

SONY.

3-861-907-22

Trinitron® Color TV

Operating Instructions

<i>KV-20V80</i>	<i>KV-27S40</i>	<i>KV-27V40</i>
	<i>KV-27S45</i>	<i>KV-27V45</i>
	<i>KV-27S65</i>	<i>KV-27V65</i>

© 1997 by Sony Corporation

Table of Contents

Welcome!	3
Precautions	3
Using This Manual	3
<hr/>	
Connecting and Installing the TV	
Making Connections	4
Cable or Antenna Connections	5
Connecting directly to cable or an antenna	5
Cable and antenna	5
Cable Box Connections	6
Cable box	6
Cable box and cable	6
VCR Connections	7
Connecting an antenna/cable TV system with a VCR	7
Connecting a VCR and TV with a cable box	7
DBS Connections	8
Connecting a DBS receiver	8

Connecting a DBS receiver and a VCR	9
Additional Connections	10
Connecting a DVD Player	10
Connecting an audio system	10
Connecting two VCRs for tape editing using MONITOR OFF	11
Connecting a camcorder	11

Basic Set Up

Inserting batteries	12
Using the remote control Move & Select buttons	12
Adjustments bars	12
On Screen Help/Instructions	12

Using your New TV

Setting up the TV automatically	13
Watching the TV	14
Watching two programs at one time— PIP	16

Using your Menus

Learning menu selection	18
Using the VIDEO menu	19
Using the AUDIO menu	20
Using the TIMER menu	22
Using the SETUP menu	23

Operating video equipment

Programming the remote	26
------------------------------	----

Operating a cable box or DBS receiver

Programming the remote	28
------------------------------	----

Troubleshooting

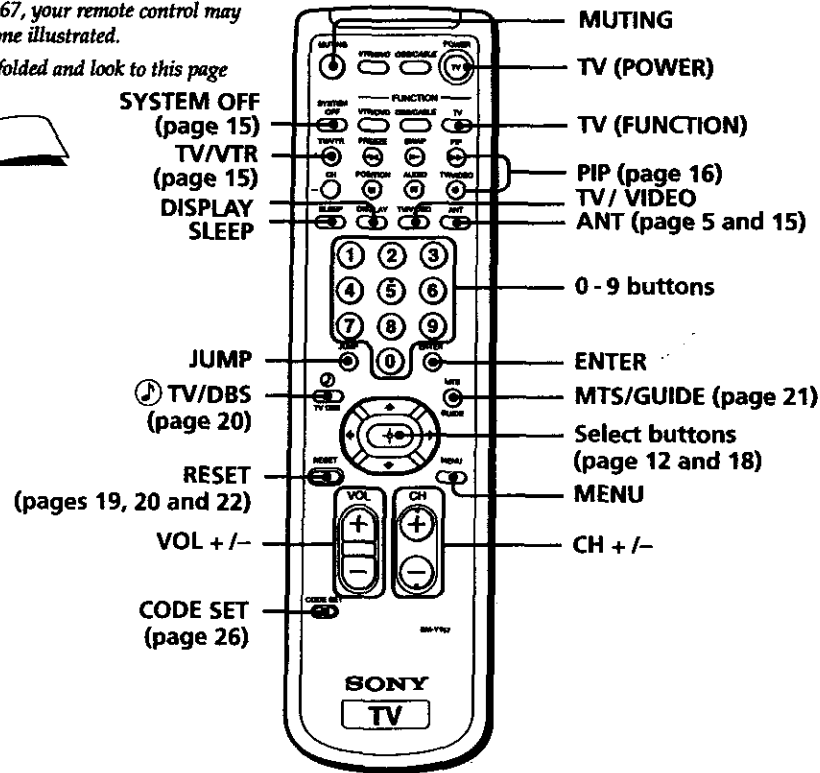
Specifications	30
-----------------------------	----

Index	32
--------------------	----

Remote Control

In the instructions that follow, we will refer to the buttons on your remote control. Model shown is RM-Y167, your remote control may not look like the one illustrated.

Keep this flap unfolded and look to this page for reference.



Getting to know the buttons on the remote control

Names of the buttons on the remote control are presented in different colors to represent the available functions.

Button color

- Transparent Press to select the component you want to control; e.g. VTR (VCR)/DVD, DBS (Direct Broadcast Satellite)/CABLE, or TV.
- Green Buttons relevant to power operations, like turning the TV, DBS (Direct Broadcast Satellite)/CABLE, or VTR (VCR)/DVD on or off.

Label color

- White TV/VTR (VCR)/DVD/DBS (Direct Broadcast Satellite)/CABLE operation buttons.
- Yellow PIP operation buttons.
- Blue DBS (Direct Broadcast Satellite) operation buttons.

For a detailed explanation of most buttons, see "Watching the TV" on page 14.

Welcome!

Thank you for purchasing the Sony Trinitron® Color TV. This manual is written for the models listed below. Before reading, check the model number located on the front of this manual or on the rear of your TV.

Model KV-27S45 is used for illustration purposes. The screens displayed are for model KV-27V65. Differences in operation features are indicated in the text; for example, "KV-27S45 only".

Model Number	Single tuner (CT required for PIP)	Dual tuner ("Ready to Use" PIP)	SRS	SURROUND	FAVORITE CHANNEL with Preview	AUTO VOLUME Control
KV-20V80				•		•
KV-27S45	•			•		
KV-27V40			•			•
KV-27V65		•	•	•		•

Precautions

Safety

- Operate the TV only on 120 V AC.
- The plug is designed, for safety purposes, to fit in the wall outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- If any liquid or solid object should fall inside the cabinet, unplug the TV immediately and have it checked by qualified personnel before operating it further.
- If you will not be using the TV for several days, disconnect power by pulling the plug itself. Never pull on the cord.

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

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.

Using This Manual

This manual is divided into four major sections. We recommend that you carefully review the contents of each section in the order presented to ensure that you fully understand the operation of your new TV.

1 Connecting and Installing the TV
This section guides you through your initial set up. It will show you how to connect to your antenna or cable, and connect any accessories or components.

2 Basic Set Up
This section teaches you the basic skills needed to operate your new TV. It shows you how to operate special functions of the remote control.

3 Using your New TV
This section shows you how to begin using your new TV. It will show you how to use the Easy Set Up Guide feature, and how to use your remote control.

4 Using your Menus
This section teaches you how to access on-screen menus and adjust your TV's settings.

Instructions in this manual are written for the remote control. Similar controls may be found on the TV console.

Connecting and Installing the TV

Making Connections

Refer to the table below, it will direct you to the diagram suitable to the components you will be connecting.

Cable or antenna only	5
Cable and antenna (KV-27S65, 27V65 only)	5
Cable box	6
Cable box and cable to view scrambled channels (KV-27S65, 27V65 only)	6
VCR and cable or antenna	7
VCR and cable box	7
Direct Broadcast Satellite Receiver (DBS)	8
VCR and Direct Broadcast Satellite Receiver (DBS)	9
Digital Versatile Disc receiver (DVD)	10
Audio system	10
Two VCRs for tape editing (KV-27V40, 27V45, 27V65 only)	11
Camcorder to view tapes	11

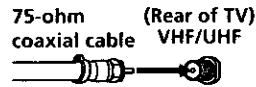
Cable or Antenna Connections

Connecting directly to cable or an antenna

The connection you choose will depend on the cable found in your home. Newer homes will be equipped with standard coaxial cable (see **A**); older homes will probably have 300-ohm twin lead cable (see **B**); still other homes may contain both (see **C**).

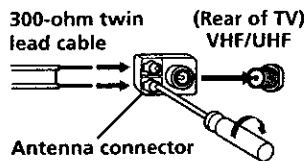
A

- VHF only
- or
- VHF/UHF
- or
- Cable



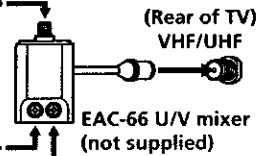
B

- VHF only
- or
- UHF only
- or
- VHF/UHF



C

- VHF 75-ohm coaxial cable
- and
- UHF 300-ohm twin lead cable

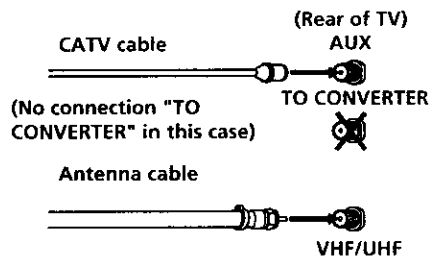


Cable and antenna

- KV-27S65, 27V65 only

If your cable provider does not feature local channels, you may find this set up convenient.

