SONY

Color Rear Video Projector

Operating Instructions — **EN**

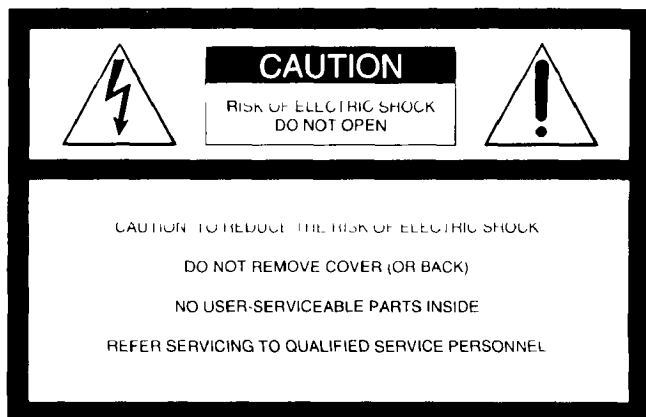Manual de instrucciones — **ES**

KP-46V35
KP-53V35
KP-61V35

WARNING

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

⚠ **CAUTION**
RISK OF ELECTRIC SHOCK
DO NOT OPEN ⚠

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 Closed Caption (Caption Vision)
This television receiver provides display of television closed captioning in accordance with §15.119 of the FCC rules.

Note on CATV system installer
This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

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

Note on convergence adjustment
Before you use your projection TV, make sure to adjust convergence. For the procedure, see page **15**.

NOTIFICATION
This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference with radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

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

This document is for the remote commander. RM-Y137
MODELS: KP-46V35/53V35/61V35.

Please keep this notice with the instruction manual.

Owner's Record

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

Model No. _____

Serial No. _____

Table of contents

EN

The captions in parentheses indicate menu names.

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

- AUTO SET UP feature that allows you to set up your projection TV easily by pressing the SET UP button
- On screen menus that let you set the picture quality, sound, and other settings
- Picture-in-Picture that allows you to watch another TV channel, video or cable image as a window picture
- On/off timer that allows you to make the TV program of your choice be displayed on the screen for a specified duration
- Dynamic Focus circuitry that automatically focuses the scanning electron beam for enhanced sharpness, especially at the corners
- Universal remote commander supplied that allows you to operate Sony and other manufacturers' video equipment
- S-Link™ that allows you to automatically change the projection TV's input mode, turn on the VCR, and play a tape by just pressing the VCR's play button. This feature is originally designed by Sony.

About this manual

The instructions in this manual are for models KP-46V35, KP-53V35 and KP-61V35. Before you start reading this manual, please check your model number, located at the rear of the projection TV. Model KP-46V35 is used for illustration purposes in this manual. There are no differences between these models in operation. The differences in specifications are indicated in the text.

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

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 a 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.
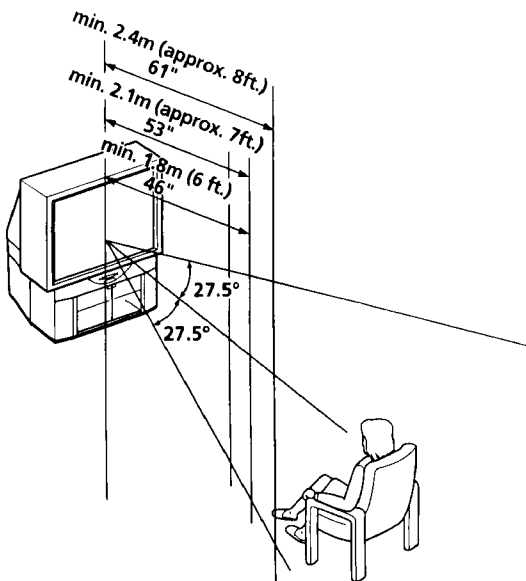
Step 1: Installing the projection TV

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

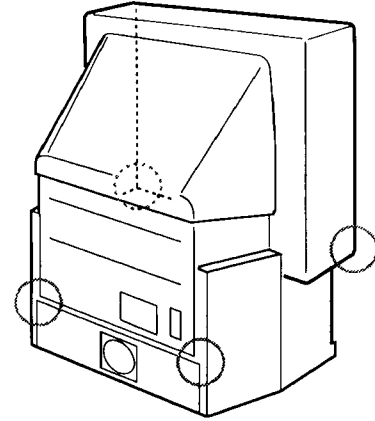## Optimum viewing area (Horizontal)
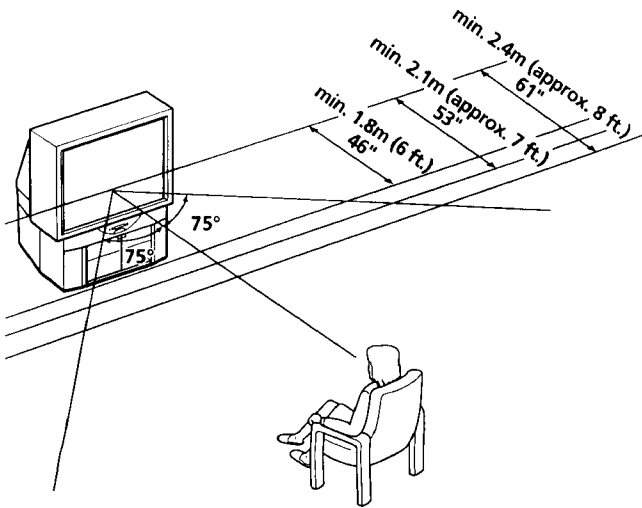
Optimum viewing area (Vertical)

Carrying your projection TV

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

(Rear of projection TV)

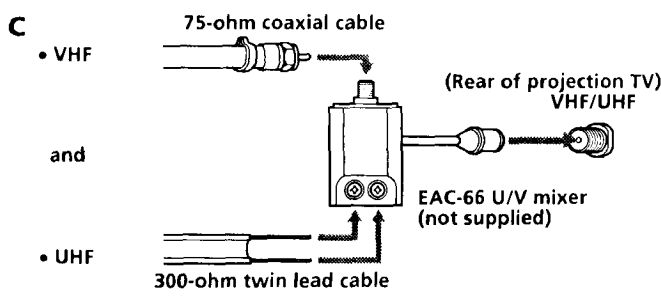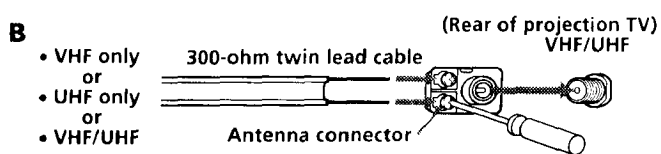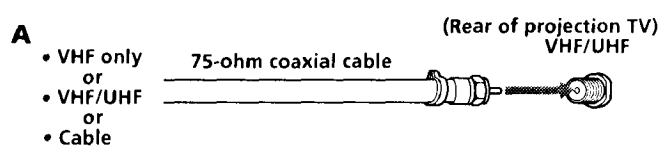## Preparing for your projection TV

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 **15**.

EN

Step 2: Connections

Although you can use either an indoor antenna or outdoor antenna with your projection TV, we recommend connecting to an outdoor antenna or a cable TV system for improved picture quality.

To 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

(Rear of projection TV)
VHF/UHF

Antenna connector

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.
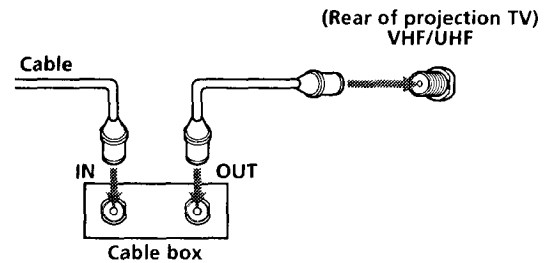
Connecting an antenna/cable TV system without a VCR
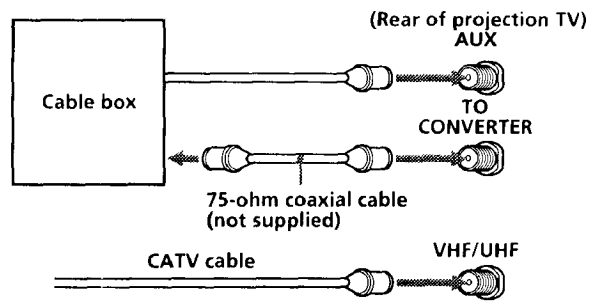
To cable or antenna

Cable

(Rear of projection TV)
VHF/UHF
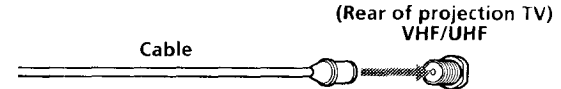
To cable box

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

Cable

(Rear of projection TV)
VHF/UHF

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 the 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 AUX connector as a window picture.

To cable and antenna

(Rear of projection TV)
AUX

CATV cable

TO CONVERTER

Antenna cable

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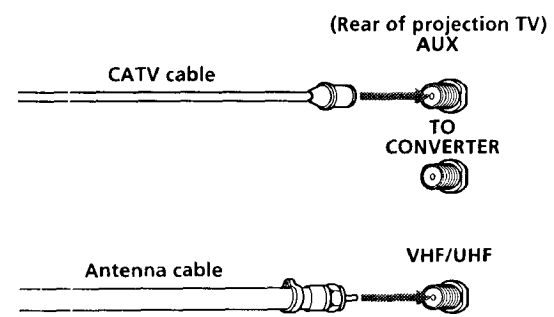
Note
- Do not connect anything to the TO CONVERTER connector in this case.

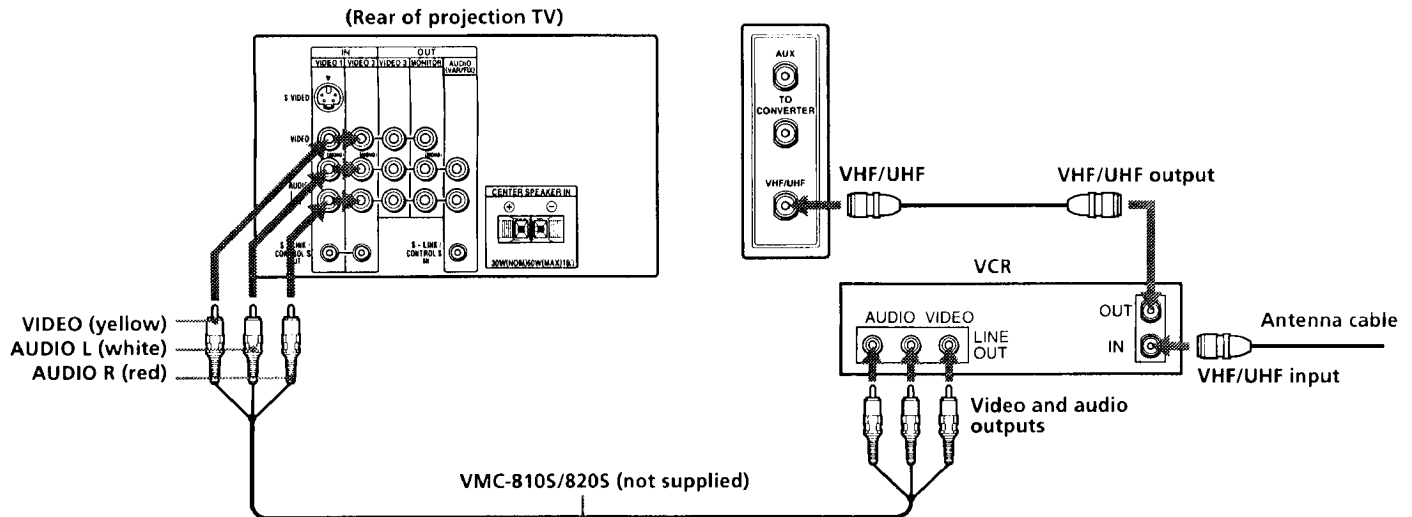## Connecting an antenna/cable TV system with a VCR

For details on connection, see the instruction manual of your VCR. Before connecting, disconnect the AC power cords of the equipment to be connected.

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
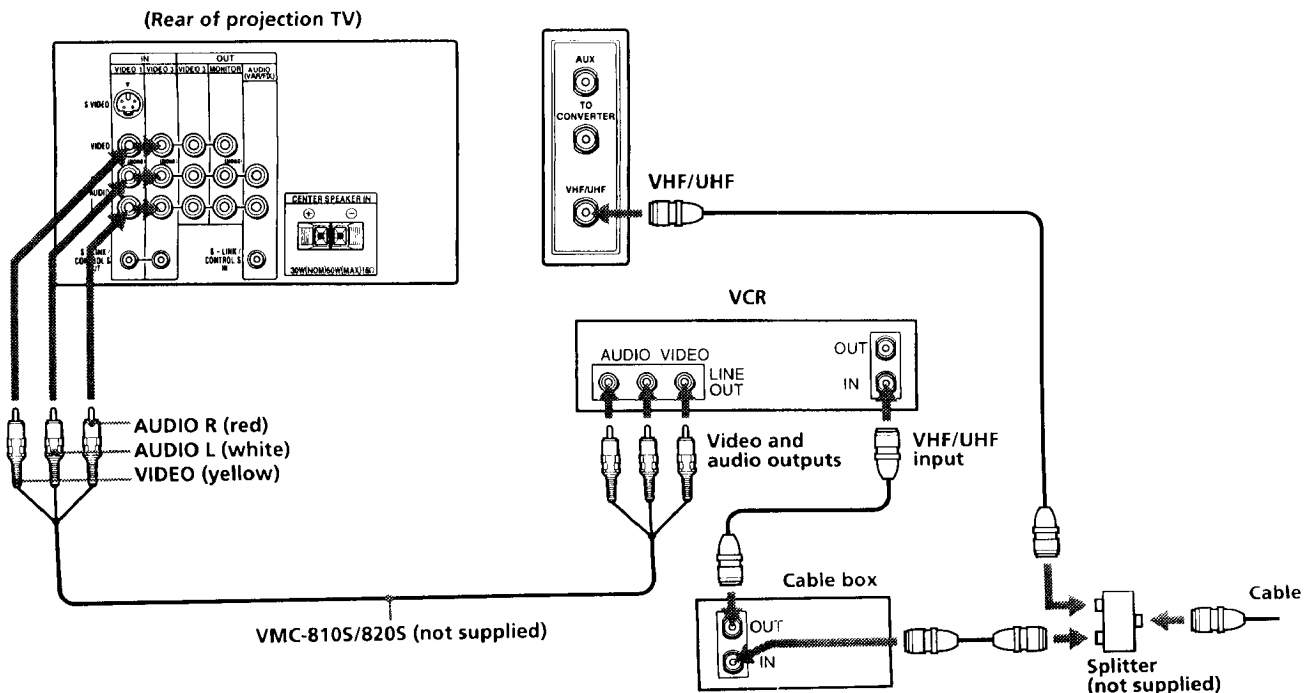
To a conventional VCR

Without a cable box

(Rear of projection TV)

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

VHF/UHF   VHF/UHF output

VCR

AUDIO   VIDEO   OUT
                LINE   IN   Antenna cable
                OUT
                                      VHF/UHF input

Video and audio outputs

VMC-810S/820S (not supplied)

EN

Notes
- To connect a monaural VCR, connect the audio output of the VCR to AUDIO L (MONO) of VIDEO 1/3 IN on the projection TV.
- Do not connect the cable to the S VIDEO connector on the projection TV.

