SONY₈

, M 7- US- 67, - 5- 67, - 11 (1)

Color Rear Video Projector

Operating Instructions	 EN
Manual de instrucciones	 ES



© 1997 by Sony Corporation



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.

CAUTION

When using TV games, computers, and similar products with your projection TV, keep the brightness and 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 contrast setting, the image can be permanently imprinted onto the 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 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.

Note on convergence adjustment

Before you use your projection TV, make sure to adjust convergence. For the procedure, see page **17**.

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 inteference 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 control RM-Y901. MODELS: KP-48V45/53V45/61V45.

Please keep this notice with the instruction manual.

Owner's Record

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

Model No. ______

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The captions in parentheses indicate menu names.

Welcome!

Thank you for purchasing the Sony Color Rear Video Projection TV. Here are some of the features you will enjoy with your projection TV:

- On-screen menus that let you set the picture quality, sound, and other settings.
- Two tuner Picture-in-Picture (PIP) that allows you to watch another TV channel, video or cable image as a window or left picture.
- SRS (SOUND RETRIEVAL SYSTEM) that allows you to receive realistic sound that recaptures audio "clues" originally present but masked in the recording process so that the action seems to happen all around you.
- SAVA SPEAKER option of the AUDIO menu that lets you take advantage of the Sony SAVA series speaker system's surround sound and super woofer mode when you connect it to the projection TV.
- S-Link[™] that allows you to automatically change the TV's input mode, turn on the VCR, and play a tape by just pressing the VCR's play button. This feature is originally designed by Sony. (Feature available when using a Sony S-Link[™] capable VCR.)

About this manual

The instructions in this manual are for models KP-48V45, KP-53V45, and KP-61V45. Before you start reading this manual, please check your model number, located at the rear of the projection TV. Model KP-53V45 is used for illustration purposes in this manual. Any differences in operation are clearly

indicated in the text, for example "*KP-48V45 only*." The differences in specifications are indicated in the text.

Instructions in this manual are based on use of the remote control. You can also use the controls on the projection TV if they have the same name as those on the remote control.

Precautions

This projection 1V operates on extremely high voltage. To prevent fire or electric shock, please follow the precautions below.

Safety

- Operate the projection 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 projection TV and have it checked by qualified personnel before operating it further.
- Unplug the projection 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.

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

Note on cleaning

Clean the cabinet of the projection TV with a dry soft cloth. To remove dust from the screen, wipe it gently with a soft cloth using vertical strokes only. Stubborn stains may be removed with a cloth slightly dampened with solution of mild soap and warm water. Never use strong solvents such as thinner or benzine for cleaning. If the picture becomes dark after using the projection TV for a long period of time, it may be necessary to clean the inside of the projection TV. Consult qualified service personnel.

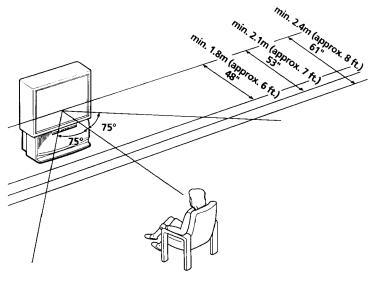
Installing

- To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the projection TV in a hot or humid place, or in a place subject to excessive dust or mechanical vibration.
- Avoid operating the projection TV at temperatures below 5°C (41°F).
- If the projection TV is transported directly from a cold to a warm location, or if the room temperature has changed suddenly, the picture may be blurred or show poor color. This is because moisture has condensed on the mirror or lenses inside. If this happens, let the moisture evaporate before using the projection TV.
- To obtain the best picture, do not expose the screen to direct illumination or direct sunlight. It is recommended to use spot lighting directed down from the ceiling or to cover the windows that face the screen with opaque drapery. It is desirable to install the projection TV in a room where the floor and walls are not of reflecting material. If necessary, cover them with dark carpeting or wall paper.

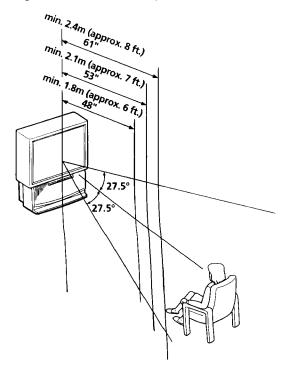


For the best picture quality, install the projection TV within the areas shown below.

Optimum viewing area (Horizontal)



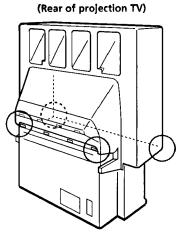
Optimum viewing area (Vertical)



Carrying your projection TV

KP-48V45/53V45 only

Be sure to grasp the areas indicated when carrying the projection TV, and to use more than two people.

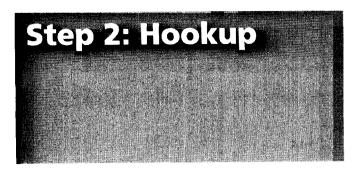


■ *KP-61V45 only* Carry your projection TV by the casters.

Preparing for your projection TV

Before you use your projection TV, adjust convergence. For the procedure, see "Step 4: Setting up the projection TV automatically (AUTO SET UP)" on page **17**.

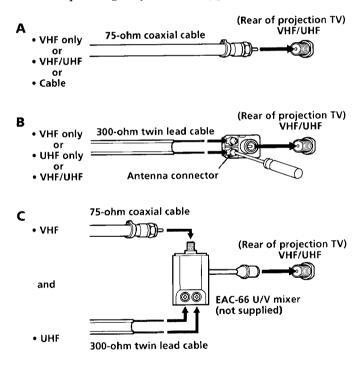
EN



Although you can use either an indoor or outdoor antenna with your projection TV, we recommend that you connect an outdoor antenna or a cable TV system to get better picture quality.

Connecting an antenna

Connect your antenna cable to the VHF/UHF antenna terminal. If you cannot connect your antenna cable directly to the terminal, follow one of the instructions below depending on your cable type.



Notes

- Most VHF/UHF combination antennas have a signal splitter. Remove the splitter before attaching the appropriate connector.
- If you use the U/V mixer, snow and noise may appear in the picture when viewing cable TV channels over 37.

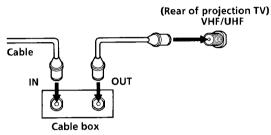
Connecting an antenna/cable TV system without a VCR

To cable or antenna

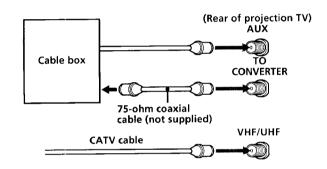
(Rear of projection TV) VHF/UHF

To cable box

If your cable company requires you to connect a cable box, make the connection as follows:



To cable box and cable



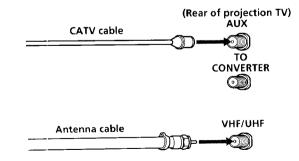
Pay cable TV systems use scrambled or encoded signals requiring a cable box* in addition to the normal cable connection.

* The cable box will be supplied by the cable company.

Note

• You cannot watch the signal through an AUX connector as a window picture.

To cable and antenna



Note

• Do not connect anything to the TO CONVERTER connector in this case.

Connecting an antenna/cable TV system with a VCR

For details on connection, see your VCR instruction manual.

Before making the connection, disconnect the AC power cords of the equipment to be connected.

To a conventional VCR

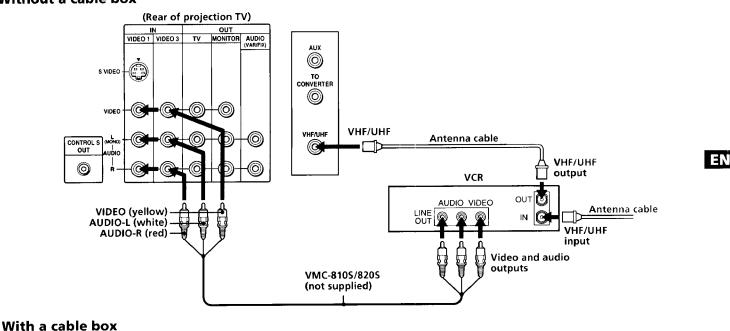
Note

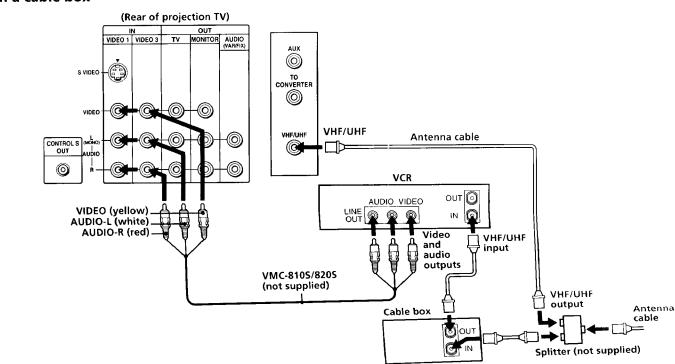
 To connect a monaural VCR, connect the audio output of the VCR to AUDIO-L (MONO) of VIDEO 1/3 IN on the projection TV.

Without a cable box

After making these connections, you will be able to do the following:

- View the playback of video tapes
- Record one TV program while viewing another program
- Watch two TV programs at once using PIP





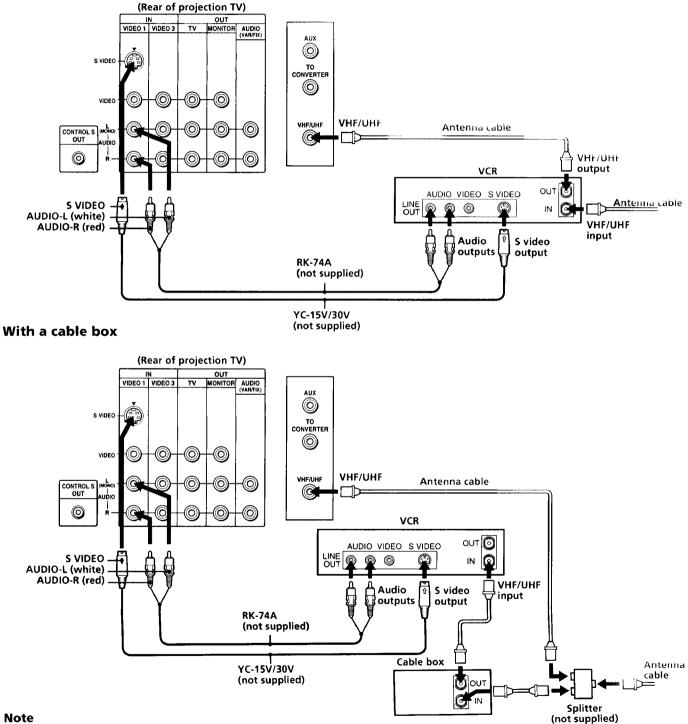
Getting Started 7-EN

To an S video equipped VCR

If your VCR has an S VIDEO output connector, make the following connections.