Select Cable or ANT mode by pressing ANT on the remote control. You will be able to alternate between the two input sources.



Note

- In order to receive channels with an antenna, you will need to turn your CABLE to OFF (see page 23) and perform the AUTO PROGRAM function.

Connecting and Installing the TV (continued)

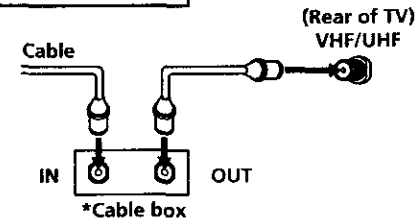
Cable Box Connections

Some pay cable TV systems use scrambled or encoded signals that require a cable box* to view all channels.

Cable box

- 1 Connect the coaxial connector from your cable to the IN on your cable box.
- 2 Using a coaxial cable, connect OUT on your cable box to VHF/UHF on your TV.

If you will be controlling all channel selection through your cable box, you should consider using the CHANNEL FIX feature discussed on page 23.



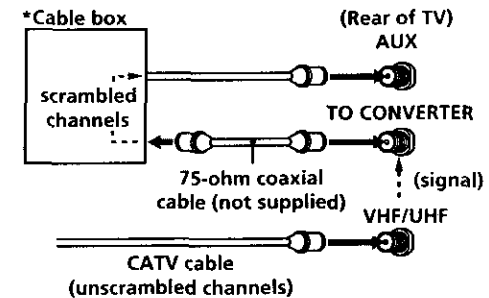
Cable box and cable

- KV-27S65, 27V65 only
- For this set up, you can switch between scrambled channels (through your cable box), and normal (CATV) channels by pressing ANT on your remote control.

Notes

- Your Sony remote control can be programmed to operate your cable box. (see page 28)
- When using PIP, you cannot view the window picture with the AUX input.

If you are connecting a cable box through the AUX input and would like to switch between the AUX and normal (CATV) input you should consider using the CHANNEL FIX feature discussed on page 23.



VCR Connections

Connecting an antenna/cable TV system with a VCR

- 1 Attach the coaxial connector from your cable or antenna to IN on your VCR.
- 2 Using A/V connectors, connect AUDIO and VIDEO OUT on your VCR to AUDIO and VIDEO IN on your TV (Yellow-VIDEO, White-AUDIO Left, Red-AUDIO Right).*
- 3 Using a coaxial connector, connect OUT on your VCR to VHF/UHF on your TV.

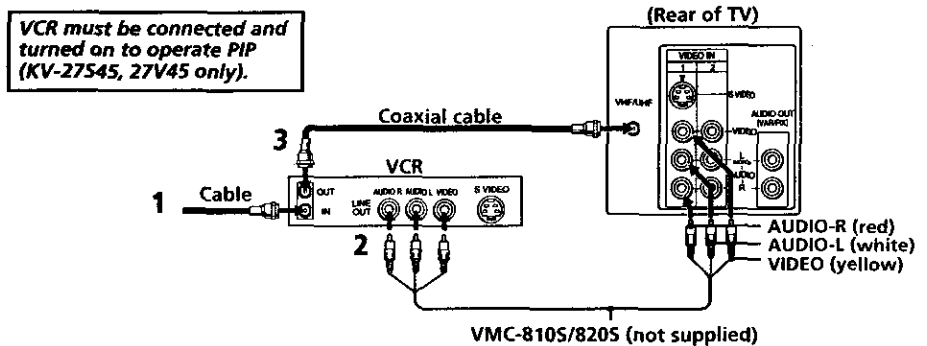
* If you are connecting a monaural VCR, connect only the single white audio output to the left input on your TV.

Connecting a VCR and TV with a cable box

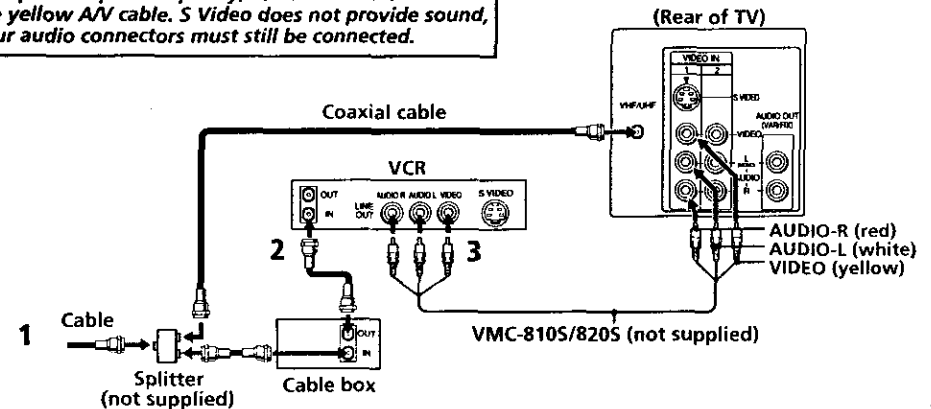
You will need a splitter (not supplied) for the following connection.

- 1 Connect the single (input) jack of the splitter to your incoming cable connection. Connect the other two (output) jacks (using coaxial cable) to IN on your cable box and VHF/UHF on your TV.
- 2 Using a coaxial connector, connect OUT on your cable box to IN on your VCR.
- 3 Using A/V connectors, connect AUDIO and VIDEO OUT on your VCR to AUDIO and VIDEO IN on your TV (Yellow-VIDEO, White-AUDIO Left, Red-AUDIO Right).

Disconnect all power sources before making any connections.



For optimum picture quality, use S VIDEO instead of the yellow A/V cable. S Video does not provide sound, your audio connectors must still be connected.



Connecting and Installing the TV (continued)

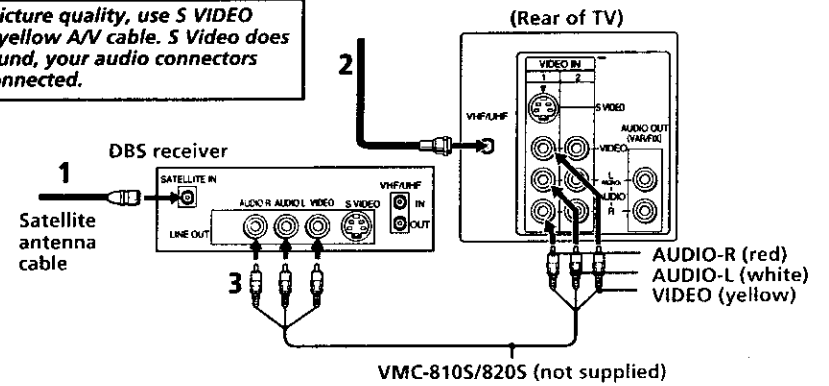
DBS Connections

Connecting a DBS (Direct Broadcast Satellite) receiver

- 1 Connect the cable from your satellite antenna to your DBS receiver.
- 2 Attach the coaxial connector from your cable or antenna to VHF/UHF on your TV.
- 3 Using A/V connectors, connect AUDIO and VIDEO OUT on your DBS receiver to AUDIO and VIDEO IN on your TV.

Disconnect all power sources before making any connections.

For optimum picture quality, use S VIDEO instead of the yellow A/V cable. S Video does not provide sound, your audio connectors must still be connected.