With a cable box

(Rear of projection TV)

VHF/UHF

VCR

AUDIO   VIDEO   OUT
                LINE   IN
                OUT

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

Video and   VHF/UHF
audio outputs   input

Cable box   Cable

VMC-810S/820S (not supplied)
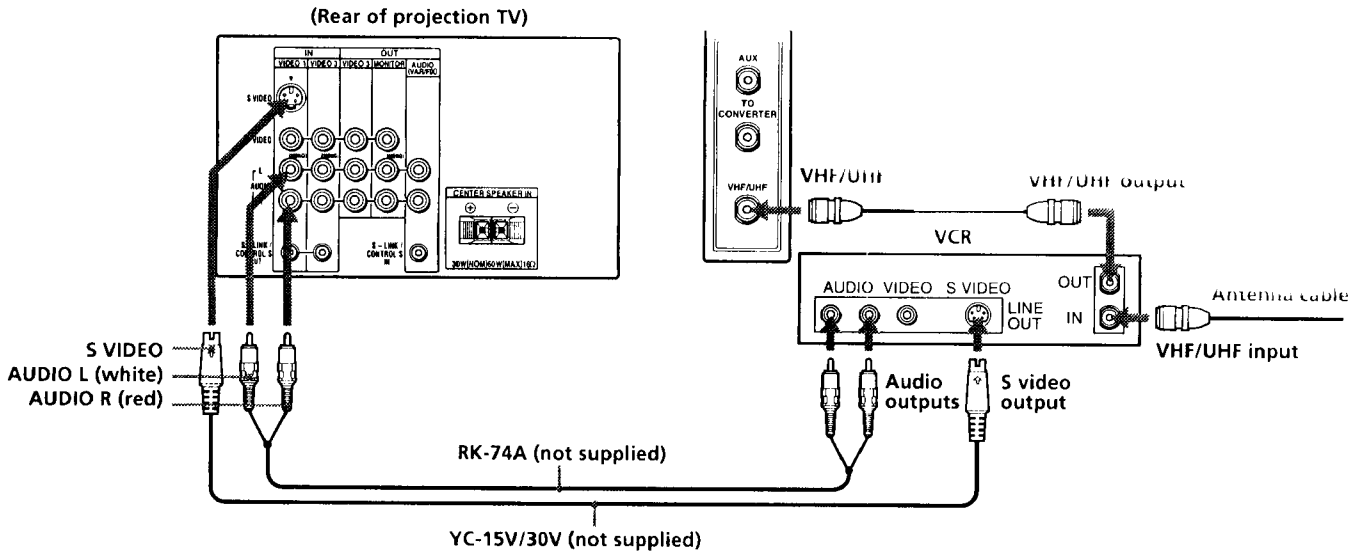
OUT
IN

Splitter
(not supplied)

To an S video equipped VCR

If your VCR has an S video output jack, make the connection as follows.

Whenever you connect the cable to the S VIDEO connector, the projection TV automatically receives S video signals.
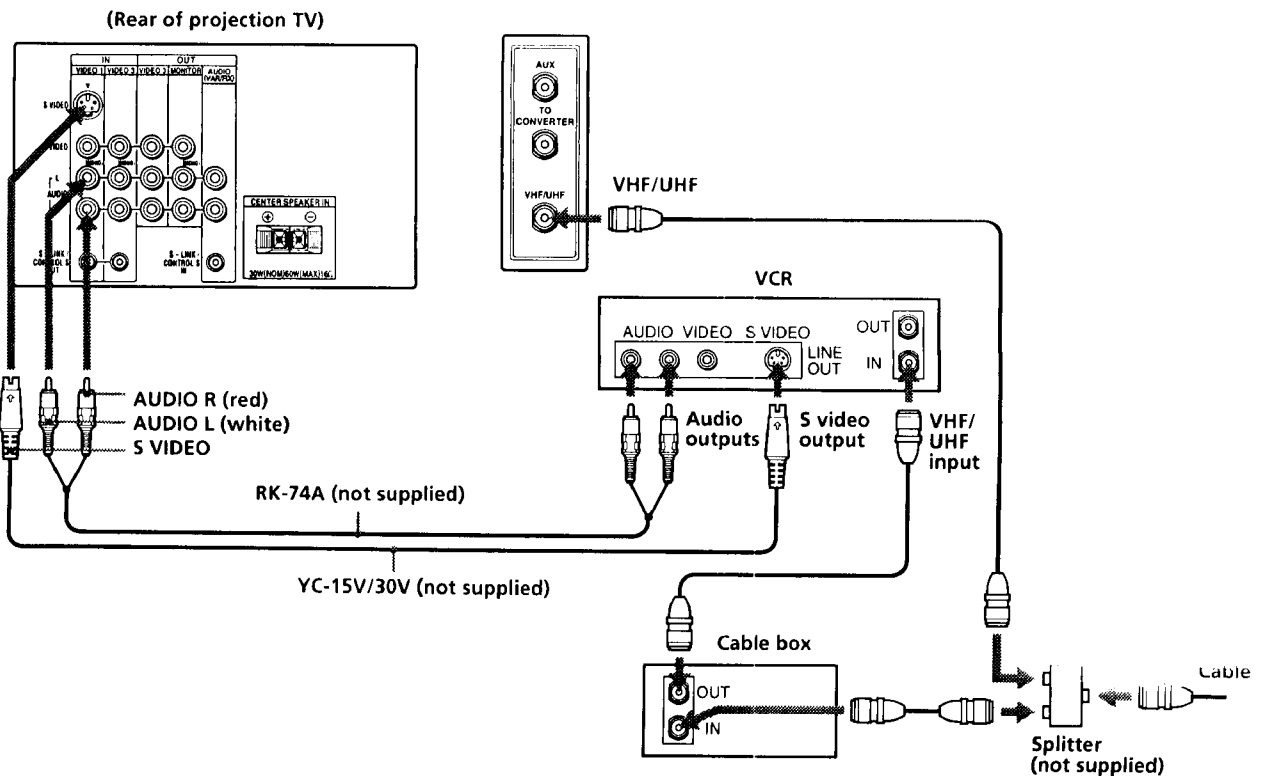
Without a cable box

(Rear of projection TV)

VHF/UHF

VHF/UHF output

VCR

Antenna cable

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

VHF/UHF input

Audio outputs

S video output

RK-74A (not supplied)

YC-15V/30V (not supplied)

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 connection.

With a cable box

(Rear of projection TV)

VHF/UHF

VCR

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

Audio outputs

S video output

VHF/ UHF input

RK-74A (not supplied)

YC-15V/30V (not supplied)

Cable box

Cable

Splitter (not supplied)

Connecting a DBS receiver

For connection details, see the instruction manual of
the DBS (Digital Broadcasting Satellites) receiver.
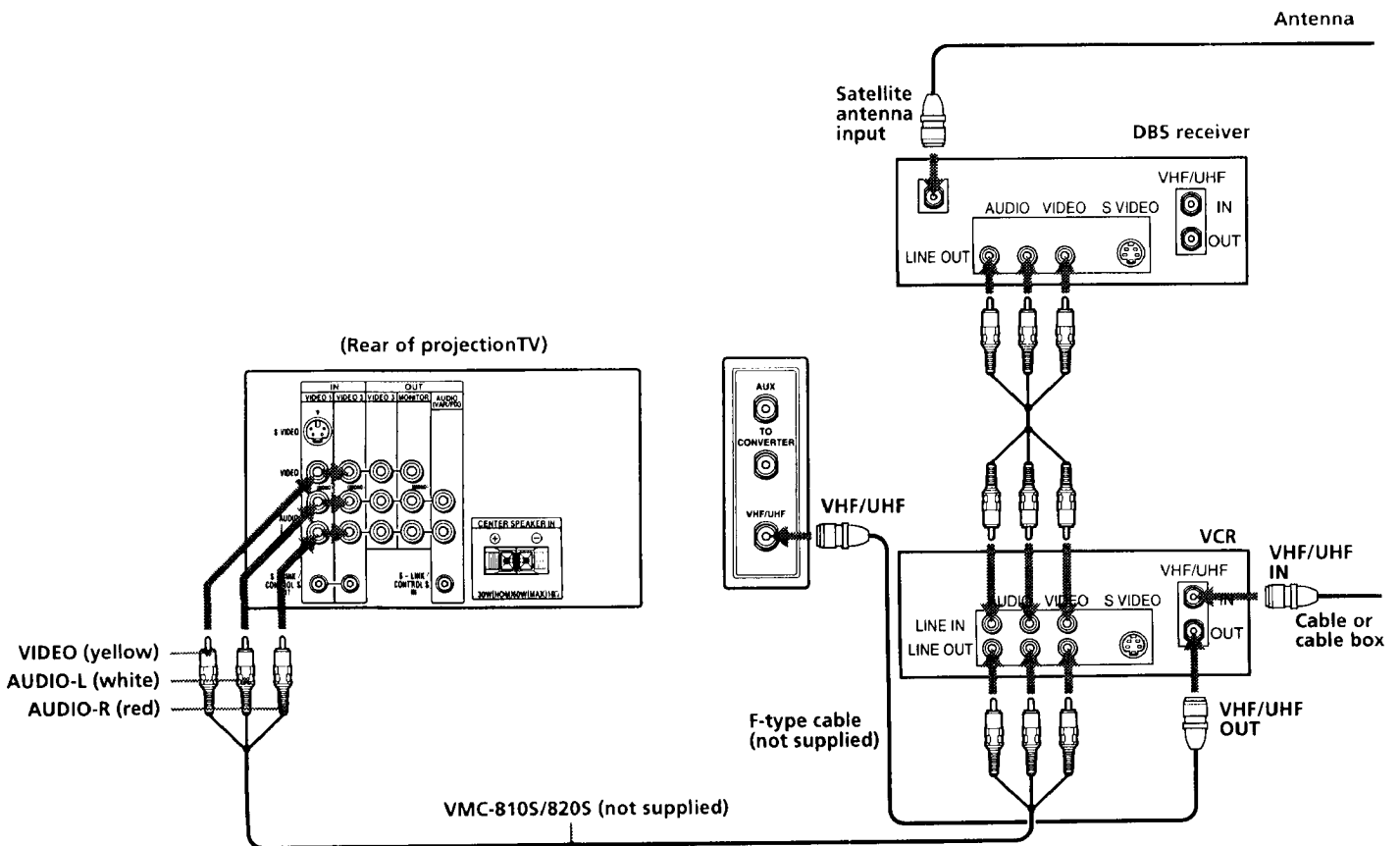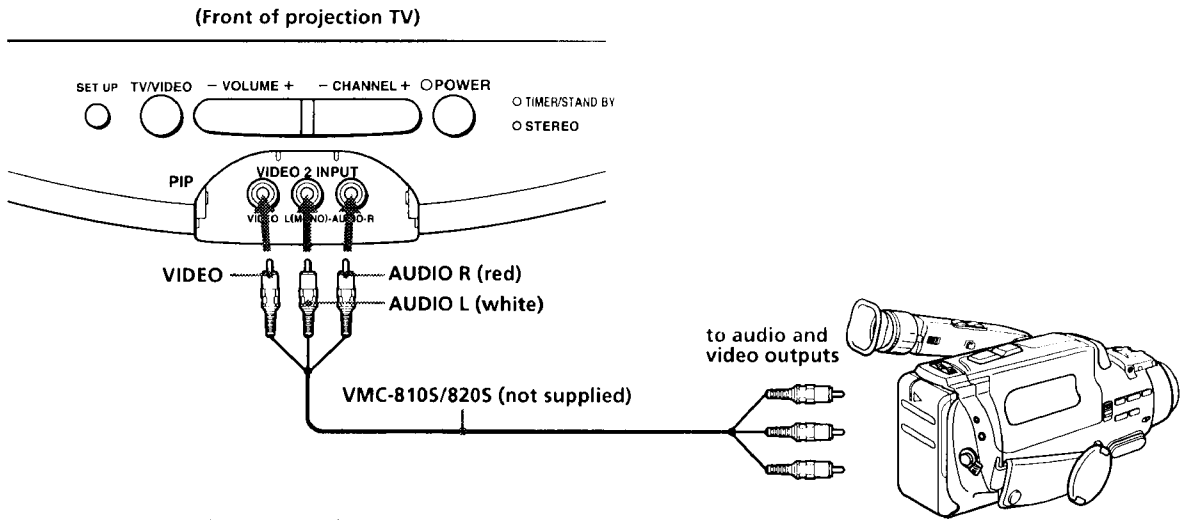
To a projection TV

(Rear of projection TV)

Cable or cable box

Antenna

VHF/UHF

Satellite antenna input

DBS receiver

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

VMC-810S/820S (not supplied)
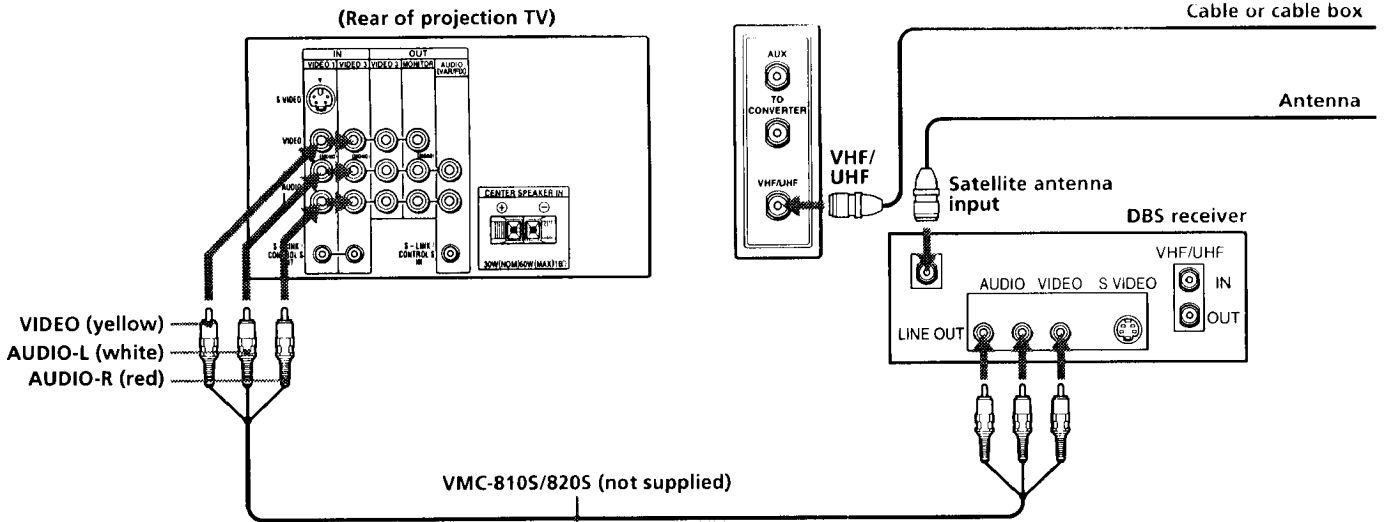
Note
- You can use the S VIDEO jack or the composite video jack for
  the video connection.

To a projection TV and VCR

Antenna

Satellite antenna input

DBS receiver

VHF/UHF

(Rear of projectionTV)

VHF/UHF

VCR VHF/UHF IN

Cable or cable box

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

F-type cable (not supplied)

VHF/UHF OUT

VMC-810S/820S (not supplied)

Connecting a camcorder

This connection is convenient for watching the picture from a camcorder.

(Front of projection TV)

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.

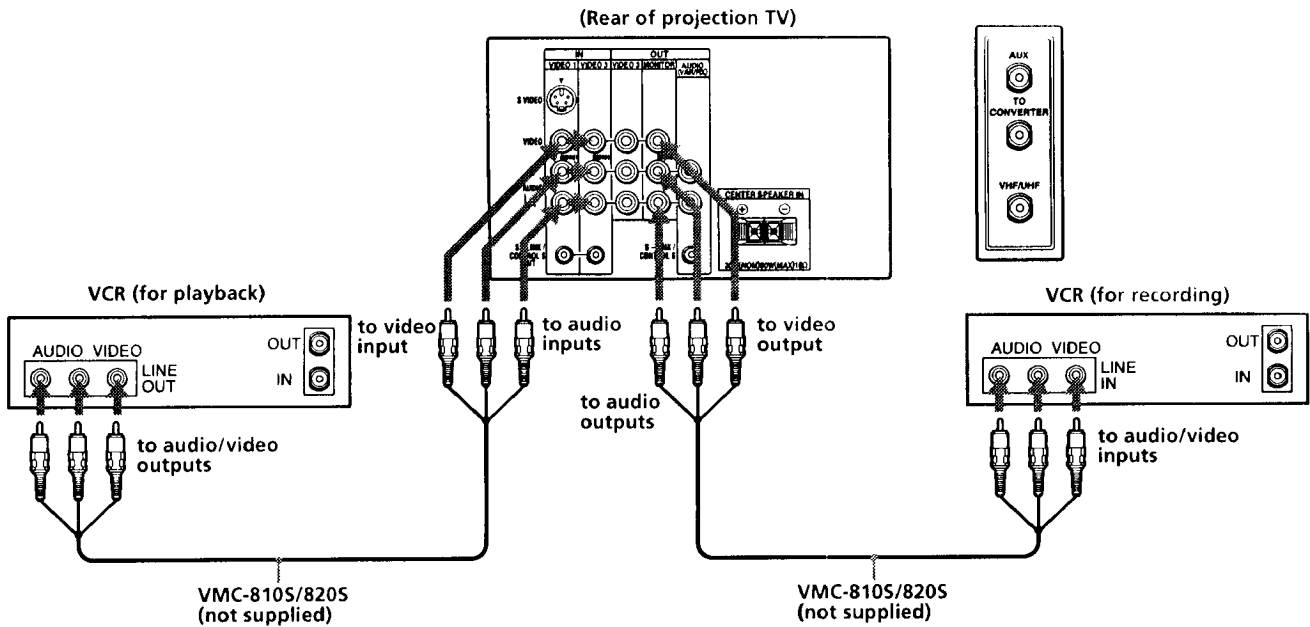## Connecting two VCRs for tape editing using VIDEO 3 IN and OUT

You can watch input images different from the image being recorded.
The VIDEO 3 OUT jacks output only the signal from the VIDEO 3 IN jacks. If you make the connection as shown below, you can watch images from either antenna, cable, VIDEO 1 IN or VIDEO 2 INPUT jacks during recording.

