with a fixed color temperature (tint) that determines the "warmth" (red tint) or "coolness" (blue tint) of the picture. With Sony's Trinitone feature, you can adjust the picture color to your preference.

- 1 Press VIDEO.
Press VIDEO repeatedly until the TRINITONE setting turns red.

VIDEO

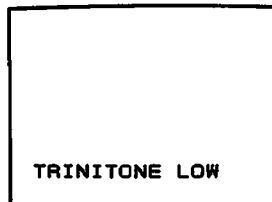
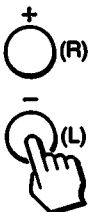


- 2 Press the A/V WINDOW +/- buttons to select HIGH or LOW.
Press + to select HIGH.



The factory preset whiteness will be restored.

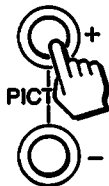
Press - to select LOW.



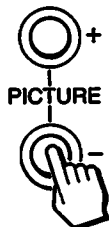
A touch of red will be added to the white areas.

Adjusting the Picture Contrast

Press + to increase picture contrast with vivid color.



Press - to decrease picture contrast with soft color.



To restore the factory settings
Press RESET while in the VIDEO menu screen.
The settings will return to factory-set condition, as shown below.

The display will disappear after a few seconds, if you do not press any other buttons.

Note

The picture contrast level, NOTCH and TRINITONE settings cannot be stored under each input mode (p. 13).

To restore the normal picture
Press EXIT.

Adjusting Picture and Sound Levels

Adjusting the Sound

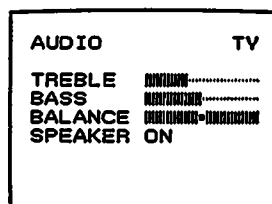
- 1 Select the input mode you want to adjust with the TV/VIDEO button.

TV/VIDEO



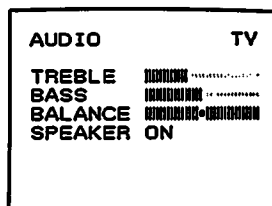
- 2 Press AUDIO.
The AUDIO menu appears on the screen.

AUDIO



- 3 Press AUDIO repeatedly until the item you want to adjust turns red.

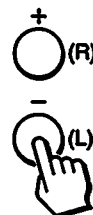
AUDIO



- 4 Press the A/V WINDOW +/- buttons to make the adjustment.



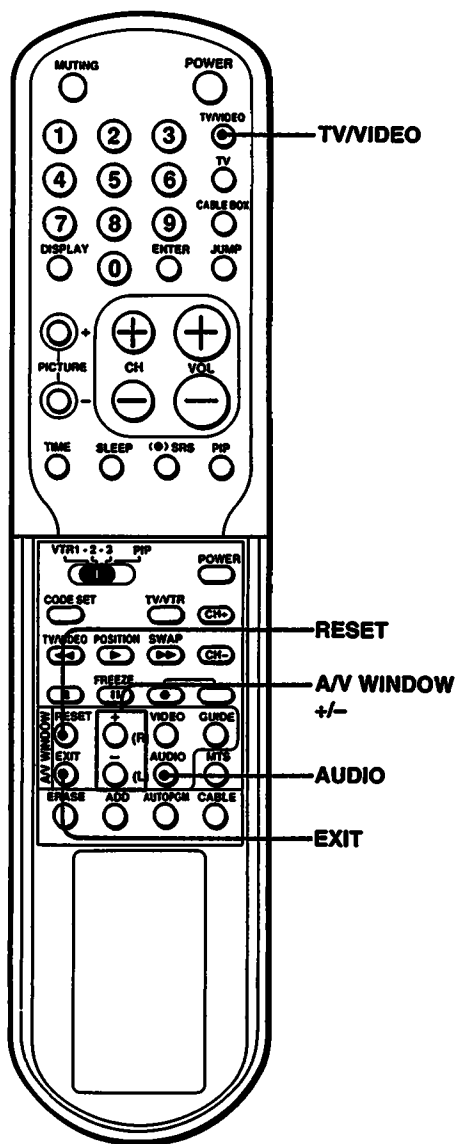
Press + to emphasize the right speaker's volume



Press - to emphasize the left speaker's volume

Sound quality	Press - (L) button	Press + (R) button
TREBLE	To decrease treble response	To increase treble response
BASS	To decrease bass response	To increase bass response
BALANCE	To emphasize the left speaker's volume	To emphasize the right speaker's volume

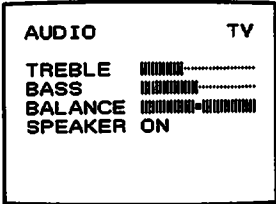
The displays will disappear automatically after a few seconds.



Turning SPEAKER ON/OFF

- 1 Press AUDIO.
Press AUDIO repeatedly until the SPEAKER setting turns red.

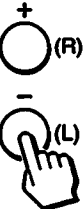
AUDIO



- 2 Press the A/V WINDOW +/- buttons to select ON or OFF.
Press + to turn on the speakers connected to theSPEAKER terminals.



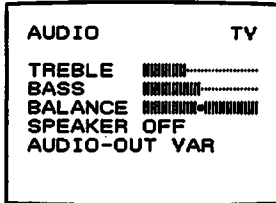
Press - to turn the above speakers off, in order to use an audio system connected to the AUDIO OUT (VARIABLE) jacks.



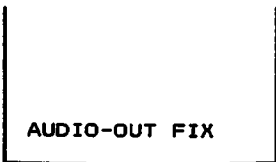
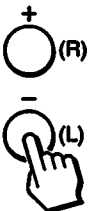
Selecting AUDIO-OUT FIX mode.

- 1 Press AUDIO.
Make sure that the SPEAKER OFF setting is selected (see above).
Press AUDIO repeatedly until the AUDIO-OUT setting turns red.

AUDIO



- 2 Press the A/V WINDOW +/- buttons to select FIX or VAR.
Press - to select FIX.

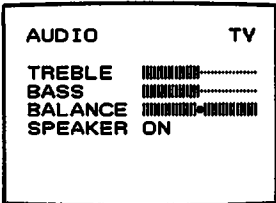


VOLUME is set to maximum, and TREBLE, BASS and BALANCE are set to center levels. You can only make adjustments with the external equipment controls.
In AUDIO-OUT VAR (VARIABLE) mode, you can adjust the audio qualities with the TV controls.

To change to AUDIO-OUT VAR mode
Press +.

Note
When you turn SPEAKER from OFF to ON, AUDIO-OUT FIX mode switches automatically to AUDIO-OUT VAR mode, and VOLUME, TREBLE, BASS and BALANCE settings prior to AUDIO-OUT FIX settings are restored.

To restore the factory settings
Press RESET while in the AUDIO menu screen.
The factory-set condition will be restored, as shown below.



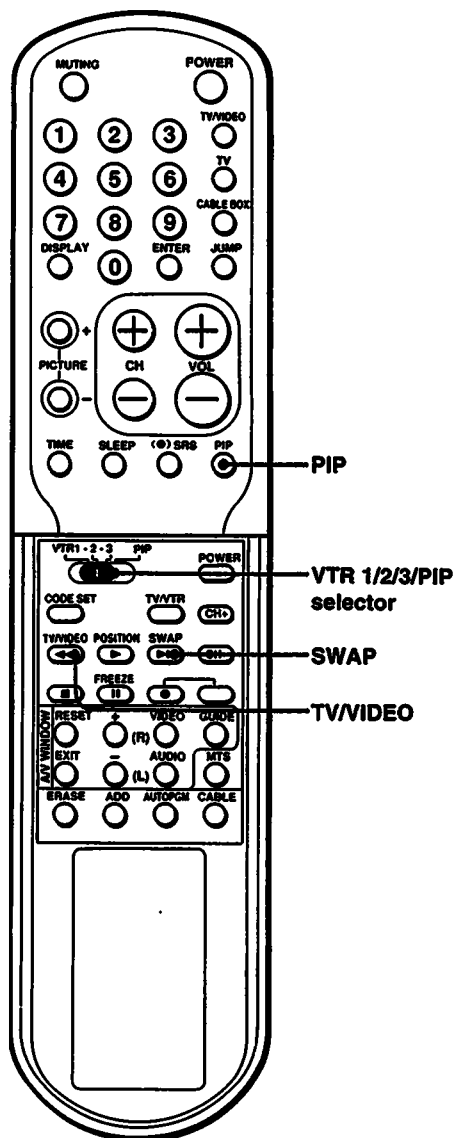
The display will disappear after approximately 3 seconds, if you do not press any other buttons.

To restore the normal picture
Press EXIT.

Chapter 3: Advanced Operation

Using Picture-in-Picture

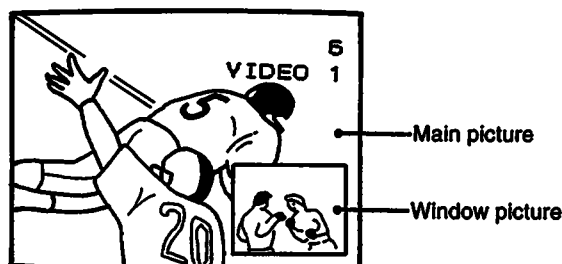
Picture-in-Picture Controls



With the Picture-in-Picture function, you can watch both the main picture and a second (window) picture at the same time.

In order to enjoy this function, **first connect your video equipment (VCR, video disc player, etc.) to the TV.** Then you can watch two TV programs, or a TV program and a video source at the same time.

For instructions on connecting video equipment, see p. 39.



Note

If the main picture is blocked, Picture-in-Picture does not function.

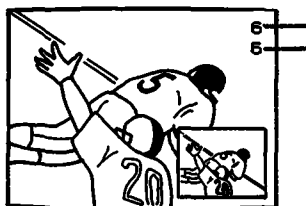
Press EXIT to cancel CHANNEL BLOCK. (See page 31 — Setting CHANNEL BLOCK.)

To display a window picture — PIP

Press PIP.



Input source mode or TV channel
for the main picture



Input source mode or TV channel
for the window picture

To make the window picture disappear
Press PIP again.


To scan channels in the window picture
Press CH +/- on the Remote Commander.

Notes on the window picture

- You cannot hear the sound of the window picture channel.
- If a window picture is blocked, the "BLOCKED" display will appear on the main screen.