DBS Connections (continued)

Connecting a DBS (Direct Broadcast Satellite) receiver and a VCR

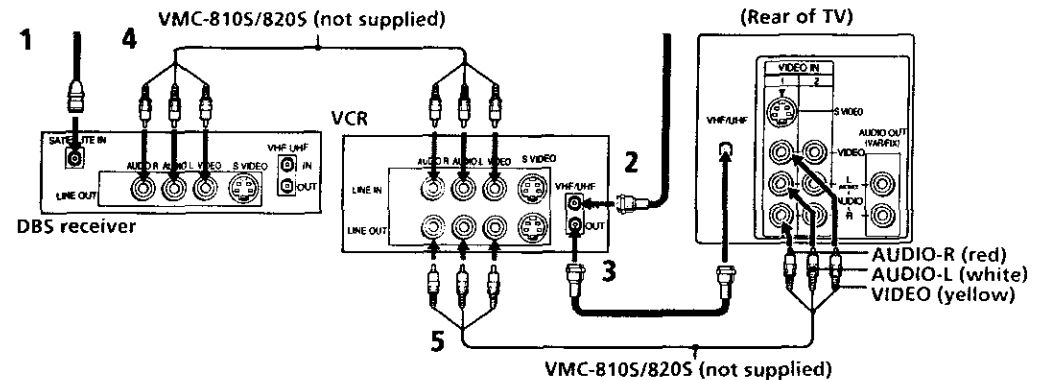
- 1 Connect the cable from your satellite antenna to your DBS receiver.
- 2 Attach the coaxial connector from your cable or antenna to VHF/UHF IN on your VCR.
- 3 Using a coaxial connector, connect VHF/UHF OUT on your VCR to VHF/UHF on your TV.
- 4 Using A/V connectors, connect AUDIO and VIDEO OUT on your DBS receiver to AUDIO and VIDEO IN on your VCR.
- 5 Using A/V connectors, connect AUDIO and VIDEO OUT on your VCR to AUDIO and VIDEO IN on your TV.

Note

- To view from the DBS or VCR, select the video input to which your DBS receiver or VCR is connected by pressing TV/VIDEO on the remote control.

Disconnect all power sources before making any connections.

For optimum picture quality, use S VIDEO instead of the yellow A/V cable. S Video does not provide sound, your audio connectors must still be connected.



Connecting and Installing the TV (continued)

Additional Connections

The following connections are for accessories that will enhance your viewing options.

Connecting a DVD Player

- 1 Using A/V connectors, connect LINE OUT on your DVD to VIDEO IN on your TV (Red-AUDIO Right, White-AUDIO Left, Yellow-VIDEO).

Note

- For the best picture quality, connect the DVD player directly to the TV.

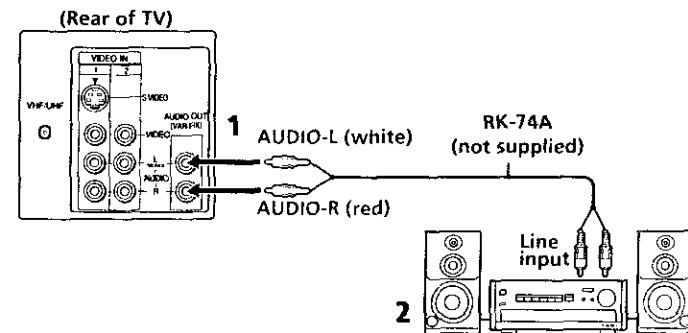
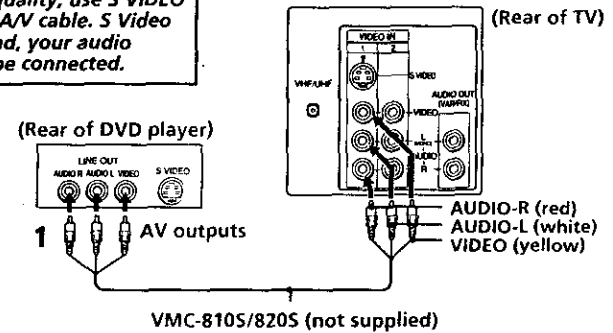
Connecting an audio system

For enhanced sound, connect your audio system to your TV.

- 1 Using AUDIO connectors, connect AUDIO OUT on your TV to one of the unused line inputs (e.g. TV, AUX, TAPE 2) on your stereo (White-AUDIO Left, Red-AUDIO Right).
- 2 Set your stereo to the chosen line input (e.g. TV, AUX, TAPE 2). Refer to page 20 of this manual for additional audio setup instructions.

Disconnect all power sources before making any connections.

For optimum picture quality, use S VIDEO instead of the yellow A/V cable. S Video does not provide sound, your audio connectors must still be connected.



Connecting two VCRs for tape editing using MONITOR OUT

- KV-27V40, 27V45, 27V65 only

MONITOR OUT gives you the ability to use a second VCR to record a program being played by the primary VCR or to perform tape editing and dubbing.

- 1 Connect the VCR intended for playback using the setup instructions on page 7 of this manual.
- 2 Using A/V connectors, connect AUDIO and VIDEO IN on your VCR intended for recording to MONITOR AUDIO and VIDEO OUT on your TV.

Connecting a camcorder

This connection is convenient for viewing a picture directly from your camcorder.

Using A/V connectors, connect AUDIO and VIDEO OUT on your camcorder to AUDIO and VIDEO IN on your TV (Yellow-VIDEO, White-AUDIO Left, Red-AUDIO Right).

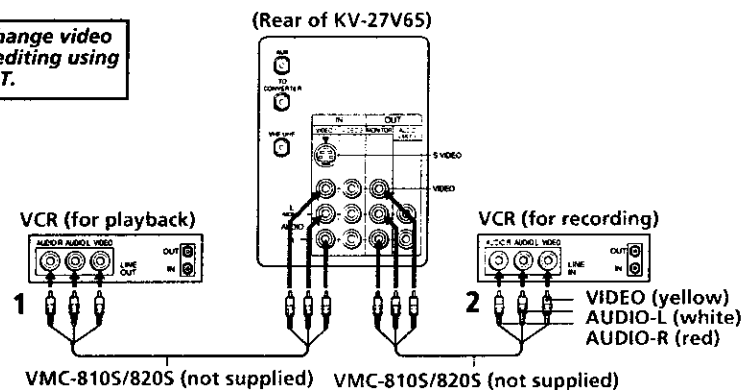
Connection can also be made directly to your A/V input located on the rear of your TV.

Note

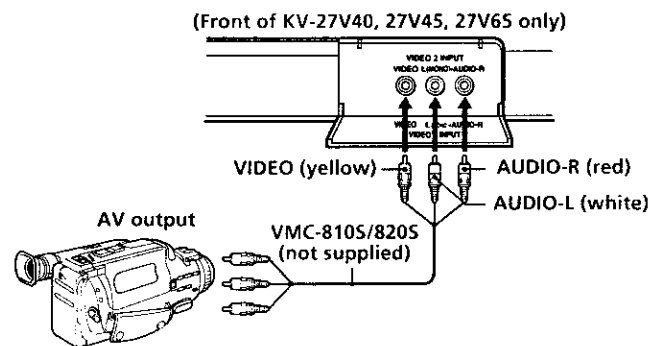
- If you are connecting a monaural camcorder, connect only the single white audio output to the left input on your TV.

Disconnect all power sources before making any connections.

You cannot change video inputs while editing using MONITOR OUT.



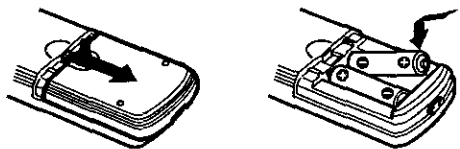
If you have an S Video equipped camcorder, you can use an S Video connection for optimum picture quality.



Basic Set up

Inserting batteries

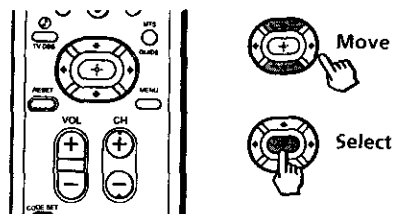
Insert two size AA (R6) batteries (supplied) by matching the + and - on the batteries to the diagram inside the battery compartment.



Notes

- Remove the batteries to avoid damage from possible battery leakage whenever you anticipate that the remote control will not be used for an extended period.
- Handle the remote control with care. Avoid dropping it, getting it wet, or placing it in direct sunlight, near a heater, or where the humidity is high.
- Your remote control can be programmed to operate most video equipment. (see page 26)

Using the remote control, Move & Select buttons



The supplied remote control has "arrow" buttons (↑, ↓, ←, →) which allow for movement of the on-screen selector in four directions. Pressing on the outer buttons will cause the selector to *move* in the corresponding direction. Pressing the center button (⊕) will *select* the item.

Adjustments bars

When menu items present an adjustment bar (▬ or ▬), use the arrow buttons to change the setting.

On-Screen Help/Instructions

Several menu windows will provide prompts and instructions to assist you in navigating through the different functions. *When presented, use these to supplement the instructions in this manual.*

Note

- To reset your TV to factory settings, turn the TV on. Then, while pressing the RESET button, press the POWER key on your TV. The TV will turn itself off, then back on. (except KV-20V80).

