SONY.

Color Rear Video Projector

Operating Instructions ——————————————————— **EN**

Manual de instrucciones ——————————————————— **ES**

KP-41T65
KP-48S65
KP-53S65
KP-61S65

© 1997 by Sony Corporation

WARNING

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

CAUTION
· RISK OF ELECTRIC SHOCK
DO NOT OPEN

ATTENTION
RISQUE DE CHOC ELECTRIQUE,
NE PAS OUVRIR

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 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.

2-EN

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 **14**.

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-Y136A.
MODELS: KP-41T65/48S65/53S65/61S65.

Please keep this notice with the instruction manual.

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

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. _____
Serial No. _____

Table of contents

Getting Started

Operations

EN

Additional Information

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 picture.
- Surround mode that simulates the sound quality of a concert hall or movie theater.
- 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.

About this manual

The instructions in this manual are for models KP-41T65, KP-48S65, KP-53S65, and KP-61S65. Before you start reading this manual, please check your model number, located at the rear of the projection TV. Model KP-53S65 is used for illustration purposes in this manual. Any differences in operation are clearly indicated in the text, for example "KP-61S65 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 TV 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.
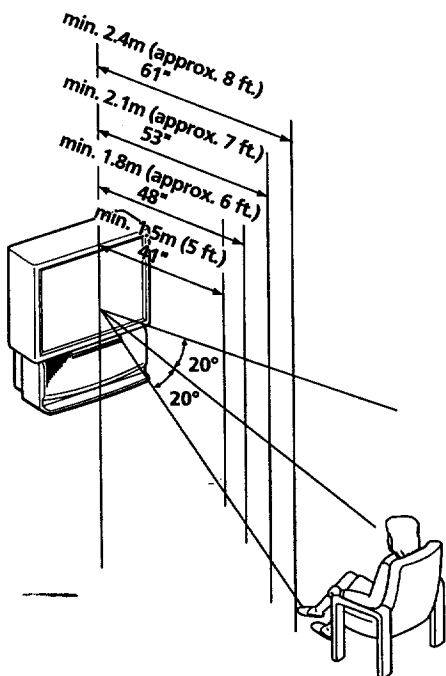
Step 1: Installing the projection TV

For the best picture quality, install the projection TV within the areas shown below.
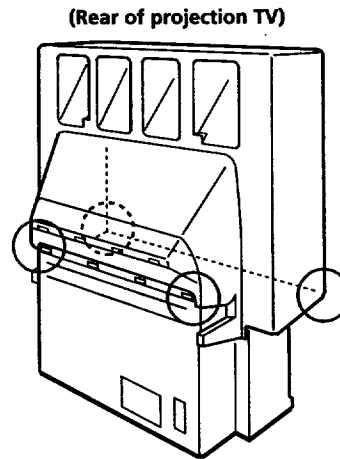
Optimum viewing area (Horizontal)
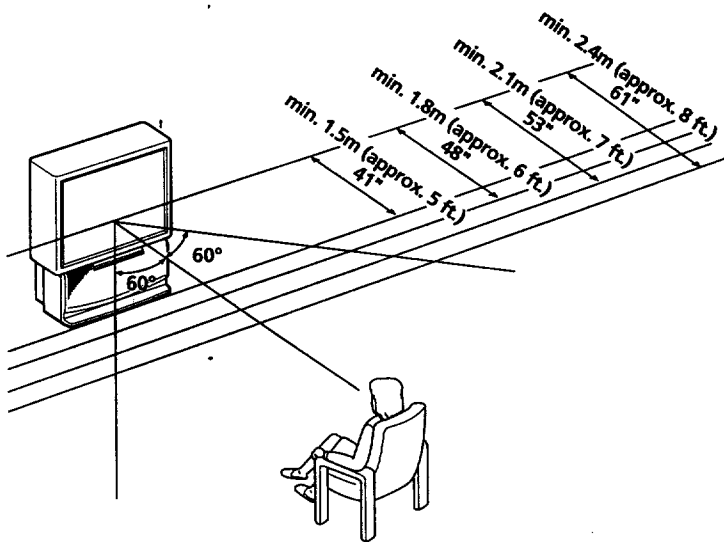
Optimum viewing area (Vertical)

Carrying your projection TV

■ *KP-41T65/48S65/53S65 only*

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

(Rear of projection TV)

■ *KP-61S65 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 **14**.

Step 2: Hookup

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.

A
- VHF only
  or
- VHF/UHF ·
  or
- Cable

75-ohm coaxial cable

(Rear of projection TV)
VHF/UHF

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

300-ohm twin lead cable

Antenna connector

(Rear of projection TV)
VHF/UHF

C
- VHF

and

- UHF

75-ohm coaxial cable

(Rear of projection TV)
VHF/UHF

EAC-66 U/V mixer
(not supplied)

300-ohm twin lead cable
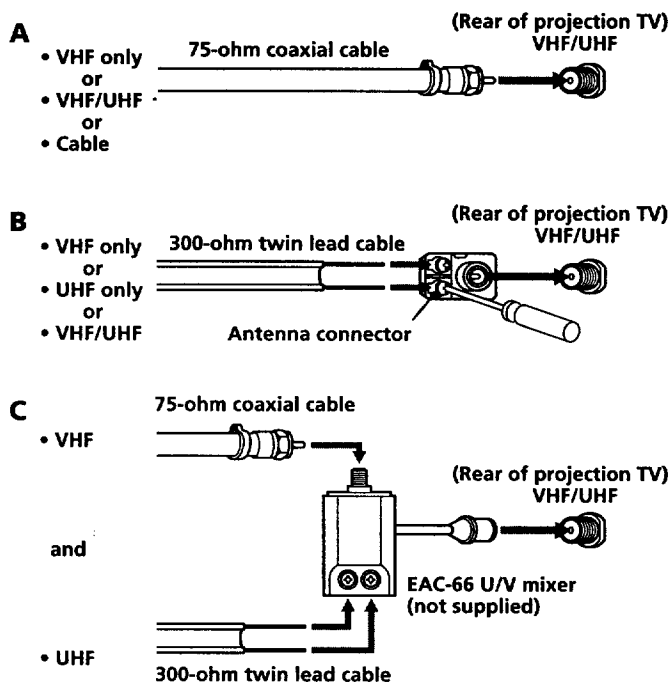
Notes
- Most VHF/UHF combination antennas have a signal splitter. Remove the splitter before attaching the appropriate connector.
- If you use the U/V mixer, snow and noise may appear in the picture when viewing cable TV channels over 37.
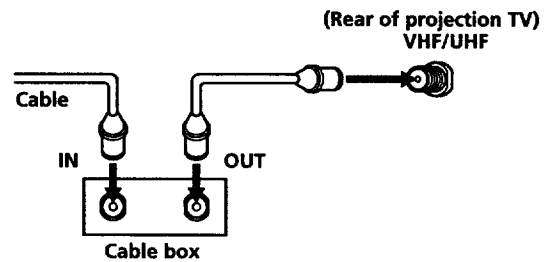
Connecting an antenna/cable TV system without a VCR
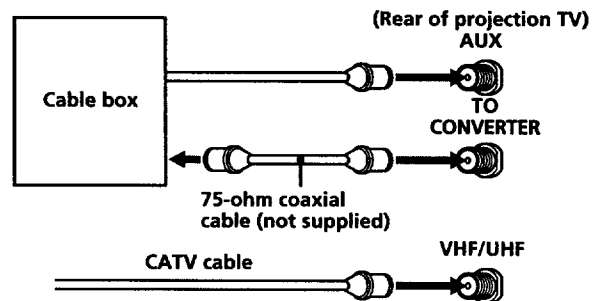
To cable or antenna

Cable

(Rear of projection TV)
VHF/UHF
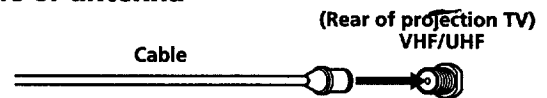
To cable box
If your cable company requires you to connect a cable box, make the connection as follows:

(Rear of projection TV)
VHF/UHF

Cable

IN   OUT

Cable box

To cable box and cable

Cable box

(Rear of projection TV)
AUX

TO
CONVERTER

75-ohm coaxial
cable (not supplied)

CATV cable

VHF/UHF

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

CATV cable

(Rear of projection TV)
AUX

TO
CONVERTER

Antenna cable

VHF/UHF
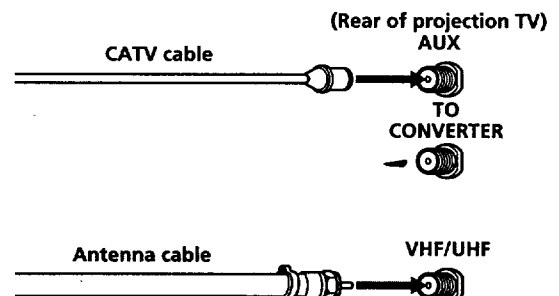
Note
- Do not connect anything to the TO CONVERTER connector in this case.

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.
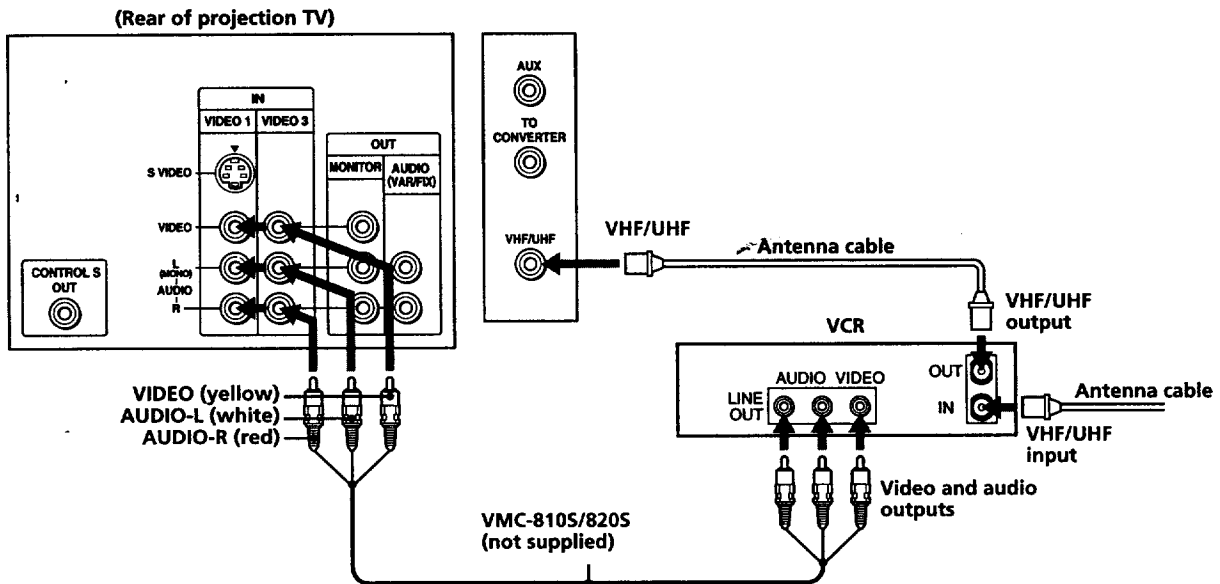
To a conventional VCR

Notes
• To connect a monaural VCR, connect the audio output of the VCR to AUDIO-L (MONO) of VIDEO 1/2/3 IN on the projection TV.
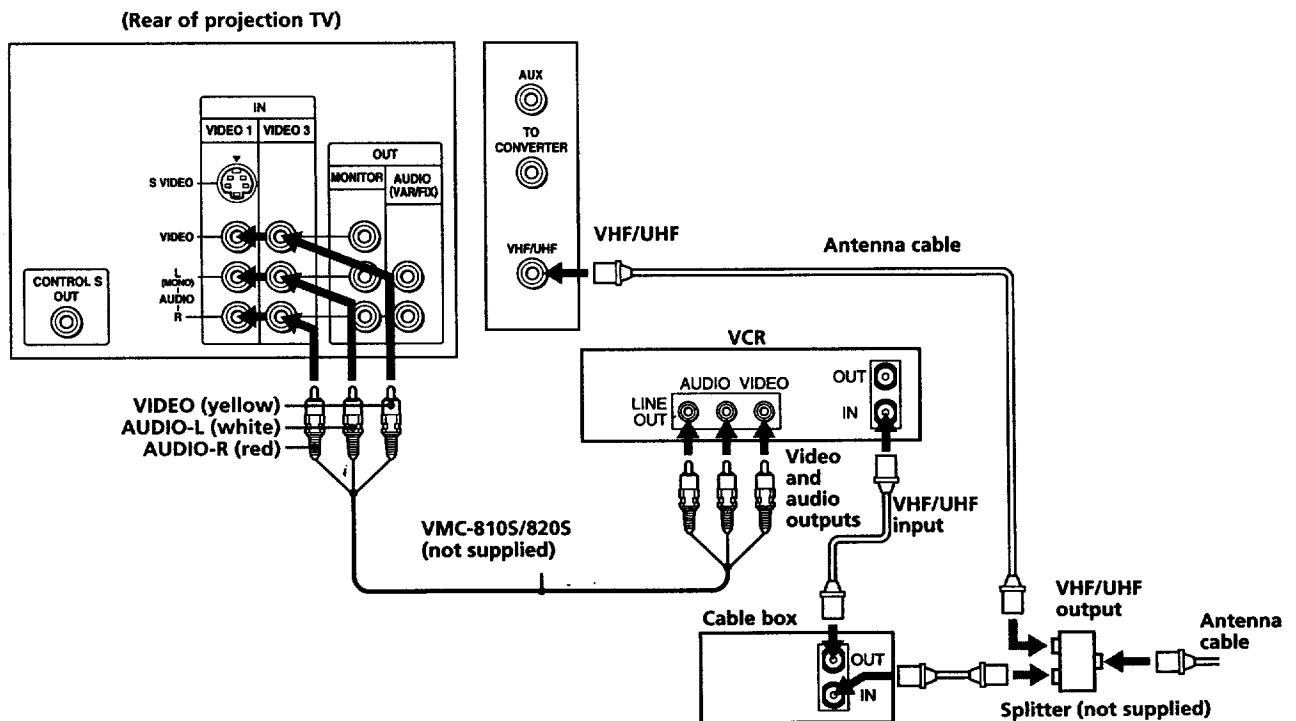
After making these connections, you will be able to do the following:
• View the playback of video tapes
• Record one TV program while viewing another program
• Watch two TV programs at once using PIP