Whenever you connect the cable to the S VIDEO input connector, the projection TV automatically receives S video signals.

Without a cable box

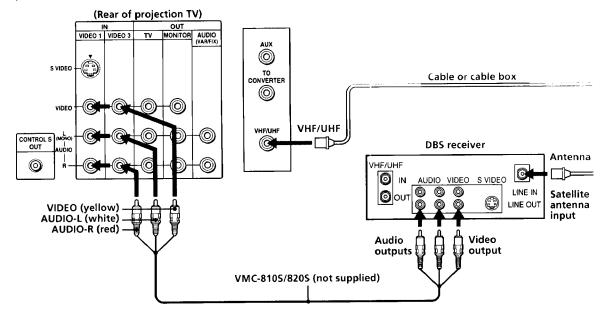


 Video signals are composed of Y (luminance) and C (chroma) signals. The S connection sends the two signals separately preventing degradation, and gives better picture quality compared to conventional connections.

Connecting a DBS receiver

For details on connection, see the instruction manual of the DBS (Digital Broadcasting Satellites) receiver.

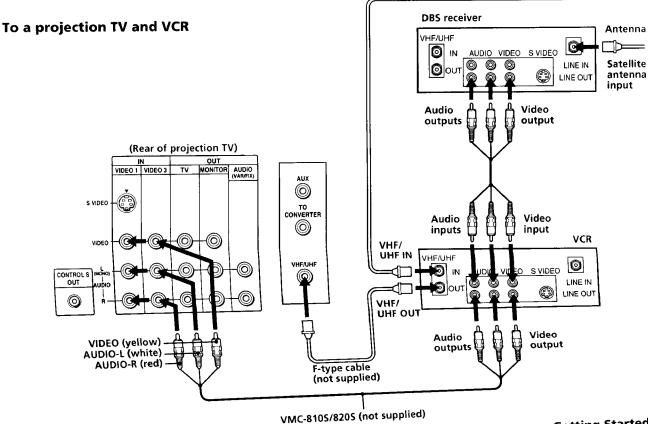
To a projection TV



Cable or cable box

Note

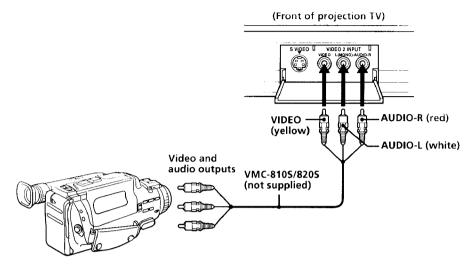
• You can use the S VIDEO connector or the composite video connector for the video connection.



Ξ

Connecting a camcorder

Use this connection to view a camcorder picture.



Notes

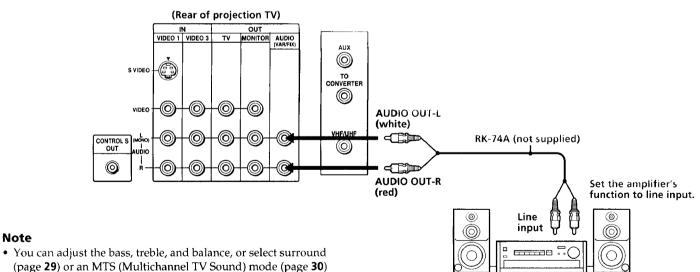
Note

- To connect a monaural camcorder, connect the audio output of the camcorder to AUDIO-L (MONO) of VIDEO 2 INPUT on the projection TV.
- To connect a camcorder equipped with the S video output, connect the S video output of the camcorder to the S VIDEO connector of the projection TV.

Stereo amplifier

Connecting an audio system

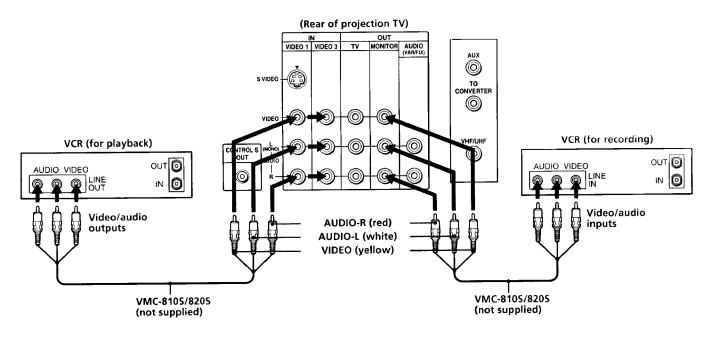
When connecting audio equipment, see page 28 for more information.



with the supplied remote control.

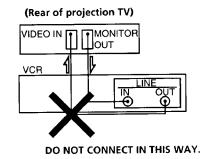
Connecting two VCRs for tape editing using MONITOR OUT

You can record input images displayed on the screen. This type of connection should be used only when you connect from the line input of one VCR, and from the line output of a second VCR.



Notes

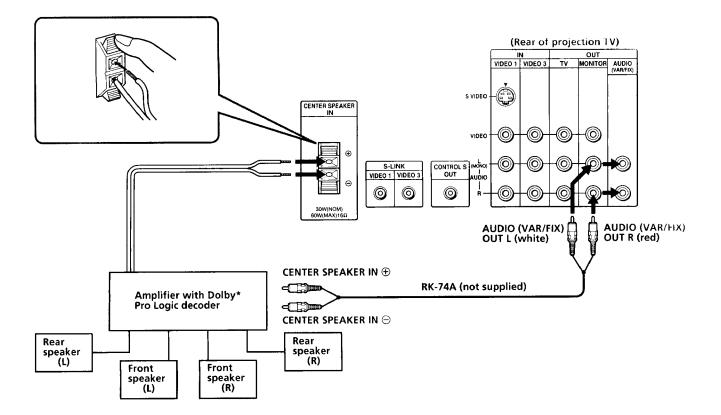
- Do not change the input signal while editing through MONITOR OUT, or the output signal will also change.
- You can use the S video jack to connect a VCR for playback and the composite video connector to connect a VCR for recording.
- When connecting a single VCR to the projection TV, do not connect the MONITOR OUT to the VCR's line input, while at the same time connecting from the projection TV's VIDEO IN connectors to the VCR's line output, as shown below.



Connecting an amplifier with Dolby Pro Logic decoder

If you use an amplifier with Dolby Pro Logic decoder instead of the projection TV's audio system, you can still use the projection TV's center speaker. See "Setting the speaker switch (SPEAKER)" on page **31**.

* Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under Canadian patent number 1,037,877. "Dolby," the double-D symbol DD and "Pro Logic" are trademarks of Dolby Laboratories Licensing Corporation.

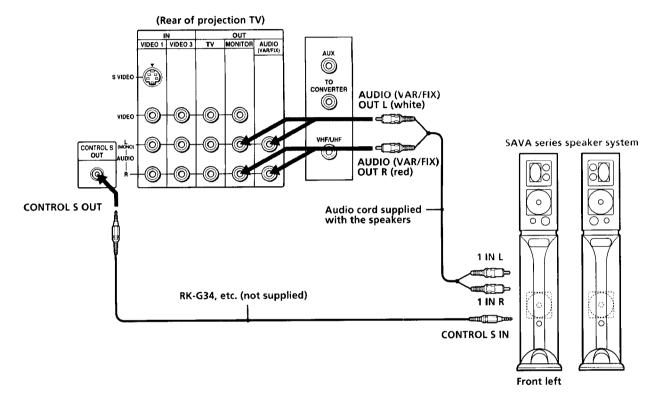


Note

 Verify that the impedance rating of your amplifier's center output is compatible with the TV's input.

Connecting a Sony SAVA series speaker system

If you have a Sony SAVA series speaker system, connect your speakers to the AUDIO (VAR/FIX) OUT jacks (or MONITOR OUT jacks) on the rear of the projection TV with the audio cable supplied with the speakers. You can take advantage of the speakers' Dolby Pro Logic surround system and super woofer mode, and control them with the supplied remote control. When connecting a Sony SAVA series speaker system, see page **31** for more information.



Using the S-Link function with S-Link capable Sony VCRs

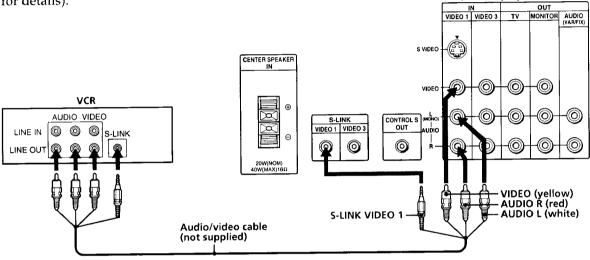
The S-Link feature allows you to operate the projection TV and VCR with the S-Link function in the following ways:

- When you press the VCR's play button, the projection TV's input mode is automatically changed to video input which is connected, and the VCR starts playing a tape.
- You can turn off the projection TV and VCR together using the SYSTEM OFF button (see page 40 for details).

Notes

- The projection TV may maltunction it you connect the S-Link cable to the projection TV without connecting the other end of the cable to the VCR.
- When making the S-Link connection, be sure to insert all the connectors firmly.

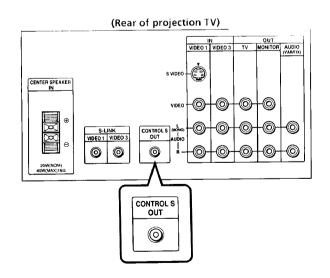
(Rear of projection TV)



Connecting other Sony equipment with CONTROL S jack

This feature allows you to control your projection TV and other Sony equipment with one remote control.