Using your New TV

Setting up the TV automatically

The Easy Setup Guide allows you to set the on-screen language and set all receivable channels. The Easy Setup Guide screen appears every time you turn on the TV until you perform AUTO PROGRAM.

The Easy Setup Guide feature does not apply for installations that use a cable box for all channel selection.

To set up the TV manually, refer to "Using the SET UP menu" on page 23.

Tips

- Perform this function during the day, with the antenna and/or cable properly connected, to ensure that all available channels will be broadcasting and receivable.
- After using the Easy Setup Guide you will still have the option of adjusting any of the system settings, like skipping channels, through the SET UP menu (page 24).
- The TV must be set to the TV input to execute AUTO PROGRAM. Press ANT until a channel number appears.
- If your cable or antenna is connected to AUX, then press ANT until AUX appears next to the channel number. (KV-27S65, 27V65 only)

Using the buttons on the front of the TV:

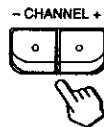


For KV-27V65, the control buttons are located on the top of the TV.

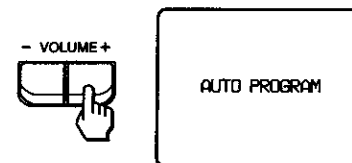
- 1 Press POWER to turn on the TV. The Easy Setup Guide screen appears.



- 2 (except Canadian models)
Press CH + to select English screens or CH - to select Spanish screens.



- 3 Press VOL + to continue or VOL - for a DEMO of functions and menus.



AUTO PROGRAM appears and the TV starts scanning and presetting channels automatically. When all the receivable channels are stored, the lowest numbered channel is displayed. If the TV receives cable TV channels, CABLE is set ON automatically.

To perform AUTO SET UP again

- Press SET UP on the TV.
- Press CH + or CH - to select a language.
- Press VOL + to restore factory settings (CONTINUE TO AUTO PROGRAM? will appear on the screen). Press CH + to continue or CH - to exit.
- Press SET UP to exit.

Note

- When you perform AUTO PROGRAM, your CHANNEL FIX, CHANNEL BLOCK and ON/OFF TIMER settings will be erased.

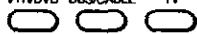





Using your New TV (continued)








Watching the TV

All of the TV features can be accessed via the remote control. The following chart will explain the function of the buttons found on your remote control.

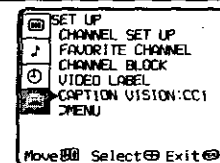


**REFER TO THE
ILLUSTRATION OF THE
REMOTE CONTROL ON THE
INSIDE FRONT COVER OF
THIS MANUAL AS YOU
REVIEW THIS CHART**

<p>FUNCTION</p> <p>VTR/DVD DBS/CABLE TV</p> 	<p>Activate the remote control for use with the following components: TV, DBS/CABLE, VTR/DVD. Press when you want to control connected components with your remote control. (see pages 26-28 for instructions on programming your remote control)</p>
<p>POWER</p> 	<p>Turns the TV on and off. If VIDEO appears on the screen, press TV/VIDEO or ANT until a channel number appears.</p>
	<p>Use for direct channel selection. Press 0-9 to select a channel, the channel will change after 2 seconds, or you can press ENTER for immediate selection.</p>
<p>CH</p> 	<p>Press to scan through the channels. <i>Keeping the CH + or - pressed allows you to rapidly scan to the desired channel.</i></p>
<p>JUMP</p> 	<p>Press to alternate or <i>jump</i> back and forth between two channels. You can jump between the last two channels selected with the 0-9 keys.</p>
<p>MUTING</p> 	<p>Press to mute the sound (MUTING will appear on the screen). Press again or press VOL + to restore sound.</p>

	<p>Press repeatedly until the TV displays the approximate time in minutes (30, 60, or 90) that you want the TV to remain on before shutting off automatically. Cancel by pressing until SLEEP OFF appears.</p>
	<p>Press repeatedly to step through available displays:</p> <p>Status Channel number, current time, channel caption (if set) and Multi-Channel TV Sound (MTS) are displayed. <i>The MTS mode indication disappears after three seconds.</i></p> <p>CAPTION VISION CAPTION VISION will be displayed on the screen if the broadcaster offers this service. (see right) To cancel the display, press DISPLAY repeatedly until DISPLAY OFF appears. <i>DISPLAY OFF disappears after three seconds.</i></p>
	<p>Press repeatedly to step through available video inputs:</p> <p>TV and VIDEO 1 (KV-27S40 only) TV, VIDEO 1 and VIDEO 2 (KV-20V80, 27S45, 27S65, 27V40 only) TV, VIDEO 1, VIDEO 2 and VIDEO 3 (KV-27V45, 27V65 only)</p>
 (AUX input)	<p>Press to change the VHF/UHF input to the AUX input (KV-27S65, 27V65 only). <i>For detailed connection information, see "Cable and antenna" or "Cable box and cable" on pages 5-6.</i></p>
	<p>Press when you are finished using a VCR and you want to switch to the TV input. Your VCR power will remain on.</p>
	<p>Press this button to cycle through the Multi-channel TV Sound (MTS) options. (see page 21). GUIDE is a feature of DBS, refer to your DBS operation instructions.</p>
	<p>The SYSTEM OFF button allows you to turn off the TV and all connected equipment at once. (Except KV-20V80)</p>

CAPTION VISION (Closed Caption)



Some programs are broadcast with CAPTION VISION.

CC1, 2, 3 or 4

Shows you a printed version of the dialog or sound effects of a program. (The mode should be set to CC1 for most programs)

TEXT1, 2, 3 or 4

Shows you network/station information presented using either half or the whole screen. It is not usually related to the program.

XDS (Extended Data Service)

Shows a network name, program name, program length, and time of the show if the broadcaster offers this service.

Note

- Poor reception of TV programs can cause errors in CAPTION VISION and XDS. Captions may appear with a white box or other errors instead of intended text.

Using your New TV (continued)

Watching two programs at one time - PIP

The Picture-in-Picture (PIP) feature allows you to view two channels simultaneously, one in the full size "main" picture and one in a smaller "window" picture. This means that two separate tuners must be available to provide the two signals.

Certain models (KV-27S45, 27V45 only) are equipped with a single tuner. This simply means that a VCR must be *connected* and *turned on* for PIP to operate.

Tip

To ensure a correct single tuner PIP connection (KV-27S45, 27V45 only), make sure the following list is complete before using PIP:

- A cable or antenna is connected to the VCR
- The VCR is connected to your TV
- The VCR is turned on

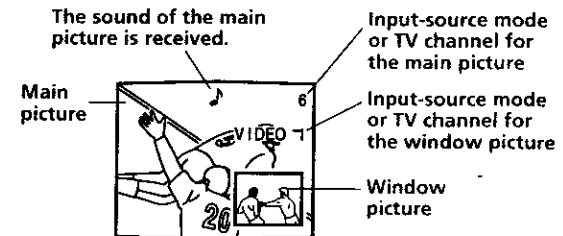
(for detailed connection information, see pages 5-7)





Note






- You must press TV (FUNCTION) before you can control PIP with the yellow labeled buttons.



REFER TO THE ILLUSTRATION OF THE REMOTE CONTROL ON THE INSIDE FRONT COVER OF THIS MANUAL AS YOU REVIEW THIS CHART



	Press once to display the window picture (1/9 size). Press again to reduce the size of the window picture (1/16 size). Press a third time to remove the window picture.
	Press repeatedly to step through available video inputs: TV, VIDEO 1, VIDEO 2, and VIDEO 3 (KV-27S45, 27S65, 27V45, 27V65 only) <i>If you have a single tuner, your PIP input source is the VCR.</i>
	Press to alternate sound between the main picture and the window picture. A  will appear for a few seconds to indicate which picture is receiving sound.