Without a cable box

(Rear of projection TV)

VIDEO (yellow)
AUDIO-L (white)
AUDIO-R (red)

VMC-810S/820S
(not supplied)

VHF/UHF
Antenna cable
VHF/UHF output
VCR
AUDIO VIDEO
LINE OUT
OUT
IN
Antenna cable
VHF/UHF input
Video and audio outputs

With a cable box

(Rear of projection TV)

VIDEO (yellow)
AUDIO-L (white)
AUDIO-R (red)

VMC-810S/820S
(not supplied)

VHF/UHF
Antenna cable
VCR
AUDIO VIDEO
LINE OUT
OUT
IN
Video and audio outputs
VHF/UHF input
Cable box
OUT
IN
VHF/UHF output
Antenna cable
Splitter (not supplied)

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

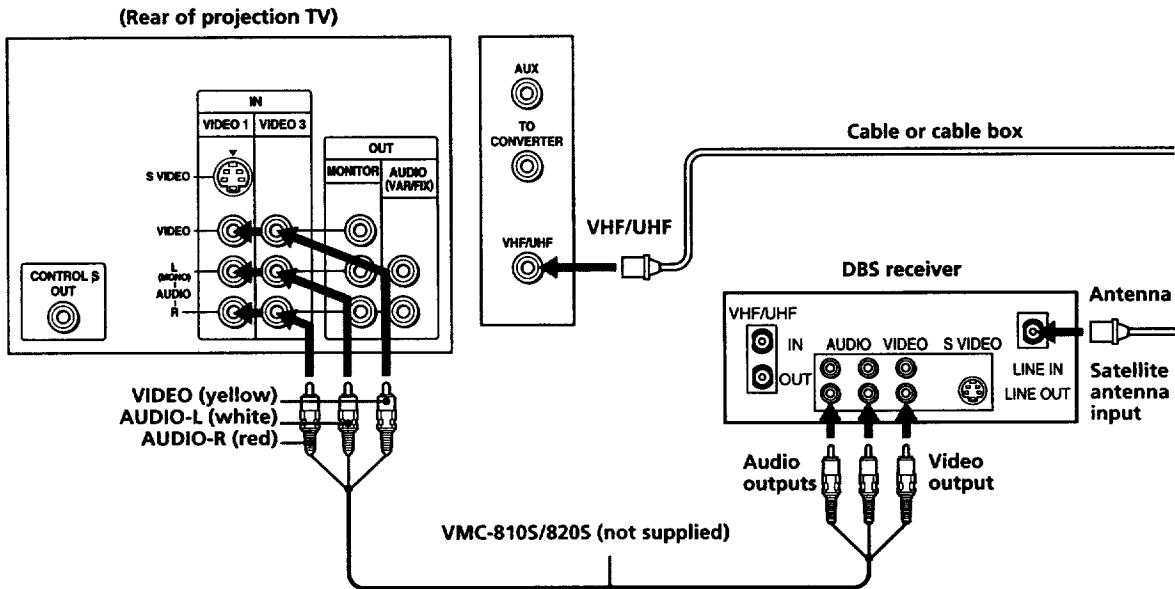(Rear of projection TV)

S VIDEO
AUDIO-L (white)
AUDIO-R (red)

RK-74A
(not supplied)

YC-15V/30V
(not supplied)

VHF/UHF

Antenna cable

VHF/UHF output

VCR

Antenna cable

VHF/UHF input

Audio outputs   S video output

With a cable box

(Rear of projection TV)

S VIDEO
AUDIO-L (white)
AUDIO-R (red)

RK-74A
(not supplied)

YC-15V/30V
(not supplied)

VHF/UHF

Antenna cable

VCR

Audio outputs   S video output   VHF/UHF input

Cable box

Splitter
(not supplied)

Antenna cable

Note

• 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

(Rear of projection TV)

Cable or cable box

DBS receiver

VIDEO (yellow)
AUDIO-L (white)
AUDIO-R (red)

Audio outputs   Video output

VMC-810S/820S (not supplied)

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

To a projection TV and VCR

Cable or cable box

DBS receiver

Antenna

Satellite antenna input

Audio outputs   Video output

Audio inputs   Video input   VCR

VHF/UHF IN

VHF/UHF OUT

Audio outputs   Video output

(Rear of projection TV)

VIDEO (yellow)
AUDIO-L (white)
AUDIO-R (red)

F-type cable (not supplied)

VMC-810S/820S (not supplied)
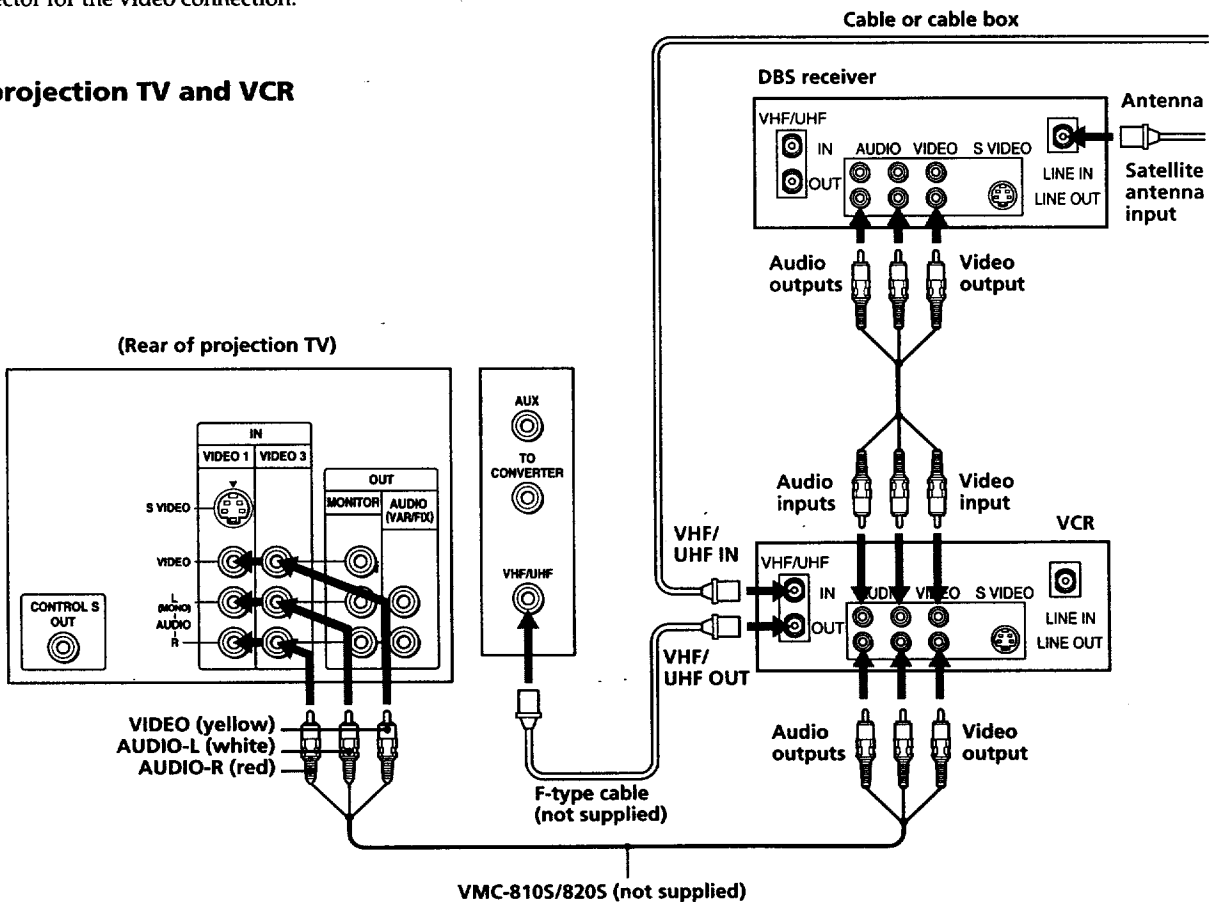
Connecting a camcorder

Use this connection to view a camcorder picture.

(Front of projection TV)

VIDEO (yellow) — AUDIO-R (red)

AUDIO-L (white)

Video and audio outputs VMC-810S/820S (not supplied)
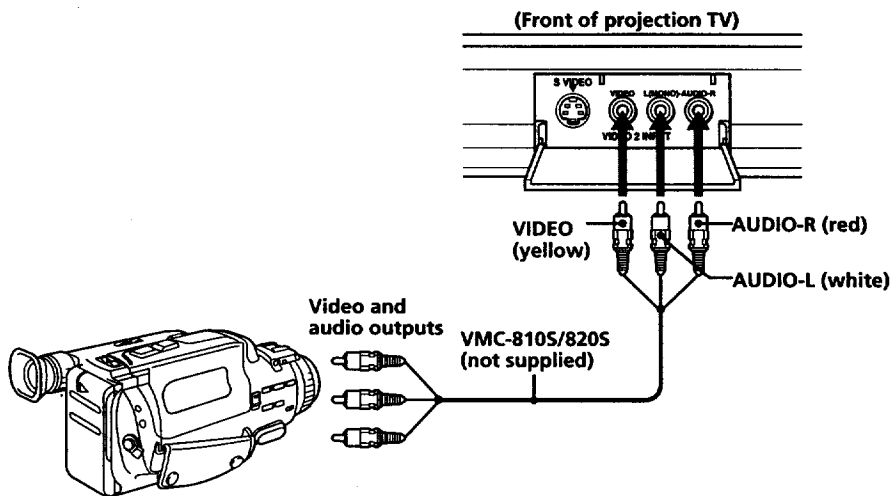
Note
* To connect a monaural camcorder, connect the audio output of the camcorder to AUDIO-L (MONO) of VIDEO 2 INPUT on the projection TV.

Connecting an audio system

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

(Rear of projection TV)

AUDIO OUT-L (white)

RK-74A (not supplied)

AUDIO OUT-R (red)

Set the amplifier's function to line input.

Line input

Stereo amplifier
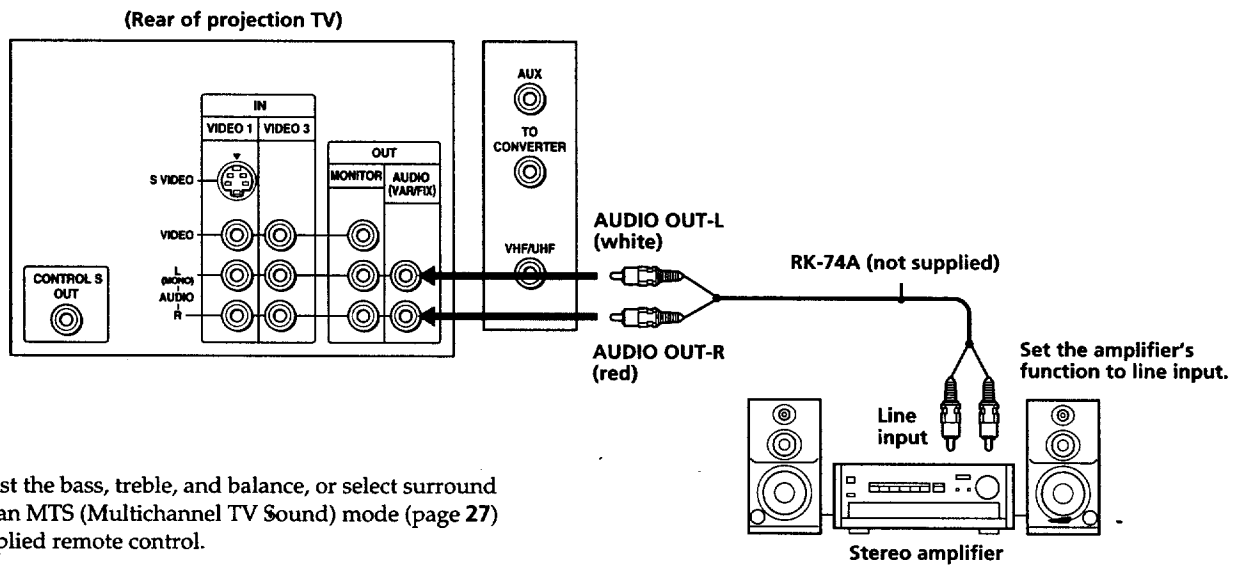
Note
* You can adjust the bass, treble, and balance, or select surround (page **26**) or an MTS (Multichannel TV Sound) mode (page **27**) with the supplied remote control.