A window picture will appear in the same mode as the last time you used Picture-in-Picture.

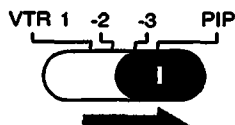
To change the input mode of a window picture

Press  on the Remote Commander. Each time you press this button, TV, VIDEO 1 or VIDEO 2 mode will be selected in sequence.

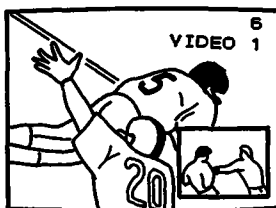
Picture-in-Picture also functions when the main picture is in VIDEO mode.

To swap the main and window pictures — SWAP

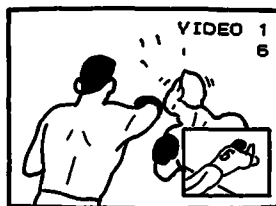
1 Set the VTR 1/2/3/PIP selector to PIP.



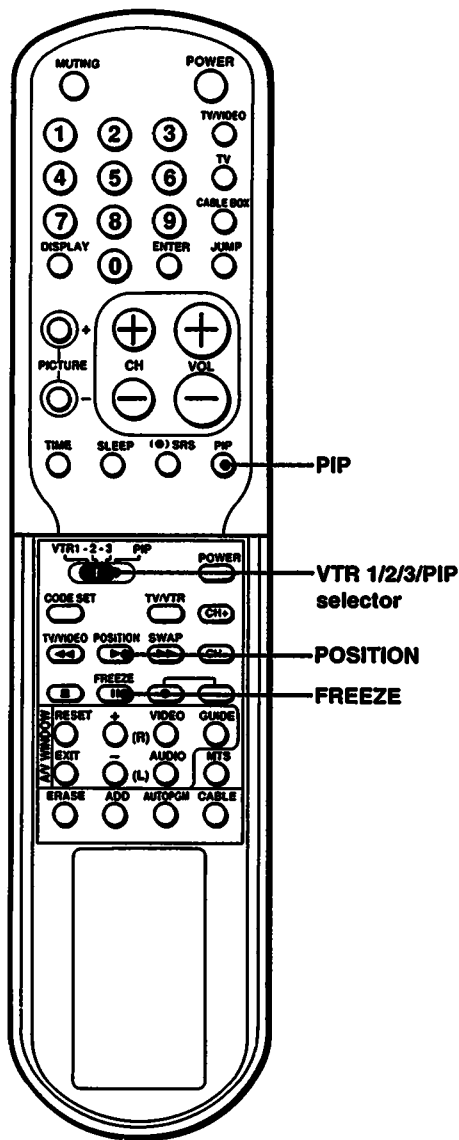
2 Press PIP to display a window picture.



3 Press SWAP.

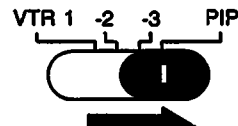


Press SWAP again to swap the pictures again.

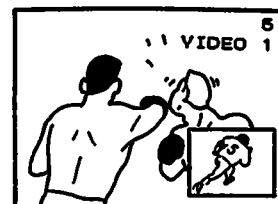


To change the position of the window picture — POSITION

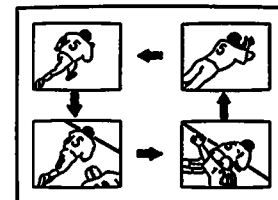
- 1 Set the VTR 1/2/3/PIP selector to PIP.



- 2 Press PIP to display a window picture.



- 3 Press POSITION.
Each time POSITION is pressed, the window picture will move counterclockwise on the screen as illustrated.

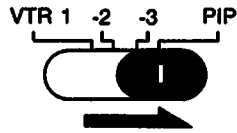


Note

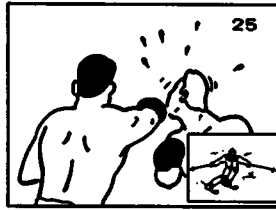
After turning the TV off, when you turn the TV on again the window picture will appear in the same position as it was when the TV was turned off.

To freeze a window picture — FREEZE

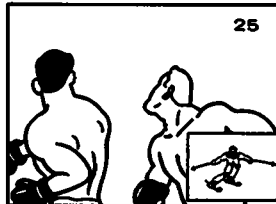
- 1** Set the VTR 1/2/3/PIP selector to PIP.



- 2** Press PIP to display a window picture.



- 3** Press FREEZE.
The window picture will freeze.
Use this feature when you want to write down the recipe of a cooking program or a displayed toll free number, etc.



To restore the normal picture
Press FREEZE again.

Note
The broadcast will be progressing normally while the still picture is on the screen.

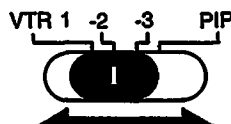
Using the Remote Commander

You can operate other video equipment (such as VCRs, video disc players and cable boxes) that have an infrared remote detector with this supplied Remote Commander.

Operating Sony Video Equipment

When using Sony video cassette recorders (Beta, 8 mm, VHS), follow the steps below.

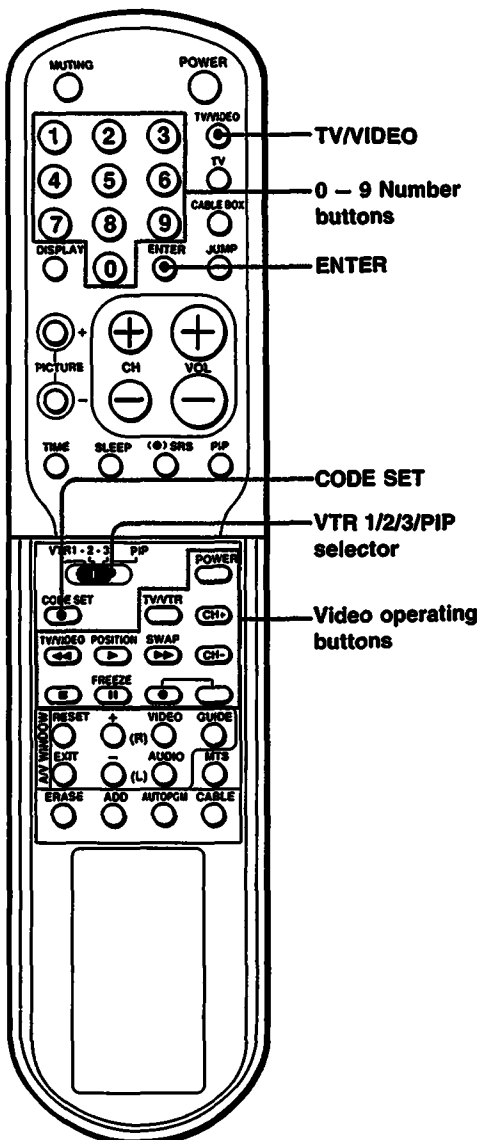
- 1 Set the VTR 1/2/3/PIP selector according to the video equipment you want to operate.



If you want to operate a:	set to:
Beta, ED Beta VCR	VTR 1
8 mm VCR	VTR 2
VHS VCR	VTR 3

When using VCR equipment, select VIDEO 1 or VIDEO 2 mode by pressing the TV/VIDEO button.

- 2 Use the video operating buttons to operate video equipment.



Operating a VCR	
To turn on or off	Press POWER .
To change channels (when watching TV programs through the VCR's tuner)	Press CH +/- .
To record	Press ● (2 buttons simultaneously).
To play	Press ▶ .
To stop	Press ■ .
To fast forward	Press ▶▶ .
To rewind the tape	Press ◀◀ .
To pause	Press ⏸ . To resume normal playback, press again.
To search the picture forward and backward	Keep pressing ▶▶ or ◀◀ during playback. To resume normal playback, release the button.

To return to TV mode
Press **POWER** to turn off the VCR.

Note

If the video equipment does not have a certain function, the corresponding button on this Remote Commander will not operate.

Caution

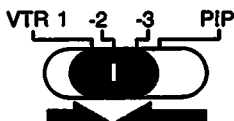
When you replace the batteries, do it within approximately 30 minutes. Otherwise Sony equipment settings and the settings you made under the Pre-Programmed function (p. 23) may be erased.

Setting the code number

When using other makers' video equipment as well as Sony's, or when using a Sony video disc player, follow the steps below.

Example: To operate an RCA video cassette recorder when you set the VTR 1/2/3/PIP selector to VTR 2.

- 1 Set the VTR 1/2/3/PIP selector to VTR 2.



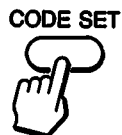
You can use the VTR 1/2/3 settings, but not PIP.*

By employing these three settings, you can use your Remote Commander to operate up to 3 pieces of equipment.

To use another manufacturer's equipment besides a Sony VTR, set the selector to a position not being used for your Sony video equipment.

*Set the selector to PIP only to use Picture-in-Picture controls (pp. 18 - 21).

- 2 While pressing CODE SET, press the number buttons for your manufacturer's code number (see charts). For RCA, press 0, 7 and ENTER.



Now you can operate the video equipment with the supplied Remote Commander.

Notes

- If more than one code number is listed, try entering them one by one, until you come to the correct code for your equipment.
- If you enter a new code number, the code number previously entered at that setting will be erased.

- 3 Use the video operating buttons to operate video equipment.
Operating a VCR
See the table on p. 22.

Operating a Video Disc Player	
To turn on or off	Press POWER.
To play	Press ►.
To stop	Press ■.
To pause	Press ■■. To resume normal playback, press again. * This function is effective only for CAV (standard-play disc). With CLV (extended-play disc), the TV will go into the standby mode if ■■ is pressed.
To search the picture forward and backward	Keep pressing ►► or ◄◄ during playback. To resume normal playback, release the button.

Manufacturers and Code Numbers (VCR)

MANUFACTURER	CODE
SONY	01, 02, 03, 04
CANON	05
EMERSON	22, 28, 30, 33
GENERAL ELECTRIC	05
HITACHI	07
JVC	16
MAGNAVOX	05, 06, 09
MITSUBISHI	18, 19, 26, 27
NEC	16
PANASONIC	05
PHILCO	05, 06
PHILIPS	05, 06, 09
QUASAR	05
RCA	07, 08
SANYO	11, 15
SCOTT	21
SHARP	13, 14
SYLVANIA	05, 06, 09
TEKNIKA	28
TOSHIBA	20, 21
ZENITH	17

Sony Equipment and Code Numbers

SONY EQUIPMENT	CODE
Beta, ED Beta VCR	01
8 mm VCR	02
VHS VCR	03
Video disc player	04

Note

In some rare cases, you may not be able to operate your non-Sony video equipment with the supplied Remote Commander. This is because your equipment may use a code that is not provided with this Remote Commander. In this case, please use the equipment's own remote control unit.