(Rear of projection TV)
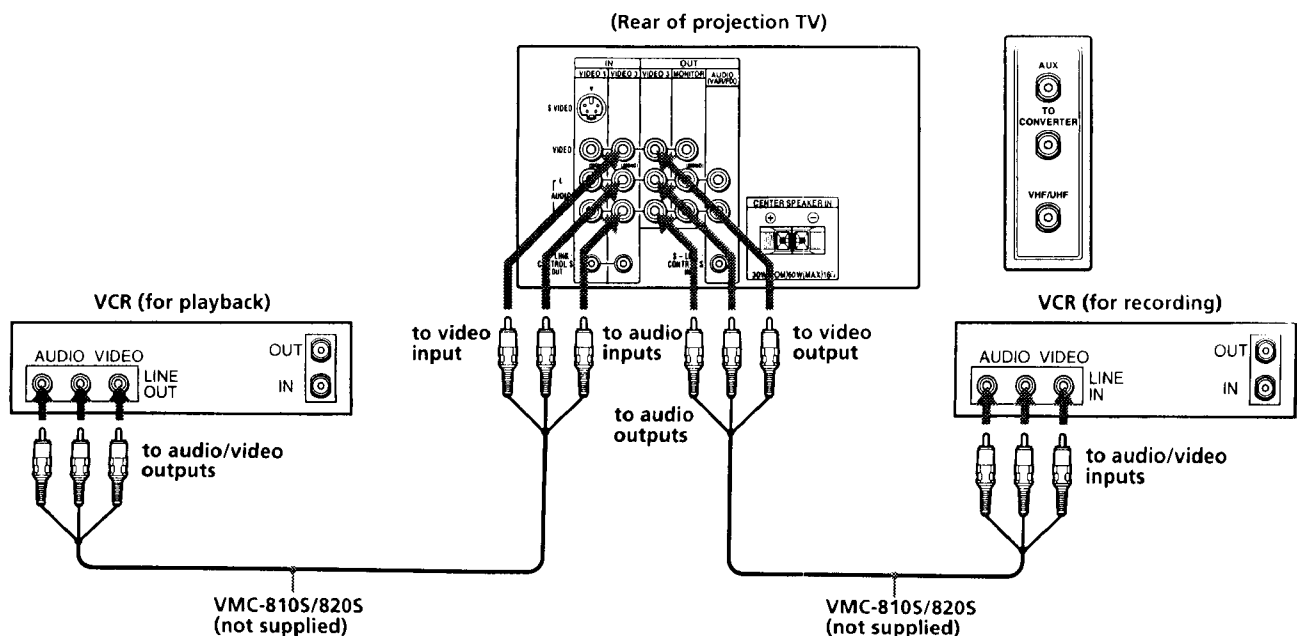
Connecting two VCRs for tape editing using MONITOR OUT

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
LINE OUT
OUT
IN

to video input
to audio inputs
to video output
to audio outputs

to audio/video outputs

AUX
TO CONVERTER
VHF/UHF

VCR (for recording)

AUDIO VIDEO
LINE IN
OUT
IN

to audio/video 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.
- When connecting a single VCR to the projection TV, do not
  connect MONITOR OUT to the VCR's line input, while at the
  same time connecting from the projection TV's VIDEO IN jacks
  to the VCR's line output.

- You can use the S VIDEO conector to connect a VCR for
  playback and either S VIDEO connector or composite video
  jack to connect a VCR for recording.

Connecting an audio system

When connecting audio equipment, see page **29** for
more information.

(Rear of projection TV)

AUX
TO CONVERTER

AUDIO OUT L (white)
RK-74A (not supplied)
AUDIO OUT R (red)
Set the amplifier's
function to line input.

Line input

Stereo amplifier
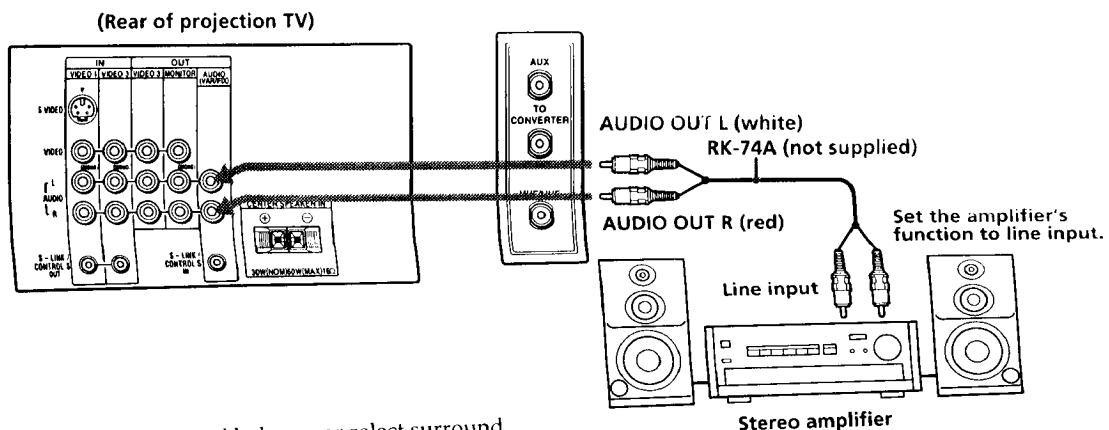
Note
- You can adjust the bass, treble and balance, or select surround,
  an MTS (Multichannel TV Sound) or OSE (Orchestra Seat
 Effect) mode with the supplied remote commander.

# Using the projection TV speakers as center speakers

This feature allows you to enjoy the benefits of Dolby Pro Logic by using the speakers of the projection TV as the center speaker. To utilize this system, you must connect an amplifier that is Dolby Pro Logic compatible. Connect the speaker wires from the amplifier's center channel output terminals to the projection TV's CENTER SPEAKER IN. Both right and left terminals must be connected to receive an audio signal. After making the right connections, select "SPEAKER: CENTER" in the AUDIO menu (page **29**). The left and right audio channels can be heard through your audio system speakers.
In this connection, adjust the volume with your amplifier.

Notes

- Always match the speaker cord and terminal colors when making the connections.
- Unplug the projection TV when making the connections. If the exposed speaker cord wires touch while the projection TV is plugged in, the projection TV may short-circuit and be damaged.
- Do not pull on the speaker cords.
- Always turn off the amplifier power before connecting to the CENTER SPEAKER IN terminals.
- When using the projection TV speakers as center speakers, the subwoofer is disabled.

(Rear of projection TV)

Dolby* Pro Logic-compatible amplifier

to center output

Speaker cords
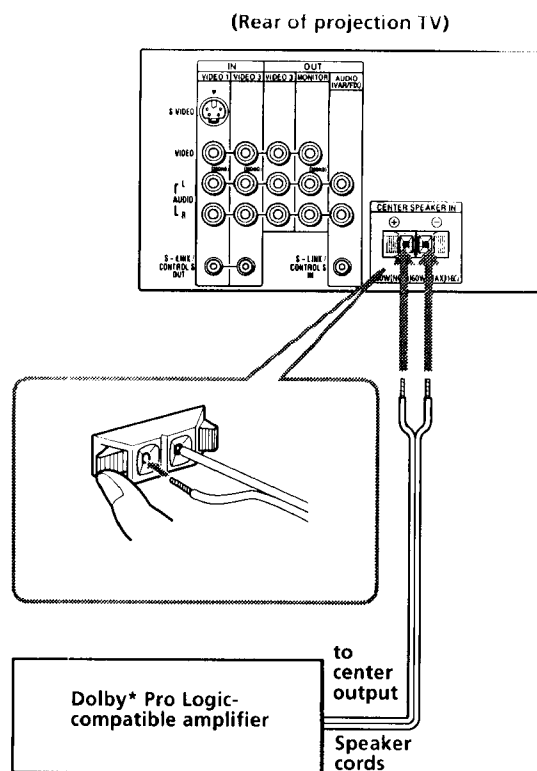
* Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. numbers 3,959,590. Canadian numbers 1,004,603 and 1,037,877. "Dolby", "Pro Logic", and the double-D symbol □□ are trademarks of Dolby Laboratories Licensing Corporation.

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

The S-Link feature allows you to operate the projection TV and VCR with the S-Link function in the following ways:
- When you press the VCR's play button, the projection TV's input mode is automatically changed to video input which is connected, and the VCR starts playing a tape.

- You can turn off the projection TV and VCR together using the SYSTEM OFF button (see page 38 for details).

Notes
- The projection TV may malfunction if you connect the S-Link cable to the projection TV without connecting the other end of the cable to the VCR.
- When making the S-Link connection, be sure to insert all the connectors firmly.
- The same terminals are used for both S-Link and CONTROL S.

EN
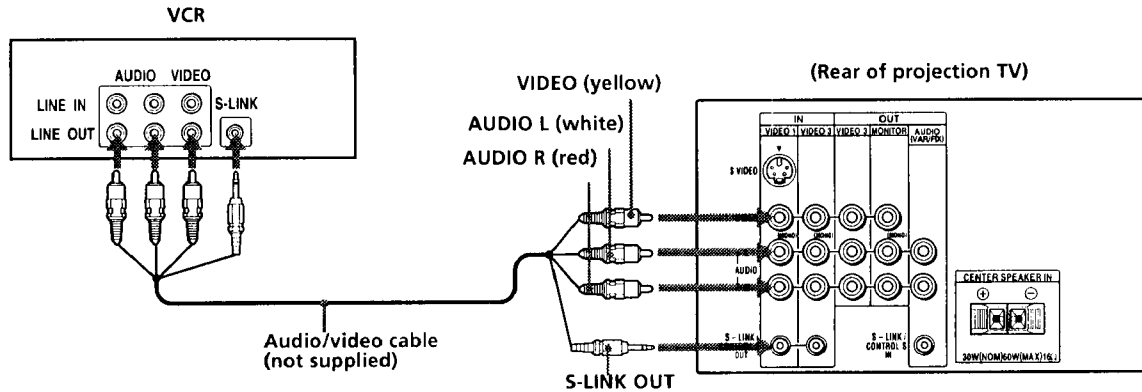
Connecting other Sony equipment with CONTROL S jack

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

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

Note
- The same terminals are used for both S-Link and CONTROL S.
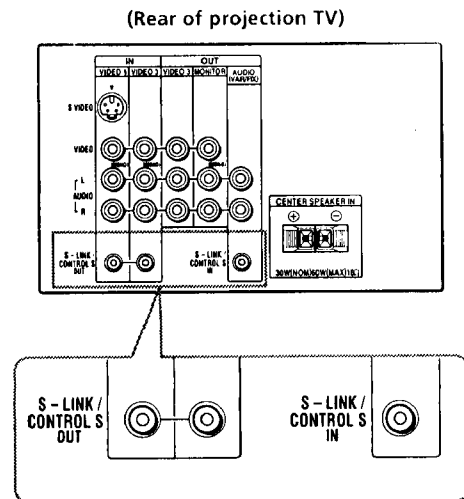
Step 3: Setting up the remote commander

Inserting batteries

Insert two size AA (R6) batteries (supplied) by matching the + and – on the battery to the diagram inside the battery compartment.
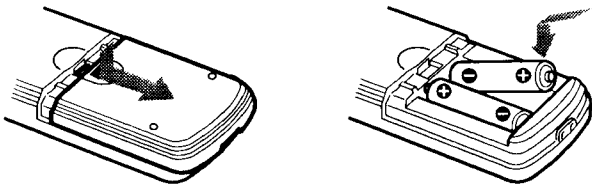
Notes
- Under normal conditions, batteries will last up to six months. If the remote commander does not operate properly or the indicators of the buttons on the remote commander do not light up, the batteries may be worn out. When replacing batteries, replace both of them with new ones.
- Do not mix 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 commander for a long period of time.
- Do not handle the remote commander roughly. Do not drop it, step on it or let it get wet.
- Do not place the remote commander in direct sunlight, near a heater, or where the humidity is high.

Getting to know buttons on the remote commander

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

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

Label color
White .... Projection TV/VCR/DBS/Cable box operation buttons.
Yellow................. PIP operation buttons.
Blue .... DBS operation buttons.
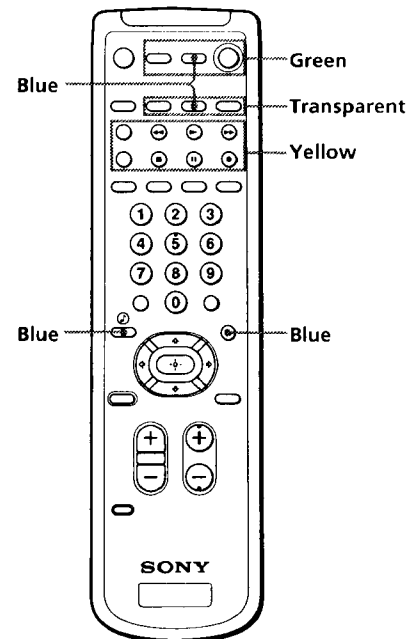
Step 4: Setting up the projection TV automatically (AUTO SET UP)

You can set up your projection TV easily by using 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 **17**), "Setting cable TV on or off" (page **18**), "Presetting channels" (page **19**) and "Changing the menu language" (page **19**).

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

(Front of projection TV)

SET UP
TV/VIDEO
VOLUME–   CHANNEL+
VOLUME+ CHANNEL–   POWER
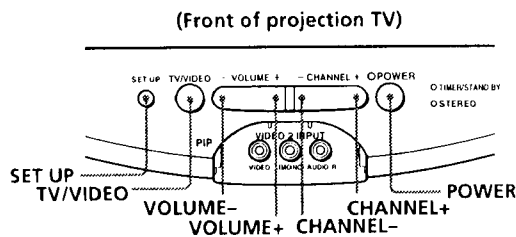
1 Press POWER to turn the projection TV on.

O POWER

2 Press SET UP on the front of the projection TV.

The AUTO SET UP screen appears.

SET UP


```
AUTO SET UP    [CH+]
AUTO AJUSTES : [CH-]
RÉGLAGE AUTO : [VOL+]
DEMO:          [VOL-]
Press [SETUP] to Exit
```
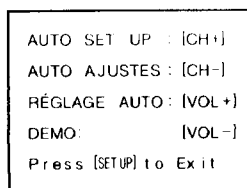
3 Press CHANNEL+ to start AUTO SET UP.

If you prefer Spanish or French to English, you can change the on-screen menu language. Press CHANNEL – for Spanish or VOLUME+ for French.

– CHANNEL +


```
CONTINUE TO
   AUTO PROGRAM?

   YES : [CH+]
   NO:   [CH-]
```
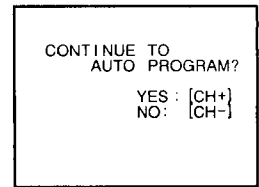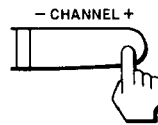
All of the menus will be set to the factory preset condition in the selected language.