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.

(Rear of projection TV)

VCR (for playback)

AUDIO VIDEO   OUT
LINE OUT   IN

Video and audio outputs

AUDIO-R (red)
AUDIO-L (white)
VIDEO (yellow)

VCR (for recording)

AUDIO VIDEO   OUT
LINE IN   IN

Video and audio inputs

VMC-810S/820S
(not supplied)

VMC-810S/820S
(not supplied)
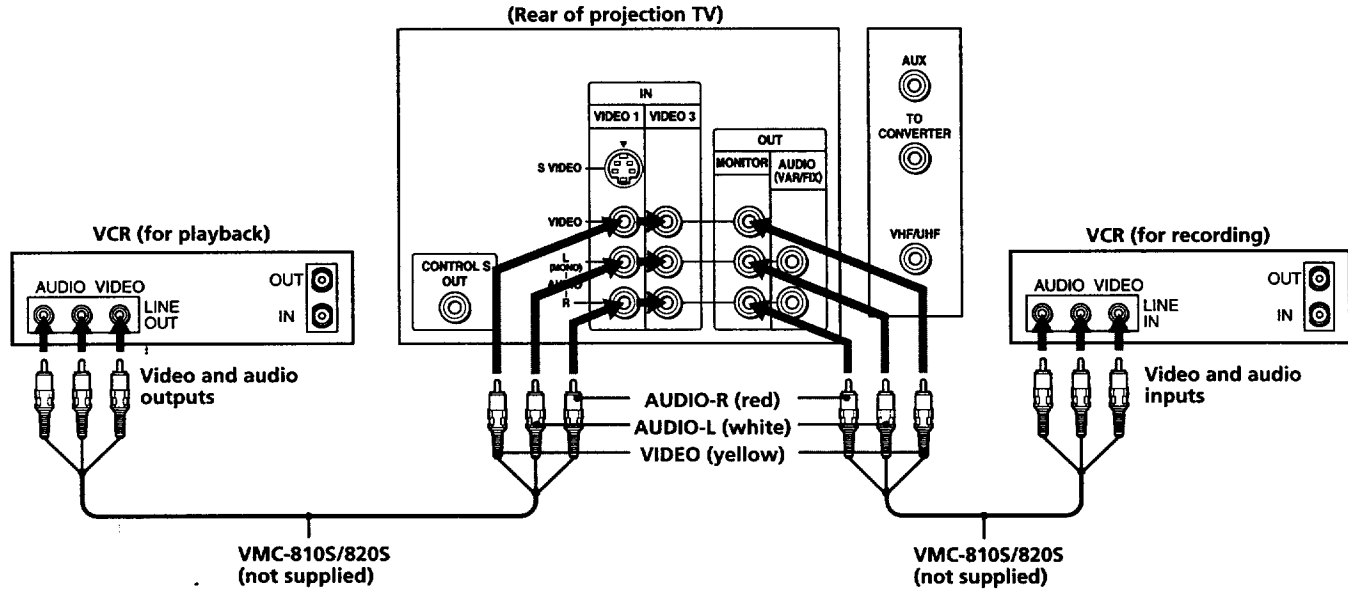
Notes

- 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.

(Rear of projection TV)

DO NOT CONNECT IN THIS WAY.
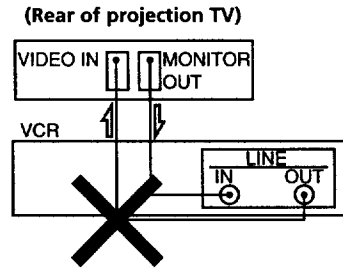
Connecting a Sony SAVA series speaker system

If you have a Sony SAVA series speaker system, connect your speakers to the AUDIO (VAR/FIX) OUT jacks 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 27 for more information.

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

(Rear of projection TV)

AUDIO (VAR/FIX) OUT L (white)

AUDIO (VAR/FIX) OUT R (red)

SAVA series speaker system

CONTROL S OUT

Audio cord supplied with the speakers

RK-G34, etc. (not supplied)

1 IN L

1 IN R

CONTROL S IN

Front left
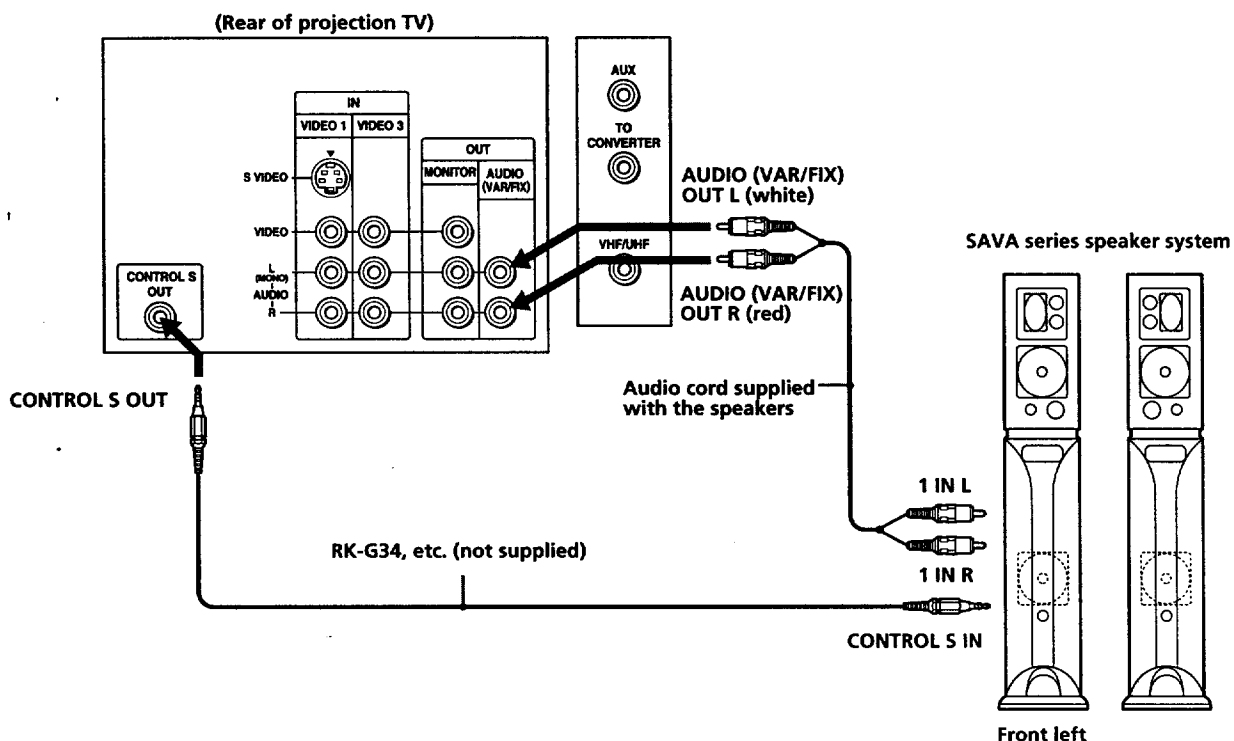
Step 3: Setting up the remote control

Inserting batteries

Insert two size AA (R6) batteries (supplied) by matching the + and − on the battery to the diagram inside the battery compartment.
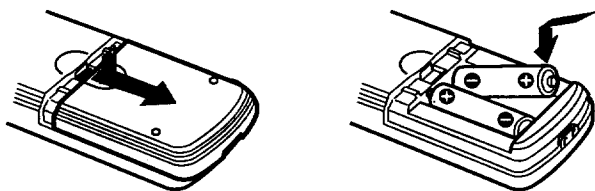
Notes
- Under normal conditions, batteries will last up to six months. If the remote control does not operate properly or the indicators of the buttons on the remote control do not light up, the batteries may be worn out. When replacing batteries, replace both of them with new ones.
- Do not mix old 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.
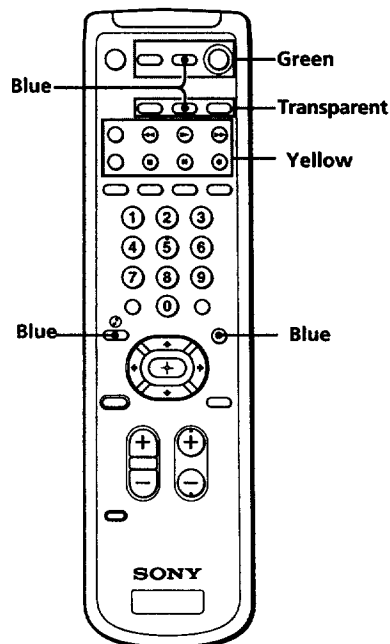
Step 4: Setting up the projection TV automatically

(AUTO SET UP)

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 on-screen menu language. To set up the projection TV manually, see "Adjusting convergence" (page 16), "Setting cable TV on or off" (page 17), "Presetting channels" (page 18) and "Changing the menu language" (page 18).
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)

SETUP TV/VIDEO   – VOLUME +   – CHANNEL +   POWER   STEREO STAND BY
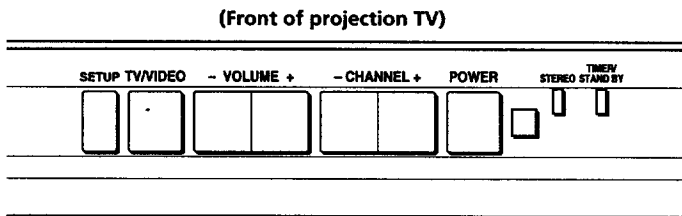
Before you start using AUTO SET UP, be sure to connect the antenna or cable to the projection TV (see page 6).

1 Press POWER to turn the projection TV on.

POWER

2 Press SETUP on the front of the projection TV.

AUTO SET UP screen appears.

SETUP

ENGLISH :	[CH+]
ESPAÑOL :	[CH-]
FRANÇAIS :	[VOL+]
AUTO SET UP :	[VOL-]
DEMO :	[TV/VIDEO]

Press [SET UP] to exit.
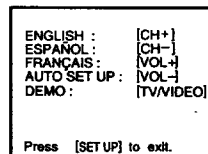
3 Press CHANNEL +/– or VOLUME + to select the on-screen menu language.

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

– CHANNEL +   or   – VOLUME +
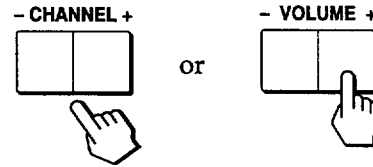
All of the menus will be set to the factory preset condition in the selected language.

4 Press VOLUME – to start AUTO SET UP.

– VOLUME +

CONTINUE TO AUTO PROGRAM?
YES : [CH+]
NO : [CH-]
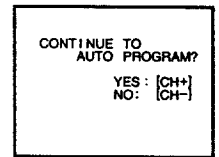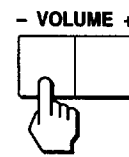
5 Press CHANNEL + to preset channels.

– CHANNEL +
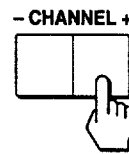
AUTO PROGRAM

"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.

CONTINUE TO CONVERGENCE?
YES : [CH+]
NO : [CH-]
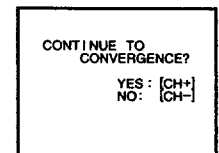
To exit AUTO PROGRAM
Press any button.

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

– CHANNEL +

R
G
B
B
G
R

CONVERGENCE : RED
↑[CH+]
[VOL–] ← → +[VOL+]
↓[CH–]
RED/BLUE : [TV/VIDEO]
Exit : [SETUP]

R=Red
G=Green
B=Blue
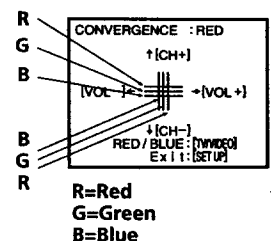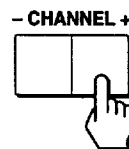
· (2) Press TV/VIDEO to select RED or BLUE.

TV/VIDEO


```
CONVERGENCE  :RED
        †[CH+]
[VOL-]←  ⫸║║⫷  →[VOL+]
        ↓[CH−]
  RED/BLUE:[TV/VIDEO]
    Exit:[SETUP]
```
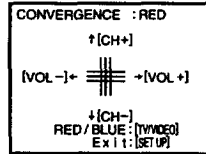
(3) Using CHANNEL +/– or VOLUME +/–, move
the line until it converges with the center green
line.

− VOLUME +   − CHANNEL +


```
         B
        G+R
CONVERGENCE  :RED
        †[CH+]
[VOL-]←  ⫸║║⫷  →[VOL+]
        ↓[CH−]
  RED/BLUE:[TV/VIDEO]
    Exit:[SETUP]
         B
        G+R
```
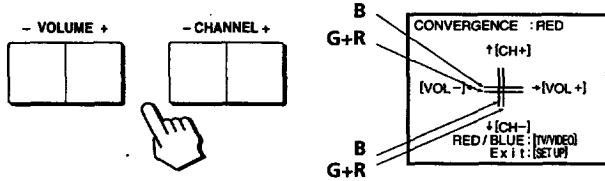
To move horizontal line up/down, press CHANNEL
+/–!
To move vertical line right/left, press VOLUME +/–.