<p>TV/VTR +  CH - </p>	<p>Press to change the TV channel in the window picture. (KV-27S65, 27V65 only) For models KV-27S45, 27V45, you must press VTR/DVD (FUNCTION), then use the main CH +/- buttons to change channels. (see right)</p>
<p>POSITION </p>	<p>Press to move the location of the window picture (counterclockwise) around the main picture.</p>
<p>FREEZE </p>	<p>Press to freeze the window picture. Great for copying down phone numbers, addresses, recipes, etc. <i>Press FREEZE again to restore the previous screen(s).</i></p>
<p>SWAP </p>	<p>Press to switch the audio and video of the main picture and the window picture. Each time you press SWAP, the picture and sound of the two will be <i>swapped</i>. <i>Any channels being received through the AUX jack cannot be displayed as a window picture. (KV-27S65, 27V65 only)</i></p>

Changing channels with a single tuner PIP

- KV-27S45, 27V45 only

- 1 Press TV/VIDEO until you reach the TV input.
- 2 Press PIP (the window picture appears).

To change the window picture:

- 1 Press VTR/DVD (FUNCTION).
- 2 Press the main CH +/- buttons to change channels.

To change the main picture:

- 1 Press TV (FUNCTION).
- 2 Press the main CH +/- buttons to change channels.

Note

- If you have the same program in both the window and the main picture and cannot change the channel in the window; press TV/VIDEO until you reach the TV input in the main picture.

Using your Menus

Learning menu selection

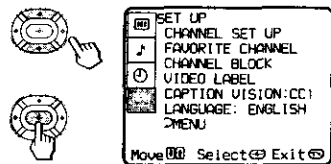
Use the MENU button to access a menu and use the select buttons (▲ or ▼) to alter settings. Use the following example, in which we activate the CABLE, to learn how to modify settings.

- 1 Press the MENU button.

The main menu appears.



- 2 Press ▲ or ▼ to highlight the desired menu (in this case SET UP) and press (+) to select it.

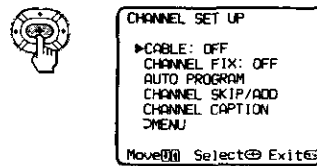


- 3 Press ▲ or ▼ to move to the desired option.

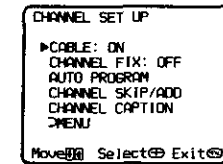


- 4 Press (+).

Options for your selection will be displayed.



- 5 Press ▲ or ▼ to make your selection and press (+).



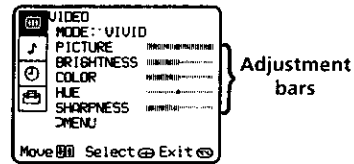
When you are finished making changes to the selected menu, choose MENU to return to the main menu.



Notes

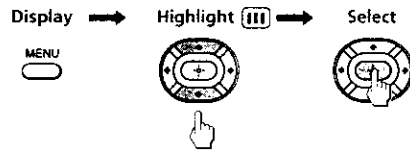
- Pressing MENU on the remote control will allow you to exit from the menus at any time.
- If any menu items are "blacked out", press the ANT button on your remote control until a channel number appears.

Using the VIDEO menu



For detailed information on using the remote to modify menu settings, refer to "Learning menu selection" on page 18.

To select the VIDEO menu:



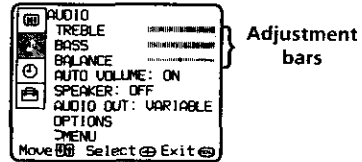
To restore the factory VIDEO settings

Press RESET while the VIDEO menu is displayed.

MODE <i>Customized picture viewing</i>	(except KV-20V80) VIVID: Select to receive a vivid, bright picture. STANDARD: Select to receive a standard picture. MOVIE: Select to receive a softened picture.
PICTURE <i>Picture Adjustment</i>	Adjust left to decrease picture contrast and soften the color. Adjust right to increase picture contrast and create more vivid color.
BRIGHTNESS <i>Picture Adjustment</i>	Adjust left to darken the picture. Adjust right to brighten the picture.
COLOR <i>Picture Adjustment</i>	Adjust left to decrease color intensity. Adjust right to increase color intensity.
HUE <i>Picture Adjustment</i>	Adjust left to decrease the green tones. Adjust right to increase the green tones.
SHARPNESS <i>Picture Adjustment</i>	Adjust left to soften the picture. Adjust right to sharpen the picture.

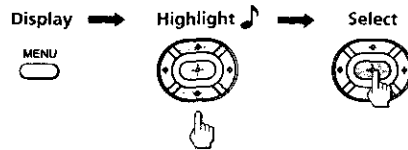
Using your Menus (continued)

Using the AUDIO menu



For detailed information on using the remote to modify menu settings, refer to "Learning menu selection" on page 18.

To select the AUDIO menu:










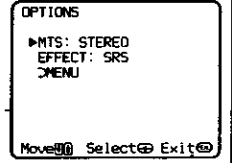
To restore the factory AUDIO settings

Press RESET while the AUDIO menu is displayed.

Tip

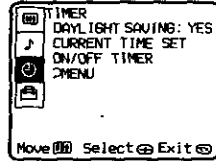
Press **Enter** for direct selection of an AUDIO setting.

TREBLE	Adjust left or right to decrease or increase higher pitched sound
BASS	Adjust left or right to decrease or increase low pitched sounds.
BALANCE	Adjust left or right to emphasize speaker volume. -
AUTO VOLUME <i>Stabilizes volume</i>	(KV-20V80, 27V40, 27V45, 27V65 only). ON: Select to stabilize the volume when changing channels. OFF: Select to turn AUTO VOLUME off.
SPEAKER <i>Custom selection of audio output source</i>	ON: Select to listen to the sound from the TV speakers and a separate stereo system. OFF: Select to turn off the TV speakers and listen to the TV's sound only through external audio system speakers.
AUDIO OUT <i>Use to control the TV's volume through a stereo</i>	AUDIO OUT can only be set when speakers are set to OFF. VARIABLE: Sound output varies according to the TV settings. <i>Useful when you want to use your remote control to control the output of a separate audio system.</i> FIXED: Sound output is held at a fixed level through your stereo.

<p>OPTIONS Enhanced audio options</p>	<p>With the OPTIONS menu open:</p> <ol style="list-style-type: none"> 1 Press  to access the feature you want to change. 2 Press  or  to cycle through the options. <p>MTS: Press  or  to select one of the following options:</p> <p>STEREO: Select for stereo reception when viewing a broadcast in stereo.</p> <p>SAP: Select to listen to bilingual broadcast. (Non-SAP programs will be muted when this feature is selected.)</p> <p>MONO: Select for mono reception (use to reduce noise during stereo broadcasts.)</p> <p>Quick MTS access: Press <i>MTS</i> on your remote control to cycle through the MTS options.</p> <p>EFFECT: Press  or  to select one of these customized effects based on the program you are viewing:</p> <p>SRS: Produces a dynamic three dimensional sound for stereo audio signals. (KV-27V40, 27V45, 27V65 only)</p> <p>SURROUND: Simulates theater quality sound (only for stereo programs). (KV-20V80, 27S40, 27S45, 27S65 only)</p> <p>SIMULATED: Adds a surround-like effect to mono programs. (KV-27V40, 27V45, 27V65 only)</p>	
--	---	---

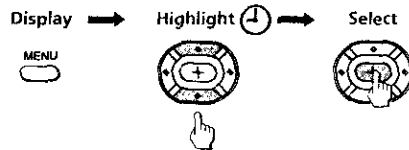
Using your Menus (continued)

Using the TIMER menu



For detailed information on using the remote to modify menu settings, refer to "Learning menu selection" on page 18.

To select the TIMER menu:



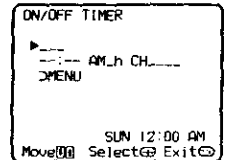
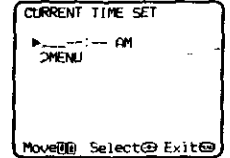
To cancel the ON/OFF TIMER function

Press RESET while the TIMER menu is displayed.

Tip

Set daylight saving time before setting the clock. Any loss of power will cause these settings to be erased.