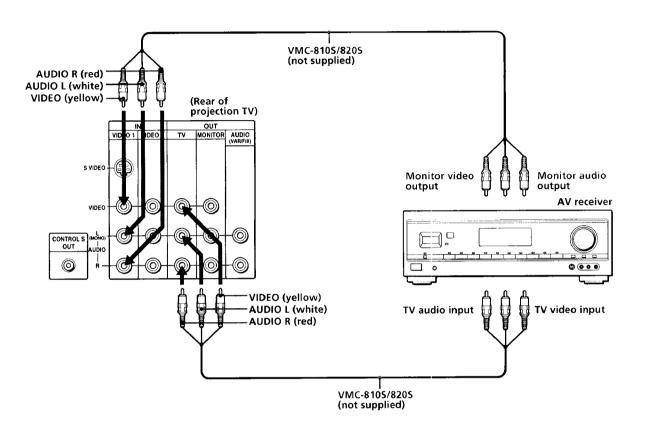
To control other Sony equipment with the projection TV's remote control, connect the input of the equipment to CONTROL S OUT jack on the projection TV.



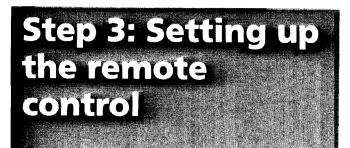
Connecting an AV receiver

Connect an optional AV receiver to the VIDEO 1 IN jacks at the rear of the projection TV.

If your AV receiver has the TV input jacks, connect them to the TV OUT jacks at the rear of the projection TV.

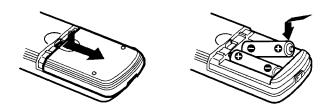


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Inserting batteries

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



Notes

- Under normal conditions, batteries will last up to six months. If the remote control does not operate properly or the indicators of the buttons on the remote control do not light up, the batteries may be worn out. When replacing batteries, replace both of them with new ones.
- Do not mix old batteries with new ones or mix different types of batteries together.
- If the electrolyte inside the battery should leak, wipe the contaminated area of the battery compartment with a cloth and replace the old batteries with new ones. To prevent the electrolyte from leaking, remove the batteries when you don't plan to use the remote control for a long period of time.
- Do not handle the remote control roughly. Do not drop it, step on it, or let it get wet.
- Do not place the remote control in direct sunlight, near a heater, or where the humidity is high.

Getting to know buttons on the remote control

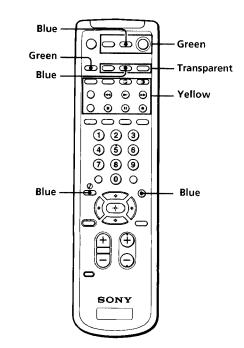
Names of buttons on the remote control are indicated in different colors to represent the available functions.

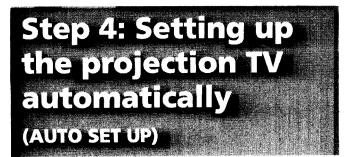
Button color

Transparent	TV/VCR/DBS/Cable box function
(light up)	buttons. Press the appropriate
	function button first to change the
	remote control's function.
Green	Buttons relevant to power operations.

Label color

White	TV/VCR/DBS/Cable box operation
	buttons.
Yellow	PIP operation buttons.
Blue	DBS operation buttons.

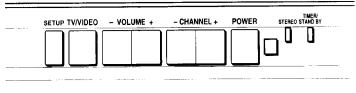




You can set up your projection TV easily by using the AUTO SET UP feature. It presets all the receivable channels, adjusts the convergence and changes the onscreen menu language. To set up the projection TV manually, see "Adjusting convergence" (page **19**), "Setting cable TV on or off" (page **20**), "Presetting channels" (page **21**) and "Changing the menu language" (page **21**).

If the projection TV is set to a video input, you cannot perform AUTO SET UP. Press TV/VIDEO so that a channel number appears.

(Front of projection TV)



Before you start using AUTO SET UP, be sure to connect the antenna or cable to the projection TV (see page 6).

1 Press POWER to turn the projection TV on.



2 Press SETUP on the front of the projection TV.

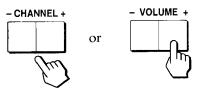
AUTO SET UP screen appears.





3 Press CHANNEL +/- or VOLUME + to select the on-screen menu language.

If you prefer Spanish or French to English, you can change the on-screen menu language.



All of the menus will be set to the factory preset condition in the selected language.

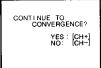
4 Press VOLUME – to start AUTO SET UP.



5 Press CHANNEL + to preset channels.



"AUTO PROGRAM" appears on the screen and the TV starts scanning and presetting channels automatically. When all the receivable channels are stored, "AUTO PROGRAM" disappears and the following menu appears. If the projection TV receives cable TV channels, CABLE is set to ON automatically.



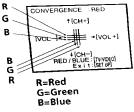
To exit AUTO PROGRAM

Press any button.

6 Adjust convergence.

(1) Press CHANNEL +. The CONVERGENCE adjustment screen appears.



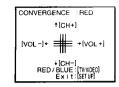


Getting Started

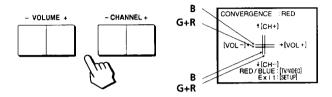
17^{-en}

(2) Press TV/VIDEO to select RED or BLUE.





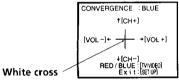
(3) Using CHANNEL +/- or VOLUME +/-, move the line until it converges with the center green line.



To move horizontal line up/down, press CHANNEL +/-.

To move vertical line right/left, press VOLUME +/-.

(4) Repeat steps (2) and (3) to adjust the other lines until all three lines converge and are seen as a white cross.



Note

• Using the AUX connector, press TV (black button) first and make sure that "AUX" is displayed beside the channel number on the screen. Then follow the steps 2 to 6 above to perform AUTO SET UP.

To preview the main functions (DEMO)

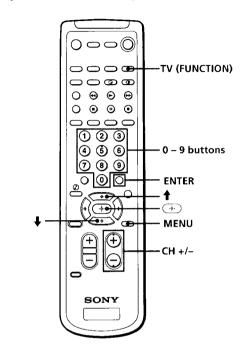
Press TV/VIDEO on the projection TV in step 4. The functions and menus are displayed one by one.

To exit DEMO

Press any button.

Erasing or adding channels

After AUTO SET UP, you can erase unnecessary channels or add the channels you want. Preset channels during the day rather than late at night, when some channels may not be broadcasting.



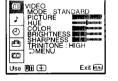
1 Press TV (FUNCTION).



2 Press MENU.

The main menu appears.

MENU



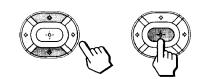
3 Press ★ or ★ to select ♣, and press .

The SET UP menu appears.



4 Press + or + to select CHANNEL ERASE/ADD, and press ↔.

The CHANNEL ERASE/ADD menu appears.

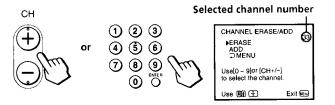




5 Erase and/or add channels:

To erase an unwanted channel

- (1) Make sure the cursor (\blacktriangleright) is beside ERASE.
- (2) Press CH +/- or the 0-9 buttons to select the channel you want to erase, and press ENTER.



(3) Press 💮 .

The "-" indication appears beside the channel number, showing that the channel is erased from the preset memory.



To add a channel that you want

- (1) Press \blacklozenge or \blacklozenge to move the cursor (\blacktriangleright) to ADD.
- (2) Press the 0 9 buttons to select the channel you want to add, and press ENTER.



CHANNEL ERASE/ADD ERASE ▶ADD ⊃MENU	69
Use 👀 🛨 Ex	it NENU

Selected channel number

(3) Press 💮 .

The "+" indication appears beside the channel number, showing that the channel is added to the preset memory.



6 To erase and/or add other channels, repeat step 5.

7 Press MENU to return to the original screen.



Notes

- If you erase or add a VHF or UHF channel, the cable TV channel with the same number is also erased or added, and vice versa.
- Erasing and adding channels is also available for the AUX input.

Adjusting convergence (CONVERGENCE)

The projection tube image appears on the screen in three layers (red, green and blue). If they do not converge, the color is poor and the picture blurs. To correct this, adjust convergence.

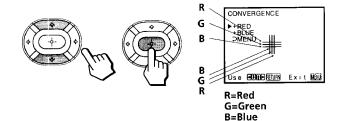
You do not have to do this procedure if you perform AUTO SET UP (page **17**). Do this procedure only when you want to adjust it manually.

1 Press MENU.

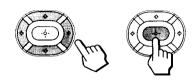
2 Press ♠ or ♥ to select 🖻 , and press ↔.

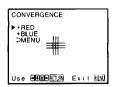
3 Press ★ or ★ to select CONVERGENCE, and press ④ .

The CONVERGENCE adjustment screen appears.

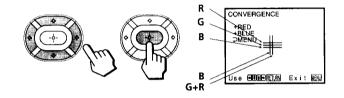


4 Press ★, ★, ♦, or → to move the cursor (►) to the symbol showing the line you want to adjust, and press (↔).





- +RED : Red vertical and horizontal line (left/right/up/ down adjustment)
- +BLUE : Blue vertical and horizontal line (left/right/up/ down adjustment)
- 5 Press ↑, ↓, or ↓ to move the line until it converges with the center green line, and press ⊕.



To move	Press	
Up	•	
Down	+	
Right	•	
Left		

- 6 Repeat steps 4 and 5 to adjust the other lines until all three lines converge and are seen as a white cross.
- **7** Press MENU to return to the original screen.

Setting cable TV on or off

If you have connected the projection TV to a cable TV system, set CABLE to ON (the factory setting). If not, set CABLE to OFF.

You do not have to do this procedure if you perform AUTO SET UP (page **17**). Do this procedure only when you want to set it manually.

1 Press MENU.

2 Press **+** or **+** to select **m**, and press **→**.

3 Set CABLE to ON or OFF:

- (1) Press ♦ or ♥ to move the cursor (▶) to CABLE, and press ④.
- (2) Press \blacklozenge or \blacklozenge to select ON or OFF, and press \bigcirc .



4 Press MENU to return to the original screen.

Note

• If CABLE appears in gray, the projection TV is set to a video input and you cannot select CABLE. Press TV (black button) so that a channel number appears.

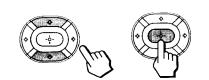
Presetting channels

You can preset TV channels easily by using the AUTO **PROGRAM feature**.

You do not have to do this procedure if you perform AUTO SET UP (page **17**). Do this procedure only when you want to set it manually.

1 Press MENU.

- 2 Press ★ or ★ to select 🚔, and press 💮.
- **3** Press **↑** or **↓** to select AUTO PROGRAM, and press ④.