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

White cross

```
CONVERGENCE  :BLUE
        †[CH+]
[VOL-]←  ✛  →[VOL+]
        ↓[CH−]
  RED/BLUE:[TV/VIDEO]
    Exit:[SETUP]
```
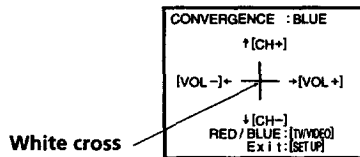
Note
• Using the AUX connector, press TV (black button) first and
make sure that "AUX" is displayed beside the channel number
on the screen. Then follow the steps 2 to 6 above to perform
AUTO SET UP.

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).

— FUNCTION —

TV
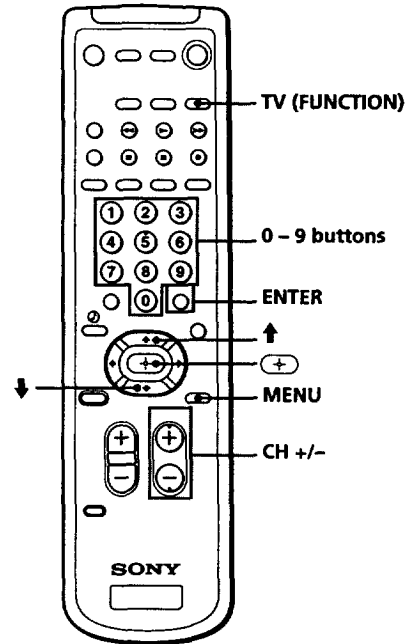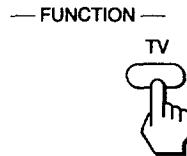
2 Press MENU.

The main menu appears.

MENU


```
VIDEO
MODE : STANDARD
PICTURE
HUE
COLOR
BRIGHTNESS
SHARPNESS
TRINITONE : HIGH
 ⊃MENU

Use ⏯ ⊞        Exit ▦
```

3 Press ↑ or ↓ to select ▤, and press ⊕.

The SET UP menu appears.


```
SET UP
CHANNEL ERASE/ADD
CHANNEL CAPTION
CHANNEL BLOCK
FAVORITE CHANNEL
CABLE : ON
AUTO PROGRAM
VIDEO LABEL
LANGUAGE : ENGLISH
CONVERGENCE
 ⊃MENU

Use ⏯ ⊞        Exit ▦
```
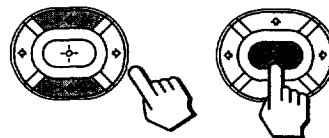
4 Press ↟ or ↡ to select CHANNEL ERASE/ADD, and press ⊕.

The CHANNEL ERASE/ADD menu appears.

```
CHANNEL ERASE/ADD    33
▶ERASE
 ADD
 ⊃MENU

Use[0 – 9]or [CH+/–]
to select the channel.

Use 🔲 ⊕        Exit 🔲
```

5 Erase and/or add channels:

To erase an unwanted channel

(1) Make sure the cursor (▶) is beside ERASE.

(2) Press CH +/– or the 0 – 9 buttons to select the channel you want to erase, and press ENTER.

CH   Selected channel number

① ② ③
or ④ ⑤ ⑥
⑦ ⑧ ⑨
⓪ ○

```
CHANNEL ERASE/ADD   ㉝
▶ERASE
 ADD
 ⊃MENU

Use[0 – 9]or [CH+/–]
to select the channel.

Use 🔲 ⊕        Exit 🔲
```
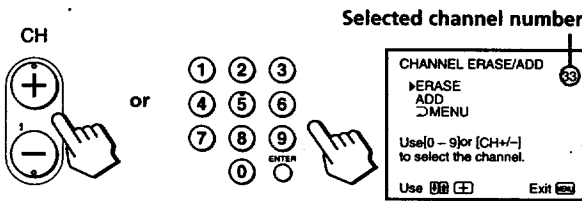
(3) Press ⊕.

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 ↟ or ↡ to move the cursor (▶) to ADD.

(2) Press the 0 – 9 buttons to select the channel you want to add, and press ENTER.

Selected channel number

① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
⓪ ○

```
CHANNEL ERASE/ADD   ㉝
 ERASE
▶ADD
 ⊃MENU

Use 🔲 ⊕        Exit 🔲
```
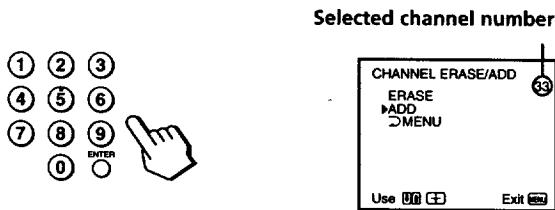
(3) Press ⊕.

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.

MENU

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 **14**). 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 ⊕.

The CONVERGENCE adjustment screen appears.

```
R          CONVERGENCE
G         ▶RED
B          BLUE
           ⊃MENU

B
G         Use 🔲🔲 Exit 🔲
R
  R=Red
  G=Green
  B=Blue
```
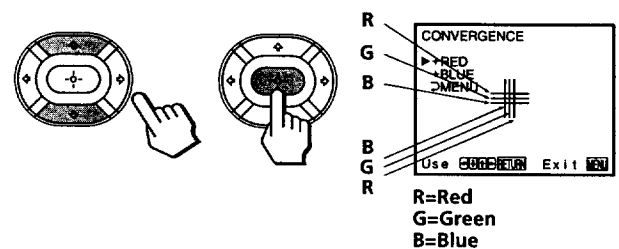
4 Press ↑, ←, ↓, or → to move the cursor (▶) to the symbol showing the line you want to adjust, and press ⊕.


```
CONVERGENCE
▶+RED
 +BLUE
 ⊃MENU    ╫╫
Use ▨▨▨▨  Exit ▨
```
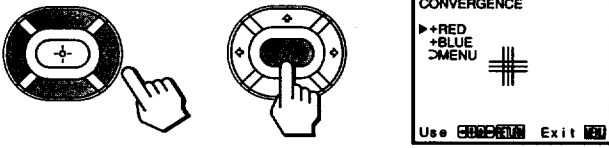
+RED :   Red vertical and horizontal line (left/right/up/down adjustment)
+BLUE : Blue vertical and horizontal line (left/right/up/down adjustment)

5 Press ↑, ←, ↓, or → to move the line until it converges with the center green line, and press ⊕.


```
        R       CONVERGENCE
        G       ▶RED
        B        +BLUE
                 ⊃MENU    ╫╫
        B       Use ▨▨▨▨  Exit ▨
        G+R
```
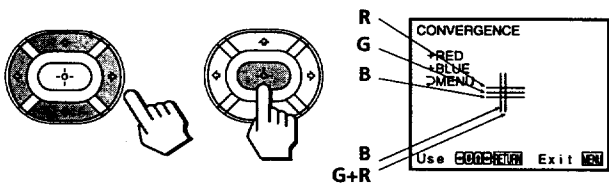
To move	Press
Up	↑
Down	↓
Right	→
Left	←

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 14). Do this procedure only when you want to set it manually.

1 Press MENU.

2 Press ↑ or ↓ to select 🖻, and press ⊕.

3 Set CABLE to ON or OFF:
(1) Press ↑ or ↓ to move the cursor (▶) to CABLE, and press ⊕.
(2) Press ↑ or ↓ to select ON or OFF, and press ⊕.


```
🖩 SET UP
    CHANNEL ERASE/ADD
♪   CHANNEL CAPTION
    CHANNEL BLOCK
    FAVORITE CHANNEL
🕐 ▶CABLE : OFF
    AUTO PROGRAM
🖼 VIDEO LABEL
    LANGUAGE : ENGLISH
🎞 CONVERGENCE
    ⊃MENU
Use ▨▨ ⊕      Exit ▨
```

EN
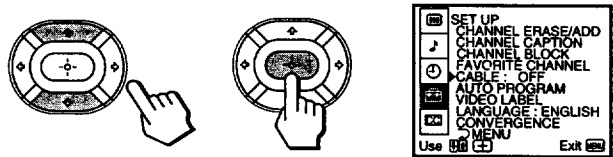
4 Press MENU to return to the original screen.

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 **14**). 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 ⊕.
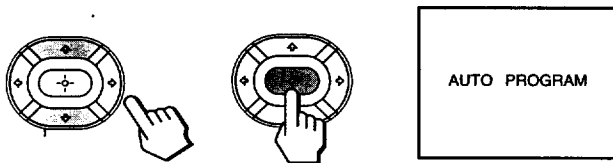
> AUTO PROGRAM

"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.

Changing the menu language

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 **14**). 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 ⊕.


```
SET UP
  CHANNEL ERASE/ADD
  CHANNEL CAPTION
  CHANNEL BLOCK
  FAVORITE CHANNEL
  CABLE : ON
  AUTO PROGRAM
  VIDEO LABEL
  LANGUAGE : ENGLISH
  CONVERGENCE
  ⇒MENU
Use 🔟 ⊕        Exit
```
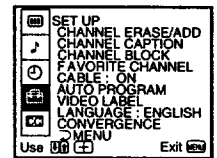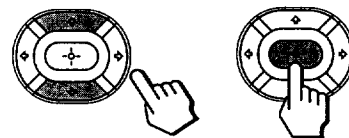
4 Press ↟ or ↡ to select your favorite language, "ENGLISH", "ESPAÑOL," or "FRANÇAIS" and press ⊕.


```
PREFERENCIAS
  BORRAR/AÑADIR CANAL
  NOMBRE DEL CANAL
  BLOQUEAR CANAL
  CANAL FAVORITO
  CABLE : SI
  AUTO PROGRAMACION
  ETIQUETA DE VIDEO
 ►LENGUAJE : ESPANOL
  CONVERGENCIA
  ⇒MENU
Usar 🔟 ⊕       Salir
```
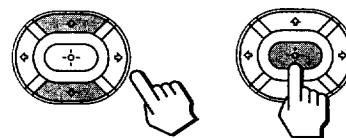
5 Press MENU to return to the original screen.

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

Watching the TV

MUTING — TV (POWER)
— TV (FUNCTION)
DISPLAY — TV/VIDEO
SLEEP — ANT
0 – 9 buttons
JUMP — ENTER
VOL +/– — CH +/–

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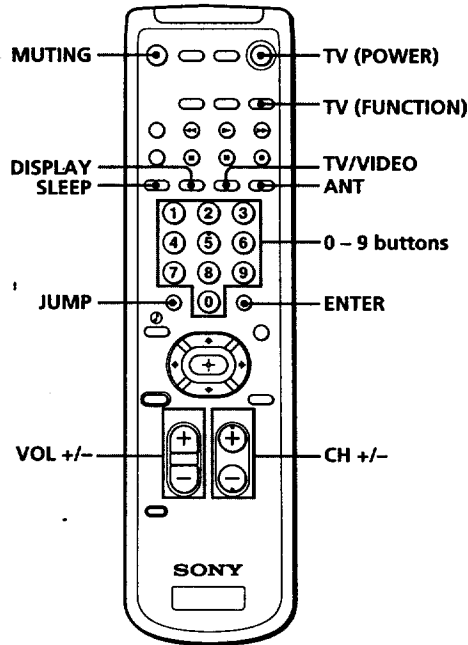
1 Press TV (POWER) to turn on the projection TV.

The TIMER/STANDBY indicator flashes until the picture appears.

POWER

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

2 Press TV (FUNCTION).
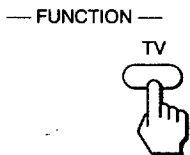
— FUNCTION —
TV

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.
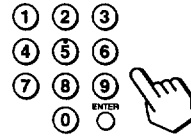
To scan through channels

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

CH
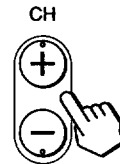
The channel can also be selected without pressing ENTER.

4 Press VOL +/- to adjust the volume.

VOL

VOLUME
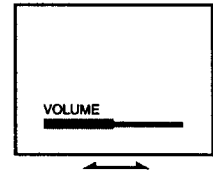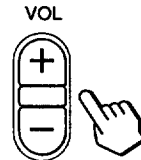
Switching quickly between two channels

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

Press JUMP.

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.

MUTING

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:

Status display* → XDS ON** → [cc] 1 ON***
└────── DISPLAY OFF ◄───┘

DISPLAY

* 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 34 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 → 60 → 90 → SLEEP OFF
└────────────────┘

SLEEP

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:

TV → VIDEO 1 → VIDEO 2 → VIDEO 3
└────────────────────────┘

TV/VIDEO

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.

ANT

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

Watching two programs at one time — PIP

The Picture-in-Picture (PIP) feature allows you to watch both the main picture and a window picture simultaneously.

CH +/- (yellow labelled button)
POSITION
AUDIO
SWAP
PIP
TV/VIDEO (yellow labelled button)

Use the yellow labelled buttons for PIP operations.

Displaying a window picture

Press PIP.

PIP

Input-source mode or TV channel for the main picture

Main picture

Window picture (1/9 size)

Input-source mode or TV channel for the window picture

Press PIP again to display a smaller window picture.