<p>DAYLIGHT SAVING Automatically adjusts the time.</p>	<p>Spring: Select YES to compensate for Daylight Saving Time. The current time automatically moves one hour ahead. Fall: Select NO at the end of Daylight Saving Time. The current time moves back one hour.</p>
<p>CURRENT TIME SET Necessary for the TIMER.</p>	<p>CURRENT TIME SET menu will appear. 1 Press . 2 Press until the current day is displayed. Press to select. 3 Press until the current hour and AM/PM is displayed. Press to select. 4 Press until the current minute is displayed, press .</p> <p>The clock is set. Press MENU to exit.</p>
<p>ON/OFF TIMER Wake up or scheduled viewing.</p>	<p>ON/OFF TIMER menu will appear. 1 Press . 2 Press until the desired day or range of days is displayed. Press to select. 3 Indicate the time that you want the TV to turn on by pressing and then .4 Set the time duration (maximum of 6 hours) by pressing and then .5 Press until you reach the desired channel. Press to select.</p> <p>The ON/OFF TIMER is now set. Press MENU to exit. When you perform AUTO PROGRAM, all ON/OFF TIMER settings will be erased.</p>

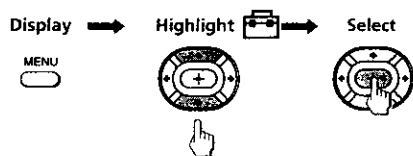


Using the SET UP menu



For detailed information on using the remote to modify menu settings, refer to "Learning menu selection" on page 18.

To select the SET UP menu:



Notes

- The FAVORITE CHANNEL feature is not available for the AUX input.
- Your remote control can be programmed to operate your cable box. (see page 28)

CHANNEL SET UP

Basic set up options for viewing

With the CHANNEL SET UP menu open:

- 1 Use \uparrow or \downarrow to access the feature you want to change.
- 2 Press \rightarrow to select the feature.

CABLE: Select ON if your TV is connected to a cable system. (After setting CABLE, you will need to run AUTO PROGRAM.)

CHANNEL FIX: Press \leftarrow and then use the \uparrow or \downarrow buttons to set the TV's input to one of the following options:

2-6: When a cable box is connected to the VHF/UHF input. Press DBS/CABLE (FUNCTION) and then CH +/- to change channels.

AUX 2-6: When a cable box is connected to AUX and a cable or antenna is connected to VHF/UHF. You can alternate between the two inputs by pressing ANT on the remote control. (KV-27S65, 27V65 only)

VIDEO 1: When you have connected video equipment (e.g. A/V receiver) and you want the TV input fixed to it. You will be able to alternate between video sources using the A/V receiver.

OFF: When you want to switch CHANNEL FIX off.

Press ANT on the remote control until you reach a picture.

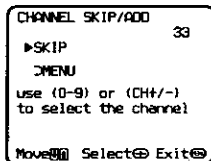
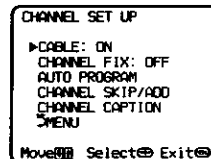
ON/OFF TIMER and CHANNEL BLOCK settings will be erased when CHANNEL FIX is set.

AUTO PROGRAM: Instructs the TV to automatically program all receivable channels.

CHANNEL SKIP/ADD:

With the CHANNEL SKIP/ADD window open:

- 1 Place the cursor next to SKIP or ADD. (only one option will be displayed)
- 2 Choose the desired channel using CH +/-, or by selecting with the 0-9 buttons and pressing ENTER.
- 3 Press \rightarrow to activate.



Using your Menus (continued)

Using the SET UP menu (continued)



For detailed information on using the remote to modify menu settings, refer to "Learning menu selection" on page 18.

To select the SET UP menu:

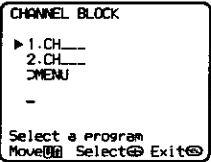

074-21



To erase the CHANNEL BLOCK settings

Press RESET while the SET UP menu is displayed.

<p>CHANNEL SET UP (continued) <i>Basic set up options for viewing</i></p>	<p>CHANNEL CAPTION: You will be able to label up to 12 channels with their call letters.(except KV-20V80) With the CHANNEL CAPTION menu open:</p> <ol style="list-style-type: none"> 1 Press \leftarrow and then \uparrow or \downarrow to access the desired channel, and press \rightarrow again. 2 Press \uparrow or \downarrow to display the first letter or number of the caption and press \rightarrow to select it. 3 Press \rightarrow to activate. To erase a caption, press RESET. <div data-bbox="1795 332 2016 495" style="border: 1px solid black; padding: 5px;"> <p>CHANNEL CAPTION ▶CHANNEL _____ CAPTION _____ >MENU</p> <p>Select a channel Move [left arrow] Select [right arrow] Exit [power icon]</p> </div>
<p>FAVORITE CHANNEL <i>Quick access to favorite channels</i></p>	<p>Setting FAVORITE CHANNEL:</p> <ol style="list-style-type: none"> 1 Press \rightarrow and then \uparrow or \downarrow to select AUTO or MANUAL. (Selecting AUTO will display the last five channels chosen with the remote control) 2 Press \uparrow or \downarrow to move the cursor to 1, 2, 3, 4 or 5 and press \rightarrow. 3 Press \uparrow or \downarrow to access the desired channel and press \rightarrow. 4 For KV-27S65, 27V65 only, you can preview your favorite channels in the window picture, to do so, set PREVIEW to ON. <p>Using FAVORITE CHANNEL:</p> <ol style="list-style-type: none"> 1 Press \rightarrow when in normal viewing mode. Your FAVORITE CHANNEL options will appear. 2 Press \uparrow or \downarrow to access the channel you want to watch, and press \rightarrow. 3 For models KV-27S65, 27V65 only, if PREVIEW is ON, a window picture displays your favorite channels as you cycle through the options. <div data-bbox="1795 576 2016 738" style="border: 1px solid black; padding: 5px;"> <p>FAVORITE CHANNEL MODE: AUTO ▶PREVIEW: ON 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ >MENU Move [left arrow] Select [right arrow] Exit [power icon]</p> </div> <div data-bbox="1900 852 2005 950" style="border: 1px solid black; padding: 5px;"> <p>FAVORITES 125 ESPN ▶14 ABC 48 CBS 16 HBO 5 CBC >Exit</p> </div>

<p>CHANNEL BLOCK Prevent child access to certain channels.</p>	<p>You will be able to block two channels. With the CHANNEL BLOCK window open:</p> <ol style="list-style-type: none"> 1 Choose 1 or 2 and press +. 2 Press ▲ or ▼ to display the channel you want to block. 3 Press + to activate. <p>When you select the blocked channel, BLOCKED will appear on the screen. CAPTION VISION will also be blocked. <i>When you perform AUTO PROGRAM, your CHANNEL BLOCK settings will be erased.</i></p>	 <p>CHANNEL BLOCK ▶ 1.CH__ 2.CH__ MENU - Select a program Move ← Select + Exit +</p>
<p>VIDEO LABEL Easy recognition of connected equipment (e.g. DBS, VHS, etc.)</p>	<p>This feature allows you to label each input mode so that you can easily identify connected equipment (e.g. you can label VIDEO 1 as VHS). (except KV-20V80) With the VIDEO LABEL window open:</p> <ol style="list-style-type: none"> 1 Press ▲ or ▼ to move to the input mode you want to label and press +. 2 Press ▲ or ▼ to choose the label and press +. <p>VIDEO LABEL Options: Video 1: VHS, 8mm, BETA, LD, GAME, DBS, DVD, WEB, RECEIVER, DTV. Video 2/3: VHS, 8mm, BETA, LD, GAME, DBS, DVD, WEB, RECEIVER, DTV. <i>When VIDEO LABEL is set to WEB, the picture will darken, creating an ideal picture for WebTV viewing.</i></p>	 <p>VIDEO LABEL ▶ VIDEO 1: VIDEO 1 VIDEO 2: VIDEO 2 VIDEO 3: VIDEO 3 MENU Move ← Select + Exit +</p>
<p>LANGUAGE</p>	<p>(except Canadian models) You can change the language of your menus to either ENGLISH or ESPAÑOL.</p>	

Operating video equipment

Programming the remote

You can use the supplied remote control to operate Sony or non-Sony video equipment.




- 1 Press CODE SET.
- 2 Press VTR/DVD (FUNCTION).
- 3 Use the 0-9 buttons to key in the manufacturer's code number from the following chart.
- 4 Press ENTER.