4 Press CHANNEL+ to preset channels.
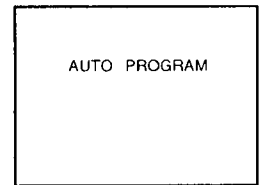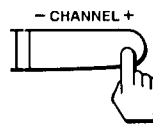
– CHANNEL +


```
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 following menu appears. If the projection TV receives cable TV channels, CATV is set to ON automatically.
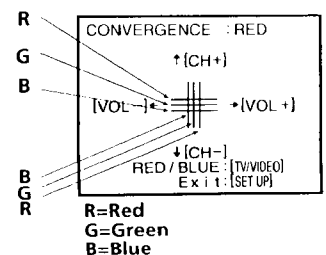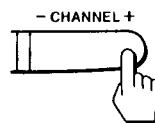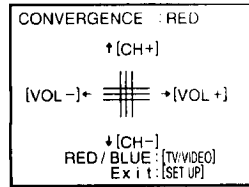
```
CONTINUE TO
   CONVERGENCE?

   YES : [CH+]
   NO:   [CH-]
```
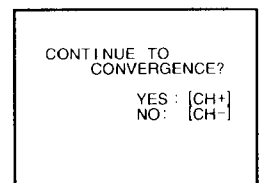
5 Adjust convergence.

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

– CHANNEL +


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

R=Red
G=Green
B=Blue

(continued)

EN

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

TV/VIDEO

```
CONVERGENCE  : RED
        ↑[CH+]

[VOL−]←  ≣╫╪  →[VOL +]

        ↓[CH−]
RED / BLUE : [TV/VIDEO]
    E x i t : [SET UP]
```

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

B
G+R

− VOLUME +   − CHANNEL +

```
CONVERGENCE  : RED
        ↑[CH+]

[VOL−]←≣╫╪  →[VOL +]

        ↓[CH−]
RED / BLUE : [TV/VIDEO]
    E x i t : [SET UP]
```

B
G+R
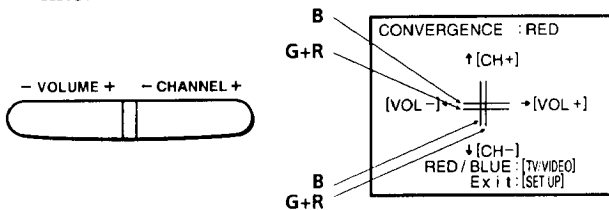
To move horizontal line up/down, press CHANNEL+/−.
To move vertical line right/left, press VOLUME+/−.

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

```
CONVERGENCE  : BLUE
        ↑[CH+]

[VOL−]←  ─┼─  →[VOL +]

        ↓[CH−]
RED / BLUE : [TV/VIDEO]
    E x i t : [SET UP]
```

White cross
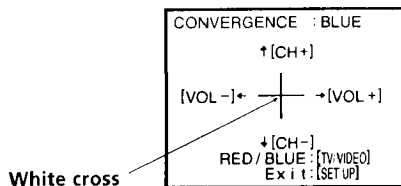
Notes
• If more than 90 seconds elapse after you press a button, the menu disappears automatically.
• In case of using the AUX connector, press TV (black button) on the remote commander first and make sure that "AUX" is displayed beside the channel number on the screen. Then follow steps 2 to 5 above to perform AUTO SET UP.

To preview the main functions (DEMO)
Press VOLUME− in step 3. 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.
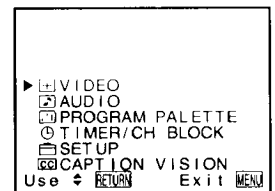
TV (FUNCTION)
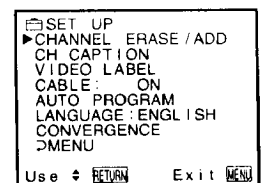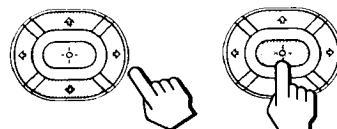
0-9 buttons

ENTER

MENU

CH +/−

SONY
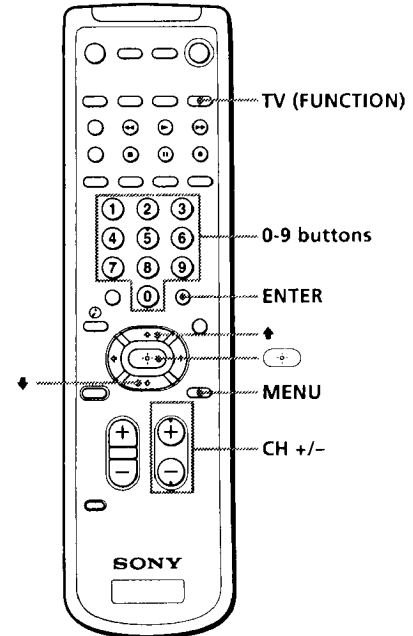
1 Press TV (FUNCTION).

— FUNCTION —
TV
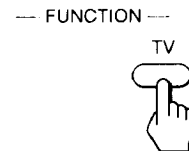
2 Press MENU.
The main menu appears.

MENU

```
► ⊟ V I D E O
  🔊 AUD I O
  ▦ PROGRAM PALETTE
  ⏱ T I MER/ CH BLOCK
  ⊟ SET UP
  🄲🄲 CAPT I ON  V I S I ON
Use ↕ RETURN   Ex i t MENU
```

3 Press ↑ or ↓ to move the cursor (►) to SET UP and press ⊙.
The SET UP menu appears.

```
⊟ SET  UP
► CHANNEL  ERASE / ADD
  CH  CAPT I ON
  V I DEO  LABEL
  CABLE :       ON
  AUTO  PROGRAM
  LANGUAGE : ENGL I SH
  CONVERGENCE
  ⊃MENU

Use ↕ RETURN   Ex i t MENU
```

4 Make sure the cursor (▶) is beside CHANNEL ERASE/ADD and press ⊕.

If the cursor is not beside CHANNEL ERASE/ ADD, press ♠ or ♦ to move the cursor and press ⊕.

The CHANNEL ERASE/ADD menu appears.

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



Use ↕ RETURN     Exit MENU
```
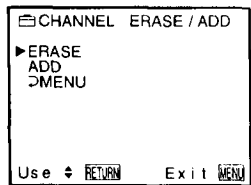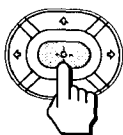
5 Erase and/or add the channel you want:

To erase an unwanted channel

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

(2) Press CH + or − to select the channel you want to erase.

Selected channel number

CH

```
⊟CHANNEL  ERASE / ADD  ⑮
▶ERASE
 ADD
 ⊃MENU


Select the channel
Use ↕ RETURN     Exit MENU
```
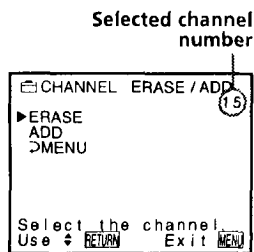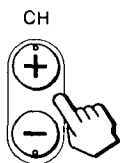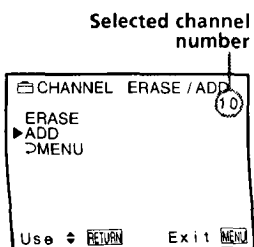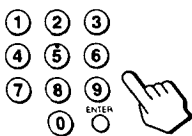
(3) Press ⊕.

The "−" indication appears beside the channel number, showing that the channel is erased from the preset memory.
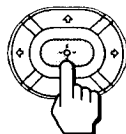
To add a channel that you want

(1) Press ♠ or ♦ to select ADD.

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

Selected channel number

```
① ② ③
④ ⑤ ⑥
⑦ ⑧ ⑨
   ⓪ ○
   ENTER
```

```
⊟CHANNEL  ERASE / ADD ⑩
 ERASE
▶ADD
 ⊃MENU



Use ↕ RETURN     Exit MENU
```

(3) Press ⊕.

The "+" indication appears beside the channel number, showing that the channel is added to the preset memory.
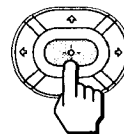
6 To erase and/or add other channels, repeat step 5.

7 When you finish, press MENU.

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.

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

• Erasing and adding channels are also available for the AUX input.

EN

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.
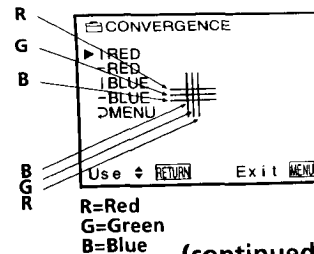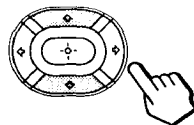
You do not have to do this procedure if you execute AUTO SET UP (page **15**). Do this procedure only when you want to adjust it manually.

1 Press MENU.

2 Press ♠ or ♦ to move the cursor (▶) to SET UP and press ⊕.

3 Press ♠ or ♦ to move the cursor (▶) to CONVERGENCE and press RETURN.

The CONVERGENCE adjustment screen appears.

```
R                ⊟CONVERGENCE
G              ▶┐RED
                 ─RED─
B                ┤BLUE
                 ─BLUE─
                 ⊃MENU
B
G
R              Use ↕ RETURN   Exit MENU
```

R=Red
G=Green
B=Blue

(continued)

4 Press ↑ or ↓ to move the cursor (▶) to the symbol showing the line you want to adjust, and press ⊙.


```
⊟CONVERGENCE
▶IRED
 −RED
 IBLUE      ╫
 −BLUE
 ⊃MENU      ╫

Use ↕ RETURN    Exit MENU
```
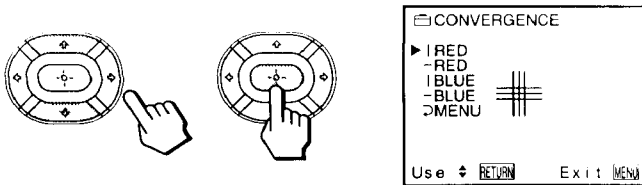
| RED: Red vertical line (left/right adjustment)
— RED: Red horizontal line (up/down adjustment)
| BLUE: Blue vertical line (left/right adjustment)
— BLUE: Blue horizontal line (up/down adjustment)

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


```
              R
              G   ⊟CONVERGENCE
              B    ┌RED
                   −RED
                   IBLUE   ╫
                   −BLUE   ╫
                   ⊃MENU

              B    Use ↕ RETURN    Exit MENU
            G+R
```

To move up/right, press ↑.
To move down/left, press ↓.

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 execute AUTO SET UP (page **15**). Do this procedure only when you want to set it manually.

1 Press MENU.
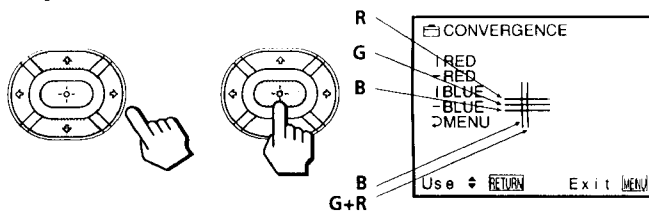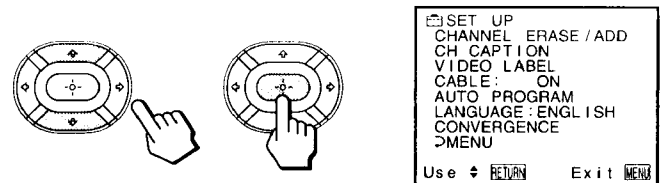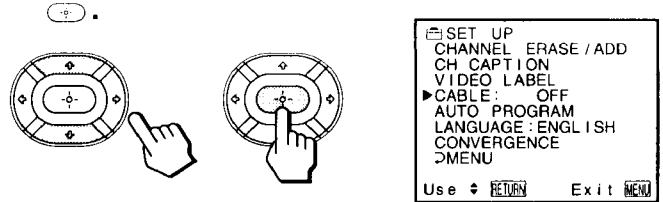
2 Press ↑ or ↓ to move the cursor (▶) to SET UP and press ⊙.

3 Press ↑ or ↓ to move the cursor (▶) to CABLE and press ⊙.


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

Use ↕ RETURN    Exit MENU
```

4 Press ↑ or ↓ to select ON or OFF and press ⊙.


```
⊟SET UP
 CHANNEL ERASE / ADD
 CH CAPTION
 VIDEO LABEL
▶CABLE:      OFF
 AUTO PROGRAM
 LANGUAGE : ENGLISH
 CONVERGENCE
 ⊃MENU

Use ↕ RETURN    Exit MENU
```

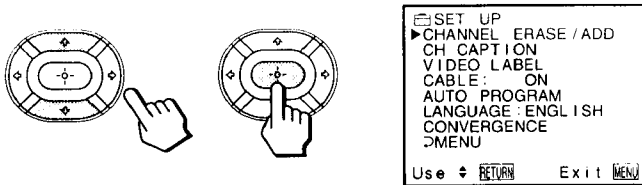**5** Press MENU to return to the original screen.

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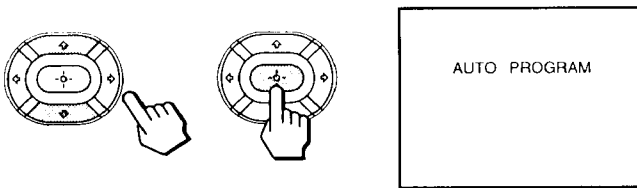
Presetting channels

You can preset TV channels easily by AUTO PROGRAM feature.
You do not have to do this procedure if you execute AUTO SET UP (page **15**). Do this procedure only when you want to set it manually.

1 Press MENU.

2 Press ↟ or ↡ to move the cursor (▶) to SET UP and press ⊙.


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

Use ↕ RETURN    Exit MENU
```

3 Press ↟ or ↡ to move the cursor (▶) to 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.

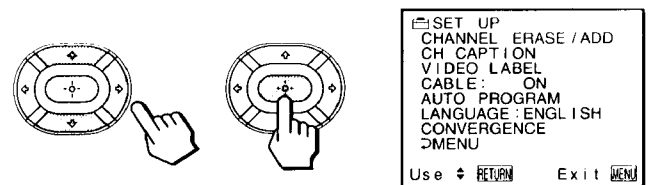**4** Press MENU to return to the original screen.

Notes
- If AUTO PROGRAM appears in black in the SET UP menu, the projection TV is set to a video input and you cannot select AUTO PROGRAM. Press TV (black) so that a channel number appears.
- If more than 90 seconds elapse after you press a button, the menu disappears automatically.
- Presetting channels is also available for the AUX input.

Changing the menu language

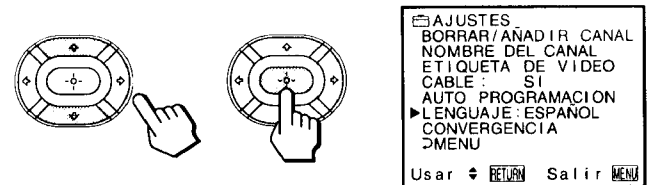If you prefer Spanish or French to English, you can change the menu language.
You do not have to do this procedure if you execute AUTO SET UP (page **15**). Do this procedure only when you want to set it manually.

1 Press MENU.

2 Press ↟ or ↡ to move the cursor (▶) to SET UP and press ⊙.

3 Press ↟ or ↡ to move the cursor (▶) to LANGUAGE and press ⊙.


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

Use ↕ RETURN    Exit MENU
```

4 Press ↟ or ↡ to select the language and press ⊙.
The menu in selected language appears.