PIP

Input-source mode or TV channel for the main picture

Main picture

Window picture (1/16 size)

Input-source mode or TV channel for the window picture

To remove the window picture, press PIP again.

Note
• The window picture may be affected by the condition of the main picture.

Changing the window picture input mode

Press TV/VIDEO (yellow labelled button) 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.

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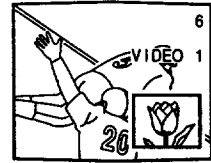
A window picture will appear in the same input mode as the last time you used PIP.

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 picture

Press AUDIO.
The ♪ display appears next to the PIP channel number for a few seconds, indicating that the window picture sound is being received.
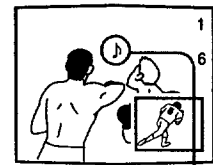
AUDIO

The sound of the window picture is received.

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

Changing TV channels in the window picture

Press CH +/- (yellow labelled button).

TV/VTR
+ ○
CH
- ○
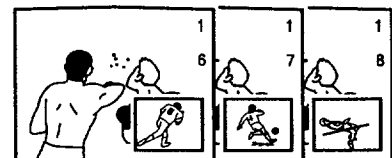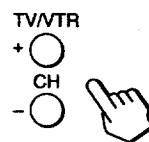
Changing the position of the window picture

Press POSITION.

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

POSITION

Swapping the main and window pictures

Press SWAP.

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

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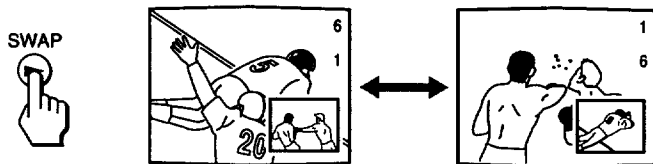
Note
• The channels being received through the AUX connector cannot be displayed as a window picture.

Freezing the picture
(FREEZE)

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. The frozen picture changes as follows depending on whether the PIP function is used or not.
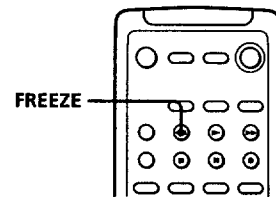
FREEZE

Press FREEZE.

FREEZE

When the PIP function is not being used

Recipe
flour----2
sugar---1/2
salt-----1/2
butter---1

Press FREEZE.

The frozen picture appears in the window picture.
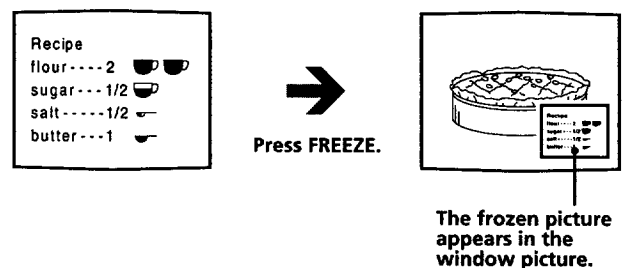
To remove the frozen window picture, press FREEZE again.

When the PIP function is being used

Main picture

Press FREEZE.

Window picture

The images in the window picture freeze.
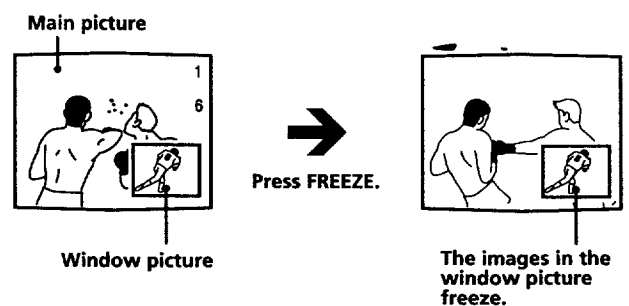
To cancel the frozen window picture, press FREEZE again.

Adjusting the picture (VIDEO)

When watching TV programs, you can adjust the picture to suit your taste.
You can adjust the picture of video input(s) as well.
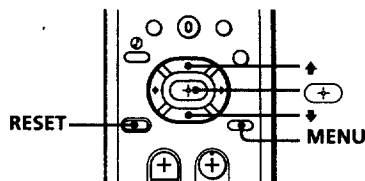
1 Press MENU.

2 Press ↟ or ↡ to select ▥, and press ⊕.
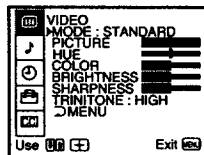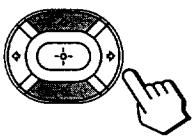
3 Select the item you want to adjust.
For example:
(1) To adjust the brightness, press ↟ or ↡ to move the cursor (▶) to BRIGHTNESS.
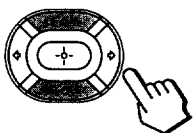
(2) Press ⊕.

4 Adjust the selected item:
(1) Press ↟, ↞, ↡, or ↠ to adjust the item.
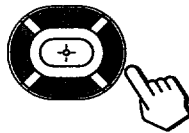
(2) Press ⊕.
The new setting appears in the VIDEO menu.

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
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.
BRIGHTNESS	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.

Adjusting the color temperature (TRINITONE)

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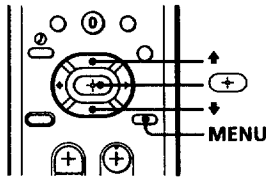
1 **Press MENU.**

2 **Press ♦ or ♦ to select ⬚ and press ⊕.**

3 **Press ♦ or ♦ to select TRINITONE and press ⊕.**
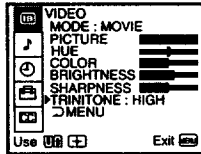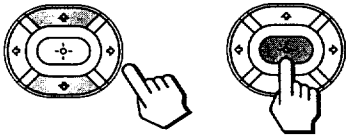
4 **Press ♦ or ♦ to select NTSC STD, MEDIUM, or HIGH and press ⊕.**
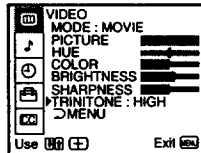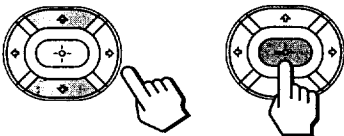
Choose	To
HIGH	a cool (bluish) white.
MEDIUM	a neutral white.
NTSC STD	a warm (reddish) white.

Selecting the video mode (VIDEO)

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 ⬚, and press ⊕.**

3 **Press ♦ or ♦ to select MODE, and press ⊕.**

4 **Press ♦ or ♦ to select STANDARD, MOVIE, or SPORTS mode, and press ⊕.**
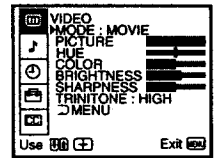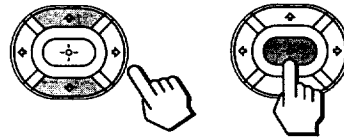
Choose	To
STANDARD	Receive a standard picture.
MOVIE	Receive a finely detailed picture.
SPORTS	Receive a vivid, bright picture.

5 **Press MENU to return to the original screen.**

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

Adjusting the sound (AUDIO)

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.
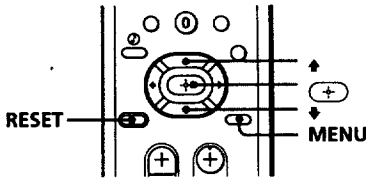
RESET — MENU

1 Press MENU.

2 Press ↑ or ↓ to select ♪, and press ⊕.
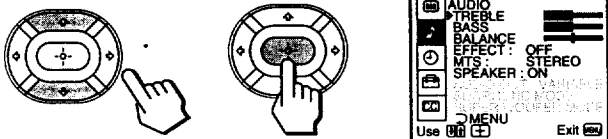
3 Select the item you want to adjust.

For example:

(1) To adjust bass, press ↑ or ↓ to move the cursor (▶) to BASS.

(2) Press ⊕.

4 Adjust the selected item:

(1) Press ↑, ←, ↓, or → to adjust the item.
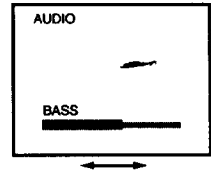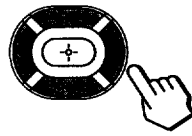
(2) Press ⊕.

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.

EN

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 **27**) is OFF and AUDIO OUT (page **28**) is in the FIXED condition, the volume, TREBLE, BASS, and BALANCE cannot be adjusted.

Using audio effect (SURROUND)

The audio effect (SURROUND) feature simulates sound reproduction with the atmosphere of a movie theater or a concert hall. Audio effect is only effective for stereo programs.

Using the ♪ (audio effect) button
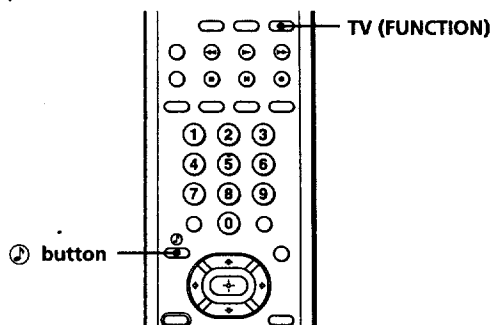
1 Press TV (FUNCTION).

2 Press ♪.
Each time you press the ♪ button, the display changes as follows:

SURROUND → SURROUND OFF
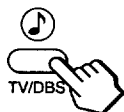
Using the menu to set audio effect
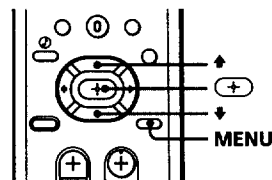
1 Press MENU.

2 Press ♦ or ♦ to select ♪, and press ⊕.

3 Press ♦ or ♦ to select EFFECT, and press ⊕.
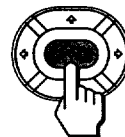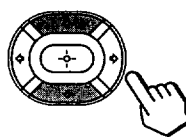
4 Press ♦ or ♦ to select the audio effect mode, and press ⊕.
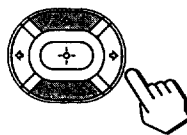
5 Press MENU to return to the original screen.

Selecting stereo or bilingual programs (MTS)

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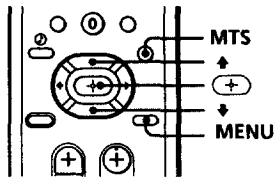
Press MTS repeatedly to select STEREO, SAP, or MONO.

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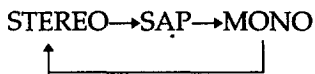
Choose	To
STEREO	Listen to stereo sound. The STEREO indicator on the projection TV lights up when a stereo broadcast is received.
SAP	Listen to bilingual programs. There is no sound when the SAP signal is not broadcasting.
MONO	Listen to monaural sound. Reduce noise during stereo broadcasts.

Note
• Stereo and SAP sounds are subject to program sources.

To set MTS using the menu
1 Press MENU.
2 Press ↟ or ↡ to select ♪, and press ⊕.
3 Press ↟ or ↡ to select MTS, and press ⊕.
4 Press ↟ or ↡ to select STEREO, SAP, or MONO.
5 Press MENU to return to the original screen.

Setting the speaker switch (SPEAKER)

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 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 12), set SPEAKER to SAVA SPEAKER, then adjust SURROUND MODE or SUPER WOOFER MODE.
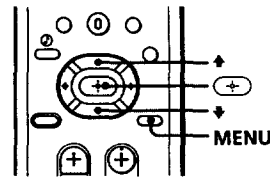
EN

1 Press MENU.

2 Press ↟ or ↡ to select ♪, and press ⊕.

3 Press ↟ or ↡ to select SPEAKER, and press ⊕.
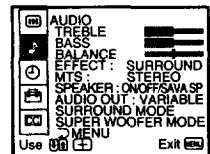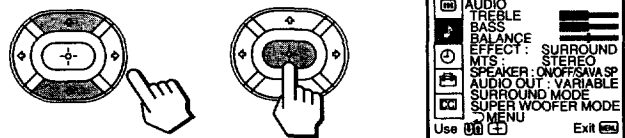
4 Press ↟ or ↡ to select ON, OFF, or SAVA SP, and press ⊕.
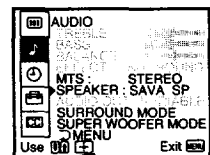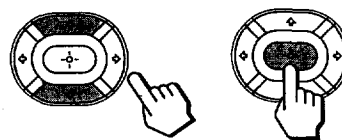
5 Press MENU to return to the original screen.

Choose	To
ON	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.
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

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

Press ↑ or ↓ to select SURROUND MODE or SUPER WOOFER MODE, and press ⊕.
For details on each option, refer to the operating instructions of the speaker system.
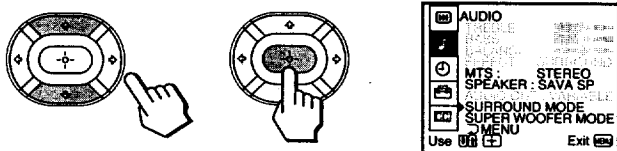
Note
• This feature is only for Sony SAVA speaker system with an operation capability for KP-41T65, KP-48S65, KP-53S65, and KP-61S65.

Setting audio out (AUDIO OUT)

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.
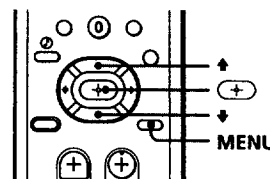
1 Press MENU.