VCR manufacturer code numbers

Manufacturer	Code
Sony	301, 302, 303
Aiwa	338, 344
Broksonic	319, 317
Canon	309, 308
Daewoo	341, 312, 309
Emerson	319, 320, 316, 317, 318, 341
Fisher	330, 335
Funai	338
General Electric	329, 304, 309
Go Video	322
Goldstar	332
Hitachi	306, 304, 305, 338
JVC	314, 336, 337, 345, 346, 347
Kenwood	314, 336, 332, 337
LXI (Sears)	332, 305, 330, 335, 338

Magnavox	308, 309, 310
Mitsubishi/MGA	323, 324, 325, 326
NEC	314, 336, 337
Panasonic	308, 309, 306, 307
Philips	308, 309, 310
Pioneer	308
Quasar	308, 309, 306
RCA/PROSCAN	304, 305, 308, 309, 311, 312, 313, 310, 329
Realistic	309, 330, 328, 335, 324, 338
Sansui	314
Samsung	322, 313, 321
Sanyo	330, 335
Sharp	327, 328
Sylvania	308, 309, 338, 310
Symphonic	338
Technics	309, 308
Toshiba	312, 311
Wards	327, 328, 335, 331, 332
Zenith	331

Operating a VCR Buttons on the remote control

To turn on or off	Press VTR (POWER).
To select a channel directly	Press the 0 - 9 buttons.
To change channels	Press CH +/-.
To record	Press  and  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 or press  .
To search the picture forward or backward	Press  or  during playback. To resume normal playback, release the button.
To change input mode	Press TV/VTR.

Tips

- In some rare cases, you may not be able to operate your non-Sony video equipment with the supplied remote control. In this case, please use the equipment's own remote control.
- The code numbers for Sony VCR's are assigned at the factory as follows:

VHS VCR	301 (preset code for the supplied remote control)
8 mm VCR	302
Beta, ED Beta VCRs	303

- When you remove the batteries, the code number may revert to the factory setting.

**MDP (Multi Disc Player)
manufacturer code numbers**

Manufacturer	Code
Sony	701
Panasonic	704, 710
Pioneer	702

Operating an MDP Buttons on the remote control

To turn on or off	Press VTR/DVD (POWER).
To play	Press ►.
To stop	Press ■.
To pause	Press ■■. To resume normal playback, press again or press ►.
To search the picture forward or backward	Press ►► or ◀◀ during playback. To resume normal playback, press ►.
To search the chapter forward or backward	Press CH +/-.

**DVD (Digital Versatile Disc)
manufacturer code numbers**

Manufacturer	Code
Sony	751
Panasonic	753
Pioneer	752
RCA	755
Toshiba	754

Operating a DVD player Buttons on the remote control

To turn on or off	Press VTR/DVD (POWER).
To play	Press ►.
To stop	Press ■.
To pause	Press ■■. To resume normal playback, press again or press ►.
To search the picture forward or backward	Press ►► or ◀◀ during playback. To resume normal playback, press ►.
To search the chapter forward or backward	Press CH +/-.
To select chapters directly	0-9 + ENTER.
MENU	Press to display DVD menu.
To move cursor in menu	Use your arrow buttons ↑ ↓, ← →.

Operating a cable box or DBS receiver

Programming the remote

You can program the supplied remote control to operate a cable box or DBS receiver.

- 1 Press CODE SET.
- 2 Press DBS/CABLE (FUNCTION).
- 3 Use the 0-9 buttons to key in the manufacturer's code number from the following chart.
- 4 Press ENTER.

For more details on operating the cable box or DBS receiver

Refer to the operating instructions that were supplied with the equipment.

If the remote control doesn't work

- First, try repeating the setup procedures using the other codes listed for your equipment.

Tips

- 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 you previously entered at that setting is erased.
- In some rare cases, you may not be able to operate your equipment with the supplied remote control. In this case, use the equipment's own remote control unit.
- Whenever you remove the batteries the code numbers may revert to the factory setting and must be reset.

Manufacturer code numbers (cable box)

Manufacturer	Code
Hamlin/Regal	222, 223, 224, 225, 226
Jerrold/G. I.	201, 202, 203, 204, 205, 206, 207, 208, 218
Oak	227, 228, 229
Panasonic	219, 220, 221
Pioneer	214, 215
Scientific Atlanta	209, 210, 211
Tocom	216, 217
Zenith	212, 213

Manufacturer code numbers (DBS receiver)

Manufacturer	Code
Sony	801 (preset code for remote control)
General Electric	802
Hitachi	805
Hughes	804
Panasonic	803
RCA/PROSCAN	802, 808
Toshiba	806, 807

Troubleshooting

Consult the table below; it suggests solutions to specific problems. If you need more information, consult the operating instructions guide.

Cannot Operate Single Tuner PIP (KV-27S45, 27V45)	<ul style="list-style-type: none"> • VCR may not be connected to your TV properly. • VCR may not be turned on. 	<ul style="list-style-type: none"> • Ensure that you have set your VCR correctly. (see page 7)
A red light keeps flashing on the TV for more than a few seconds	<ul style="list-style-type: none"> • Your TV may need service. 	<ul style="list-style-type: none"> • Call your local Sony service center.
TV makes a noise when turned on	<ul style="list-style-type: none"> • This is a normal function of your TV. 	
Screen is not lit and there is no sound	<ul style="list-style-type: none"> • Power cord may not be plugged in. • Batteries may not have been placed with the correct polarity. • TV/VIDEO setting may be incorrect. 	<ul style="list-style-type: none"> • Press TV/VIDEO until you receive a channel. • Perform AUTO SET UP again by pressing the SET UP button on your TV. (see page 13)
Poor or no picture (screen lit), good sound	<ul style="list-style-type: none"> • VIDEO menu settings may not be adjusted correctly. • Antenna/cable connections may be faulty. • VIDEO LABEL inputs may be set to WEB. (This label darkens the screen for ideal WebTV viewing.) 	<ul style="list-style-type: none"> • Readjust your VIDEO menu settings. (see page 19) • Check your VIDEO LABEL settings. (see page 25)
Good picture, no sound	<ul style="list-style-type: none"> • Sound may be set to MUTE. • Your TV may be set to SAP. • Speaker may not be set correctly. 	<ul style="list-style-type: none"> • Check the MTS setting in the AUDIO menu. (see page 21) • Check your SPEAKER settings. (see page 20)
No color	<ul style="list-style-type: none"> • Color settings may not be adjusted correctly. 	<ul style="list-style-type: none"> • Adjust the COLOR settings in the VIDEO menu. (see page 19)

■ ■ ■ Troubleshooting (continued)

Only snow and noise appear on the screen	<ul style="list-style-type: none"> • CABLE setting may not be set correctly in the SET UP menu. • Antenna/cable connections may not be correct. • TV may be set to AUX mode. 	<ul style="list-style-type: none"> • Ensure that you have selected the correct CABLE mode in the SET UP menu. (see page 23) • Press ANT on your remote control to change the input mode. (see page 15)
Cannot receive upper channels (UHF) when using an antenna	<ul style="list-style-type: none"> • CABLE setting may not be correct in the SET UP menu. 	<ul style="list-style-type: none"> • Ensure that CABLE is set to OFF in the SET UP menu. (see page 23) • Use AUTO PROGRAM to add receivable channels that are not presently in TV memory. (see page 24)
Cannot receive any channels when using cable	<ul style="list-style-type: none"> • CABLE setting may not be set correctly in the SET UP menu. 	<ul style="list-style-type: none"> • Ensure that CABLE is set to ON in the SET UP menu. (see page 23) • Use AUTO PROGRAM to add receivable channels that are not presently in TV memory. (see page 24)
Cannot gain enough volume when using a cable box	<ul style="list-style-type: none"> • Volume may not be adjusted on your cable box. 	<ul style="list-style-type: none"> • Press TV (FUNCTION) and adjust the TV's volume.
TV is fixed to one channel	<ul style="list-style-type: none"> • CHANNEL FIX settings may not be correct. 	<ul style="list-style-type: none"> • Check your CHANNEL FIX settings. (see page 23)

If, after reading these operating instructions, you have additional questions related to the use of your Sony television, please call our Direct Response Center at 1-800-222-SONY (7669).