```
⊟AJUSTES
 BORRAR / AÑADIR CANAL
 NOMBRE DEL CANAL
 ETIQUETA DE VIDEO
 CABLE:     SI
 AUTO PROGRAMACION
▶LENGUAJE : ESPAÑOL
 CONVERGENCIA
 ⊃MENU

Usar ↕ RETURN    Salir MENU
```
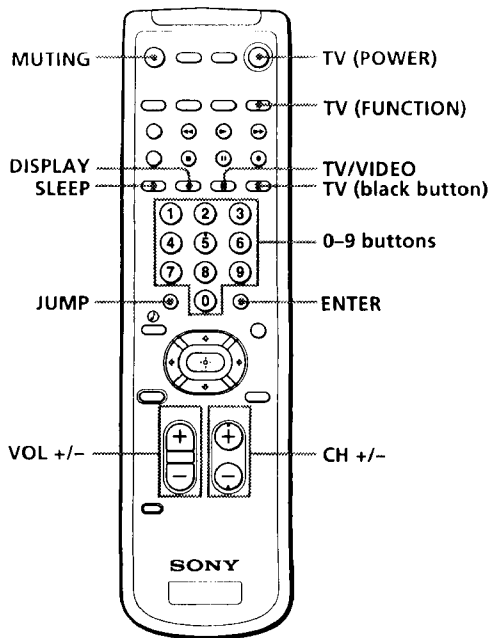
5 Press MENU to return to the original screen.

Note
- Even when you select Spanish or French language, certain parts of the menus remain in English.
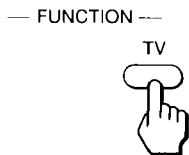
Watching TV programs

MUTING — TV (POWER)

TV (FUNCTION)

DISPLAY — TV/VIDEO
SLEEP — TV (black button)

0-9 buttons

JUMP — ENTER

VOL +/- — CH +/-

SONY

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

The TIMER/STAND BY indicator flashes until the picture appears.

POWER

If "VIDEO" appears on the screen, press TV (black button) so that a channel number appears.

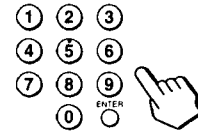## 2 Press TV (FUNCTION).

— FUNCTION —

TV

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

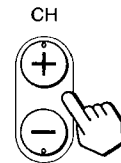## 3 Select the channel you want to watch:

To select a channel directly

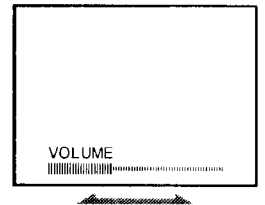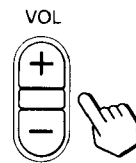Press the 0 – 9 buttons and then press ENTER. For example, to select channel 10, press 1, 0 and ENTER.

To scan through channels

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

CH

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 back the channel.

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

Muting the sound

Press MUTING.

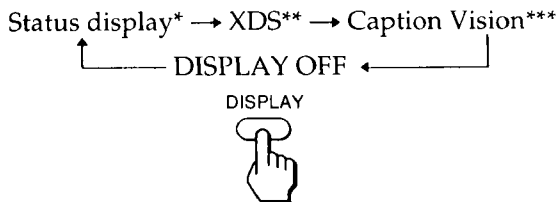"MUTING" appears on the screen.

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** → Caption Vision***

L—— DISPLAY OFF ←———J

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 **36** 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 (in minutes) you want appears.
Each time you press SLEEP, the time changes as follows: 30 → 60 → 90 → OFF.

SLEEP

"SLEEP" appears about one minute before the projection TV shuts off.

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

The sleep timer is also cancelled when you select AUTO PROGRAM under the SET UP menu.

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 TV picture, press TV (black button).

EN

Changing the VHF/UHF input to the AUX input

Press TV (black button).
"AUX" appears beside the channel number.

TV

Pressing TV (black button) again switches back to the VHF/UHF input.
When switching from "VIDEO" to "AUX," TV must be pressed twice.

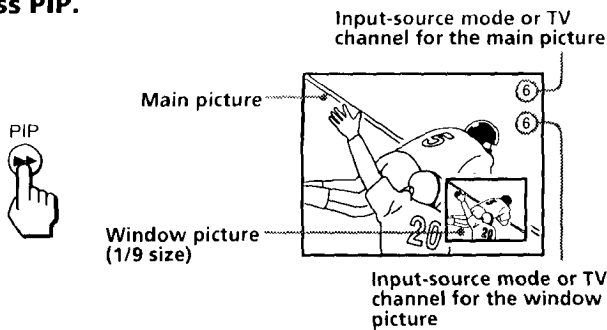# Watching two programs at one time — PIP

The Picture-in-Picture (PIP) feature allows you to watch both the main picture and a window picture simultaneously. You can also watch two TV channels at one time.

FREEZE
CH +/– (yellow labeled button)
POSITION
AUDIO
SWAP
PIP
TV/VIDEO (yellow labeled button)
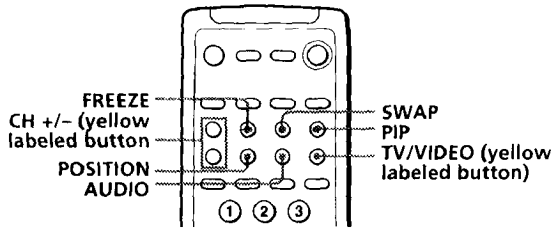
Use the yellow labeled buttons for PIP operations.

Displaying a window picture

Press PIP.

Input-source mode or TV channel for the main picture

Main picture

PIP

Window picture (1/9 size)

Input-source mode or TV channel for the window picture

Press PIP again to display a smaller window picture.

Main picture

PIP

Window picture (1/16 size)
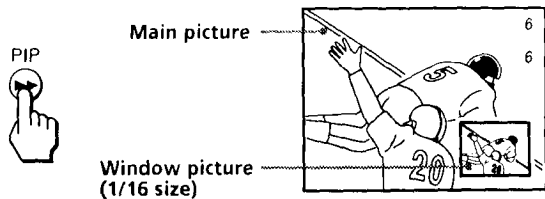
To remove the window picture, press PIP again.

Notes
• The widow picture may be affected by the condition of the main picture.
• If the main picture is not receiving an image, the window picture may be in black and white.
• The widow picture sound is also output from the AUDIO (VAR/FIX) OUT jacks when you listen to it.

Changing the window picture input mode

Press TV/VIDEO (yellow labeled button) to select the input mode.
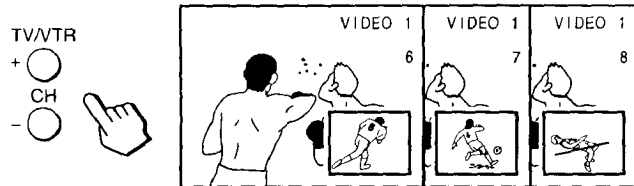Each time you press TV/VIDEO (yellow labeled button), "TV," "VIDEO 1," "VIDEO 2" and "VIDEO 3" appear in sequence.

TV/VIDEO
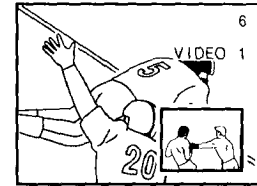
Note
• If you connect your VCR without a cable box, your PIP input source is a VCR. If you connect your VCR with a cable box, your PIP input source is a VCR or cable box.
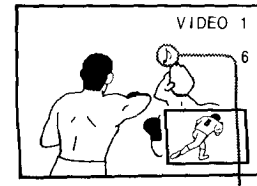
Changing TV channels in the window picture

Press CH +/– (yellow labeled button).

TV/VTR
+
CH
–

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.
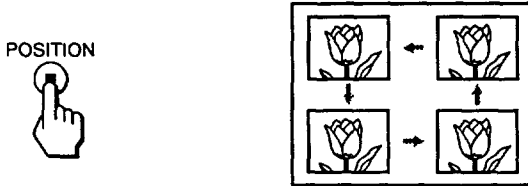
AUDIO

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.

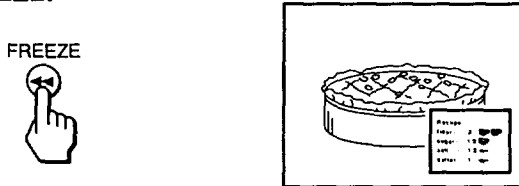## Changing the position of the window picture

Press POSITION.

Each time you press POSITION, the window picture will move as illustrated.

POSITION

Freezing the window picture

This feature is useful when you want to write down a recipe from a cooking program, a displayed address or a phone number and so on.
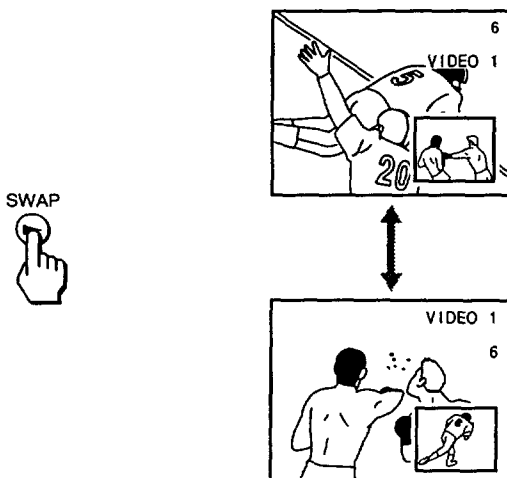
Press FREEZE.

FREEZE

To restore the normal screen, press FREEZE again.

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.
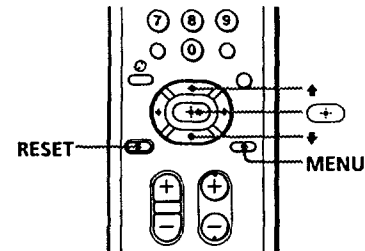
SWAP

VIDEO 1
6

VIDEO 1
6

Note
- The channels being received through the AUX jack cannot be displayed as a window picture.
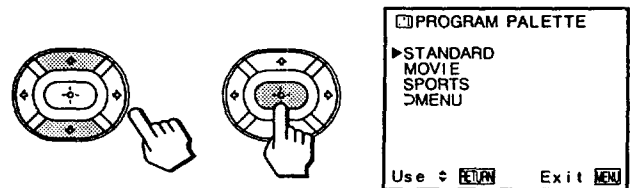

Selecting picture and sound effects
(PROGRAM PALETTE)

You can select one of three settings for picture and sound effects that best suits the program.
You can also adjust picture effect for each setting to suit your taste.

RESET
MENU

1 Press MENU.

2 Press ✦ or ✦ to select PROGRAM PALETTE and press ⊕.

```
▣PROGRAM PALETTE

►STANDARD
 MOVIE
 SPORTS
 ⊃MENU


Use ✧ RETURN    Exit MENU
```

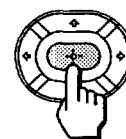**3** Select the item you want to adjust.
For example:
(1) To select MOVIE, press ✦ or ✦ to move the cursor (►) to MOVIE.

```
▣PROGRAM PALETTE

 STANDARD
►MOVIE
 SPORTS
 ⊃MENU


Use ✧ RETURN    Exit MENU
```
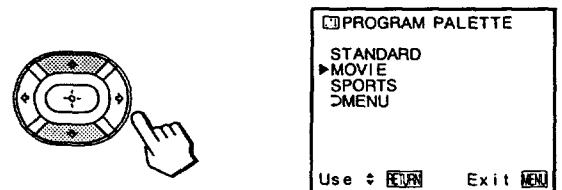
(2) Press ⊕.

For details on each item, see "Effect of three items" on the next page.

(continued)

Effect of three items
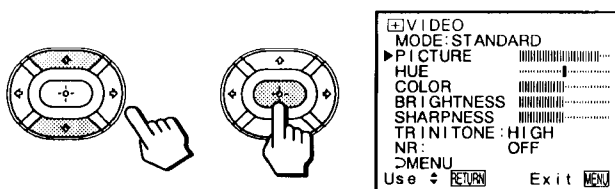
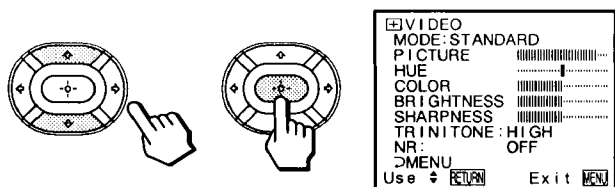| Item	Picture effect	Sound effect
STANDARD	Standard	Standard
MOVIE	Finely detailed picture	Theatrical audio effect
SPORTS	Vivid, bright picture	Sound with a sports stadium effect

Adjusting the picture in PROGRAM PALETTE

1 Press MENU.

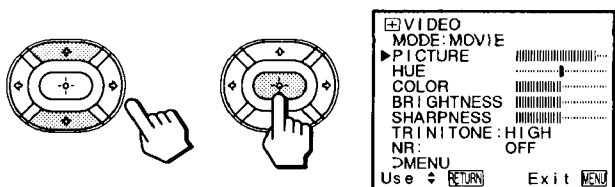**2 Press ↟ or ↡ to select VIDEO and press ⊙.**


```
⊞VIDEO
  MODE:STANDARD
▶PICTURE      |||||||||||||||||||||···
  HUE                    ·······|·········
  COLOR         ||||||||||||||········
  BRIGHTNESS ||||||||||||········
  SHARPNESS  ||||||||||||········
  TRINITONE:HIGH
  NR:              OFF
  ⊃MENU
Use ↕ RETURN     Exit MENU
```

3 Press ↟ or ↡ to select MODE and press ⊕.


```
⊞VIDEO
  MODE:STANDARD
  PICTURE      |||||||||||||||||||||···
  HUE                    ·······|·········
  COLOR         ||||||||||||||········
  BRIGHTNESS ||||||||||||········
  SHARPNESS  ||||||||||||········
  TRINITONE:HIGH
  NR:              OFF
  ⊃MENU
Use ↕ RETURN     Exit MENU
```

4 Press ↟ or ↡ to select the item which you want to adjust and press ⊕.


```
⊞VIDEO
  MODE:MOVIE
▶PICTURE      |||||||||||||||||||||···
  HUE                    ·······|·········
  COLOR         ||||||||||||||········
  BRIGHTNESS ||||||||||||········
  SHARPNESS  ||||||||||||········
  TRINITONE:HIGH
  NR:              OFF
  ⊃MENU
Use ↕ RETURN     Exit MENU
```

5 Adjust the picture according to the steps 3 to 5 in "Adjusting the picture."

To restore the factory setting
Press RESET while the VIDEO menu is displayed.

Adjusting the picture (VIDEO)

When watching TV programs, you can adjust the quality of the picture to suit your taste. The adjusted level is stored in PROGRAM PALETTE in which that adjustment is done.
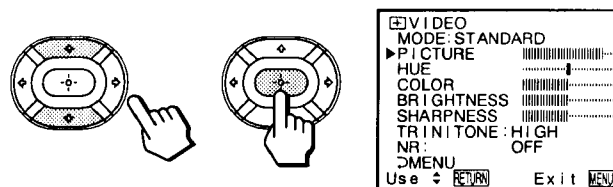You can adjust the picture of video input(s) as well.
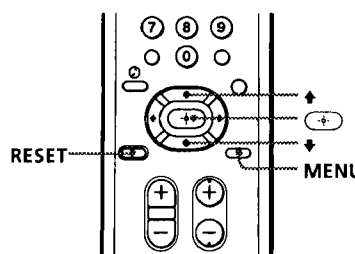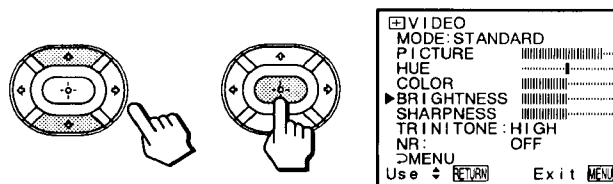

1 Press MENU.

2 Press ↟ or ↡ to move the cursor to VIDEO and press ⊕.
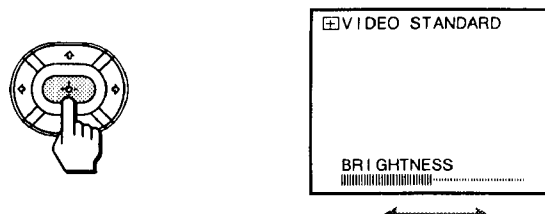The VIDEO adjustment menu appears.


```
⊞VIDEO
  MODE:STANDARD
▶PICTURE      |||||||||||||||||||||···
  HUE                    ·······|·········
  COLOR         ||||||||||||||········
  BRIGHTNESS ||||||||||||········
  SHARPNESS  ||||||||||||········
  TRINITONE:HIGH
  NR:              OFF
  ⊃MENU
Use ↕ RETURN     Exit MENU
```

3 Select the item you want to adjust.
For example:
(1) To adjust brightness, press ↟ or ↡ to select BRIGHTNESS.