For your convenience

Write the manufacturer name and code number for your equipment onto one of the supplied self-adhesive labels and affix the label to the Remote Commander for easy reference.

	BRAND	CODE
1		
2		
3		

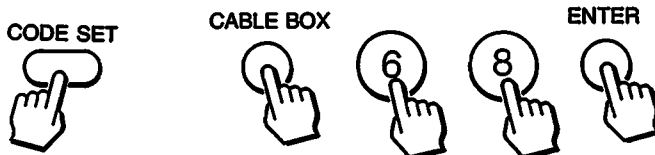
Operating a Cable Converter Box (Pre-Programmed Function)

Setting the code number

When using a cable converter box, follow the steps below.

Example: To operate a Zenith cable converter box.

While pressing CODE SET, press CABLE BOX and the number buttons for your distributor's code number (see chart). For Zenith, press 6, 8 and ENTER.



Notes

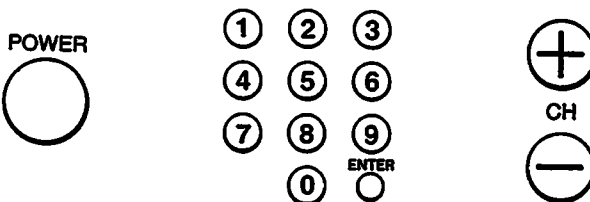
- If more than one code number is listed, try entering them one by one, until you come to the correct code for your equipment.
- If you enter a new code number, the code number previously entered at that setting will be erased.
- In some rare cases, you may not be able to operate your cable converter box with the supplied Remote Commander. This is because your equipment may use a code that is not provided with this Remote Commander. In this case, please use the equipment's own remote control unit.

Operating your cable converter box

1 Press CABLE BOX.



2 Use the TV control buttons (POWER, 0 – 9, ENTER and CH +/-) to control the cable converter box.



To return to TV mode

Press TV.

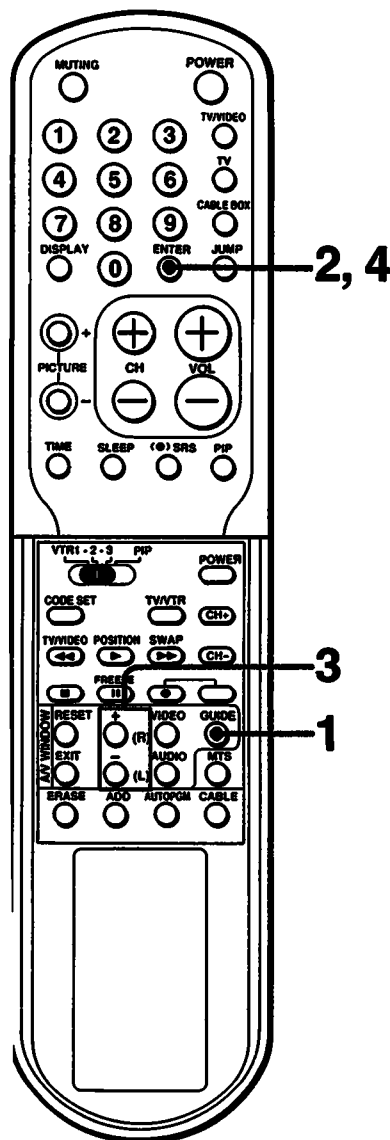
You can then use the TV control buttons to control the TV.

For details, refer to the cable box's instructions.

DISTRIBUTOR	CODE
JERROLD	60, 61, 62, 63, 64, 65
PIONEER	69, 70
SCIENTIFIC ATLANTA	66, 67
TOCOM	71, 72
ZENITH	68

Using the GUIDE Function (on-screen menu)

Use the GUIDE function to call up the on-screen menu, which gives you instructions on how to set the CURRENT TIME, ON/OFF TIMER, CHANNEL BLOCK, VIDEO I.D. and CHANNEL CAPTION.



Setting the Clock — CURRENT TIME SET

Example: Set the clock to Monday, 5:30 PM.

- 1 Press GUIDE.
Press repeatedly until the "CURRENT TIME SET" display turns red.

GUIDE



GUIDE

CURRENT TIME SET
ON/OFF TIMER
CHANNEL BLOCK
VIDEO I.D.
CHANNEL CAPTION

- 2 Press ENTER.

ENTER



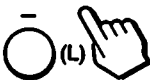
CURRENT TIME SET

SUN ---:-- AM

SELECT TODAY'S
DAY.
PLEASE USE [+] [-]
& [ENTER].

- 3 Press the A/V WINDOW +/- buttons to select the day of the week.

+ (R)



CURRENT TIME SET

MON ---:-- AM

SELECT TODAY'S
DAY.
PLEASE USE [+] [-]
& [ENTER].

- 4 Press ENTER.
(If the time is already set, the time currently set will appear.
Proceed to step 5 (p. 26) to enter a new time.

ENTER

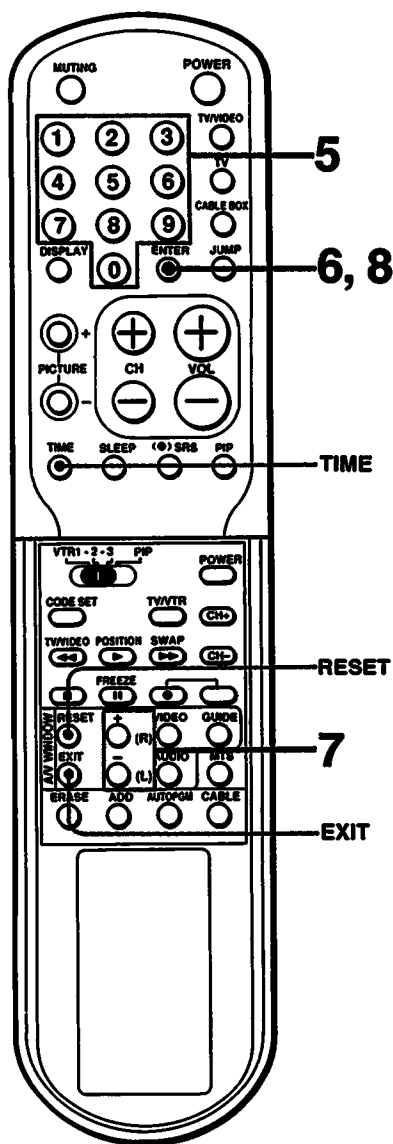


CURRENT TIME SET

MON ---:-- AM

SET THE CURRENT
TIME.
PLEASE USE [0-9]
& [ENTER].

(cont'd. on next page)



Notes

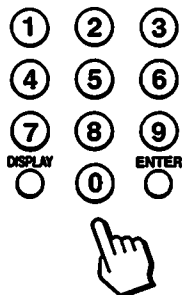
- The ON/OFF TIMER and CHANNEL BLOCK will operate only if the clock is set correctly.
- The internal clock of this TV operates on a 12-hour cycle. If you enter a 24-hour cycle number, it will be cleared when you press ENTER.

12:00 AM stands for midnight.
12:00 PM stands for noon.

- If you unplug the TV, or if a power failure occurs, all settings will be erased from the TV's memory, and the internal clock will return to the factory-set condition. Follow steps 1 – 8 to reset the current time.

Setting the Clock — CURRENT TIME SET (cont'd. from prev. page)

- 5** Press 0 – 9 to set the current time.
For example, to set 5:30, press 0, 5, 3 and 0. (You must press 4 digits.)



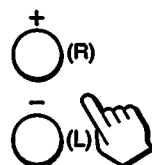
CURRENT TIME SET
MON 05:30 AM
SET THE CURRENT TIME.
PLEASE USE [0-9] & [ENTER].

- 6** Press ENTER.



CURRENT TIME SET
MON 05:30 AM
SELECT AM OR PM.
PLEASE USE [+] [-] & [ENTER].

- 7** Press +/- to set AM or PM.



CURRENT TIME SET
MON 05:30 PM
SELECT AM OR PM.
PLEASE USE [+] [-] & [ENTER].

- 8** Press ENTER.
The moment you press ENTER, the internal clock will start. The screen display will indicate that the clock has been set. The display will disappear automatically after approximately 5 seconds.



CURRENT TIME SET
MON 05:30 PM
CURRENT TIME IS SET. THANK YOU.

To clear the current time setting

Call up the "CURRENT TIME SET" display (steps 1 and 2, p. 25; press RESET, then EXIT.

To enter a new time setting

Call up the "CURRENT TIME SET" display; press RESET, then repeat steps 3 to 8.

To display the current time

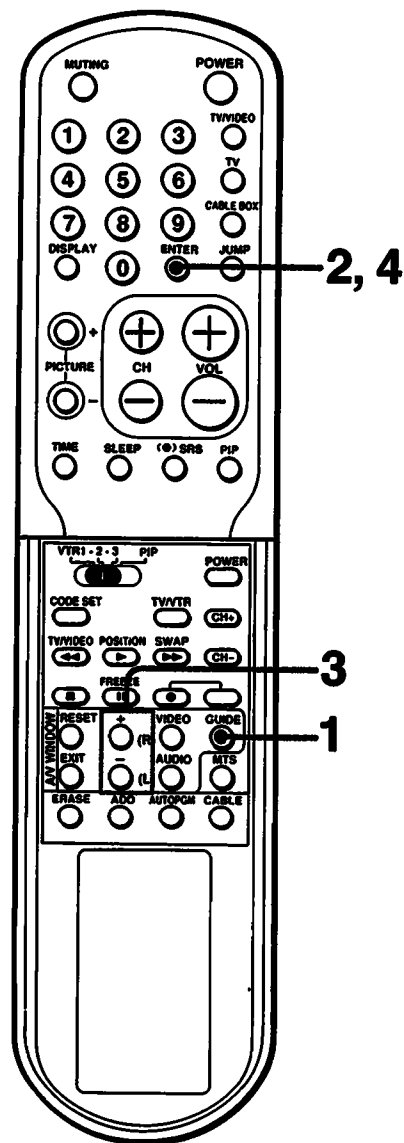
Press TIME.