■ ■ ■ Specifications

Supplied accessories

Remote control RM-Y135A (1)
(KV-20V80 only)
Remote control RM-Y165 (1)
(KV-27S40, 27V40 only)
Remote control RM-Y167 (1)
(KV-27S45, 27S65, 27V45, 27V65 only)
Batteries size AA (R6) (2)

Optional accessories

Connecting cables
VMC-810S/820S, VMC-720M,
YC-15V/30V, RK-74A
TV Stand SU-27A3
(All models except KV-20V80)
U/V mixer EAC-66

	KV- 20V80	27S40	27S45	27S65	27V40	27V45	27V65
Power requirements	120 V, 60 Hz	120 V, 60 Hz	120 V, 60 Hz	120 V, 60 Hz	120 V, 60 Hz	120 V, 60 Hz	120 V, 60 Hz
Number of inputs/outputs							
Video ¹⁾	2	1	2	2	2	3	3
S Video ²⁾	1	-	1	1	1	1	1
Audio ³⁾	2	1	2	2	2	3	3
Audio out ⁴⁾	1	1	1	1	1	1	1
Monitor out ¹⁾	-	-	-	-	1	1	1
Speaker output (W)	5W x 2	5W x 2	5W x 2	5W x 2	5W x 2	5W x 2	10W x 2
Power consumption (W)							
In use (Max.)	100W	140W	140W	145W	140W	140W	170W
In standby	10W	2W	2W	2W	2W	2W	2W
Dimensions (W/H/D)							
(mm)	556 x 464.5 x 474.9 mm	660.4 x 598 x 505.5 mm	660.4 x 598 x 505.5 mm	660.4 x 598 x 505.5 mm	690 x 575.4 x 503.4 mm	690 x 575.4 x 503.4 mm	690 x 575.4 x 503.4 mm
(in.)	21 7/8 x 18 1/4 x 18 2/3 in.	26 x 23 1/2 x 20 in.	26 x 23 1/2 x 20 in.	26 x 23 1/2 x 20 in.	27 1/4 x 22 3/4 x 19 7/8 in.	27 1/4 x 22 3/4 x 19 7/8 in.	27 1/4 x 22 3/4 x 19 7/8 in.
Mass (kg)	22.6 kg	38.9 kg	38.9 kg	39 kg	42.4 kg	42.4 kg	42.4 kg
(lbs)	49 lbs 3 oz	85 lbs 8 oz	85 lbs 8 oz	86 lbs	93 lbs 8 oz	93 lbs 8 oz	93 lbs 8 oz

Television system

American TV standard

Channel coverage

VHF: 2-13/UHF: 14-69/CATV: 1-125

Picture tube

Trinitron® tube

Visible screen size

20-inch picture measured diagonally (KV-20V80 only)

27-inch picture measured diagonally

Actual screen size

21-inch picture measured diagonally (KV-20V80 only)

29-inch picture measured diagonally

Antenna

75 ohm external terminal for VHF/UHF

¹⁾ 1 Vp-p, 75 ohms unbalanced, sync negative

²⁾ Y: 1 Vp-p, 75 ohms unbalanced, sync negative
C: 0.286 Vp-p (Burst signal), 75 ohms

³⁾ 500 mVrms (100% modulation), Impedance: 47 kilohms

⁴⁾ More than 408 mVrms at the maximum volume setting (variable)
More than 408 mVrms (fix)
Impedance: 50 kilohms

Design and specifications are subject to change without notice.



(●)® SRS (SOUND RETRIEVAL SYSTEM)




The (●) SRS (SOUND RETRIEVAL SYSTEM) is manufactured by Sony Corporation under license from SRS Labs, Inc. It is covered by U.S. Patent No. 4,748,669. Other U.S. and foreign patents pending.

The word 'SRS' and the SRS symbol (●) are registered trademarks of SRS Labs, Inc.

Licensed by BBE Sound, Inc under USP 4638258.4482866. BBE and BBE symbol are trademarks of BBE Sound, Inc.


Index

A		C		E	
Adjusting your menus	18	CABLE	23	Easy Setup Guide	13
ANT	15	Cable box	6	Editing using MONITOR OUT	11
Antenna cable	5	operation	28	EFFECT	
Antenna connector	5			SIMULATED	21
AUDIO  button	20			SRS	21
AUDIO menu operations 				SURROUND	21
AUDIO OUT	20			F	
BALANCE	20			Factory settings	19, 20
BASS	20			FAVORITE CHANNEL	25
EFFECT	21			FAVORITE CHANNEL w/preview	25
MTS	21			FREEZE button	15, 17
SPEAKER	20			H	
TREBLE	20			HUE	19
AUDIO OUT				I, J, K	
FIXED	20			Input-source mode	16
VARIABLE	20			JUMP button	14
AUTO PROGRAM	24			L	
AUX Hookup	5			Language selection	13, 25
B				Learning menus	
BALANCE	20			AUDIO	20
BASS	20			SET UP	23
Battery installation	12			TIMER	22
BRIGHTNESS	19			VIDEO	19
C					
CAPTION VISION	15				
CATV cable	5				
Coaxial cable	5				
CH +/-	14				
CHANNEL SKIP/ADD	24				
CHANNEL BLOCK	24				
CHANNEL CAPTION	24				
CHANNEL FIX	23				
COLOR	19				
Connecting TV to					
Antenna	5				
Audio system	10				
Cable	5				
Cable box and cable	6				
Camcorder	11				
DBS receiver	8				
DBS receiver and VCR	9				
DVD player	10				
Two VCRs	11				
VCR	7				
CURRENT TIME SET	22				
D					
DAYLIGHT SAVING	22				
DBS receiver operation	28				
DISPLAY					
CAPTION VISION	15				
Status	15				
XDS	15				
DVD player operation	27				

M, N			
MDP operation	27	PIP	16
Menu selection	18	POSITION	17
Mode		SWAP	17
MOVIE	19	TV/VIDEO	16
STANDARD	19	Programming the remote	26, 28
VIVID	19	R	
MONITOR OUT	11	Remote control	14
Mono	21	FUNCTION buttons	14
MTS		Illustration	inside front cover
MONO	21	S	
SAP	21	SAP	21
STEREO	21	Safety	3
MUTING button	14	Select buttons	12
O		Adjustment bars	12
On-Screen Help	12	SET UP menu 	23
ON/OFF TIMER	22	AUTO PROGRAM	23
Operating video equipment	26	CABLE	23
P, Q		CHANNEL SKIP/ADD	24
Picture-in-Picture (PIP)		CHANNEL CAPTION	24
Main picture	16	CHANNEL BLOCK	24
Window picture	16	FAVORITE CHANNEL	25
PIP connections (single tuner)	16	Setting up TV	13
PIP operations		SHARPNESS	19
AUDIO	16	SLEEP button	15
CH+/-	17	SPEAKER	
FREEZE	15	ON	20
		OFF	20
		Specifications	30, 31
		Splitter	5
		SWAP button	17
		SYSTEM OFF button	15
		T, U	
		TIMER menu operations 	22
		CURRENT TIME SET	22
		DAYLIGHT SAVING	22
		ON/OFF TIMER	22
		TREBLE	20
		Troubleshooting	29, 30
		TV (FUNCTION) button	14
		TV POWER button	14
		TV/VIDEO button	15
		V, W, X, Y, Z	
		VCR	6, 7
		VCR manufacturer code numbers	26
		VCR operation	26
		VIDEO LABEL	25
		VIDEO menu operations 	
		BRIGHTNESS	19
		COLOR	19
		HUE	19
		MODE	19
		PICTURE	19
		SHARPNESS	19
		VOL +/-	14
		VTR	26
		XDS	15

WARNING

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



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



ATTENTION
RISQUE DE CHOC ELECTRIQUE,
NE PAS OUVRIIR

PRECAUCION
RIESGO DE CHOQUE ELECTRICO
NO ABRIR

**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.**



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.

CAUTION

When using TV games, computers, and similar products with your TV, keep the brightness and picture contrast functions at low settings. If a fixed (non-moving) pattern is left on the screen for long periods of time at a high brightness or picture contrast setting, the image can be permanently imprinted onto the screen. Continuously watching the same program can cause the imprint of station logos onto the TV screen. These types of imprints are not covered by your warranty because they are the result of misuse.

Note on Caption Vision

This television receiver provides display of television closed captioning in accordance with §15.119 of the FCC rules.

Note on cleaning the TV

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.

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.

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.

NOTIFICATION

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This

equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antennas.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

This document is for the remote controls RM-Y135A/Y165/Y167.

MODELS: KV-20V80, 27S40, 27S45, 27S65, 27V40, 27V45, 27V65



As an ENERGY STAR® Partner, Sony has determined that this product or product models meets the ENERGY STAR® guidelines for energy efficiency.

Note

Model KV-20V80 is not ENERGY STAR® compliant.

ENERGY STAR® is a U.S. registered mark.