2 Press ↑ or ↓ to select ♪, and press ⊕.

3 Press ↑ or ↓ to select AUDIO OUT, and press ⊕.
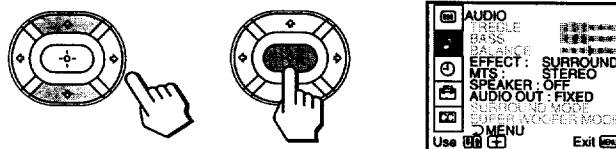
4 Press ↑ or ↓ to select VARIABLE or FIXED, and press ⊕.
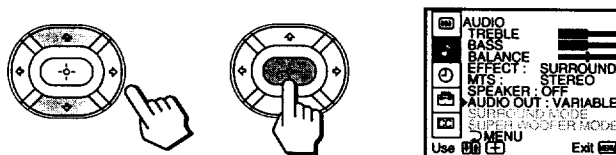
VARIABLE: Sound output varied according to the projection TV settings. You can adjust the volume, bass, treble, and balance.
FIXED: Sound output is always fixed to a certain level. The volume, bass, treble, and balance are also fixed to the factory settings.

5 Press MENU to return to the original screen.

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

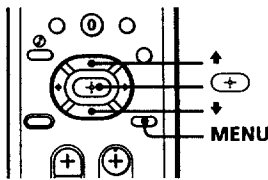# Setting daylight saving time (DAYLIGHT SAVING)

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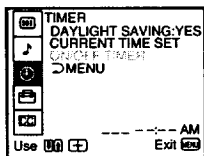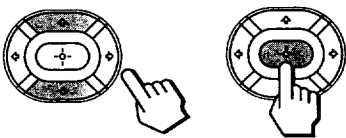
Daylight saving end
- After the last Sunday in October, set DAYLIGHT SAVING to NO. Current time setting automatically moves one hour back.

1 Press MENU.

2 Press ↟ or ↡ to select ☉, and press ⊕.

3 Press ↟ or ↡ to select DAYLIGHT SAVING, and press ⊕.

	TIMER
	DAYLIGHT SAVING:YES
♪	CURRENT TIME SET
	⊃MENU
⊙	
	---- --:-- AM
Use 🔢 ⊕	Exit 🔘

4 Press ↟ or ↡ to select YES or NO, and press ⊕.

	TIMER
	DAYLIGHT SAVING:NO
♪	CURRENT TIME SET
	⊃MENU
⊙	
	--- --:-- AM
Use 🔢 ⊕	Exit 🔘
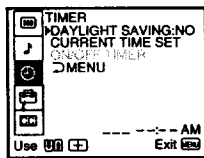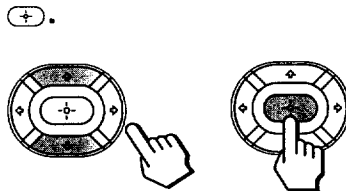
Choose	To
YES	Set for daylight saving start.
NO	Set for daylight saving end.

5 Press MENU to return to the original screen.
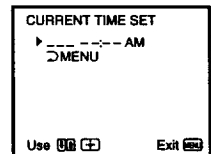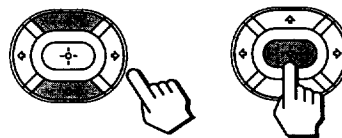
Setting the clock (CURRENT TIME SET)

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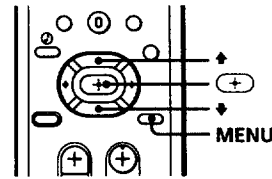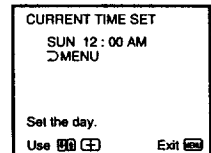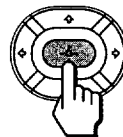
1 Press MENU.

2 Press ↟ or ↡ to select ☉, and press ⊕.

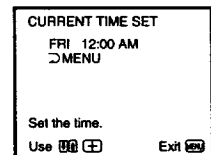**3 Press ↟ or ↡ to select CURRENT TIME SET, and press ⊕.**

EN

CURRENT TIME SET
▶ ___ --:-- AM
⊃MENU
Use 🔢 ⊕   Exit 🔘

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

CURRENT TIME SET
SUN 12 : 00 AM
⊃MENU
Set the day.
Use 🔢 ⊕   Exit 🔘

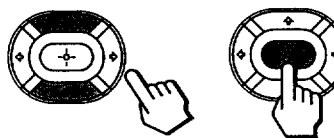**5 Set the current day of the week and time.**
(1) Press ↟ or ↡ to set the day of the week, and press ⊕.

CURRENT TIME SET
FRI 12:00 AM
⊃MENU
Set the time.
Use 🔢 ⊕   Exit 🔘
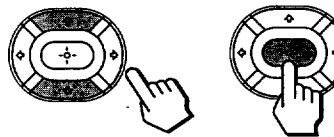
(2) Set the hour and minutes in the same way as in step (1). When you press ⊕ after setting the minutes, the clock starts.

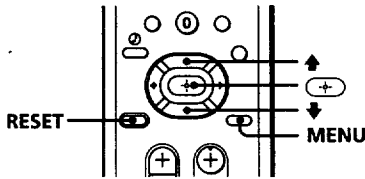| CURRENT TIME SET |
|---|
| ▶ FRI 12:04 AM |
| ⊃MENU |
| |
| Use 🔢 ⊕   Exit 🔘 |
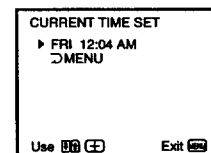
6 Press MENU to return to the original screen.

Setting the timer to turn the projection TV on and off
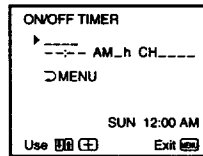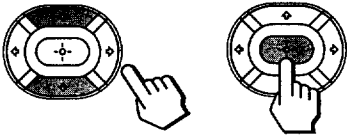
(ON/OFF TIMER)

You can set the projection TV to turn on and off at the times you specify. Make sure the clock is set correctly. If it is not, set the clock first (page **29**).

1 Press MENU.

2 Press ♦ or ♦ to select ◑, and press ⊕.

3 Press ♦ or ♦ to select ON/OFF TIMER, and press ⊕.


```
ON/OFF TIMER
▶ ____
  --:-- AM_h CH____
  ⊃MENU

                SUN 12:00 AM
Use 🔲 ⊞          Exit 🔳
```
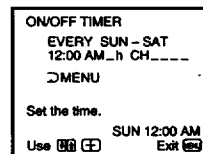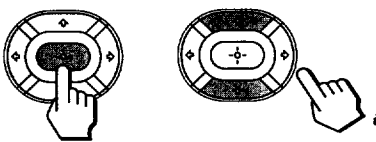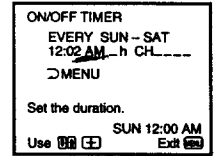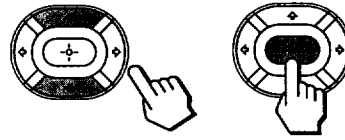
4 Press ⊕ and enter the ON/OFF TIMER setting.

(1) Press ♦ or ♦ to set the day(s), and press ⊕.

Each time you press ♦ or ♦, the days cycle as follows:
EVERY SUN–SAT→EVERY MON–FRI→
SUNDAY→...→SATURDAY→EVERY
SUNDAY→...→EVERY SATURDAY


```
ON/OFF TIMER
  EVERY SUN – SAT
  12:00 AM_h CH____
  ⊃MENU

Set the time.
                SUN 12:00 AM
Use 🔲 ⊞          Exit 🔳
```
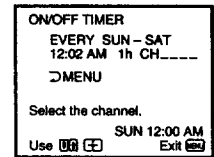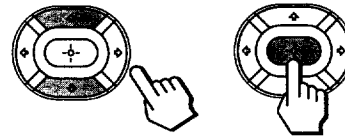
(2) Press ♦ or ♦ to set the time (hour then minutes) that you want to turn on the projection TV, and press ⊕.


```
ON/OFF TIMER
  EVERY SUN – SAT
  12:02 AM_h CH____
  ⊃MENU

Set the duration.
                SUN 12:00 AM
Use 🔲 ⊞          Exit 🔳
```
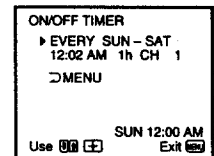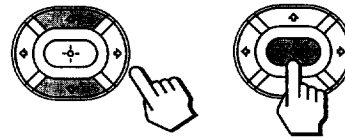
(3) Press ♦ or ♦ to set the time duration, and press ⊕.

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


```
ON/OFF TIMER
  EVERY SUN – SAT
  12:02 AM  1h CH____
  ⊃MENU

Select the channel.
                SUN 12:00 AM
Use 🔲 ⊞          Exit 🔳
```

(4) Press ♦ or ♦ to select the channel, and press ⊕.


```
ON/OFF TIMER
▶ EVERY SUN – SAT
  12:02 AM  1h CH  1
  ⊃MENU

                SUN 12:00 AM
Use 🔲 ⊞          Exit 🔳
```

The TIMER indicator on the projection TV lights up.

5 To set the other program, press ⊕, 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.
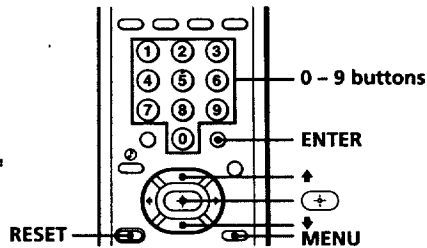
To cancel the timer
In step 3 or 4, press RESET.

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. —
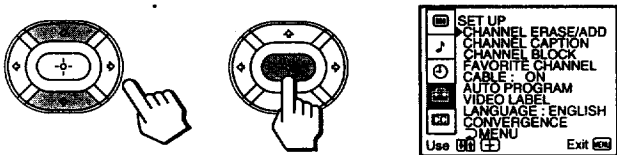
Customizing the channel names

(CHANNEL CAPTION)

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.
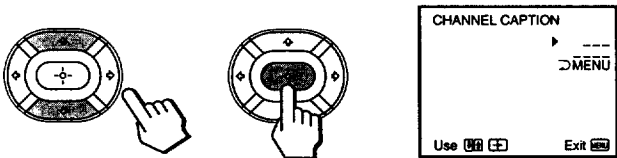

- 0 - 9 buttons
- ENTER
- ⊕
- MENU
- RESET

1 Press MENU.

2 Press ♦ or ♦ to select 🗄, and press ⊕.


```
⊞ SET UP
   ▶CHANNEL ERASE/ADD
♪    CHANNEL CAPTION
     CHANNEL BLOCK
⊙    FAVORITE CHANNEL
     CABLE : ON
     AUTO PROGRAM
⊞    VIDEO LABEL
     LANGUAGE : ENGLISH
☐☐  CONVERGENCE
        ⊃MENU
Use ▥▥ ⊕           Exit ▦
```

3 Press ♦ or ♦ to select CHANNEL CAPTION, and press ⊕.


```
CHANNEL CAPTION
              ▶ ___
                ⊃MENU


Use ▥▥ ⊕         Exit ▦
```

4 Press ⊕ and press ♦ or ♦ to select the channel that you want to caption, and press ⊕.


```
CHANNEL CAPTION
              125
                ⊃MENU

Select the letter.
Use ▥▥ ⊕         Exit ▦
```
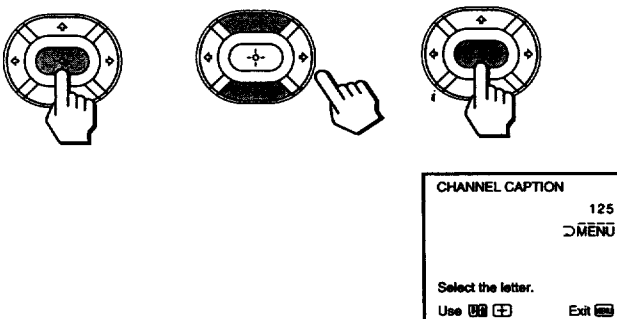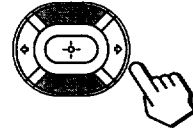
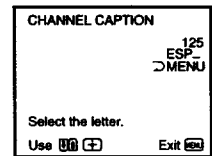## 5 Enter the letters (up to four) to caption the channel:

(1) Press ♦ or ♦ to select the first letter.

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

0...9↔A...Z↔&,/,_(blank space)

(2) Press ⊕.


```
CHANNEL CAPTION
              125
              ESP_
                ⊃MENU

Select the letter.
Use ▥▥ ⊕         Exit ▦
```

(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.
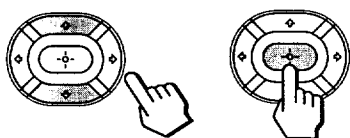
Blocking out a channel (CHANNEL BLOCK)

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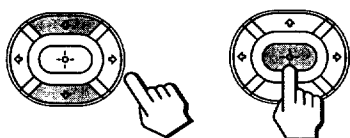

RESET — MENU
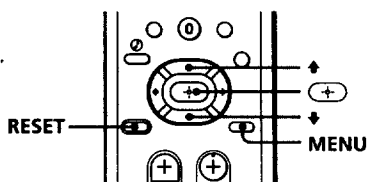
1 Press MENU.