To turn off the display

Press TIME again.

To restore the normal picture

Press EXIT.



Setting the ON/OFF TIMER

Set the ON/OFF TIMER to make the program of your choice appear on the screen at the desired time.

Example: Set the timer to turn on the TV to channel 8 for 3 hours, from 1:00 PM every Monday through Friday.

- 1 Press **GUIDE**.
Press repeatedly until the "ON/OFF TIMER" display turns red.

GUIDE



GUIDE

CURRENT TIME SET
ON/OFF TIMER
CHANNEL BLOCK
VIDEO I.D.
CHANNEL CAPTION

- 2 Press **ENTER**.
Instructions for selecting the day appear.
(If the clock has not been set, the display "PLEASE SET THE CURRENT TIME FIRST" will appear on the screen.
Go back to p. 25 — "Setting the Clock".)

ENTER



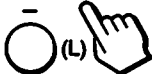
ON/OFF TIMER

EVERY SUN-SAT
--:--AM _H CH--

SELECT THE DAY.
PLEASE USE [+][-]
& [ENTER].

- 3 Press the **A/V WINDOW +/-** buttons to select the day of the week.
(See illustration on p. 30)

+ (R)



ON/OFF TIMER

EVERY MON-FRI
--:--AM _H CH--

SELECT THE DAY.
PLEASE USE [+][-]
& [ENTER].

- 4 Press **ENTER**.
Instructions for setting the time appear.

ENTER

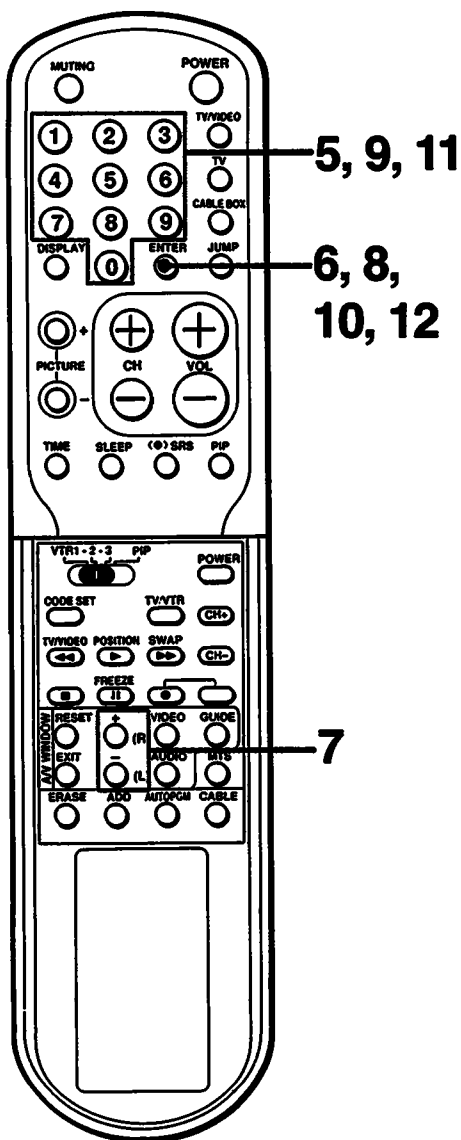


ON/OFF TIMER

EVERY MON-FRI
--:--AM _H CH--

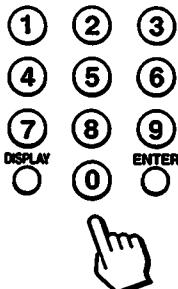
SET THE TIME.
PLEASE USE [0-9]
& [ENTER].

(cont'd. on next page)



Setting the ON/OFF TIMER (cont'd. from prev. page)

5 Press 0 – 9 to set the desired time.
For example, to set 1:00, press 0, 1, 0 and 0. (You must press 4 digits.)



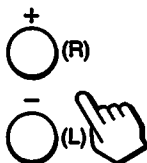
ON/OFF TIMER
EVERY MON-FRI
01:00AM _H CH____
SET THE TIME.
PLEASE USE [0-9]
& [ENTER].

6 Press ENTER.



ON/OFF TIMER
EVERY MON-FRI
01:00AM _H CH____
SELECT AM OR PM.
PLEASE USE [+] [-]
& [ENTER].

7 Press +/- to set AM or PM.



ON/OFF TIMER
EVERY MON-FRI
01:00PM _H CH____
SELECT AM OR PM.
PLEASE USE [+] [-]
& [ENTER].

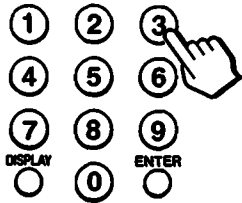
8 Press ENTER.



ON/OFF TIMER
EVERY MON-FRI
01:00PM _H CH____
SET THE DURATION.
PLEASE USE [0-9]
& [ENTER].



9 Press 1 – 9 to set the duration (up to 9 hours).



ON/OFF TIMER
EVERY MON-FRI
01:00PM 3H CH____

SET THE DURATION.
PLEASE USE [0-9]
& [ENTER].

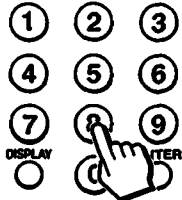
10 Press ENTER.



ON/OFF TIMER
EVERY MON-FRI
01:00PM 3H CH____

SET THE CHANNEL.
PLEASE USE [0-9]
& [ENTER].

11 Press 0 – 9 to set the desired channel number.



ON/OFF TIMER
EVERY MON-FRI
01:00PM 3H CH__8

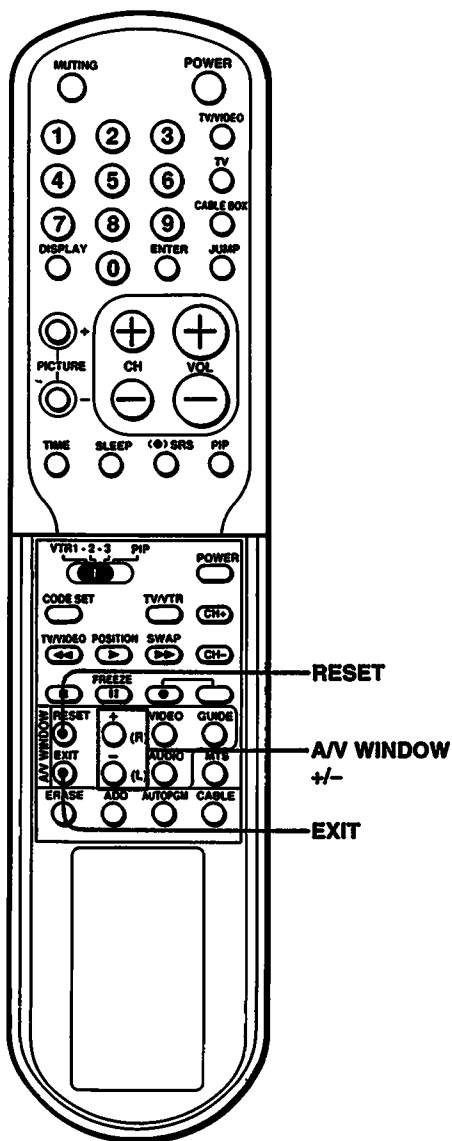
SET THE CHANNEL.
PLEASE USE [0-9]
& [ENTER].

12 Press ENTER. *The following display will appear on the screen, and the TIMER indicator lamp on the TV will light up, showing that the ON/OFF TIMER has been set.*



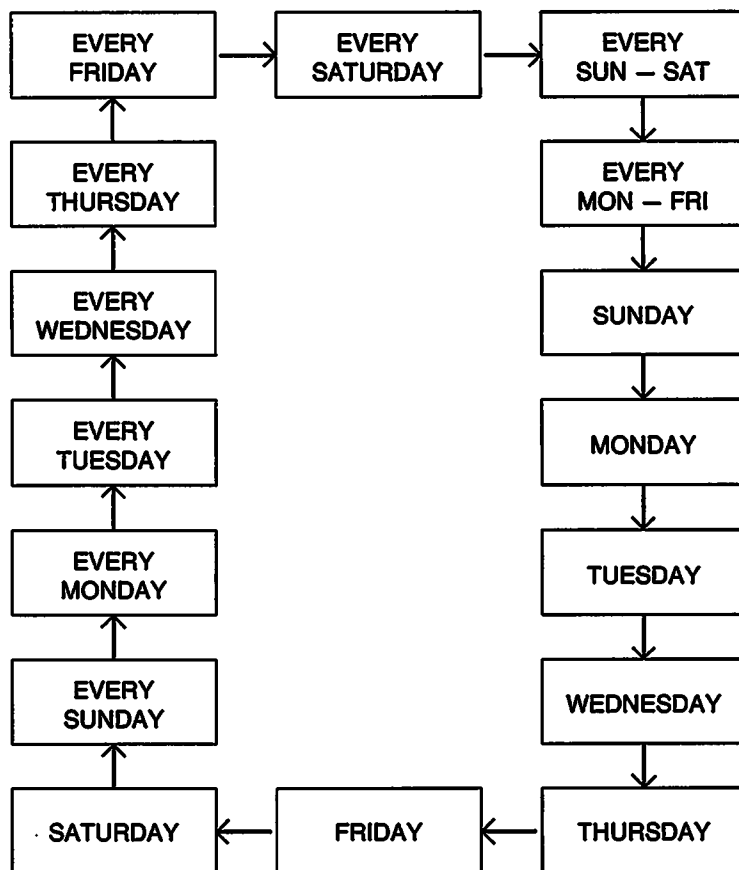
ON/OFF TIMER
EVERY MON-FRI
_1:00PM 3H CH__8

ON/OFF TIMER IS
SET. THANK YOU.



Setting the ON/OFF TIMER (cont'd. from prev. page)

When you press AV/WINDOW + button, the selectable days will appear in the following order. (See step 3, p. 22.)



Press the A/V WINDOW – button to move in the reverse direction.

To clear the setting

Call the "ON/OFF TIMER" page (steps 1 and 2, p. 27). Press RESET, then EXIT.