"AUTO PROGRAM" appears on the screen and the projection TV starts scanning and presetting channels automatically. When all the receivable channels are stored, "AUTO PROGRAM" disappears and the lowest numbered channel is displayed.

4 Press MENU to return to the original screen.

To exit AUTO PROGRAM

Press any button.

Notes

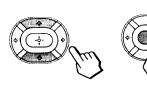
- If the AUTO PROGRAM menu appears in gray, the projection TV is set to a video input and you cannot select AUTO PROGRAM. Press ANT so that a channel number appears.
- Presetting channels is also available for the AUX input.



If you prefer Spanish or French to English, you can change the menu language.

You do not have to do this procedure if you select the language during AUTO SET UP (page **17**). Do this procedure only when you want to set it manually.

- **1** Press MENU.
- **2** Press **+** or **+** to select **⊕**, and press ⊕.
- 3 Press + or + to select LANGUAGE, and press ⊕.





EN

4 Press ★ or ★ to select your favorite language, "ENGLISH", "ESPAÑOL," or "FRANÇAIS" and press (...).



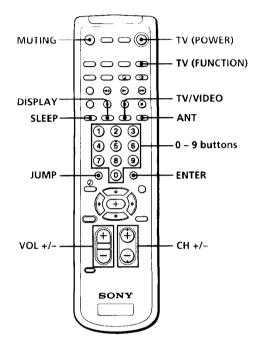
5 Press MENU to return to the original screen.

Note

• Certain parts of the Spanish or French menus remain in English.

Operations





1 Press TV (POWER) to turn on the projection TV.

The TIMER/STANDBY indicator flashes until the picture appears.



If "VIDEO" appears on the screen, press ANT so that a channel number appears.

2 Press TV (FUNCTION).



Once you press TV (FUNCTION), the projection TV function is set unless another function button is pressed.

3 Select the channel you want: To select a channel directly

Press the 0 – 9 buttons, and press ENTER. For example, to select channel 10, press 1, 0 and ENTER.



To scan through channels

Press CH +/- until the channel you want appears.



The channel can also be selected without pressing ENTER.

4 Press VOL +/- to adjust the volume.



Switching quickly between two channels

You can use the JUMP button to switch or "jump" back and forth between two channels.

Press JUMP.



Pressing JUMP again switches the channel back to the one you selected last.

Note

• You cannot jump to channels you scanned through using the CH +/- buttons.

Muting the sound

Press MUTING.

"MUTING" appears on the screen.

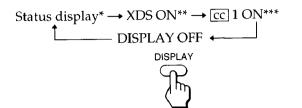


To restore the sound, press MUTING again, or press VOL +.

Displaying on-screen information

Press DISPLAY repeatedly until the desired display appears.

Each time you press DISPLAY, the display changes as follows:



- * Channel number, the current time, channel caption (if set), and MTS mode (if SAP is selected) are displayed. SAP indication disappears after three seconds.
- ** Some programs are broadcast with XDS (Extended Data Service) which shows a network name, program name, program type, program length, call letters, and time of the show. When you select XDS with the DISPLAY button, this information will be displayed on the screen if the broadcaster offers this service.
- *** Some programs are broadcast with Caption Vision. When you select Caption Vision with the DISPLAY button, Caption Vision will be displayed on the screen if the broadcaster offers this service. (See page **38** for selecting Caption Vision.)

To cancel the display, press DISPLAY repeatedly until "DISPLAY OFF" appears. "DISPLAY OFF" goes off after three seconds.

Setting the Sleep Timer

The projection TV stays on for the length of time you specify and then shuts off automatically.

Press SLEEP repeatedly until the time (minutes) you want appears.

Each time you press SLEEP, the time changes as follows:

$$30 \rightarrow 60 \rightarrow 90 \rightarrow \text{SLEEP OFF}$$

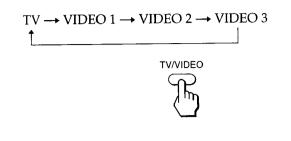


To cancel the Sleep Timer, press SLEEP repeatedly until "SLEEP OFF" appears, or turn off the projection TV.

Watching a video input picture

Press TV/VIDEO repeatedly until the desired video input appears.

Each time you press TV/VIDEO, the display changes as follows:



To return to the TV picture, press ANT so that a channel number appears.

Changing the VHF/UHF input to the AUX input

Press ANT.

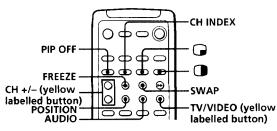
"AUX" appears beside the channel number.



Pressing ANT again switches back to the VHF/UHF input.

Watching two programs at one time — PIP/P&P (Twin ViewTM)/CH INDEX

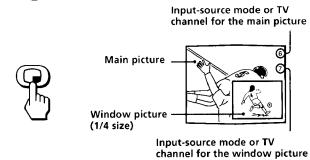
You can watch both the main/right picture and a window/left picture simultaneously using the Picture-in-Picture (PIP) or the Picture-and-Picture (Twin ViewTM) feature.



Use the yellow labelled buttons for PIP operations.

Displaying a window picture (PIP)

Press 🕞 .



Press **G** repeatedly to display a smaller window picture.

Each time you press \bigcirc , the size of the window picture changes as follows: 1/4 size $\rightarrow 1/9$ size $\rightarrow 1/16$ size.

To remove the window picture, press PIP OFF.

Displaying a left picture (P&P)

Press 🕕 .

Input-source mode or TV channel for the left picture Input-source mode or TV channel for the right picture

To restore the normal picture, press PIP OFF.

Notes

- If the main/right picture is not receiving an image, the window/left picture may become a noisy picture.
- The window/left picture sound is also output from the AUDIO (VAR/FIX) OUT jacks when you listen to it.

Changing the window/left picture input mode

Press TV/VIDEO (yellow labelled button) in PIP or P&P mode to select the input mode.

Each time you press TV/VIDEO (yellow labelled button), "TV," "VIDEO 1," "VIDEO 2," and "VIDEO 3" appear in sequence.



A window/left picture will appear in the same input mode as the last time you used PIP.

Note

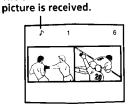
• If you connect your VCR without a cable box, your PIP input source is a VCR. If you connect your VCR with a cable box, your PIP input source is a VCR or cable box.

Listening to the sound of the window/ left picture

Press AUDIO in PIP or P&P mode.

The J display appears above the window/left picture for a few seconds, indicating that the window/left picture sound is being received.



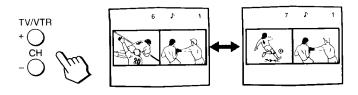


The sound of the window

To restore the main picture sound, press AUDIO again. The → display moves to the main picture channel number.

Changing TV channels in the window/ left picture

Press CH +/- (yellow labelled button) in PIP or P&P mode.

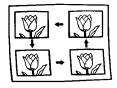


Changing the position of the window picture

Press POSITION in PIP mode.

Each time you press POSITION, the window picture will move counterclockwise on the screen.

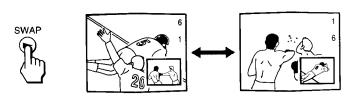




Swapping the main/right and window/ left pictures

Press SWAP in PIP or P&P mode.

Each time you press SWAP, the images and sound from the main/right and window/left pictures switch places with another.



Note

• The channels being received through the AUX connector cannot be displayed as a window picture.

Watching multiple TV channels at one time (CH INDEX)

You can display all the preset channels in sequence.

1 Press CH INDEX.

The main picture is displayed in the center with a pink frame and 12 window pictures are displayed around the main picture.



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ΞN

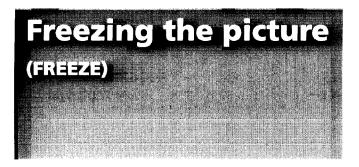
Each time you press CH INDEX, the 12 window pictures will rotate and a new picture will appear.

2 Press ★, ★, ★ or ★ to move the pink frame to the channel you want to watch, and press (+).

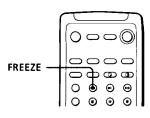
The selected channel appears on the screen.

To display eight favorite channels, press 💮 .

To return to the normal picture, press PIP OFF.



The FREEZE feature is useful when you want to write down an information such as a recipe from a cooking program, a displayed address, or a phone number.



Press FREEZE.



The frozen picture differs depending on the current display mode.

Normal mode



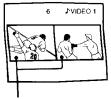
PIP mode



the window picture disappears.

The current picture freezes.

P&P mode



Both pictures freeze.

The main picture freezes and

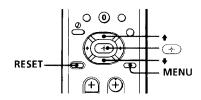


To cancel the frozen picture, press FREEZE again.

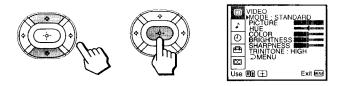


When watching TV programs, you can adjust the picture to suit your taste.

You can adjust the picture of video input(s) as well.

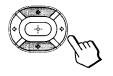


- **1** Press MENU.
- **2** Press **♦** or **♦** to select **(ii)**, and press **⊕**.



3 Select the item you want to adjust. For example:

 To adjust the brightness, press ◆ or ◆ to move the cursor (►) to BRIGHTNESS.

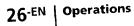




(2) Press 💮 .

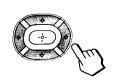


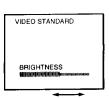




4 Adjust the selected item:

(1) Press \blacklozenge , \blacklozenge , \blacklozenge , or \blacklozenge to adjust the item.





(2) Press 🕒 .

The new setting appears in the VIDEO menu.



W	VIDEO MODE : S	TANDARD
5	PICTURE	
Ð	COLOR BRIGHTN SHARPNE	
6		E : HIGH
CC)	DIVIEINO	
Use	DA (±)	Exit 🔤

For details on each item, see "Description of adjustable items" below.

5 To adjust other items, repeat steps 3 and 4.

6 Press MENU to return to the original screen.

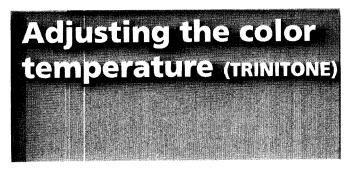
Description of adjustable items

Item	Press + or + to	Press + or + to
PICTURE	Decrease picture contrast and give soft color.	Increase picture contrast and give vivid color.
HUE	Make picture tones become purplish.	Make picture tones become greenish.
COLOR	Decrease color intensity.	Increase color intensity.
BRIGHTNES	S Darken the picture.	Brighten the picture.
SHARPNESS	Soften the picture.	Sharpen the picture.