2 Press ↑ or ↓ to select 🗄, and press ⊕.

3 Press ↑ or ↓ to select CHANNEL BLOCK, and press ⊕.

> CHANNEL BLOCK
> ▶ 1. CH___
>   2. CH___
>   ⊃MENU
>
> Select a program.
> Use ▣▣ ⊞   Exit ▣
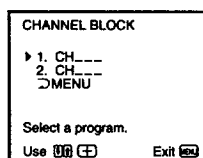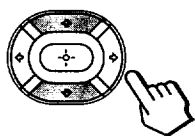
4 Press ↑ or ↓ to select program 1 or 2, and press ⊕.
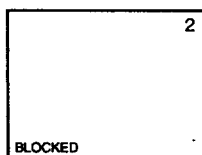

5 Press ↑ or ↓ to select the channel which you want to block out, and press ⊕.

6 Press MENU to return to the original screen.
When you select the blocked channel, the message "BLOCKED" appears on the screen.

> | | 2 |
> |---|---|
> | BLOCKED | |

## 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.

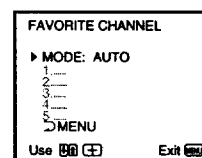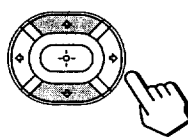# Setting your favorite channels (FAVORITE CHANNEL)

The favorite channel feature allows your projection TV to memorize your favorite channels easily.
If you set to AUTO, the last five 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
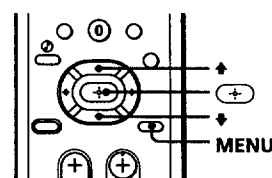
MENU

1 Press MENU.

2 Press ↑ or ↓ to select 🗄, and press ⊕.

3 Press ↑ or ↓ to select FAVORITE CHANNEL, and press ⊕.

> FAVORITE CHANNEL
> ▶ MODE: AUTO
>   1.--
>   2.--
>   3.--
>   4.--
>   5.--
>   ⊃MENU
> Use ▣▣ ⊞   Exit ▣

4 Press ⊕ and press ↑ or ↓ to select AUTO or MANUAL, and press ⊕.

> FAVORITE CHANNEL
> ▶ MODE: MANUAL
>   1.---
>   2.---
>   3.---
>   4.---
>   5.---
>   ⊃MENU
> Select a position.
> Use ▣▣ ⊞   Exit ▣
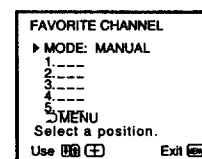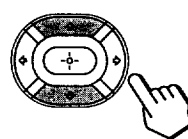
If you select AUTO, skip steps 5 and 6.
The last five channels you selected with the 0 – 9 buttons are automatically set as your favorite channels.
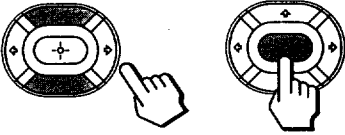
If you select MANUAL, the favorite channel numbers become white, indicating that favorite channels can be entered.

5 Press ↑ or ↓ to select a favorite channel number, and press ⊕.

FAVORITE CHANNEL
MODE: MANUAL
1:----
2:----
3:----
4:----
5:MENU
Select the channel.
Use ▓▓ ⊕   Exit ▓▓

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

FAVORITE CHANNEL
MODE: MANUAL
▶ 1.   5
2:----
3:----
4:----
5:MENU
Select a position.
Use ▓▓ ⊕   Exit ▓▓
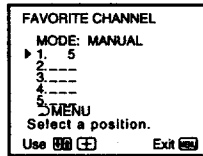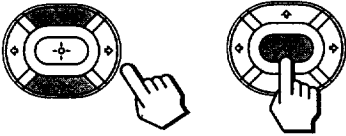
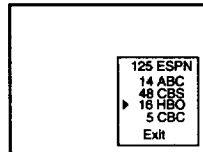**7** Press MENU to return to the original screen.

Notes
- If the FAVORITE CHANNEL menu appears in gray, the projection TV is set to a video input and you cannot select FAVORITE CHANNEL.
- 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.
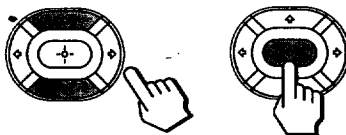
Selecting your favorite channel


```
  ○ ⊙ ○
     ↑
     ⊕
     ↓
    MENU
```
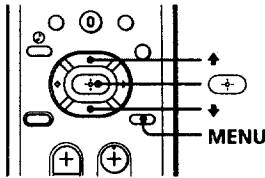
1 Press ⊕.
The FAVORITE CHANNEL menu appears.


```
        125 ESPN
         14 ABC
         48 CBS
      ▶  16 HBO
          5 CBC
        Exit
```

2 Press ↑ or ↓ to select the favorite channel you want to watch, and press ⊕.
The selected channel appears on the screen.

To cancel the FAVORITE CHANNEL menu
Press ↑ or ↓ to select "Exit," and press ⊕.

Setting video labels
(VIDEO LABEL)

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.


```
  ○ ⊙ ○
     ↑
    ⊕
     ↓
   MENU
```

1 Press MENU.
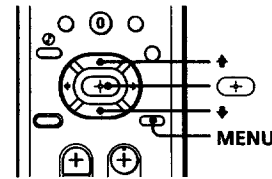
2 Press ↑ or ↓ to select ▣, and press ⊕.

3 Press ↑ or ↓ to select VIDEO LABEL, and press ⊕.

VIDEO LABEL

▶ VIDEO 1: VIDEO 1
  VIDEO 2: VIDEO 2
  VIDEO 3: VIDEO 3
  MENU

Use ▓▓ ⊕   Exit ▓▓
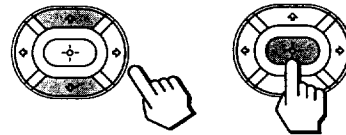
4 Press ↑ or ↓ to select the input mode you want to label, and press ⊕.

VIDEO LABEL

VIDEO 1: VIDEO 1
VIDEO 2: VIDEO 2
VIDEO 3: VIDEO 3
MENU

Use ▓▓ ⊕   Exit ▓▓
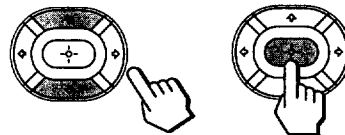
5 Press ↑ or ↓ to select the label, and press ⊕.

VIDEO LABEL

▶ VIDEO 1: VHS
  VIDEO 2: VIDEO 2
  VIDEO 3: VIDEO 3
  MENU

Use ▓▓ ⊕   Exit ▓▓
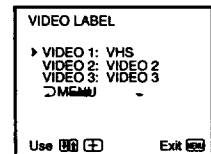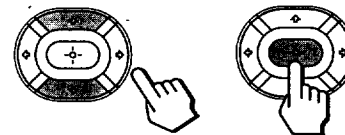
Each time you press ✦ or ✦, the label changes as follows:

VIDEO 1

VIDEO 1 ↔ VHS ↔ 8 mm ↔ BETA
↕   ↕
DBS ↔ DVD ↔ S VIDEO ↔ LD

VIDEO 2

VIDEO 2 ↔ VHS ↔ 8 mm ↔ BETA
↕   ↕
DBS ↔ DVD ↔ S VIDEO ↔ LD

VIDEO 3

VIDEO 3 ↔ VHS ↔ 8 mm ↔ BETA
└→ DBS ↔ DVD ↔ LD ←┘
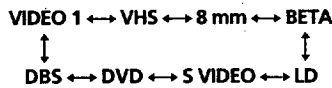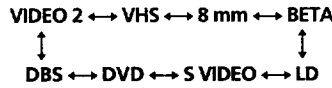
6 Repeat steps 4 and 5 to label other input modes.

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

Setting Caption Vision (CAPTION VISION)

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 ⊞, and press ⊕.

```
CAPTION VISION
▶CC1
 CC2
 CC3
 CC4
 TEXT 1
 TEXT 2
 TEXT 3
 TEXT 4
 ⊃MENU
Use ⊞⊕          Exit ▣
```
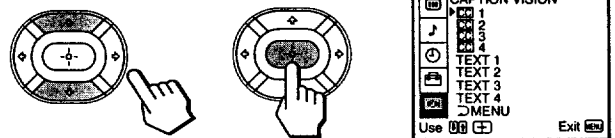
3 Press ✦ or ✦ to select the caption type, and press ⊕.
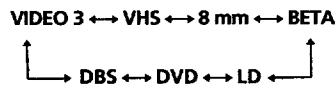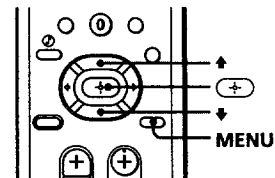
```
CAPTION VISION
 CC1
▶CC2
 CC3
 CC4
 TEXT 1
 TEXT 2
 TEXT 3
 TEXT 4
 ⊃MENU
Use ⊞⊕          Exit ▣
```
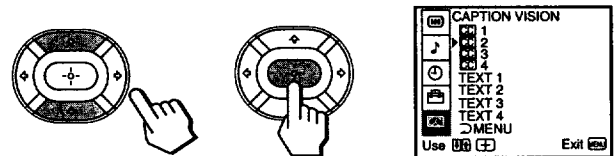
4 Press MENU to return to the original screen.

To display Caption Vision
Press DISPLAY. (See page 20 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 20.

Operating video equipment

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

VTR (FUNCTION)

0 – 9 buttons

ENTER

CODE SET

Press the CODE SET, VTR (FUNCTION), and 0 – 9 buttons to enter the manufacturer's code number (see the chart on page 35-36), then press ENTER.
For example, to operate a Sony 8 mm VCR, press CODE SET, VTR (FUNCTION), 3, 0, 2, and ENTER.

VCR manufacturer code numbers

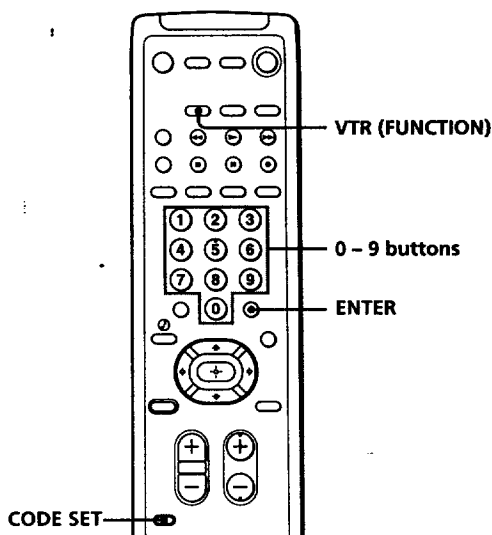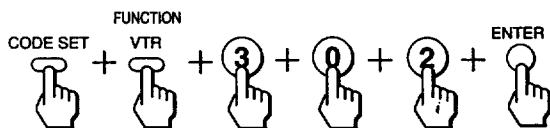| Manufacturer	Code number
Sony	301, 302, 303
Aiwa	338
Audio Dynamic	314, 337
Bell & Howell (M. Wards)	330, 343
Brocsonic	319
Canon	309, 308
Citizen	332
Craig	315, 302, 332
Curtis Mathis	304, 338, 309
Daewoo	341, 312, 309
DBX	314, 336, 337
Dimensia	304
Emerson	319, 320, 316, 317, 318
Fisher	330, 334, 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
NEC	314, 336, 337
Olympic	309, 308
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
Sharp	327, 328
Shintom	315
Signature 2000 (M. Wards)	338, 327
Sylvania	308, 309, 338
Symphonic	338
Tashiro	332
Tatung	314, 336, 337
Teac	314, 336, 338, 337
Technics	309, 308
Toshiba	312, 311
Wards	327, 328, 335, 331, 332
Yamaha	330, 314, 336, 337
Zenith	331

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

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 remote control)
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

VTR (POWER)
VTR (FUNCTION)
Video operating buttons
0 – 9 buttons
ENTER
CH +/–
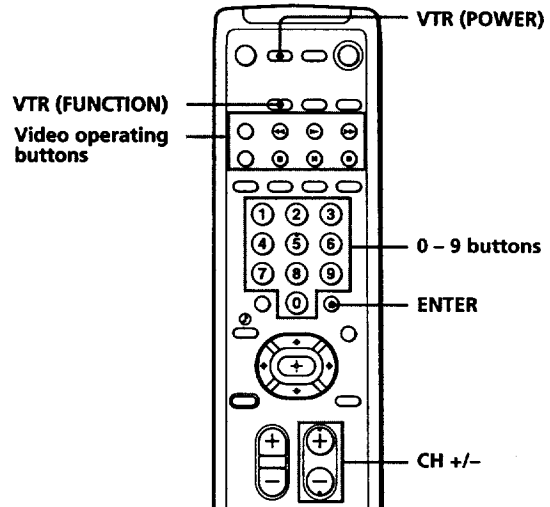
Use the video operating buttons on the remote control to operate the video equipment.
Press VTR (FUNCTION) before operating the video equipment.