To reset the setting

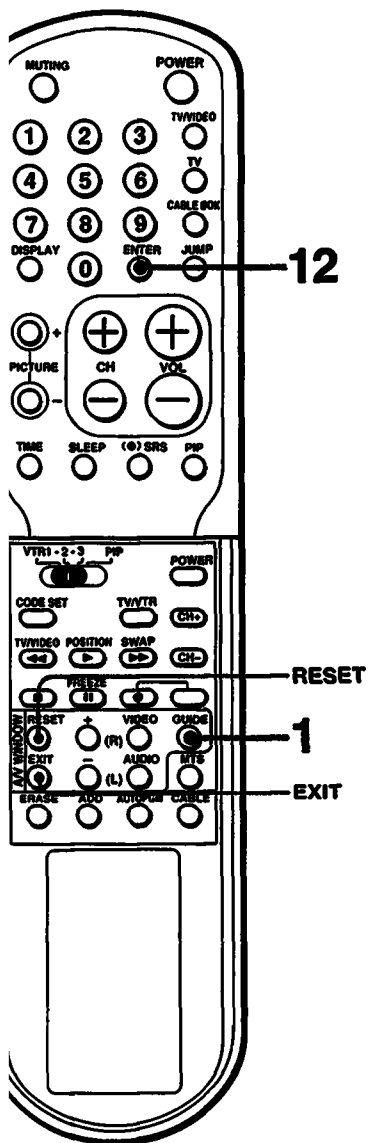
Call the "ON/OFF TIMER" page (p. 27). Press RESET, then repeat steps 3 to 12.

To restore the normal picture

Press EXIT.

Notes

- The "TIMER WILL BE OFF" display will appear on the screen one minute before the timer goes off.
- If you unplug the TV, or a power failure occurs, both the clock and timer settings will be erased. Reset the current time, then set the timer.



Setting CHANNEL BLOCK

CHANNEL BLOCK prevents a channel from appearing on the screen during the time that you set. We suggest that you use this function to prevent children from watching undesirable programs.

Example: Set CHANNEL BLOCK for 1 hour, at 4:00 PM every Saturday, on channel 12.

- 1** Press GUIDE.
Press repeatedly until the "CHANNEL BLOCK" display turns red.

GUIDE



GUIDE

CURRENT TIME SET
ON/OFF TIMER
CHANNEL BLOCK
VIDEO I.D.
CHANNEL CAPTION

2-11 Same as "Setting the ON/OFF TIMER" (pp. 27 - 29)

- 12** Press ENTER
The following display will appear, indicating that CHANNEL BLOCK has been set.
At the preset time, the picture of the selected channel will be blocked from view, and the sound will be muted. A red "BLOCKED" display will appear on the screen while the channel is blocked.

ENTER



CHANNEL BLOCK

EVERY SATURDAY
_4:00PM 2H CH_12
CHANNEL BLOCK IS
SET. THANK YOU.

Using the GUIDE function

To clear the setting

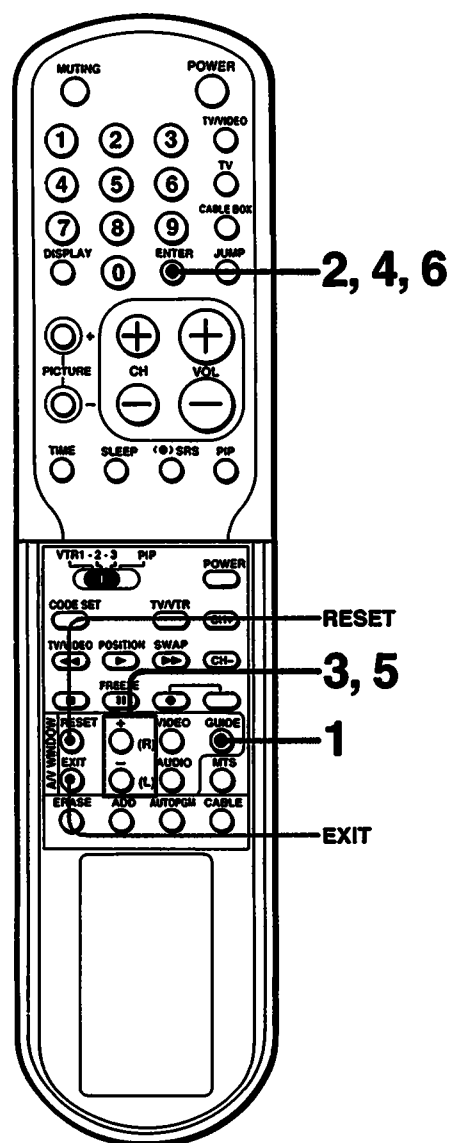
Call up the "CHANNEL BLOCK" page (steps 1 and 2). Press RESET, then EXIT.

To reset the setting

Call up the "CHANNEL BLOCK" page, then repeat steps 1 through 12.

To restore the normal picture

Press EXIT.



Setting VIDEO I.D.

Use this function to identify the type of video equipment connected to the VIDEO 1 and VIDEO 2 IN jacks. You can change the VIDEO 1 display to BETA, 8 mm, VHS, LD (laser disc player) or S VIDEO, and the VIDEO 2 display to BETA, 8 mm, VHS or LD (laser disc player).

Note

The VIDEO I.D. function works only with the main picture.

- 1 Press **GUIDE**.
Press repeatedly until the "VIDEO I.D." display turns red.

GUIDE



GUIDE

CURRENT TIME SET
ON/OFF TIMER
CHANNEL BLOCK
VIDEO I.D.
CHANNEL CAPTION

- 2 Press **ENTER**.

ENTER

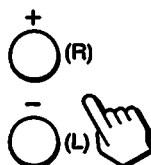


VIDEO I.D.

VIDEO 1: VIDEO 1
VIDEO 2: VIDEO 2
PLEASE USE [+][-]
& [ENTER].

Display is red

- 3 Press the **A/V WINDOW +/-** buttons to select the I.D. for VIDEO 1 (p. 28).



VIDEO I.D.

VIDEO 1: S VIDEO
VIDEO 2: VIDEO 2
PLEASE USE [+][-]
& [ENTER].

Display is red

- 4 Press **ENTER**.

ENTER

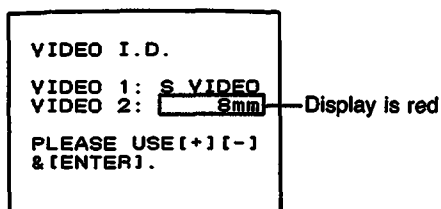
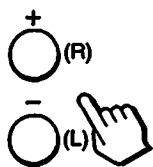


VIDEO I.D.

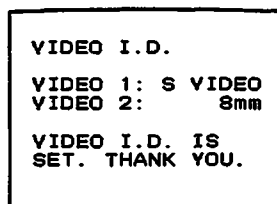
VIDEO 1: S VIDEO
VIDEO 2: VIDEO 2
PLEASE USE [+][-]
& [ENTER].

Display is red

5 Press the A/V WINDOW +/- buttons to select the I.D. for VIDEO 2.
(See chart below).



6 Press ENTER.
A display will appear indicating the VIDEO I.D. has been set.



Setting the I.D.

Each time you press A/V WINDOW +, the I.D. will change in the following order:

VIDEO 1 I.D. Settings

VIDEO 1 → BETA → 8 mm → VHS → LD → S VIDEO

VIDEO 2 I.D. Settings

VIDEO 2 → BETA → 8 mm → VHS → LD

To move in the reverse direction

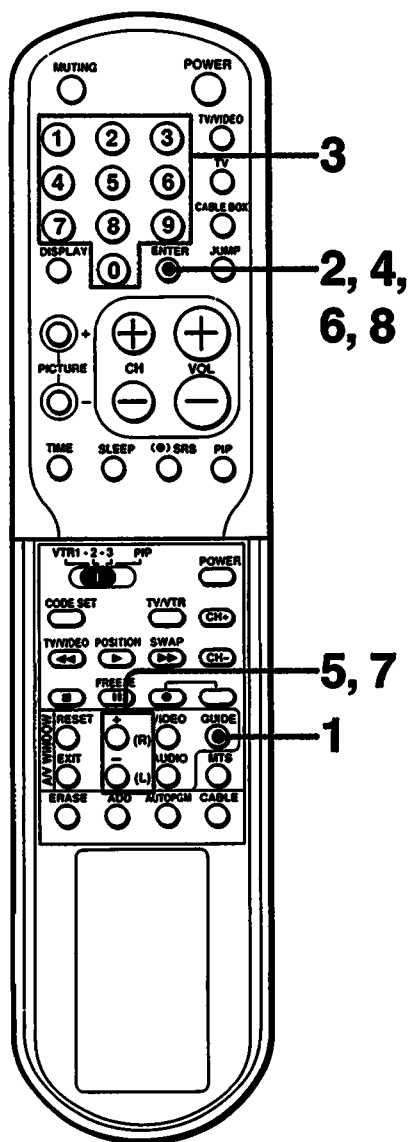
Press A/V WINDOW -.

To reset the setting

Call the "VIDEO I.D." screen, then repeat steps 1 - 6.

To restore the normal picture

Press EXIT.



Setting CHANNEL CAPTION

Use this function to caption each channel number display with the channel call letters (up to four letters).

- 1 Press GUIDE.
Press repeatedly until the "CHANNEL CAPTION" display turns red.

GUIDE



GUIDE

CURRENT TIME SET
ON/OFF TIMER
CHANNEL BLOCK
VIDEO I.D.
CHANNEL CAPTION

- 2 Press ENTER.

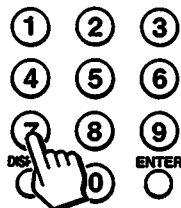
ENTER



CHANNEL
CAPTION

ENTER THE CH
TO BE CAPTIONED.
PLEASE USE [0-9]
& [ENTER].

- 3 Press the 0 – 9 buttons to select the channel number you want to caption.



CHANNEL
CAPTION

ENTER THE CH
TO BE CAPTIONED.
PLEASE USE [0-9]
& [ENTER].

- 4 Press ENTER.

ENTER

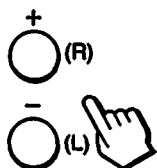


CHANNEL
CAPTION

SELECT THE 1ST
LETTER.
PLEASE USE [+][-]
& [ENTER].