```
⊞VIDEO
  MODE:STANDARD
  PICTURE      |||||||||||||||||||||···
  HUE                    ·······|·········
  COLOR         ||||||||||||||········
▶BRIGHTNESS ||||||||||||········
  SHARPNESS  ||||||||||||········
  TRINITONE:HIGH
  NR:              OFF
  ⊃MENU
Use ↕ RETURN     Exit MENU
```

(2) Press ⊕.


```
⊞VIDEO STANDARD




  BRIGHTNESS
  ||||||||||||||||||||||||||||||·········
```

4 Adjust the selected item:

(1) Press ✦/➡ or ✦/⬅ to adjust the item.

```
⊞VIDEO STANDARD




BRIGHTNESS
IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
```
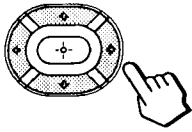
(2) Press ⊕.

The new setting appears in the VIDEO menu, and is stored in the displayed PROGRAM PALETTE mode.
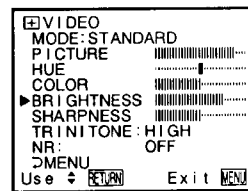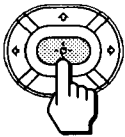
```
⊞VIDEO
   MODE:STANDARD
   PICTURE      IIIIIIIIIIIIIIIIIIIIIIIIII···
   HUE          ············I···········
   COLOR        IIIIIIIIII·········
  ▶BRIGHTNESS   IIIIIIIIIIIIIIIIII········
   SHARPNESS    IIIIIIIIIIII·······
   TRINITONE:HIGH
   NR:          OFF
   ⊃MENU
Use ✦ RETURN     Exit MENU
```

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

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

Description of adjustable items.

Item	Press ✦/➡ to	Press ✦/⬅ to
PICTURE	Increase picture contrast for vivid color	Decrease picture contrast for soft color
HUE	Make picture tones become greenish	Make picture tones become purplish
COLOR	Increase color intensity	Decrease color intensity
BRIGHTNESS	Brighten the picture	Darken the picture
SHARPNESS	Sharpen the picture	Soften the picture

To restore the factory setting

Press RESET on the remote commander.

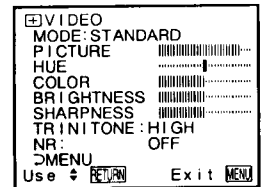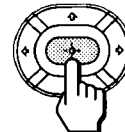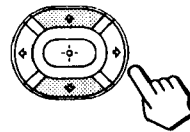## Adjusting the color temperature (TRINITONE)

The TRINITONE feature controls the color temperature, permitting white balance preference adjustment without affecting skin tones.
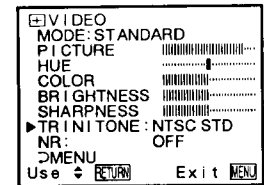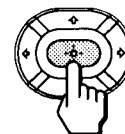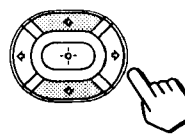
```
⑦ ⑧ ⑨
○ ○ ○
○ ○ ○
                    ✦
                   ⊕
                    ✦
                   MENU
⊕ ⊕
⊖ ⊖
```

EN
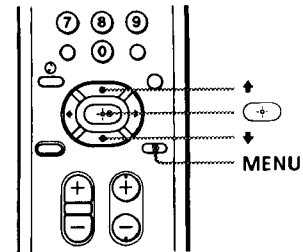
1 Press MENU.

2 Press ✦ or ✦ to select VIDEO and press ⊕.

3 Press ✦ or ✦ to select TRINITONE and press ⊕.

```
⊞VIDEO
   MODE:STANDARD
   PICTURE      IIIIIIIIIIIIIIIIIIIIIIIIII···
   HUE          ············I···········
   COLOR        IIIIIIIIII·········
   BRIGHTNESS   IIIIIIIIIIIIIIIIII········
   SHARPNESS    IIIIIIIIIIII·······
   TRINITONE:HIGH
   NR:          OFF
   ⊃MENU
Use ✦ RETURN     Exit MENU
```

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

```
⊞VIDEO
   MODE:STANDARD
   PICTURE      IIIIIIIIIIIIIIIIIIIIIIIIII···
   HUE          ············I···········
   COLOR        IIIIIIIIII·········
   BRIGHTNESS   IIIIIIIIIIIIIIIIII········
   SHARPNESS    IIIIIIIIIIII·······
  ▶TRINITONE:NTSC STD
   NR:          OFF
   ⊃MENU
Use ✦ RETURN     Exit MENU
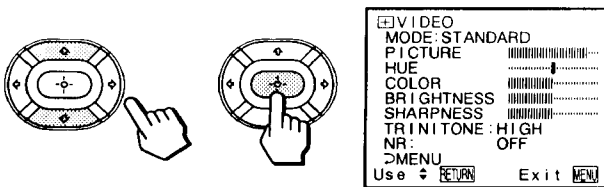```

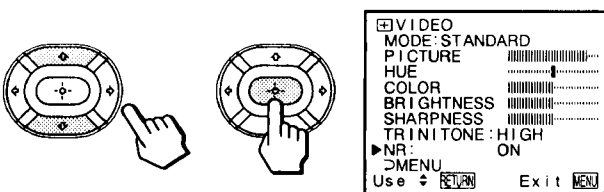| Choose | To |
|--------|-----|
| NTSC STD | Make the white color reddish. |
| MEDIUM | Make the white color whitish. |
| HIGH | Make the white color bluish. |

# Reducing picture noise (NR)

# Adjusting sound (AUDIO)

You can reduce picture noise when NR is set to ON.

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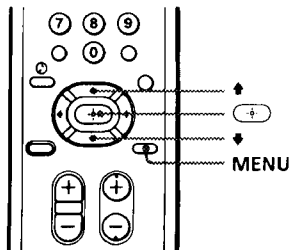
**1 Press MENU.**

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

**3 Press ♦ or ♦ to select NR and press ⊕.**

```
⊞VIDEO
  MODE:STANDARD
  PICTURE ||||||||||||||||||||||···
  HUE   ···········|··········
  COLOR ||||||||||||||···········
  BRIGHTNESS ||||||||||||···········
  SHARPNESS ||||||||||||···········
  TRINITONE:HIGH
  NR: OFF
  ⊃MENU
Use ✦ RETURN   Exit MENU
```
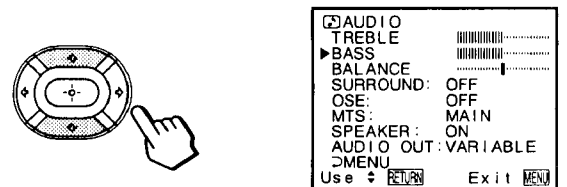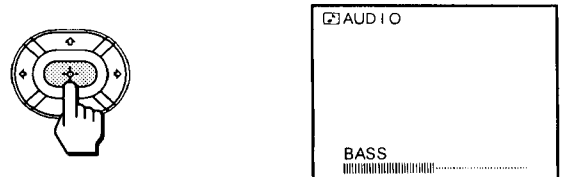
**4 Press ♦ or ♦ to select ON and press ⊕.**

```
⊞VIDEO
  MODE:STANDARD
  PICTURE      ||||||||||||||||||||||···
  HUE          ···········|··········
  COLOR        ||||||||||||||···········
  BRIGHTNESS   ||||||||||||···········
  SHARPNESS    ||||||||||||···········
  TRINITONE:HIGH
▶NR:           ON
  ⊃MENU
Use ✦ RETURN     Exit MENU
```

Note
• This feature is useful when watching a weak broadcast signal.

1 Press MENU.

2 Press ♦ or ♦ to select AUDIO and press ⊕.

```
⊡AUDIO
▶TREBLE       ||||||||||||···········
  BASS        ||||||||||||···········
  BALANCE     ···········|··········
  SURROUND:   OFF
  OSE:        OFF
  MTS:        MAIN
  SPEAKER:    ON
  AUDIO OUT:VARIABLE
  ⊃MENU
Use ✦ RETURN     Exit MENU
```

3 Select the item you want to adjust.
For example:
(1) To adjust bass, press ♦ or ♦ to select BASS.

```
⊡AUDIO
  TREBLE       ||||||||||||···········
▶BASS         ||||||||||||···········
  BALANCE     ···········|··········
  SURROUND:   OFF
  OSE:        OFF
  MTS:        MAIN
  SPEAKER:    ON
  AUDIO OUT:VARIABLE
  ⊃MENU
Use ✦ RETURN     Exit MENU
```

(2) Press ⊕.

```
⊡AUDIO




  BASS
  ||||||||||||||||||||||||···········
```

4 Adjust the selected item:

(1) Press ✦/➡ or ➡/✦ to adjust the item.


```
□ AUDIO



BASS
||||||||||||||||||||||||||||||||||||||||||||
```
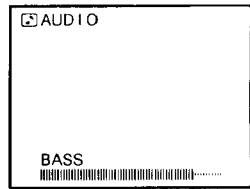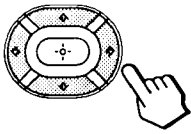
(2) Press ⊙.

The new setting appears in the AUDIO menu.
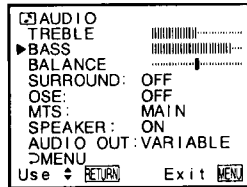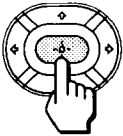

```
□ AUDIO
   TREBLE       ||||||||||||||
▶ BASS          ||||||||||||||||||||||
   BALANCE            |
   SURROUND:    OFF
   OSE:         OFF
   MTS:         MAIN
   SPEAKER:     ON
   AUDIO OUT:   VARIABLE
   ⊃MENU
Use ↕ RETURN      Exit MENU
```

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

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

Description of adjustable items

Item	Press ✦/➡ to	Press ➡/✦ to
TREBLE	Increase the treble response	Decrease the treble response
BASS	Increase the bass response	Decrease the bass response
BALANCE	Emphasize the right speaker's volume	Emphasize the left speaker's volume

To restore the factory settings

Press RESET on the remote commander.
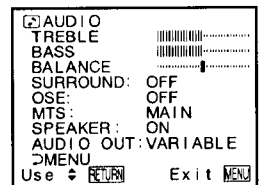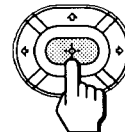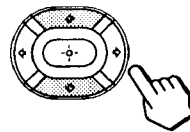

Listening to surround sound (SURROUND)

The SURROUND feature simulates sound reproduction with the atmosphere of a movie theater or a concert hall. Surround sound is only effective for stereo programs.
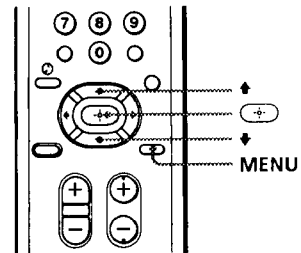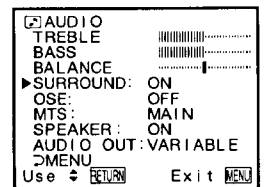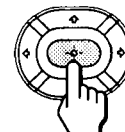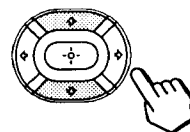

1 Press MENU.

2 Press ✦ or ➡ to select AUDIO and press ⊙.

3 Press ✦ or ➡ to select SURROUND and press ⊙.


```
□ AUDIO
   TREBLE       ||||||||||||||
   BASS         ||||||||||||||
   BALANCE            |
   SURROUND:    OFF
   OSE:         OFF
   MTS:         MAIN
   SPEAKER:     ON
   AUDIO OUT:   VARIABLE
   ⊃MENU
Use ↕ RETURN      Exit MENU
```

4 Press ✦ or ➡ to select ON and press ⊙.


```
□ AUDIO
   TREBLE       ||||||||||||||
   BASS         ||||||||||||||
   BALANCE            |
▶ SURROUND:    ON
   OSE:         OFF
   MTS:         MAIN
   SPEAKER:     ON
   AUDIO OUT:   VARIABLE
   ⊃MENU
Use ↕ RETURN      Exit MENU
```
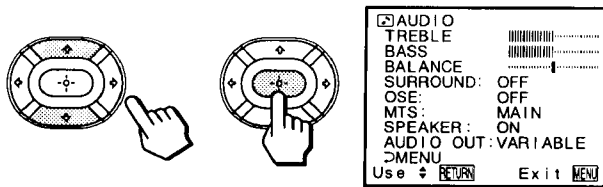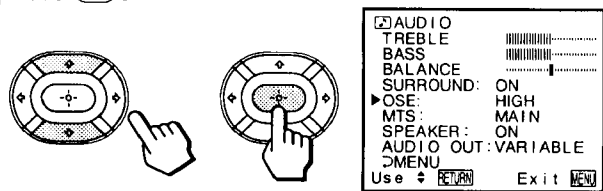
Orchestra Seat Effect* (OSE) feature restores the harmonic balance of the sound to dramatically improve the overall reproduction of programs. It gives the sound more clarity, depth, and definition, making the sound more dynamic.
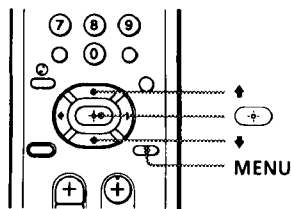
1 Press MENU.

2 Press ↑ or ↓ to select AUDIO and press ⊕.

3 Press ↑ or ↓ to select OSE and press ⊕.


```
⊡AUDIO
 TREBLE        ||||||||||||·········
 BASS          ||||||||||||·········
 BALANCE            ·········|·········
 SURROUND:  OFF
 OSE:       OFF
 MTS:       MAIN
 SPEAKER:   ON
 AUDIO OUT:VARIABLE
 ⊃MENU
Use ↕ RETURN     Exit MENU
```

4 Press ↑ or ↓ to select LOW, HIGH or OFF and press ⊕.


```
⊡AUDIO
 TREBLE        ||||||||||||·········
 BASS          ||||||||||||·········
 BALANCE            ·········|·········
 SURROUND:  ON
▶OSE:       HIGH
 MTS:       MAIN
 SPEAKER:   ON
 AUDIO OUT:VARIABLE
 ⊃MENU
Use ↕ RETURN     Exit MENU
```

Choose	To
LOW	Listen to news programs, etc.
HIGH	Listen to music, sports, video games or movies.
OFF	Deactivate the OSE effect.

For the best sound quality, we recommend that AUDIO to be set at factory setting when you set OSE to LOW or HIGH.

* Orchestra Seat™ Sound Effect (OSE) feature is using BBE technology under licence from BBE sound Inc.
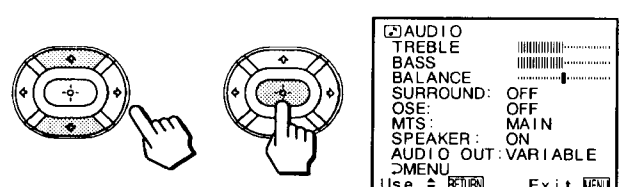
Note
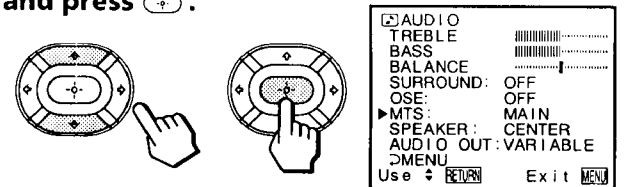• OSE may also be output through audio outputs.

The Multichannel TV Sound (MTS) feature gives you the choice to enjoy stereo sound or Second Audio Programs (SAP) when available. The initial setting is stereo sound (MAIN).
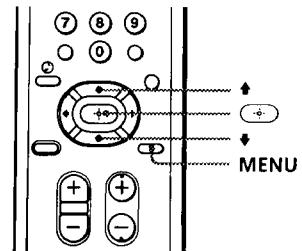
1 Press MENU.