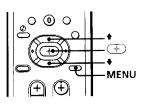
To restore the factory settings

Press RESET after displaying and selecting the VIDEO menu.

All of the settings are restored to the factory settings.

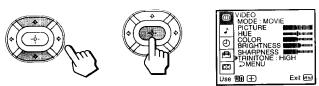


The TRINITONE feature controls the color temperature, permitting white balance preference adjustment without affecting skin tones.

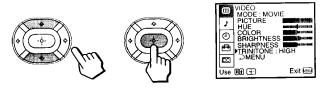


- **1** Press MENU.
- 2 Press ★ or ★ to select in and press (...).

3 Press ★ or ★ to select TRINITONE and press ↔.



4 Press ★ or ★ to select NTSC STD, MEDIUM, or HIGH and press ⊕.



Choose	То
HIGH	a cool (bluish) white.
MEDIUM	a neutral white.
NTSC STD	a warm (reddish) white.



The video mode feature allows you to choose three different modes of picture settings. Choose the one that best suits the type of program that you want to watch.

- **1** Press MENU.
- **2** Press + or + to select III, and press -.
- **3** Press + or + to select MODE, and press 💮 .
- 4 Press ★ or ★ to select STANDARD, MOVIE, or SPORTS mode, and press ⊕.



Choose	То	
STANDARD	Receive a standard picture.	
MOVIE	Receive a finely detailed picture.	
SPORTS	Receive a vivid, bright picture.	

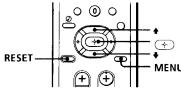
5 Press MENU to return to the original screen.

Note

• The settings for these modes can be adjusted in the VIDEO menu.



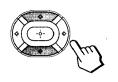
You can adjust the quality of the TV sound to suit your taste. You can adjust the sound of the video input(s) as well.



- **1** Press MENU.
- **2** Press **↑** or **↓** to select ♪, and press ④.



3 Select the item you want to adjust. For example:





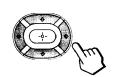
(2) Press 💮 .



AUDIO
HEIGHTHEIGHTEIGHEIGHEIGHEIG

4 Adjust the selected item:

(1) Press \blacklozenge , \blacklozenge , \blacklozenge , or \blacklozenge to adjust the item.





(2) Press 🕂 .

The new setting appears in the AUDIO menu.





For details on each item, see "Description of adjustable items" below.

5 To adjust other items, repeat steps 3 and 4.

6 Press MENU to return to the original screen.

Description of adjustable items

Item	Press + or + to	Press + or + to
TREBLE	Decrease the treble response.	Increase the treble response.
BASS	Decrease the bass response.	Increase the bass response.
BALANCE	Emphasize the left speaker's volume.	Emphasize the right speaker's volume.

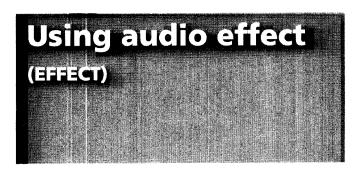
To restore the factory settings

Press RESET after displaying and selecting the AUDIO menu.

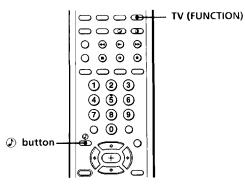
All of the settings are restored to the factory settings.

Note

• When SPEAKER (page **31**) is OFF and AUDIO OUT (page **32**) is in the FIXED condition, the volume, TREBLE, BASS, and BALANCE cannot be adjusted.







EN

1 Press TV (FUNCTION).

2 Press D.

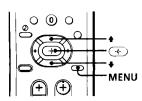
Each time you press the D button, the display changes as follows:

SRS
$$\rightarrow$$
 SIMULATED \rightarrow EFFECT OFF

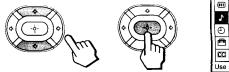


Choose	То
SRS	When the program's audio signal is stereo or encoded, SRS expands the material and embraces you with dynamic three- dimensional sound.
SIMULATED	Recieve monaural sound with a surrond-like effect.
EFFECT OFF	Cancel audio effect.

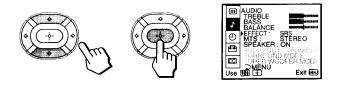
Using the menu to set audio effect



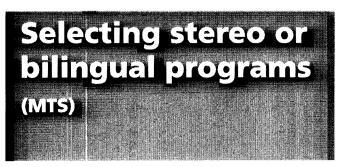
- **1** Press MENU.
- **2** Press **+** or **+** to select ♪, and press ⊕.
- **3** Press **↑** or **↓** to select EFFECT, and press (...).



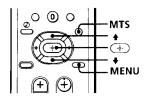




5 Press MENU to return to the original screen.



The Multichannel TV Sound (MTS) feature allows you to enjoy stereo sound or Second Audio Programs (SAP) of your choice. The initial setting is stereo sound (STEREO).



Press MTS repeatedly to select STEREO, SAP, or MONO.

STEREO→SAP→MONO

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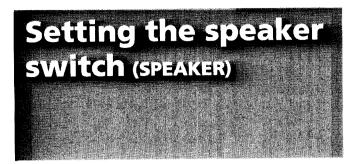
Choose	То
STEREO	Listen to stereo sound. The STEREO indicator on the projection TV lights up when a stereo broadcast is received.
SAP	Listen to bilingual programs. There is no sound when the SAP signal is not broadcasting.
MONO	Listen to monaural sound. Reduce noise during stereo broadcasts.

Note

• Stereo and SAP sounds are subject to program sources.

To set MTS using the menu

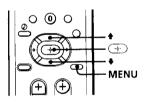
- 1 Press MENU.
- **2** Press \blacklozenge or \blacklozenge to select \blacklozenge , and press \boxdot .
- **3** Press \blacklozenge or \blacklozenge to select MTS, and press \diamondsuit .
- **4** Press **♦** or **♦** to select STEREO, SAP, or MONO.
- **5** Press MENU to return to the original screen.



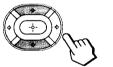
You may switch off the projection TV speakers when, for example, you want to listen to the sound through a stereo system.

If you connect an amplifier with Dolby Pro Logic decoder to the CENTER SPEAKER IN terminals, you can use the projection TV speakers as center speaker. After making the connection (page **12**), set SPEAKER to CENTER. (Use your amplifier volume control to adjust the volume level.)

If you connect the Sony SAVA series speaker system to the AUDIO (VAR/FIX) OUT connectors, you can take advantage of the speakers' surround sound and super woofer mode. After making the connections (page **13**), set SPEAKER to SAVA SP, then adjust SURROUND MODE or SUPER WOOFER MODE.



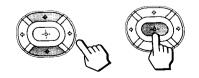
- **1** Press MENU.
- **2** Press **+** or **+** to select ♪, and press ④.







4 Press ★ or ★ to select ON, OFF, CENTER or SAVA SP, and press ⊕.





5 Press MENU to return to the original screen.

Choose	То
<u>ON</u>	Listen to the sound from the
	projection TV.
OFF	Turn off the projection TV speaker
	sound and listen to the projection
	TV's sound solely through the audio
	system speakers.
CENTER	Use the projection TV center speakers
	as the center speaker in another
	surround audio system.
SAVA SP	Turn off the projection TV speaker
	sound and listen to the projection
	TV's sound through the Sony SAVA
	series speaker system. You can adjust
	volume, muting, surround modes,
	and super woofer mode with the
	remote control supplied with the
	projection TV.

To select surround sound or super woofer mode of the SAVA speaker system (requires Sony SAVA SURROUND SPEAKERS)

After setting SPEAKER to SAVA SP, follow the procedure below.

Press ← or ← to select SURROUND MODE or SUPER WOOFER MODE, and press ④.

For details on each option, refer to the operating instructions of the speaker system.



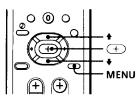
Note

 This feature is only for Sony SAVA speaker system with an operation capability for KP-48V45, KP-53V45, and KP-61V45.

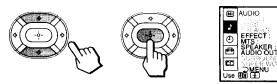


You can change AUDIO OUT to VARIABLE or FIXED when SPEAKER is set to OFF.

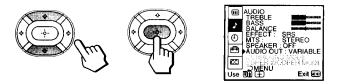
AUDIO OUT is variable when SPEAKER is set to ON.



- **1** Press MENU.
- **2** Press + or + to select ♪, and press ⊕.



4 Press + or + to select VARIABLE or FIXED, and press ⊕.



VARIABLE: Sound output varied according to the projection TV settings. You can adjust the volume, bass, treble, and balance.
FIXED: Sound output is always fixed to a certain level. The volume, bass, treble, and balance are also fixed to the factory settings.

5 Press MENU to return to the original screen.

Note

• If AUDIO OUT appears in gray, set SPEAKER to OFF.



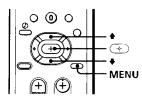
If your area uses daylight saving time, change DAYLIGHT SAVING setting depending on the season, before setting the current time.

Daylight saving start

• After the first Sunday in April, set DAYLIGHT SAVING to YES. Current time setting (right column) automatically moves one hour ahead.

Daylight saving end

• After the last Sunday in October, set DAYLIGHT SAVING to NO. Current time setting automatically moves one hour back.

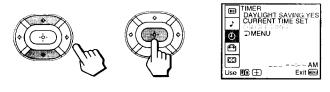


1 Press MENU.

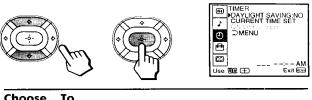
(·•·).

Exit Now

- 2 Press + or + to select ⊕, and press
- **3** Press **♦** or **♦** to select DAYLIGHT SAVING, and press ⊕.



4 Press + or + to select YES or NO, and press

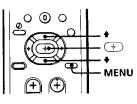


Choose	10
YES	Set for daylight saving start.
NO	Set for daylight saving end.

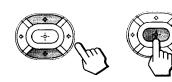
5 Press MENU to return to the original screen.

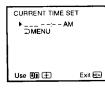


Setting the clock enables you to turn the projection TV on and off with the timer. Make sure to set daylight saving time first.



- **1** Press MENU.
- **2** Press \bullet or \bullet to select \oplus , and press \oplus .
- **3** Press ★ or ★ to select CURRENT TIME SET, and press ④.





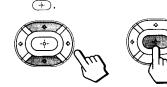
4 Make sure the cursor (►) is to the left of "--:-- AM," and press ④.