5 Press the A/V WINDOW +/- buttons to choose the first letter of the caption.



CHANNEL ---7
CAPTION E---

SELECT THE 1ST
LETTER.
PLEASE USE [+] [-]
& [ENTER].

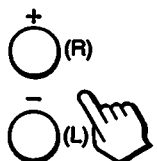
6 Press ENTER.



CHANNEL ---7
CAPTION E---

SELECT THE 2ND
LETTER.
PLEASE USE [+] [-]
& [ENTER].

7 Press the A/V WINDOW +/- buttons to choose the second letter of the caption.



CHANNEL ---7
CAPTION ES--

SELECT THE 2ND
LETTER.
PLEASE USE [+] [-]
& [ENTER].

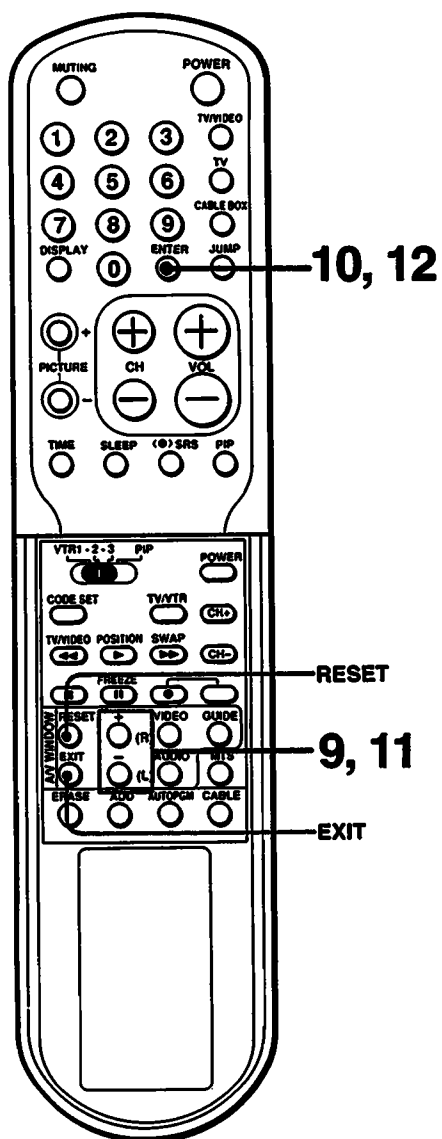
8 Press ENTER.



CHANNEL ---7
CAPTION ES--

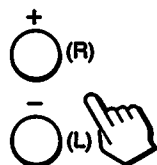
SELECT THE 3RD
LETTER.
PLEASE USE [+] [-]
& [ENTER].

(cont'd. on next page)



Setting CHANNEL CAPTION (cont'd. from prev. page)

9 Press the A/V WINDOW +/- buttons to choose the third letter of the caption.



CHANNEL
CAPTION --7
ESP_

SELECT THE 3RD
LETTER.
PLEASE USE [+] [-]
& [ENTER].

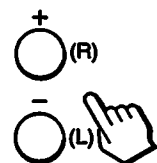
10 Press ENTER.



CHANNEL
CAPTION --7
ESP_

SELECT THE 4TH
LETTER.
PLEASE USE [+] [-]
& [ENTER].

11 Press the A/V WINDOW +/- buttons to choose the fourth letter of the caption.



CHANNEL
CAPTION --7
ESP_N

SELECT THE 4TH
LETTER.
PLEASE USE [+] [-]
& [ENTER].

12 Press ENTER.
The channel caption is set.



CHANNEL
CAPTION --7
ESP_N

PRESS [+] FOR MORE

To set more captions

Press A/V WINDOW +, then repeat steps 3 – 12.

To clear the setting

Call up the "CHANNEL CAPTION" screen and press RESET, then EXIT.

To reset the setting

Call up the "CHANNEL CAPTION" screen. Press RESET, then repeat steps 3 – 12.

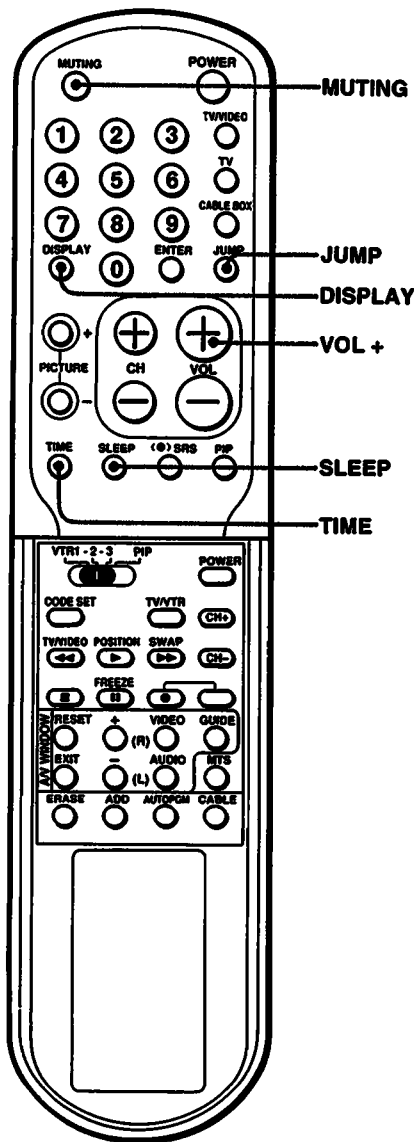
To restore the normal picture

Press EXIT.

Notes

- If you want to leave a blank space in the channel number or caption, press ENTER without pressing A/V WINDOW +/-.
- You can enter up to 32 channel captions.

Enjoying Other Useful Features



Muting the sound—MUTING

Press MUTING.

The display "MUTING" will appear on the screen.

To restore the sound

Press MUTING again, or press VOL +.

MUTING



Keeping the channel displayed — DISPLAY

To display the channel

Press DISPLAY.

The main picture input mode, channel caption, Multichannel TV Sound (MTS), and Picture-in-Picture input mode will appear for a few seconds, then disappear. The main picture input mode will remain on the screen.

To turn off the display

Press DISPLAY again.

The main picture input mode will disappear.

DISPLAY



Using the sleep timer — SLEEP

Turns TV off automatically approximately 1 hour after setting.

Press SLEEP.

A green "SLEEP ON" display appears for a few seconds.

A red "SLEEP" display will appear 1 minute before the TV shuts off.

To cancel the setting

Press SLEEP again.

A green "SLEEP OFF" display appears for approximately 3 seconds.

OR

Turn the TV off.

The sleep timer setting will be cancelled.

SLEEP



Switching quickly between 2 channels — JUMP

Press JUMP once to recall the channel you were watching previously; press JUMP again to switch back. Use this feature to keep track of two programs alternately.

JUMP



Displaying the current time — TIME

To display the current time

Press TIME.

To turn off the display

Press TIME again.

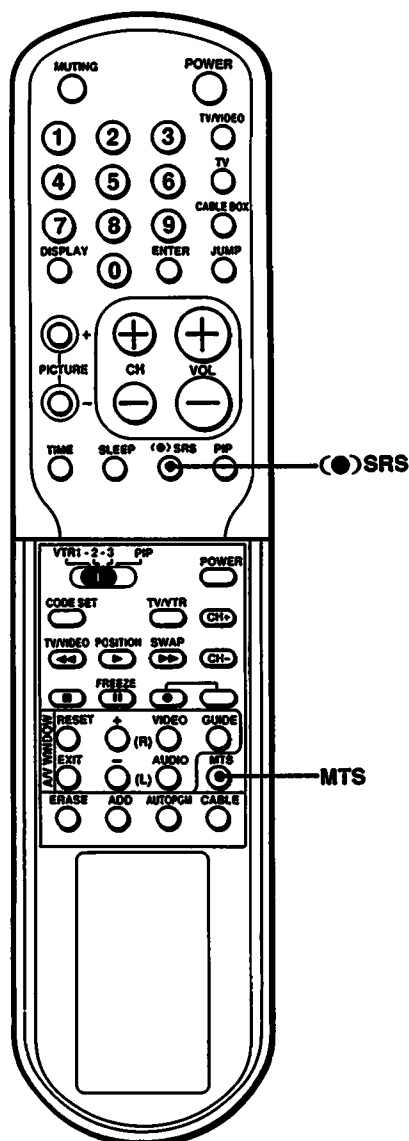
Note

The display will not appear if the current time has not been set (p. 25).

TIME



Enjoying Other Useful Features



Receiving a Multichannel TV Sound program — MTS

Each time you press MTS, the MAIN, SAP (Second Audio Program) and MONO modes are selected in sequence. The display (in green) for each mode will appear on the screen for approximately 3 seconds.

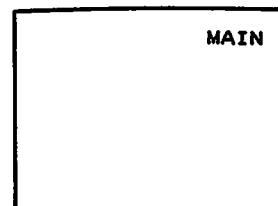
(NOTE: During SAP modes, the sound of non-SAP programs will be muted.)

To listen to stereo sound

Press MTS to select MAIN mode.

The MAIN display will appear on the screen.

The STEREO indicator lamp on the TV will light up whenever a stereo broadcast is received.

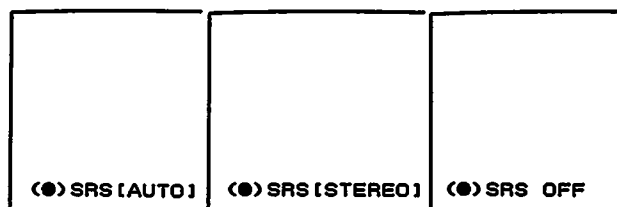


Notes

- A weak incoming signal may cause excessive noise with some stereo broadcasts. Select MONO mode to eliminate this noise.
- MTS functions only when the main picture is in TV mode.

Receiving lifelike sound reproduction — (●)SRS

The Sound Retrieval System (SRS) allows you to select the sound mode you prefer. Each time you press (●) SRS, "(●)SRS [AUTO]," "(●)SRS [STEREO]," and "(●)SRS OFF" modes are selected in sequence.