2 Press ↑ or ↓ to select AUDIO and press ⊕.

3 Press ↑ or ↓ to select MTS and press ⊕.


```
⊡AUDIO
 TREBLE        ||||||||||||·········
 BASS          ||||||||||||·········
 BALANCE            ·········|·········
 SURROUND:  OFF
 OSE:       OFF
 MTS:       MAIN
 SPEAKER:   ON
 AUDIO OUT:VARIABLE
 ⊃MENU
Use ↕ RETURN     Exit MENU
```

4 Press ↑ or ↓ to select MAIN, SAP or MONO and press ⊕.


```
⊡AUDIO
 TREBLE        ||||||||||||·········
 BASS          ||||||||||||·········
 BALANCE            ·········|·········
 SURROUND:  OFF
 OSE:       OFF
▶MTS:       MAIN
 SPEAKER:   CENTER
 AUDIO OUT:VARIABLE
 ⊃MENU
Use ↕ RETURN     Exit MENU
```

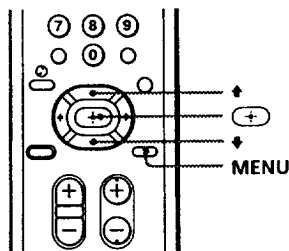| Choose	To
MAIN	Listen to stereo sound. The STEREO indicator on the projection TV lights up while a stereo broadcast is received.
SAP	Listen to bilingual programs. The sound of non-SAP programs will be muted when SAP is selected.
MONO	Reduce noise during stereo broadcasts.

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

Setting the speaker switch (SPEAKER)

Selecting subwoofer sound

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 a Dolby Pro Logic-compatible amplifier to the CENTER SPEAKER IN terminals, you can use the projection TV speakers as center speakers.
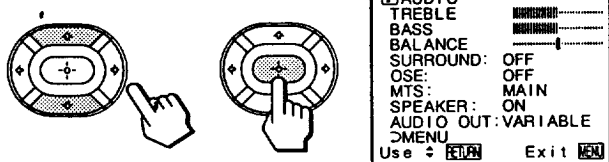
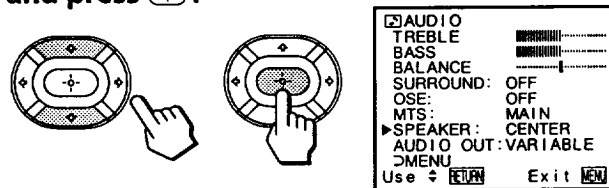After making the connections (pages **12**), set SPEAKER to "CENTER."

1 Press MENU.

2 Press ↑ or ↓ to select AUDIO and press ⊕.

3 Press ↑ or ↓ to select SPEAKER and press ⊕.


```
□AUDIO
  TREBLE        ▮▮▮▮▮▮▮▮·······
  BASS          ▮▮▮▮▮▮▮▮·······
  BALANCE       ──────┃·······
  SURROUND:  OFF
  OSE:       OFF
  MTS:       MAIN
  SPEAKER:   ON
  AUDIO OUT:VARIABLE
  ⊃MENU
Use ↕ 🔲    Exit 🔲
```

4 Press ↑ or ↓ to select MAIN, CENTER or OFF and press ⊕.


```
□AUDIO
  TREBLE        ▮▮▮▮▮▮▮▮·······
  BASS          ▮▮▮▮▮▮▮▮·······
  BALANCE       ──────┃·······
  SURROUND:  OFF
  OSE:       OFF
  MTS:       MAIN
▶SPEAKER:   CENTER
  AUDIO OUT:VARIABLE
  ⊃MENU
Use ↕ 🔲    Exit 🔲
```

| Choose	To
ON	Listen to the sound from the projection TV.
CENTER	Use the projection TV speakers as center speakers.
OFF	Cut off the projection TV speaker sound and listen to the projection TV's sound solely through the audio system speakers.

The projection TV is incorporated with the subwoofer at the rear designed primarily for reproduction of lower audio frequency. You can select the level of the subwoofer.
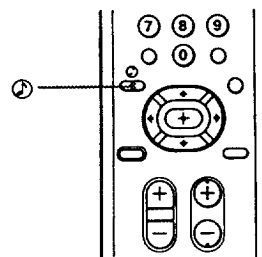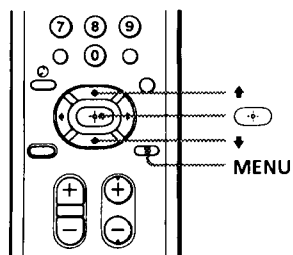

Press ⊘.
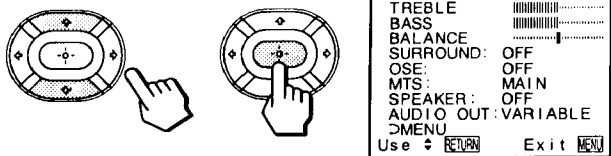
Each time you press ⊘, the display changes as follows:
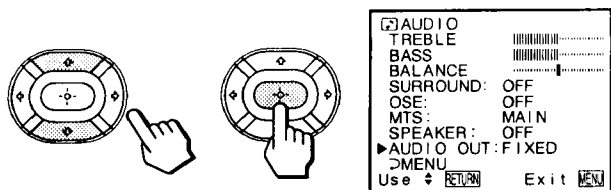
→ SUBWOOFER: OFF → HIGH → MIDDLE → LOW
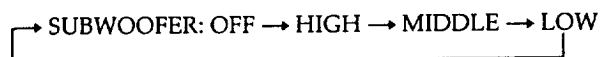
You can select audio out to variable or fixed when SPEAKER is set to OFF or CENTER.
Audio out is variable when SPEAKER is set to ON.

1 Press MENU.

2 Press ↑ or ↓ to select AUDIO and press ⊙.

3 Press ↑ or ↓ to select AUDIO OUT and press ⊙.


```
⊡AUDIO
 TREBLE       IIIIIIIIIIIII·········
 BASS         IIIIIIIIIIIII·········
 BALANCE            ········I·········
 SURROUND:  OFF
 OSE:       OFF
 MTS:       MAIN
 SPEAKER:   OFF
 AUDIO OUT:VARIABLE
 ⊃MENU
Use ↕ RETURN    Exit MENU
```

4 Press ↑ or ↓ to select VARIABLE or FIXED and press ⊙.


```
⊡AUDIO
 TREBLE       IIIIIIIIIIIII·········
 BASS         IIIIIIIIIIIII·········
 BALANCE            ········I·········
 SURROUND:  OFF
 OSE:       OFF
 MTS:       MAIN
 SPEAKER:   OFF
▶AUDIO OUT:FIXED
 ⊃MENU
Use ↕ RETURN    Exit MENU
```

VARIABLE: Sound output varied according to the TV settings. You can adjust the volume, bass, treble and balance.

**FIXED:** Sound output is always fixed to a certain level. You cannot adjust the volume.

If your area uses daylight saving time, change DAYLIGHT SAVING setting depending on the season, before setting the current time.
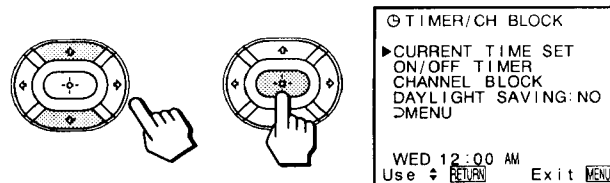
Daylight saving start
- After the first Sunday in April, set DAYLIGHT SAVING to YES. Current time setting (page **31**) automatically moves one hour ahead.

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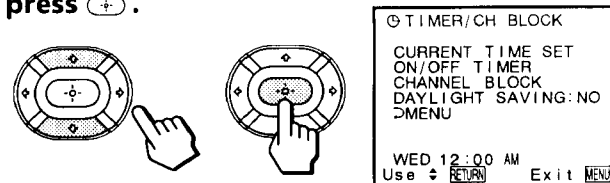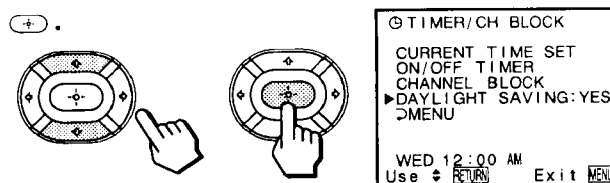- After the last Sunday in October, set DAYLIGHT SAVING to NO. Current time setting automatically moves one hour back.
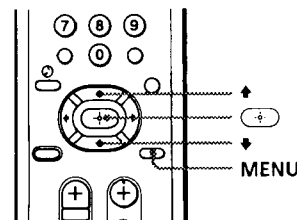
1 Press MENU.

2 Press ↑ or ↓ to move the cursor (▶) to TIMER/CH BLOCK and press ⊙.


```
⊕TIMER/CH BLOCK
▶CURRENT TIME SET
 ON/OFF TIMER
 CHANNEL BLOCK
 DAYLIGHT SAVING:NO
 ⊃MENU

 WED 12:00 AM
Use ↕ RETURN    Exit MENU
```

3 Press ↑ or ↓ to select DAYLIGHT SAVING and press ⊙.


```
⊕TIMER/CH BLOCK
 CURRENT TIME SET
 ON/OFF TIMER
 CHANNEL BLOCK
 DAYLIGHT SAVING:NO
 ⊃MENU

 WED 12:00 AM
Use ↕ RETURN    Exit MENU
```

4 Press ↑ or ↓ to select YES or NO and press ⊙.


```
⊕TIMER/CH BLOCK
 CURRENT TIME SET
 ON/OFF TIMER
 CHANNEL BLOCK
▶DAYLIGHT SAVING:YES
 ⊃MENU

 WED 12:00 AM
Use ↕ RETURN    Exit MENU
```

| Choose	To
YES	Set for daylight saving start
NO	Set for daylight saving end

Setting the clock
(CURRENT TIME SET)

Set the current time before using On/off Timer (page 32) and Channel Block features (page **33**). For example, set the clock to 3:15 P.M., Monday.

MENU

## 1 Press MENU.

2 Press ♦ or ♦ to select TIMER/CH BLOCK and press ⊕.

```
⊙ TIMER/CH BLOCK
▶CURRENT TIME SET

DAYLIGHT SAVING:NO
⊃MENU
                --:-- AM
- - -
Use  ✦ RETURN     Exit MENU
```
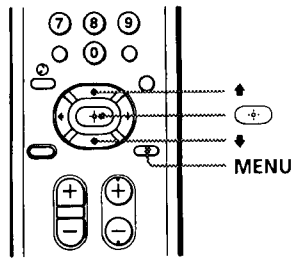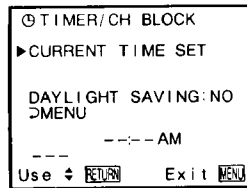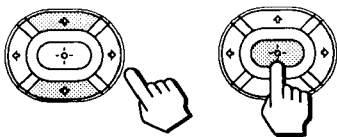
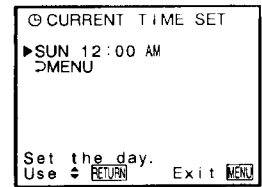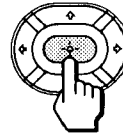If you need to set DAYLIGHT SAVING, follow the procedure on the previous page.

3 Make sure the cursor (▶) is beside CURRENT TIME SET, and press ⊕.
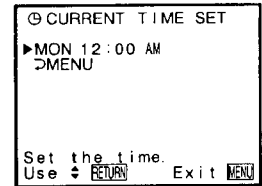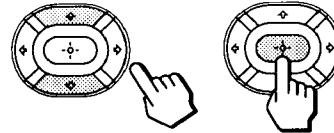If the cursor is not beside CURRENT TIME SET, press ♦ or ♦ to move the cursor and press ⊕.

```
⊙ CURRENT TIME SET
▶        --:-- AM
- - -



Use  ✦ RETURN     Exit MENU
```
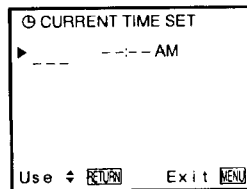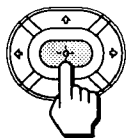
4 Set the current time.
(1) Press ⊕ to start setting the time.

```
⊙ CURRENT TIME SET
▶SUN 12:00 AM
⊃MENU



Set the day.
Use ✦ RETURN     Exit MENU
```

(2) Press ♦ or ♦ to set the day and press ⊕.
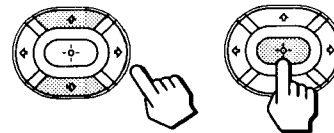
```
⊙ CURRENT TIME SET
▶MON 12:00 AM
⊃MENU



Set the time.
Use ✦ RETURN     Exit MENU
```

(3) Using ♦ or ♦ and ⊕, set hour and minute in the same way as in step (2).
When you press ⊕ after setting the minute, the clock starts.

```
⊙ CURRENT TIME SET
▶MON  3:15 PM
⊃MENU



Use ✦ RETURN     Exit MENU
```
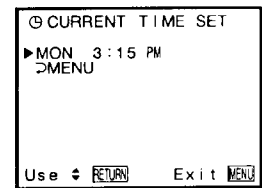
If you make a mistake while setting the time
Press RESET while the CURRENT TIME SET menu is displayed, then repeat step 4.

To display the current time
Press DISPLAY.

Note
- If you unplug the projection TV or a power interruption occurs, the clock will be erased. Reset the current time.

EN

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 time you specify. Make sure the clock is set correctly. If it is not, set the clock first (page **31**).
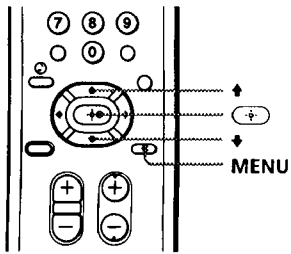
1 Press MENU.

2 Press ♠ or ♦ to select TIMER/CH BLOCK and press ⊕.

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


```
⊕ ON/OFF  TIMER

►1. -------------
    --:--AM  -h  CH---
2. -------------
    --:--AM  -h  CH---
⊃MENU

Select  a  program.
Use  ↕ RETURN      Exit MENU
```

4 Enter the ON/OFF TIMER setting.

(1) Press ♠ or ♦ to select program 1 or 2 and press ⊕.

(2) Press ♠ or ♦ to set the days and press ⊕.
Each time you press ♠ or ♦, the days cycle as shown below.
EVERY SUN–SAT→EVERY MON–FRI→
SUNDAY→MONDAY→...→SATURDAY→
EVERY SUNDAY→EVERY MONDAY →
...→EVERY SATURDAY


```
⊕ ON/OFF  TIMER

1. EVERY  SUN–SAT
   12:00AM  -h  CH---
2. -------------
   --:--AM  -h  CH---
⊃MENU

Set  the  time.
Use  ↕ RETURN      Exit MENU
```

(3) Press ♠ or ♦ to set the time (hour then minute) that you want to turn on the projection TV and press ⊕.


```
⊕ ON/OFF  TIMER

1. EVERY  SUN–SAT
   7:30AM  1h  CH---
2. -------------
   --:--AM  -h  CH---
⊃MENU

Set  the  duration.
Use  ↕ RETURN      Exit MENU
```

(4) Press ♠ or ♦ to set the hour duration and press ⊕.
You can set the hour duration by one hour up to a maximum of six hours.


```
⊕ ON/OFF  TIMER

1. EVERY  SUN–SAT
   7:30AM  3h  CH---
2. -------------
   --:--AM  -h  CH---
⊃MENU

Select  the  channel.
Use  ↕ RETURN      Exit MENU
```

(5) Press ♠ or ♦ to select the channel and press ⊕.


```
⊕ ON/OFF  TIMER

1. EVERY  SUN–SAT
   7:30AM  3h  CH 10
2. -------------
   --:--AM  -h  CH---
⊃MENU

Select  the  day.
Use  ↕ RETURN      Exit MENU
```

The TIMER/STAND BY indicator on the projection TV lights.

5 To set the other program, press ⊕ and repeat step 4.

One minute before the projection TV switches to turn off, a message "TV will turn off." is displayed on the screen.

To cancel the timer
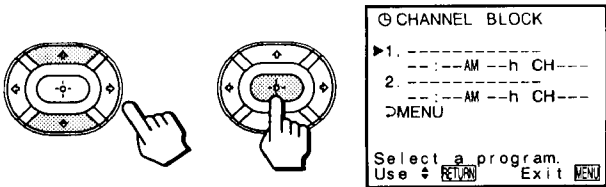Press RESET on the remote commander.

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

Blocking out a channel (CHANNEL BLOCK)

This feature allows you to prevent children from watching unsuitable programs.
Make sure the clock is set correctly. If it is not, set the clock first (page **31**).
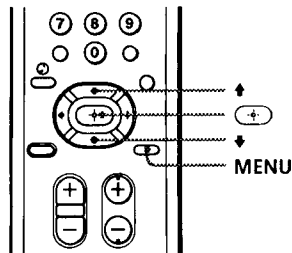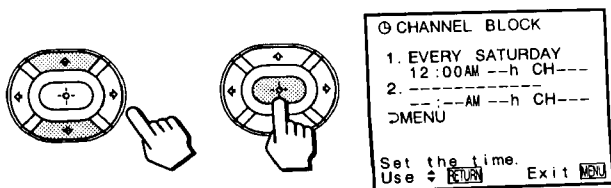
1 Press MENU.