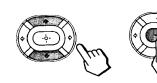
5 Set the current day of the week and time.

(1) Press \blacklozenge or \blacklozenge to set the day of the week, and press





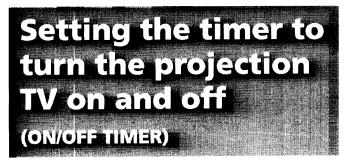
(2) Set the hour and minutes in the same way as in step (1). When you press (→) after setting the minutes, the clock starts.



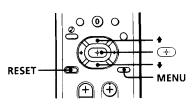


Exit 📖

6 Press MENU to return to the original screen.



You can set the projection TV to turn on and off at the time and channel you specify. Make sure the clock is set correctly. If it is not, set the clock first (left column).



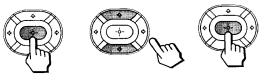
- **1** Press MENU.
- **2** Press **+** or **+** to select ⊕, and press **.**.
- **3** Press ♦ or ♦ to select ON/OFF TIMER, and press ⊕.



- **4** Press → and enter the ON/OFF TIMER setting.
 - (1) Press \blacklozenge or \blacklozenge to set the day(s), and press $\textcircled{\bullet}$.

Each time you press \blacklozenge or \blacklozenge , the days cycle as follows:

EVERY SUN-SAT \rightarrow EVERY MON-FRI \rightarrow SUNDAY \rightarrow ... \rightarrow SATURDAY \rightarrow EVERY SUNDAY \rightarrow ... \rightarrow EVERY SATURDAY

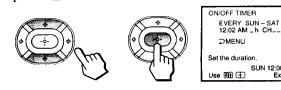


ON/OFF TIME	
EVERY SI 12:00 AM	UN-SAT _h CH
⊃MENU	
Set the time.	
Use 💵 🕀	SUN 12:00 AM Exit

(continued)



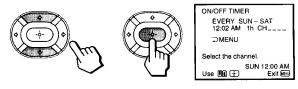
(2) Press \blacklozenge or \blacklozenge to set the time (hour then minutes) that you want to turn on the projection TV, and press (+).



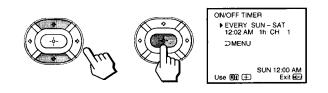
(3) Press \blacklozenge or \blacklozenge to set the time duration, and press (·•;·).

SUN 12:00 AM Exit Est

Each time you press \blacklozenge , the time duration increases by one hour up to a maximum of six hours.



(4) Press \blacklozenge or \blacklozenge to select the channel, and press \bigcirc .



The TIMER indicator on the projection TV lights up.

5 To set the other program, press (\cdot, \cdot) , and repeat step 4.

6 Press MENU to return to the original screen.

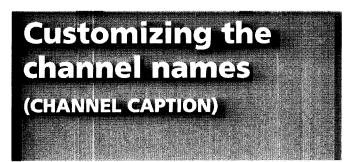
One minute before the projection TV turns off, the message "TV will turn off soon." is displayed on the screen.

To cancel the timer

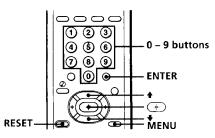
In step 3 or 4, press RESET.

Note

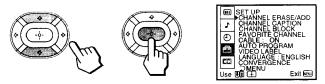
• If you unplug the projection TV or a power interruption occurs, the ON/OFF TIMER setting will be erased. Reset the current time, then set the timer.



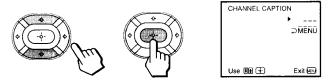
You can add a caption for up to 12 channels. This feature allows you to easily identify which channel you are watching. You can make your own caption.



- **1** Press MENU.
- Press + or + to select 善, and press ↔.



3 Press + or + to select CHANNEL CAPTION, and press \odot .



4 Press → and press + or + to select the channel that you want to caption, and press 📀.

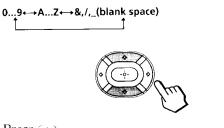




CHANNEL CAPTIO	ЭN
	125
	⊃MĒNŪ
1	
Select the letter.	
Use 🗓 🕀	Exit 📾
	_

- **5** Enter the letters (up to four) to caption the channel:
 - (1) Press \blacklozenge or \blacklozenge to select the first letter.

Each time you press \blacklozenge or \blacklozenge , the letter changes as follows:



(2) Press (-).





(3) Repeat steps (1) and (2) to select the remaining letters, and press .

6 Repeat steps 4 and 5 to caption other channels.

7 Press MENU to return to the original screen.

After you customize the channel, the channel caption appears green.

To erase a caption

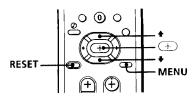
In step 5, press RESET.

Notes

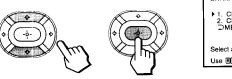
- If the CHANNEL CAPTION menu appears in gray, the projection TV is set to a video input, and you cannot select CHANNEL CAPTION. Press TV (black button) so that a channel number appears.
- If more than 90 seconds elapse after you press a button, the menu disappears automatically.
- The channel caption feature is not available for the AUX input.



The channel block feature allows you to prevent children from watching unsuitable programs. You can block out two channels.

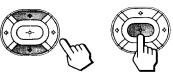


- **1** Press MENU.
- 2 Press ♠ or ♦ to select 🖻, and press 💮.
- Press + or + to select CHANNEL BLOCK, and press 🕞.

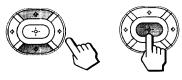


CHANNEL BLOCK 1. CH.... 2. CH.... ⊇MENU Select a program Use 💵 🛨 Exit March EN

4 Press + or + to select program 1 or 2, and press 💿.



Press + or + to select the channel which you 5 want to block out, and press 🕘.



6 Press MENU to return to the original screen.

When you select the blocked channel, the message "BLOCKED' appears on the screen.



To cancel a CHANNEL BLOCK setting

In step 4 or 5, press RESET.

Note

 Once you use CHANNEL BLOCK, Caption Vision and XDS of the blocked channel and the selected channel output from MONITOR OUT are also blocked out.

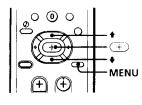
35-EN Operations



The favorite channel feature allows your projection TV to memorize your favorite channels easily. If you set to AUTO, the last eight channels you selected with the 0-9 buttons are automatically set as your favorite channels. If you want to input your own

selection of channels, set to MANUAL.

Setting your favorite channels

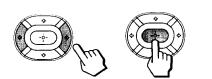


- **1** Press MENU.
- 2 Press ♠ or ♥ to select ඏ, and press 💮.
- **3** Press + or + to select FAVORITE CHANNEL, and press .





4 Press → and press + or + to select AUTO or MANUAL, and press →.

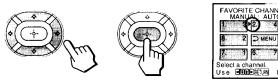


FAVORITE CHANN	IEL O
1. 32. 4	3. 1
8, 2 D MENU	4. 10
7. 1 6. 7	5. 14
Select a position.	Evit Man

If you select AUTO, skip steps 5 to 7.

The last eight channels you selected with the 0-9 buttons are automatically set as your favorite channels.

If you select MANUAL, the favorite channel numbers become white, indicating that favorite channels can be entered. 5 Press +, +, + or + to select a favorite channel number, and press ⊕.



6 Press ★ or ★ to select the channel that you want to set as your favorite channel, and press ⊕.



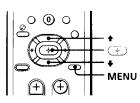
7 To set the other favorite channels, repeat steps 5 and 6.

8 Press MENU to return to the original screen.

Notes

- If more than 90 seconds elapse after you press another button, the menu disappears automatically.
- The favorite channel feature is not available for the AUX input.

Selecting your favorite channel



Press 🕒.

The picture of the current channel is displayed in the center with a pink frame and the eight favorite channels are displayed around it.



Å 3	Rec 1 5 Ilouin - 2 99 Sugar - 1 2 99 Sugar - 1 2 99 Sugar - 1 2 99 Sugar - 1 2 99	é.
		₩, } }
1 1	The second	14

2 Press ★, ★, ★ or ★ to move the pink frame to the channel you want to watch, and press

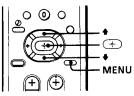
· · ·

The selected channel appears on the screen.

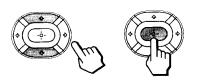




The video label feature allows you to label each input mode so that you can easily identify the connected equipment. For example, you can label VIDEO 1 as VHS.



- **1** Press MENU.
- **2** Press \bullet or \bullet to select e, and press e.
- **3** Press ★ or ★ to select VIDEO LABEL, and press ④.

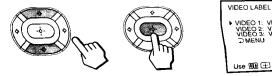




4 Press ★ or ★ to select the input mode you want to label, and press ⊕.



5 Press + or + to select the label, and press .





Each time you press \blacklozenge or \blacklozenge , the label changes as follows:



```
VIDEO 1 \leftrightarrow VHS \leftrightarrow 8 mm \leftrightarrow BETA

\uparrow \uparrow

DBS \leftrightarrow DVD \leftrightarrow S VIDEO \leftrightarrow LD

VIDEO 2

VIDEO 2 \leftrightarrow VHS \leftrightarrow 8 mm \leftrightarrow BETA

\uparrow \uparrow

DBS \leftrightarrow DVD \leftrightarrow S VIDEO \leftrightarrow LD
```

VIDEO 3

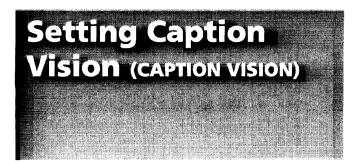
```
VIDEO 3 \leftrightarrow VHS \leftrightarrow 8 mm \leftrightarrow BETA

\downarrow \rightarrow DBS \leftrightarrow DVD \leftrightarrow LD \leftarrow \downarrow
```

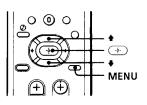
6 Repeat steps 4 and 5 to label other input modes.

Note

• If more than 90 seconds elapse before you press another button, the menu disappears automatically.



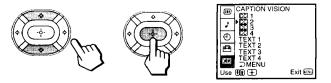
Some programs are broadcast with Caption Vision. To display Caption Vision, select either CC1, CC2, CC3, CC4, TEXT1, TEXT2, TEXT3, or TEXT4 from the menu. CC1, CC2, CC3, or CC4 shows you on-screen version of the dialogue or sound effects of a program. (The mode should be set to CC1 for most programs.) TEXT1, TEXT2, TEXT3, or TEXT4 shows you on-screen information presented using either half or the whole screen. It is not usually related to the program.