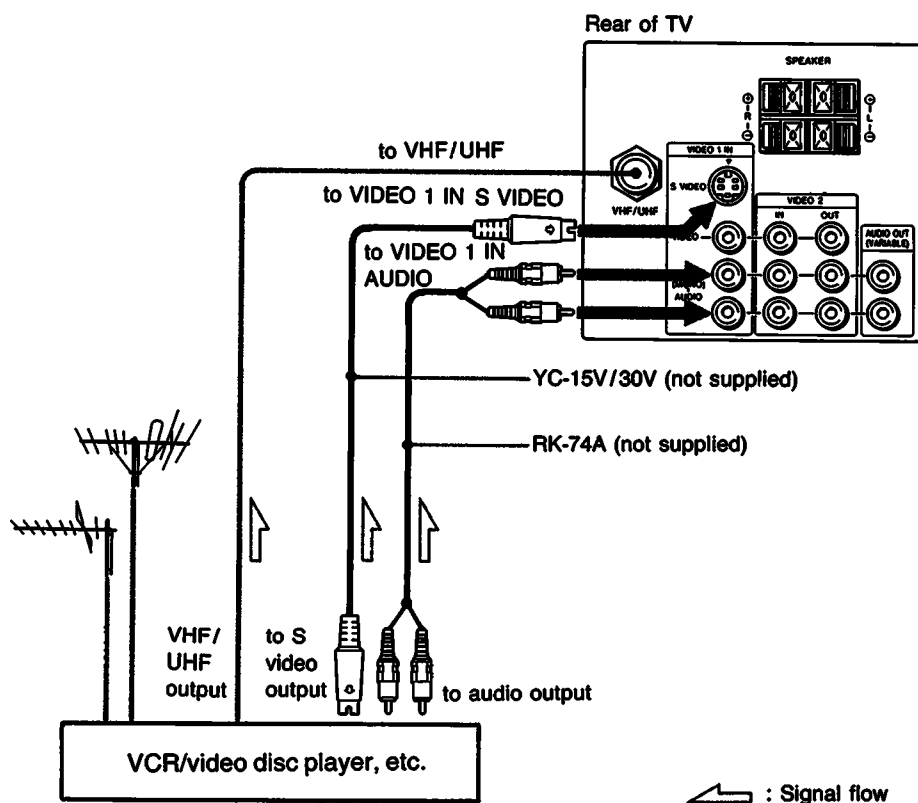
In (●)SRS [AUTO] mode, SRS functions in both monaural and stereo modes. Monaural sound programs will have a 'simulated stereo' effect.

In (●)SRS [STEREO] mode, SRS functions only when a stereo program is received.

Connecting Video Equipment

- After connecting, you will be able to ...
- Play back video tapes or video discs, etc.
 - Record TV programs
 - Record one TV program while viewing another
 - Watch two TV programs at once using Picture-in-Picture, (pp.18 – 21)

Connecting a VCR/video disc player, etc. equipped with an S video output jack



Notes

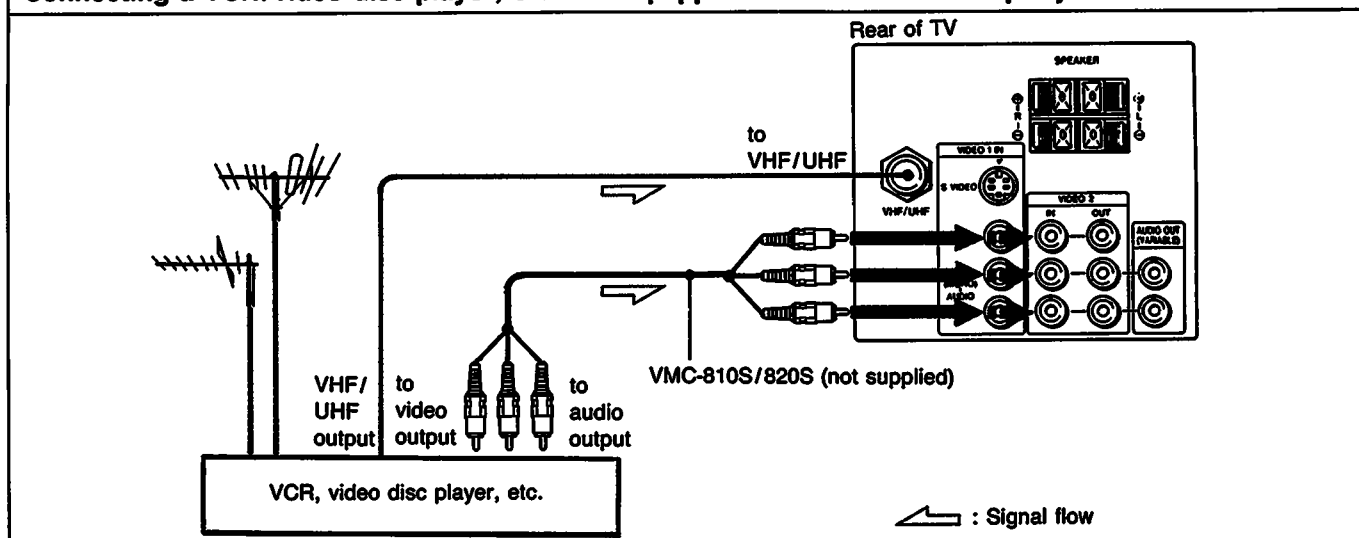
- If you connect a monaural VCR, connect the audio output of the VCR to the L (MONO) jack of VIDEO 1/2 IN on the TV. The monaural sound will be heard from both speakers.
- For operating instructions, refer to the instruction manual furnished with the VCR.
- If the picture or sound is affected, move the VCR away from the TV.

About S video input

Video input and output signals can be separated into Y (luminance or brightness) and C (chroma or color) signals. Usually these two signals are combined in a VCR and sent as one signal to a TV. Separation of the Y and C signals prevents them from interfering with one another, thereby improving picture (especially color) quality.

This TV is equipped with an S video input jack through which these separated signals can be input directly.

Connecting a VCR/video disc player, etc. not equipped with an S video output jack



Preparing for use

- 1 Turn on the TV.
- 2 Press the TV/VIDEO button on the TV or on the Remote Commander so that "VIDEO 1" or "VIDEO 2" appears on the screen.

VIDEO 1: for equipment connected to VIDEO 1 IN
 VIDEO 2: for equipment connected to VIDEO 2 IN

To view one TV program while recording another

Press the TV/VTR mode select button on the VCR or on the Remote Commander so that the VCR is in TV mode. Press the TV/VIDEO button on the Remote Commander to enter TV mode, and select the channel you want to view.

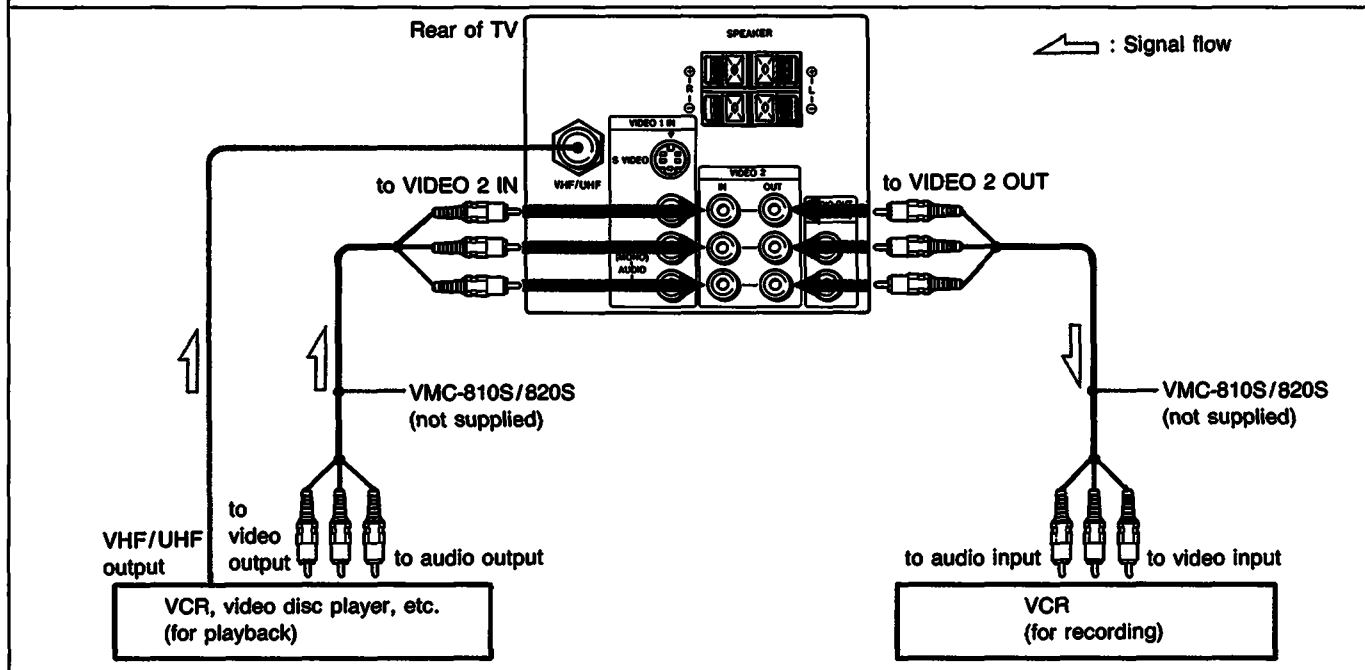
When you cannot obtain a clear picture and/or sound

Make sure that the TV/VTR mode select button on the VCR is set to TV. Reselect the desired channel with the buttons on the TV or on the Remote Commander.

Operating your equipment

You can operate a Sony VCR or video disc player, or non-Sony VCR with the Remote Commander supplied with your TV. For details, see pp. 22 – 23.

Connecting two VCRs for tape editing



Operating your equipment

- 1 Press TV/VIDEO on the TV or on the Remote Commander so that "VIDEO 2" appears on the screen.
- 2 Set the playback VCR to the playback mode and the recording VCR to the recording mode.