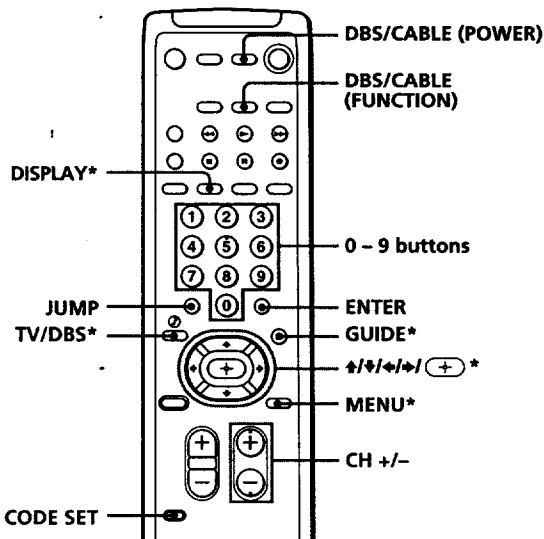| Operating a VCR	Buttons on the remote control
To turn on or off	Press VTR (POWER).
To select a channel directly	Press the 0 – 9 buttons.
To change channels	Press CH +/–.
To record	Press ►► while pressing ●. First release ►►, then release ●.
To play	Press ►►.
To stop	Press ■.
To fast forward	Press ►►.
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 +/–.

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

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.
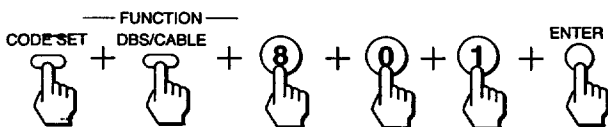

DBS/CABLE (POWER)
DBS/CABLE (FUNCTION)
DISPLAY*
0 – 9 buttons
JUMP
ENTER
TV/DBS*
GUIDE*
$\leftarrow/\downarrow/\leftarrow/\rightarrow/$ (+) *
MENU*
CH +/–
CODE SET

* The TV/DBS, GUIDE, DISPLAY, $\leftarrow/\downarrow/\leftarrow/\rightarrow/$ (+), 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).
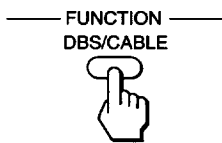
FUNCTION
DBS/CABLE

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.

FUNCTION
CODE SET   DBS/CABLE   ENTER

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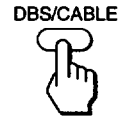
DBS/CABLE

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.

Troubleshooting

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 14)

Poor or no picture (screen lit), good sound
→ Adjust PICTURE in the VIDEO menu. (page 23)
→ Adjust BRIGHTNESS in the VIDEO menu. (page 23)
→ Adjust convergence. (page 16)
→ Check antenna/cable connections. (page 6)
→ Perform AUTO SET UP again using the SETUP button to return to the factory preset condition. (page 14)
→ Remove objects from the front of the projection TV.

Good picture, no sound
→ Press MUTING so that "MUTING" disappears from the screen. (page 19)
→ Check the MTS setting in the AUDIO menu. (page 27)
→ Make sure SPEAKER is set to ON in the AUDIO menu. (page 27)
→ Perform AUTO SET UP again using the SETUP button to return to the factory preset condition. (page 14)

No color
→ Adjust the COLOR in the VIDEO menu. (page 23)
→ 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 14)

Only snow and noise appear on the screen
→ Check the CABLE setting in the SET UP menu. (page 17)
→ Check the antenna/cable connections. (page 6)
→ Make sure the channel is broadcasting programs.
→ Press ANT to change the input mode. (page 20)

Dotted lines or stripes
→ Adjust the antenna.
→ Move the projection TV away from noise sources such as cars, neon signs, and hair-dryers.

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 17)

Cannot receive upper channels (UHF) when using an antenna
→ Make sure CABLE is OFF in the SET UP menu. (page 17)
→ Use AUTO PROGRAM to add receivable channels that are not presently in projection TV memory. (pages 14, 18)

Cannot receive any channels when using cable TV
→ Make sure CABLE is ON in the SET UP menu. (page 17)
→ Use AUTO PROGRAM to add receivable channels that are not presently in projection TV memory. (pages 14, 18)

Remote control does not operate
→ Batteries could be weak. Replace the batteries. (page 13)
→ 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.

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.

Specifications

Projection system 3 picture tubes, 3 lenses, horizontal in-line system

Picture tube 7 inch high-brightness monochrome tubes (6.3 raster size), with optical coupling and liquid cooling system

Projection lenses High performance, large-diameter hybrid lens F1.1

Screen size (measured diagonally)

KP-41T65	41 inches
KP-48S65	48 inches
KP-53S65	53 inches
KP-61S65	61 inches

Television system American TV standards

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

Antenna 75 ohm external antenna terminal for VHF/UHF

Inputs/output VIDEO IN 1
VIDEO IN 2 (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
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 jacks): 1 Vp-p, 75-ohms unbalanced, sync negative
AUDIO (phono jacks): 500 mVrms (100% modulation)
Impedance: 47 kilohms

MONITOR OUT
VIDEO (phono jack): 1 Vp-p, 75-ohms unbalanced, sync negative
AUDIO (phono jacks): 500 mVrms (100% modulation),
Impedance: 5 kilohms
AUDIO OUT (phono jacks): 500 mVrms (100% modulation)
Impedance: 5 kilohms

Speaker Full range speaker 100 mm (3.9 inches) diameter

Speaker output 12 W × 2

Power requirement
120 V, 60 Hz

Power consumption
165 W
Standby mode: 2.5 W

	Dimensions(W/H/D)	Mass
KP-41T65	951 × 1,022 × 602 mm (37 1/2 × 40 1/4 × 23 3/4 inches)	55 kg (121 lbs 4 oz)
KP-48S65	1,106 × 1,337 × 571 mm (43 5/8 × 52 5/8 × 22 1/2 inches)	67 kg (147 lbs 11 oz)
KP-53S65	1,218 × 1,413 × 614 mm (48 × 55 5/8 × 24 1/4 inches)	69 kg (152 lbs 1 oz)
KP-61S65	1,338 × 1,506 × 642 mm (52 3/4 × 59 3/8 × 25 3/8 inches)	122 kg (268 lbs 15 oz)

Supplied accessories
Remote control RM-Y136A (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
Stand SU-41T2 (*For KP-41T65*)
High-contrast protective screen
SCN-48X2 (*For KP-48S65*)
SCN-53X2 (*For KP-53S65*)
SCN-61X2 (*For KP-61S65*)

Design and specifications are subject to change without notice.
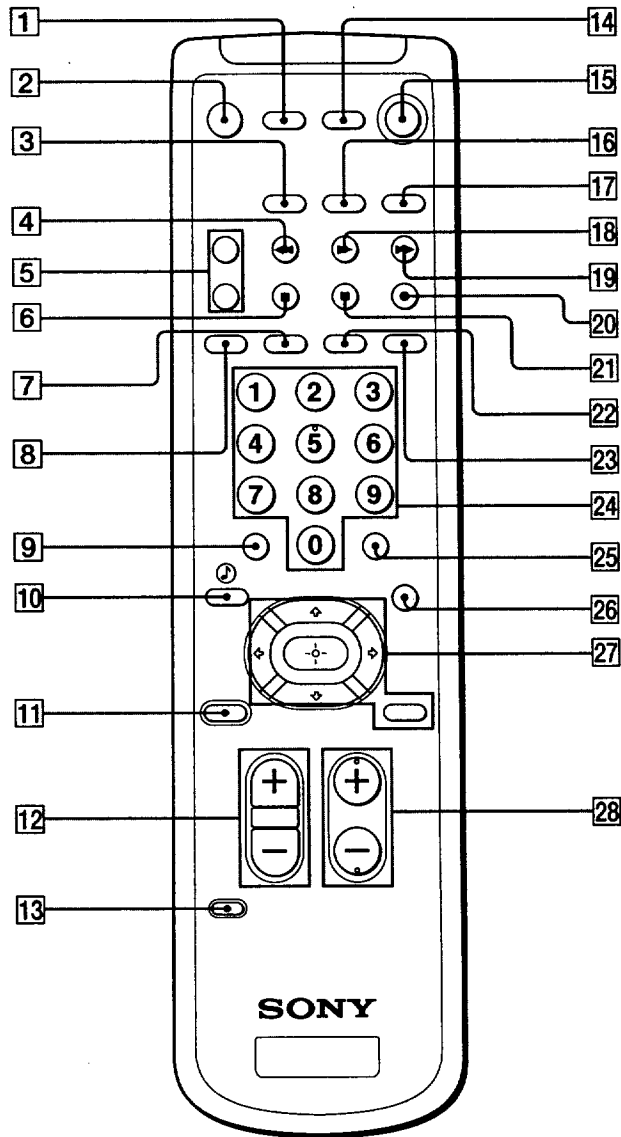
EN

Index to parts and controls

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
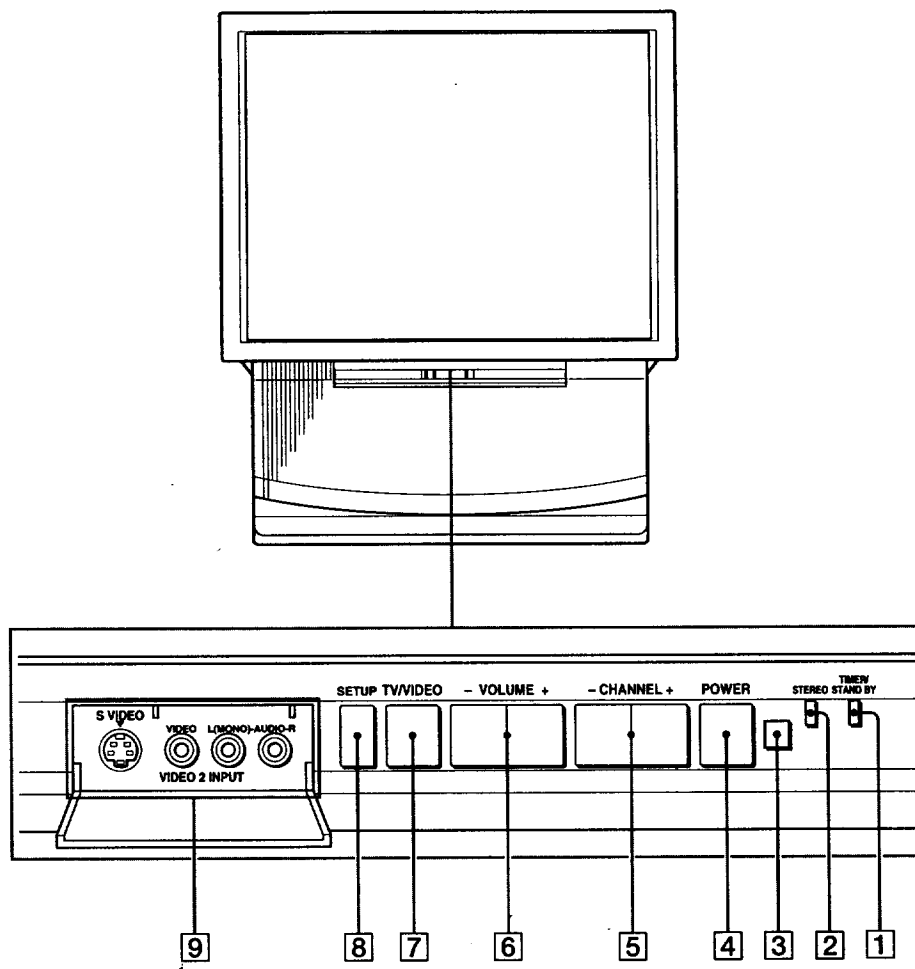
[1] TIMER/STANDBY indicator (pages **19, 30**)

[2] STEREO indicator (page **27**)

[3] Remote sensor

[4] POWER switch (page **14**)

[5] CHANNEL +/- buttons (page **14**)

[6] VOLUME +/- buttons (page **14**)

[7] TV/VIDEO button (page **14, 15**)

[8] SETUP button (page **14**)

[9] S VIDEO/VIDEO 2 INPUT (VIDEO/AUDIO L(MONO)/R) jacks (page **10**)

Remote control

[1] VTR (POWER) switch (page **36**)

[2] MUTING button (page **19**)

[3] VTR (FUNCTION) button (page **35**)

[4] FREEZE button (page **22**)

[5] TV/VTR CH +/– buttons (Yellow labelled button) (page **21**)

[6] POSITION button (page **22**)

[7] DISPLAY button (page **20**)

[8] SLEEP button (page **20**)

[9] JUMP button (page **19**)

[10] TV/DBS ⊘ button (page **26, 37**)

[11] RESET button (page **23**)

[12] VOL (volume) +/– buttons (page **19**)

[13] CODE SET button (page **35**)

[14] DBS/CABLE (POWER) switch (page **37**)

[15] TV (POWER) switch (page **19**)

[16] DBS/CABLE (FUNCTION) button (page **37**)

[17] TV (FUNCTION) button (pages **15, 19**)

[18] SWAP button (page **22**)

[19] PIP button (page **21**)

[20] TV/VIDEO button (yellow labelled button) (page **21**)

[21] AUDIO button (page **21**)

[22] TV/VIDEO button (page **20**)

[23] ANT button (page **20**)

[24] 0 – 9 buttons (page **16**)

[25] ENTER button (page **16**)

[26] MTS/GUIDE button (page **27, 37**)

[27] Menu operation buttons (page **15**)

MENU button

↑/←/↓/→/ buttons

⊕ button

[28] CH (channel) +/– buttons (pages **16, 19**)

Index

Names of controls