- **1** Press MENU.
- **2** Press **↑** or **↓** to select ^{ICC}, and press **④**.



3 Press **→** or **→** to select the caption type, and press (...).



4 Press MENU to return to the original screen.

To display Caption Vision

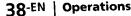
Press DISPLAY. (See page 23 for details.)

Notes

• 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 a certain word.

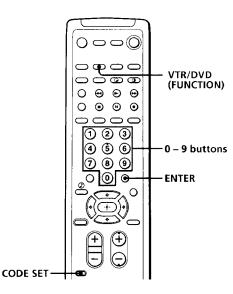
- XDS, Caption Vision, and the status display cannot be used at the same time.
- For details on XDS, see page 23.





You can use the supplied remote control to operate Sony or non-Sony video equipment that has an infrared remote sensor. For this operation, set the manufacturer's code number.

Setting the manufacturer's code



Press the CODE SET, VTR/DVD (FUNCTION), and 0 – 9 buttons to enter the manufacturer's code number (see the chart on page 39), then press ENTER.

For example, to operate a Sony 8 mm VCR, press CODE SET, VTR/DVD (FUNCTION), 3, 0, 2, and ENTER.



VCR manufacturer code numbers

Manufacturer	Code number
Sony	301, 302, 303
Aiwa	338
Audio Dynamic	314, 337
Bell & Howell (M. Wards)	330, 343
Brocsonic	319
Canon	309, 308
Citizen	332
Craig	315, 302, 332
Curtis Mathis	304, 338, 309
Daewoo	341, 312, 309
DBX	314, 336, 337
Dimensia	304 319, 3 2 0, 316, 317, 318
Emerson Fisher	330, 334, 335, 333
Funai	338
General Electric	329, 304, 309
Goldstar	332
Hitachi	306, 304, 305
Instant Replay	309, 308
JC Penny	309, 305, 304, 330, 314,
	336, 337
JVC	314, 336, 337
Kenwood	314, 336, 332, 337
LXI (Sears)	332, 305, 333, 334, 330,
	335
Magnavox	308, 309
Marantz	314, 336, 337
Marta	332
Memorex	309, 335
Minolta	305, 304
Mitsubishi/MGA	323, 324, 325, 326
Multitech	325, 338, 321 314, 336, 337
NEC	309, 308
Olympic Panasonic	308, 309, 306, 307
Pentax	305, 304
Philco	308, 309
Philips	308, 309
Pioneer	308
Quasar	308, 309
RCA/PROSCAN	304, 305, 308, 309, 311,
	312, 313
Realistic	309, 330, 328, 335, 324,
	338
Sansui	314
Singer	315
Samsung	322, 313, 321
Sanyo	330, 335
Scott	312, 313, 321, 335, 323,
	324, 325, 326 327, 328
Sharp	327, 328 315
Shintom	315 338, 327
Signature 2000 (M. Wards) Sylvania	308, 309, 338
Sylvania Symphonic	338
Tashiro	332
Tatung	314, 336, 337
Teac	314, 336, 338, 337
	309, 308
Technics	
Technics Toshiba	312, 311
Technics Toshiba Wards	312, 311 327, 328, 335, 331, 332
Toshiba	312, 311

MDP manufacturer code numbers

Manufacturer	Code number	
Sony	701	
Kenwood	707	
Magnavox	703	
Maranz	702	
Mitsubishi	702	
Panasonic	704	
Philips	703	
Pioneer	702	
RCA	702	
Sanyo	706	
Sharp	705	
Yamaha	703	

DVD manufacturer code numbers

Manufacturer	Code number	
Sony	751	

Notes

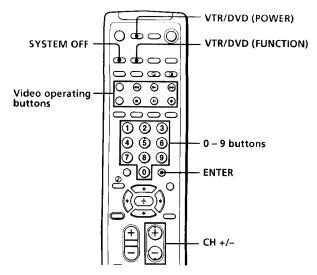
- If more than one code number is listed, try entering them one by one, until you come to the correct code for your equipment.
- In some rare cases, you may not be able to operate your non-Sony video equipment with the supplied remote control. This is because your equipment may use a code that is not included with this remote control. In this case, please use the equipment's own remote control unit.
- The code numbers for Sony equipment are assigned at the factory as follows:
 VHS VCR 301 (preset code for the supplied

	(preset code for the supplied remote control)
302	

8 mm VCR	302
Beta, ED Beta VCRs	303

• Whenever you remove the batteries — to replace them, for example — if too much time is taken, the code number may revert to the factory setting and must be reset.

Operating video equipment



Use the video operating buttons on the remote control to operate the video equipment. Press VTR (FUNCTION) before operating the video equipment.

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 ► while pressing ●. First release ►, then release ●.	
To play	Press ►.	
To stop	Press .	
To fast forward	Press D.	
To rewind the tape	Press 📢.	
To pause	Press II. To resume normal playback, press again	
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.	

Operating an MDP Buttons on the remote control		
To turn on or off	Press VTR (POWER).	
To play	Press ►.	
To stop	Press .	
To pause	Press II. To resume normal playback, press again	
To search the picture forward or backward	Keep pressing ►► or ◄◀ during playback. To resume normal playback, release the button.	
To search the chapter forward and backward	Press CH +/	

Operating an DVD	Buttons on the remote control	
To turn on or off	Press VTR (POWER).	
To play	Press ►.	
To stop	Press .	
To pause	Press II. To resume normal playback, press again	
To search the picture forward or backward	Keep pressing → or ◀◀ during playback. To resume normal playback, release the button.	

Note

• If the video equipment does not have a certain function, the corresponding button on this remote control will not operate.

Turning off the system

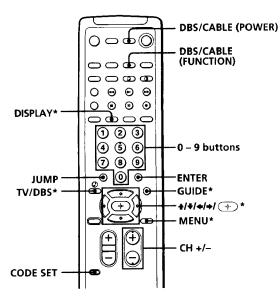
You can turn off the projection TV and Sony equipment with the S-Link function, such as a VCR, together when you make the S-Link connection (see page **14** for the connection).

Press SYSTEM OFF.



Operating a cable box or DBS receiver

You can program the supplied remote control to operate a cable box or DBS receiver. Follow the procedures below to set the manufacturer's code number in the remote control.



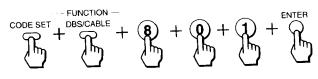
* The TV/DBS, GUIDE, DISPLAY, ♦/♦/♦/↔/↔, and MENU buttons can be used only with a DBS receiver.

1 Turn off the equipment you want to set up, and press DBS/CABLE (FUNCTION).



2 Press the CODE SET, DBS/CABLE (FUNCTION), and 0 – 9 buttons to enter the manufacturer's code number (see the chart on the right column), then press ENTER. For

example, to program your remote control to operate a Sony DBS receiver, press CODE SET, DBS/CABLE (FUNCTION), 8, 0, 1, and ENTER.



3 Press DBS/CABLE (POWER) to turn on the cable box or DBS receiver.



4 Use the cable box/DBS control buttons to check if the code number works.

For example, to operate a cable box or DBS receiver, you can use the DBS/CABLE (POWER), JUMP, CH +/-, 0-9 and ENTER buttons.

Note

• If the cable box or DBS receiver does not have a certain function, the corresponding button on this remote control will not operate.

To operate the projection TV

Press TV (FUNCTION). Then use the projection TV control buttons to control the projection TV.

For more details on operating the cable box or DBS receiver

Refer to the operating instructions that come with the equipment.

If the remote control doesn't work

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

Manufacturer code numbers (cable box)

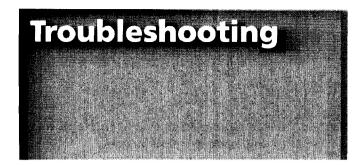
Manufacturer	Code number	
Hamlin/Regal	222, 223, 224, 225, 226	
Jerrold/G. I.	201, 202, 203, 204, 205, 206, 207, 208 218	
Oak	227, 228, 229	
Panasonic	219, 220, 221	
Pioneer	214, 215	
Scientific Atlanta	209, 210, 211	
Tocom	216, 217	
Zenith	212, 213	

Manufacturer code numbers (DBS receiver)

Manufacturer	Code number
Sony	801 (preset code for the supplied remote control)
RCA	802

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 you previously entered at that setting is erased.
- In some rare cases, your equipment may use a code that is not provided with this remote control and 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 to replace them, for example if too much time is taken, the code numbers may revert to the factory setting and must be reset.



If the problem persists after trying the methods below, contact your nearest Sony dealer.

No picture (screen not lit), no sound

- Make sure the power cord is connected securely.
- Operate with the buttons on the projection TV.
- Insert the batteries in the remote control with the correct polarity.
- → Replace the batteries with new ones if they are weak.
- Check to see if the TV/VIDEO setting is correct: when watching TV, set to TV, and when watching video tapes, set to VIDEO1, 2, or 3.
- → Try another channel. It could be station trouble.
- Perform AUTO SET UP again using the SETUP button to return to the factory preset condition. (page 17)

Poor or no picture (screen lit), good sound

- → Adjust PICTURE in the VIDEO menu. (page 26)
 → Adjust BRIGHTNESS in the VIDEO menu.
- (page **26**) → Adjust convergence. (page **19**)
- → Check antenna/cable connections. (page 6)
- Perform AUTO SET UP again using the SETUP button to return to the factory preset condition. (page 17)
- Remove objects from the front of the projection TV.

Good picture, no sound

- ➡ Press MUTING so that "MUTING" disappears from the screen. (page 22)
- Check the MTS setting in the AUDIO menu. (page 30)
- ➡ Make sure SPEAKER is set to ON in the AUDIO menu. (page 31)
- ➡ Perform AUTO SET UP again using the SETUP button to return to the factory preset condition. (page 17)

No color

- Adjust the COLOR in the VIDEO menu. (page 27)
- Confirm that black and white program is not being broadcast.
- Perform AUTO SET UP again using the SETUP button to return to the factory preset condition. (page 17)

Only snow and noise appear on the screen

- Check the CABLE setting in the SET UP menu. (page 20)
 - Check the antenna/cable connections. (page 6)
 - Make sure the channel is broadcasting programs.
 - Press ANT to change the input mode. (page 23)

Dotted lines or stripes

- ➡ Adjust the antenna.
- Move the projection TV away from noise sources such as cars, neon signs, and hairdryers.

Double images or ghosts

Use a highly directional outdoor antenna or a cable (when the problem is caused by reflections from nearby mountains or tall buildings).