To edit the tape

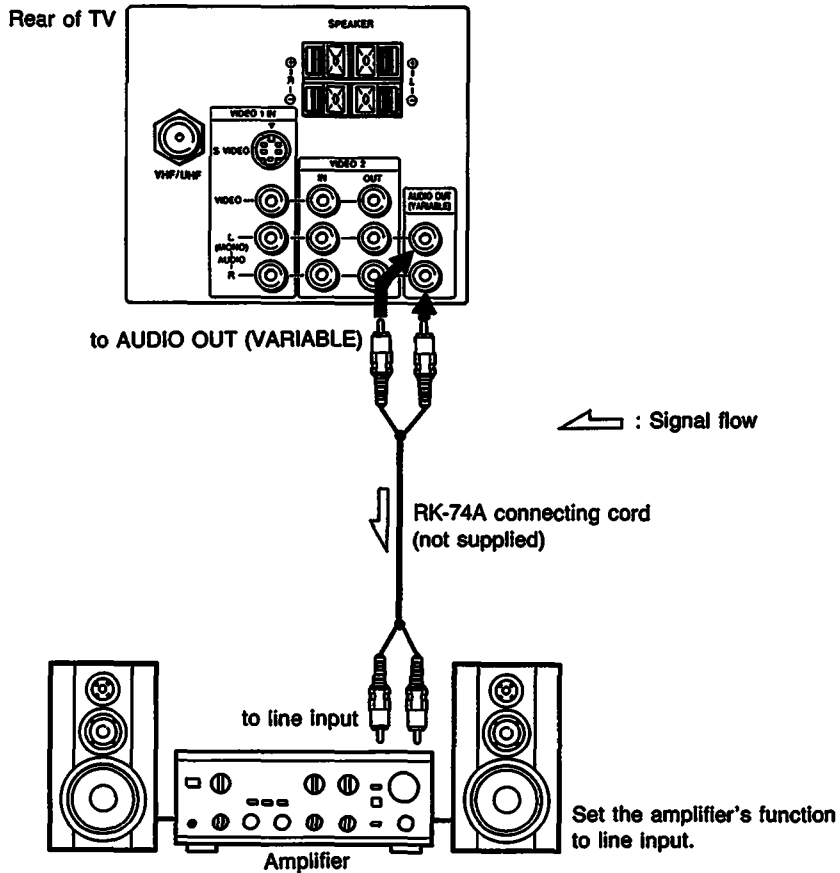
Connect the playback VCR to the VIDEO 2 IN jacks.

Note

The video signal input from the equipment connected to the VIDEO 2 IN jacks is directly output from VIDEO 2 OUT even when the TV is turned off. The video signal input from VIDEO 1 IN is not output from VIDEO 2 OUT. To edit the tape, use the VIDEO 2 IN and OUT jacks.

Connecting an Audio System

Listening to the TV's sound through an audio system



Adjusting the sound level

Leave the amplifier volume, bass and treble controls at their mid position and adjust the level with the VOLUME +/- buttons on the TV or the VOL +/- buttons on the Remote Commander.

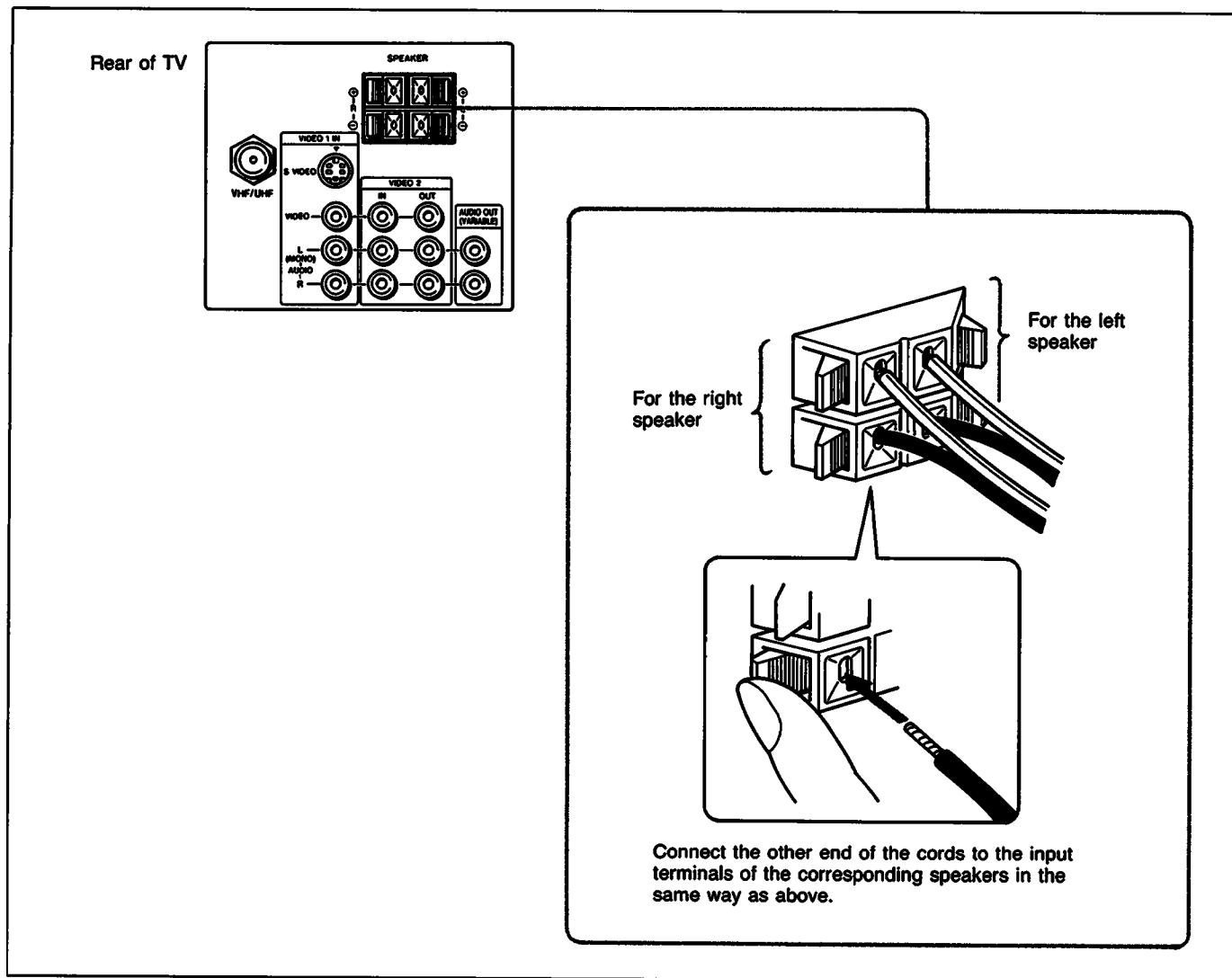
Note

You can choose the AUDIO-OUT VAR or FIX modes by selecting SPEAKER OFF (p. 17).

Selecting SPEAKER OFF

Turn the TV speakers off when you connect an audio system to your TV.
For details, see p. 17.

Connecting Extra (not supplied) External Speakers



Note

Remove the speaker cords of the TV from the SPEAKER terminals before connecting external speakers.

Phasing

Correct \oplus \ominus connection of both speaker systems ensures proper in-phase operation. If the speaker system is out-of-phase, the bass tones seem to be missing and the position of the instruments is obscured.

Caution

- If you connect external speakers, they must be rated at over 8-ohm impedance (with normal power holding capacity of more than 5 W).
- Unplug the TV while making these connections. If the exposed speaker cord wires touch while the TV is connected, the TV may short-circuit and be damaged.
- Do not pull on the speaker cords.

Connecting an audio system
Connecting extra (not supplied) external speakers

Specifications & Troubleshooting

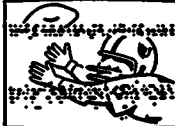

Specifications

Television system	American TV standards
Channel coverage	VHF: 2 – 13 UHF: 14 – 69 Cable TV: 1 – 125
Picture tube	Microblack™ Trinitron® tube 27-inch picture measured diagonally 28-inch picture tube measured diagonally
Antenna	75-ohm external antenna terminal for VHF/UHF
Input	VIDEO 1 and 2 IN S VIDEO IN (4-pin mini DIN) Y: 1 Vp-p, 75-ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal), 75-ohms Video (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync negative Audio (phono jacks): 500 mVrms (100% modulation) Impedance: 47 kilohms
Output	VIDEO 2 OUT Video (phono jack): 75-ohms unbalanced, sync negative Audio (phono jacks): Impedance: 10 kilohms AUDIO OUT (VARIABLE) (phono jacks) More than 408 mVrms at the maximum volume setting (variable) Impedance: 5 kilohms
Speaker output	5 W × 2
Power requirements	120 V AC, 60 Hz
Power consumption	Maximum: 165 W Standby: 1.5 W
Dimensions (h/w/d)	595 × 683 × 573.5 mm (23 1/2 × 27 × 22 5/8 inch)
Supplied accessories	Remote Commander RM-Y111 (1) with 2 size AA (R6) EVEREADY batteries Terminal cover (1)
Recommended accessories	U/V mixer EAC-66 Connecting cable VMC-810/820S, YC-15V/30V

Design and specifications are subject to change without notice.

Troubleshooting

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed below.

SYMPTOM	CHECK AND ADJUST
Poor or no picture (screen not lit), good sound	<ul style="list-style-type: none"> • Adjust PICTURE. • Adjust BRIGHT. • Check antenna/cable connections.
Good picture, no sound	<ul style="list-style-type: none"> • Press VOLUME + on the TV or VOL + on the Remote Commander. • Press MUTING on the Remote Commander. • Check that the MTS button is set correctly. • Check that the TV/VIDEO button is set correctly. • Check that "SPEAKER ON" is set. • Check that the speaker cords are connected to the SPEAKER terminals.
No picture (screen not lit), no sound	<ul style="list-style-type: none"> • Is POWER switched on? • Plug the unit into a wall outlet. • Check that the TV/VIDEO button is set correctly.
No color	<ul style="list-style-type: none"> • Is it a color program? • Adjust COLOR.
Snow and noise only	<ul style="list-style-type: none"> • Is it an active or the correct channel? • Check the CABLE setting. • Check antenna/cable connections.
 Dotted lines or stripes	This is often caused by local interference. (e.g. cars, neon signs, hairdryers etc.) Adjust the antenna for minimum interference.
 Double images or ghosts	Reflections from nearby mountains or buildings often cause this problem. A highly directional outdoor antenna or a CATV cable may improve the picture.
Try another channel. It could be station trouble.	

If the problem persists, contact your nearest service facility.