Cannot operate menu

- If the item you want to choose appears in gray, you cannot select it. Press TV/VIDEO correctly.
- Check the CABLE setting in the SET UP menu. (page 20)

Cannot receive upper channels (UHF) when using an antenna

- → Make sure CABLE is OFF in the SET UP menu. (page **20**)
- ➡ Use AUTO PROGRAM to add receivable channels that are not presently in projection TV memory. (pages 17, 21)

Cannot receive any channels when using cable TV

- → Make sure CABLE is ON in the SET UP menu. (page 20)
- Use AUTO PROGRAM to add receivable channels that are not presently in projection TV memory. (pages 17, 21)

Remote control does not operate

- ➡ Batteries could be weak. Replace the batteries. (page 16)
- Make sure the projection TV's power cord is connected securely to the wall outlet.
- Press TV (FUNCTION) when operating your projection TV.
- ➡ Are fluorescent lights too close to the projection TV? Move them at least 3-4 feet away from the projection TV.

Cannot gain enough volume when using a cable box

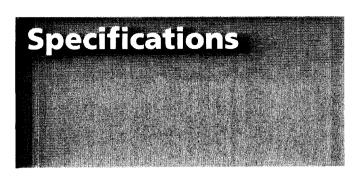
➡ Increase the volume at the cable box. Then press TV (FUNCTION) and adjust the projection TV's volume.

Projection TV malfunctions when using the S-Link function

- Make sure the projection TV's power cord is connected securely to the wall outlet.
- → Check the S-Link connection. (page 14)

The projection TV needs to be cleaned

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



Projection system	3 picture tubes, 3 lenses, horizontal in-line system	Speaker
Picture tube	7 inch high-brightness monochrome tubes (6.3 raster size), with optical coupling and liquid cooling system	Speaker o
Projection lenses	High performance, large- diameter hybrid lens F1.1	Douvor rog

Screen size (measured diagonally)

KP-48V45	48 inches	
KP-53V45	53 inches	
KP-61V45	61 inches	

Television system American TV standards

Channel coverage VHF: 2 – 13 / UHF: 14 – 69 / CATV: 1 – 125

Antenna

Inputs/output

terminal for VHF/UHF VIDEO IN 1 VIDEO 2 INPUT S VIDEO (4-pin mini DIN): Y: 1 Vp-p, 75-ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal) 75 ohms

75 ohm external antenna

VIDEO (phono jack): 1 Vp-p, 75-ohms unbalanced, sync negative

AUDIO (phono jacks): 500 mVrms (100% modulation) Impedance : 47 kilohms

VIDEO IN 3

VIDEO (phono jack): 1 Vp-p, 75-ohms unbalanced, sync negative

AUDIO (phono jacks): 500 mVrms (100% modulation) Impedance: 47 kilohms TV OUT MONITOR OUT VIDEO (phono jack): 1 Vp-p, 75-ohms unbalanced, sync negative AUDIO (phono jacks) 500 mVrms (100% modulation), Impedance: 10 kilohms AUDIO (VAR/FIX) OUT (phono jacks) 900 mVrms (100% modulation) Impedance: 5 kilohms Full range speaker 100 mm (3.9 inches) diameter

Speaker output $15 \text{ W} \times 2$

CENTER SPEAKER IN: 30 W × 1 (NORMAL), 60 W × 1 (MAX), 16 ohms

Power requirement

120 V, 60 Hz

Power consumption

175 W Standby mode: 3 W

	Dimensions(W/H/D)	Mass
KP-48V45	1,106 × 1,337 × 571 mm (43 ⁵ /8 × 52 ⁵ /8 × 22 ¹ /2 inches)	70 kg (154 lbs 5 oz)
KP-53V45	$1,218 \times 1,413 \times 614$ mm ($48 \times 55^{5}/8 \times 24^{1}/4$ inches)	73 kg (161 lbs 2 oz)
KP-61V45	1,338 × 1,506 × 642 mm (52 ³ /4 × 59 ³ /8 × 25 ³ /8 inches)	124 kg (273 lbs 9 oz)

Supplied accessories

Remote control RM-Y901 (1) Size AA (R6) battery (2)

Optional accessories

U/V mixer EAC-66 Connecting cables RK-74A, VMC-810S/ 820S, YC-15V/30V, VMC-720M

Design and specifications are subject to change without notice.

(●)[®] SRS (SOUND RETRIEVAL SYSTEM)

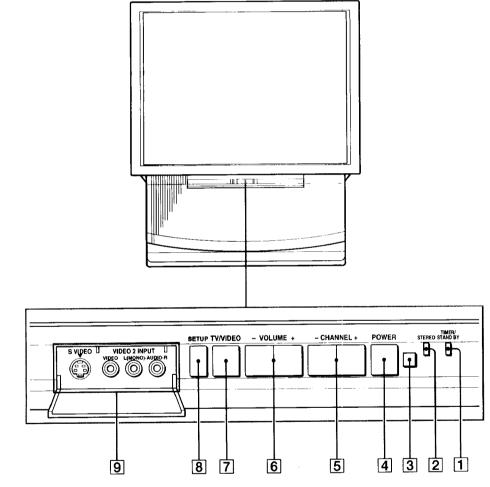
The (● SRS (SOUND RETRIEVAL SYSTEM) is manufactured by Sony Corporation under license from SRS Labs, Inc. It is covered by U.S. Patent No. 4,748,669. Other U.S. and foreign patents pendeing.

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



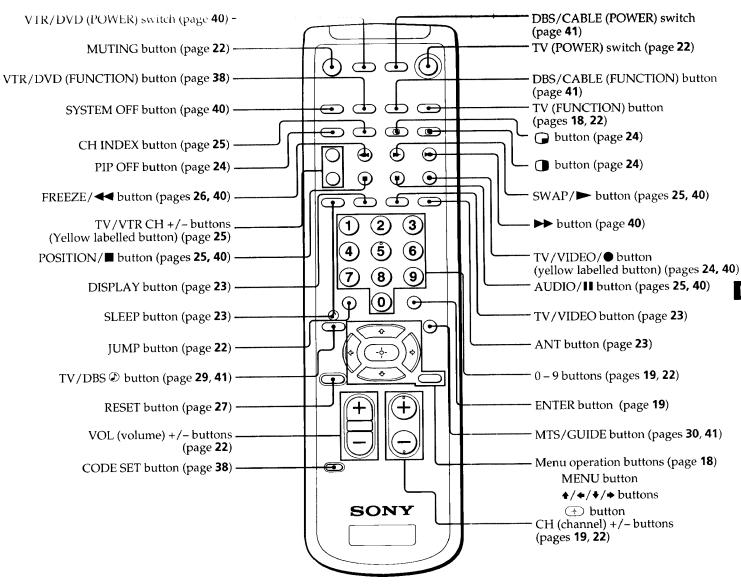
This section briefly describes the buttons and controls on the projection TV and on the remote control. For more information, refer to the pages next to each description.

Projection TV — Front



- 1 TIMER/STANDBY indicator (pages 22, 34)
- **2** STEREO indicator (page **30**)
- **3** Remote sensor
- **4** POWER switch (page **17**)
- **5** CHANNEL +/- buttons (page **17**)

- **6** VOLUME +/- buttons (page **17**)
- 7 TV/VIDEO button (page 17, 18)
- **8** SETUP button (page **17**)
- S VIDEO/VIDEO 2 INPUT (VIDEO/AUDIO L(MONO)/R) jacks (page 10)



Inclex

Adjusting the convergence 19 the picture 26 the sound 28 ANT 23 Antenna 6 Audio effect ② 29 Audio out **32** Auto program 21 Auto set up 17 AV receiver 15 Battery 16 Cable box 6 Cable TV 20 Caption Vision 38 Changing the menu language 21 Channel block **35** Channel caption 34 Current time set 33 Daylight savig time 32 DBS **9,41 DEMO 18** EFFECT 29 Erase/Add 18 Favorite channel 36 Hookup with a DBS receiver 9 with a VCR 7 with an antenna 6 with an audio system 10 without a VCR 6 Language 21 MTŠ (Multichannel TV Sound) 30 On/off timer 33 P&P (Picture-and-Picture) 24 PIP (Picture-in-Picture) 24 Presetting channels 21 Remote control 16 S-Link 14 SAP (Second Audio Program) 30 SAVA speaker 13, 31 Setting daylight saving time 32 the clock 33 SIMULATED mode 29 Sleep timer 23 STEREO indicator 30 SRS mode 29 Super woofer mode 31 Surround mode 31 **TEXT 38** TIMER/STANDBY indicator 22, 34 **Additional Information** 46-EN

Twin View^{1M} 24 Video label 37 Video mode 28 Watching TV 22 video tapes 23 XDS 23 Names of controls (+) button **18** (PIP) button 24 (P&P) button 24 ▶ button 40 0 – 9 buttons **19, 22** ANT button 23 AUDIO button 25 AUDIO (VAR/FIX) OUT jacks 13 AUX antenna terminal 6 CHANNEL +/- buttons 17 CH (channel) +/- buttons **19**, **22** CH INDEX button 25 CODE SET button 38 CONTROL S OUT jack 13, 14 CONVERTER antenna terminal 6 DBS/CABLE (FUNCTION) button 41 DBS/CABLE (POWER) switch 41 DISPLAY button 23 ENTER button 19 FREEZE button 26 JUMP button 22 MENU button 18 MONITOR OUT jacks 11 MTS/GUIDE button 30, 41 MUTING button 22 PIP OFF button 24 POSITION button 25 POWER switch 17 RESET button 27 SETUP button 17 S VIDEO input connector 8 S VIDEO/VIDEO 2 INPUT (VIDEO/AUDIO L (MONO)/R) jacks 10 SLEEP button 23 SWAP button 25 SYSTEM OFF button 40 TV / DBS ② button 29, 41 TV (FUNCTION) button 18, 22 TV (POWER) switch 22 TV/VIDEO button 23 TV/ VIDEO button (yellow labelled button) 24 TV/VTR CH +/- buttons (yellow labelled button) 25 VHF/UHF antenna terminal 6 VIDEO 1 IN jacks 7 VIDEO 2 INPUT jacks 10 VIDEO 3 IN jacks 7 VOLUME +/- buttons 17 VOL (volume) +/- buttons 22 VTR/DVD (FUNCTION) button 38 VTR/DVD (POWER) switch 40