2 Press ♦ or ♦ to select TIMER/CH BLOCK and press ⊕.

3 Press ♦ or ♦ to select CHANNEL BLOCK and press ⊕.

```
⊙ CHANNEL  BLOCK
▶1. -------------
    --:--AM --h  CH---
2. -------------
    --:--AM --h  CH---
⊃MENU

Select a program.
Use ⬍ RETURN     Exit MENU
```

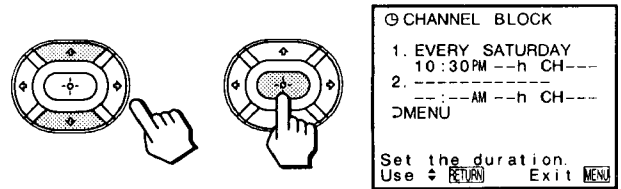## 4 Enter a CHANNEL BLOCK setting.

(1) Press ♦ or ♦ to select program 1 or 2 and press ⊕.

(2) Press ♦ or ♦ to set the days and press ⊕. Each time you press ♦ or ♦, the days cycle as shown below.
EVERY SUN–SAT→EVERY MON–FRI→
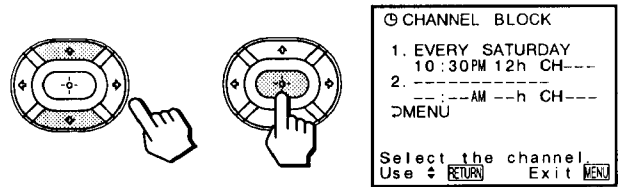SUNDAY→MONDAY→...→SATURDAY→
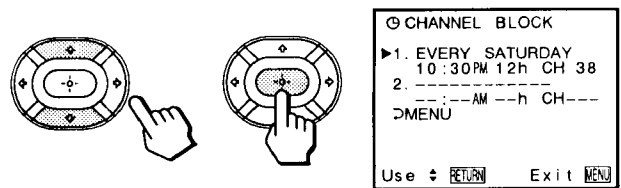EVERY SUNDAY→EVERY MONDAY→
...→EVERY SATURDAY

```
⊙ CHANNEL  BLOCK
1. EVERY  SATURDAY
    12:00AM --h  CH---
2. -------------
    --:--AM --h  CH---
⊃MENU

Set the time.
Use ⬍ RETURN     Exit MENU
```

(3) Press ♦ or ♦ to set the time (hour then minute) that you want to start blocking the channel and press ⊕.

```
⊙ CHANNEL  BLOCK
1. EVERY  SATURDAY
    10:30PM --h  CH---
2. -------------
    --:--AM --h  CH---
⊃MENU

Set the duration.
Use ⬍ RETURN     Exit MENU
```

(4) Press ♦ or ♦ to select the hour duration you want to block and press ⊕.
Each time you press ⊕, the hour duration increases by one hour up to a maximum of 12 hours.

```
⊙ CHANNEL  BLOCK
1. EVERY  SATURDAY
    10:30PM 12h  CH---
2. -------------
    --:--AM --h  CH---
⊃MENU

Select the channel.
Use ⬍ RETURN     Exit MENU
```

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

```
⊙ CHANNEL  BLOCK
▶1. EVERY  SATURDAY
    10:30PM 12h  CH 38
2. -------------
    --:--AM --h  CH---
⊃MENU

Use ⬍ RETURN     Exit MENU
```

If you select the blocked channel during the time you set, the message "BLOCKED" appears and the picture is blocked and the sound is muted.

To cancel a CHANNEL BLOCK setting
Press RESET on the remote commander.

Note
• If the CHANNEL BLOCK and ON/OFF TIMER settings are overlapped, the later time setting has priority over the other setting.

EN

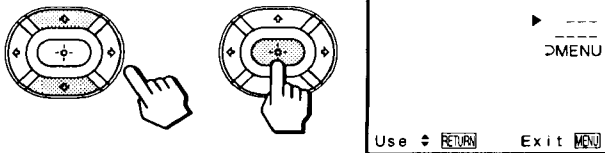# Customizing the channel names (CH CAPTION)

You can add a caption for up to 20 channels. This feature allows you to easily identify which channel you are watching. You can make your own caption.
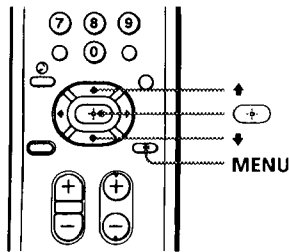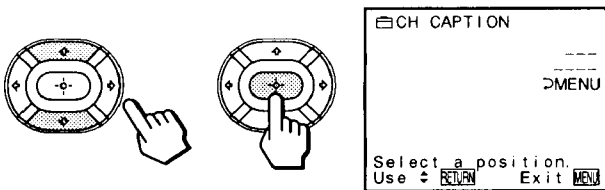

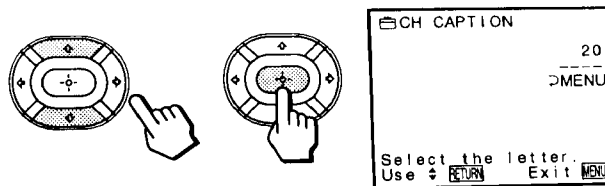MENU

1 Press MENU.

2 Press ♦ or ♦ to select SET UP and press ⊕.

3 Press ♦ or ♦ to select CH CAPTION and press ⊕.


```
⊟CH CAPTION
                    ▶ ---
                      ----
                   ⊃MENU


Use ♦ RETURN    Exit MENU
```

4 Press ⊕ again.


```
⊟CH CAPTION
                      ---
                      ----
                   ⊃MENU

Select a position.
Use ♦ RETURN    Exit MENU
```

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


```
⊟CH CAPTION
                       20
                      ----
                   ⊃MENU


Select the letter.
Use ♦ RETURN    Exit MENU
```
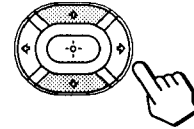
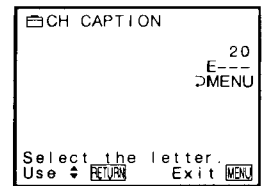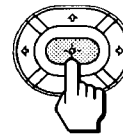## 6 Enter the letters (up to four) to caption the channel:

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

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

0↔1↔...↔9↔A↔B↔...↔Z↔&↔/↔_(blank space)

(2) Press ⊕.


```
⊟CH CAPTION
                       20
                      E---
                   ⊃MENU


Select the letter.
Use ♦ RETURN    Exit MENU
```

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


```
⊟CH CAPTION
                       20
                      ESPN
                   ⊃MENU


Select the letter.
Use ♦ RETURN    Exit MENU
```
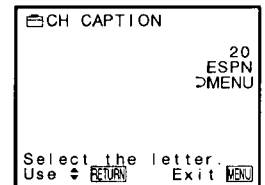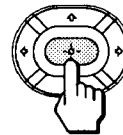
7 Repeat steps 4 to 6 to caption other channels.

### To erase a caption
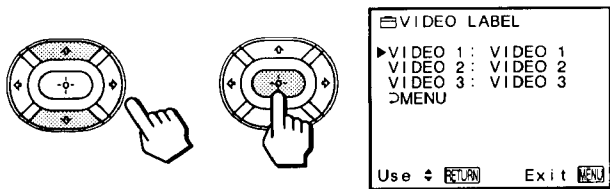Press RESET after step 4.

Notes
- If the CH CAPTION menu appears in black, the projection TV is set to a video input, and you cannot select CH 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.
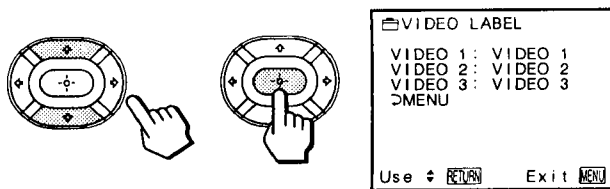
Setting video labels (VIDEO LABEL)

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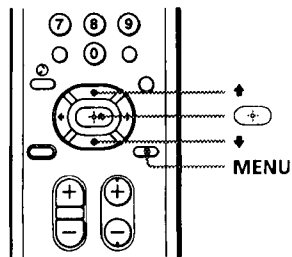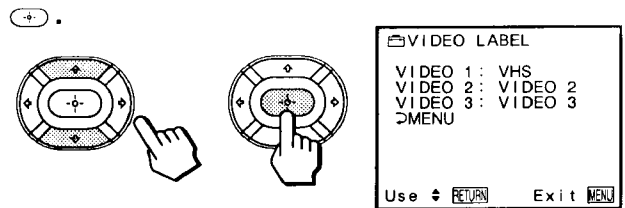
1 Press MENU.

2 Press ↑ or ↓ to select SET UP 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 ⇕ RETURN     Exit MENU
```

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 ⇕ RETURN     Exit MENU
```

5 Press ↑ or ↓ to select the label and press ⊕.

```
⊟VIDEO LABEL
 VIDEO 1:  VHS
 VIDEO 2:  VIDEO 2
 VIDEO 3:  VIDEO 3
 ⊃MENU

Use ⇕ RETURN     Exit MENU
```

Each time you press ↑ or ↓, the label changes as shown below.

VIDEO 1
VIDEO 1—→S-VIDEO—→BETA—→8mm—→VHS—→LD—→DBS

VIDEO 2
VIDEO 2—→BETA—→8mm—→VHS—→LD—→DBS

VIDEO 3
VIDEO 3—→BETA—→8mm—→VHS—→LD—→DBS

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

Note
- If more than 90 seconds elapse after you press a button, the menu disappears automatically.

Displaying 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 a caption, that is a printed version of the dialog or sound effects of a program. (The mode should be set to CC1 for most programs.)
TEXT1, TEXT2, TEXT3 or TEXT4 shows you text, that is information presented using either half or the whole screen. It is not usually related to the program.
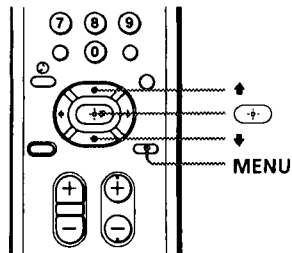
To display Caption Vision
Press DISPLAY. (See page 21 for details.)

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 21.

1 Press MENU.

2 Press ↑ or ↓ to select CAPTION VISION and press ⊕.


```
CC CAPTION VISION
►CC1
  CC2
  CC3
  CC4
  TEXT1
  TEXT2
  TEXT3
  TEXT4
  ⊃MENU
Use ↕ RETURN    Exit MENU
```
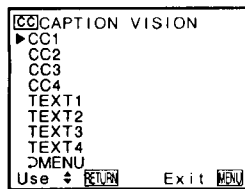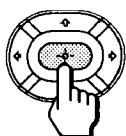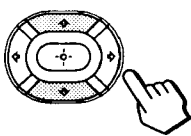
3 Press ↑ or ↓ to select the caption type and press ⊕.
The selected caption type is colored green.


```
CC CAPTION VISION
  CC1
  CC2
  CC3
  CC4
  TEXT1
  TEXT2
  TEXT3
  TEXT4
  ⊃MENU
Use ↕ RETURN    Exit MENU
```
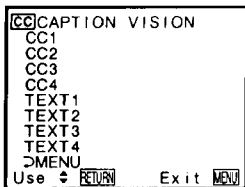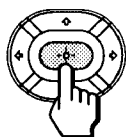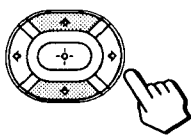
Operating video equipment

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

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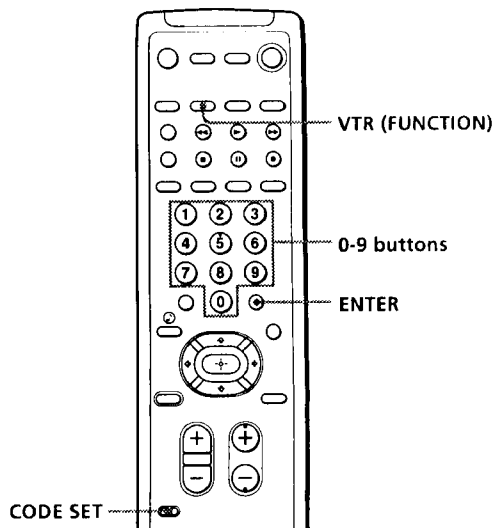
Press the CODE SET, VTR (FUNCTION), and 0 – 9 buttons to enter the manufacturer's code number (see the chart), then press ENTER. For example, to operate a Sony 8 mm VCR, press CODE SET, VTR (FUNCTION), 3, 0, 2, and ENTER.
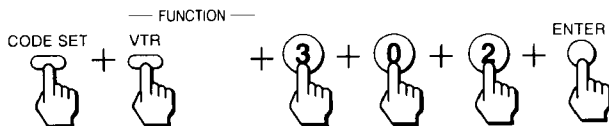
VCR manufacturer code numbers

Manufacturer	Code number
Sony	301, 302, 303
Admiral (M. Wards)	327
Aiwa	338
Audio Dynamic	314, 337
Bell & Howell (M. Wards)	330, 343
Broksonic	319, 317
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, 341
Fisher	330, 334, 335, 333
Funai	338
General Electric	329, 304, 309
Go Video	322
Goldstar	332
Hitachi	306, 304, 305
Instant Replay	309, 308
JC Penney	309, 305, 304, 330, 314, 336, 337
JVC	314, 336, 337
Kenwood	314, 336, 332, 337
LXI (Sears)	332, 305, 333, 334, 330, 335, 338
Magnavox	310, 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
Optimus	327
Panasonic	308, 309, 306, 307
Pentax	305, 304
Philco	308, 309
Philips	310, 308, 309
Pioneer	308
Quasar	308, 309, 306
RCA/PROSCAN	304, 305, 308, 309, 310, 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	310, 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
XR-1000	315
Yamaha	330, 314, 336, 337
Zenith	331

EN

(continued)

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 this remote commander. This is because your equipment may use a code that is not provided with this remote commander. In this case, please use the equipment's own remote control unit.
- The code numbers for Sony equipment are assigned at the factory as follows:

VHS VCR   301 (preset code for the supplied remote commander)

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)

SYSTEM OFF

Video operating buttons

0-9 buttons

ENTER

CH +/–

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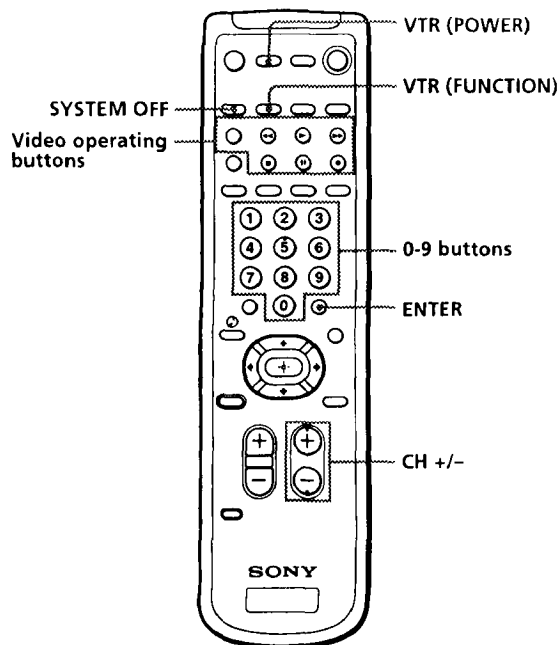
Use the video operating buttons on the remote commander to operate the video equipment. Press VTR (FUNCTION) before operating the video equipment.

Operating a VCR	Buttons on the remote commander
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 ll. 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 a laser-disc player	Buttons on the remote commander
To play	Press ►.
To stop	Press ■.
To pause	Press ll. To resume normal playback, press again.
To search the picture forward and backward	Keep pressing ►► or ◄◄ during playback. To resume normal playback, release the button.
To 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 commander will not operate.
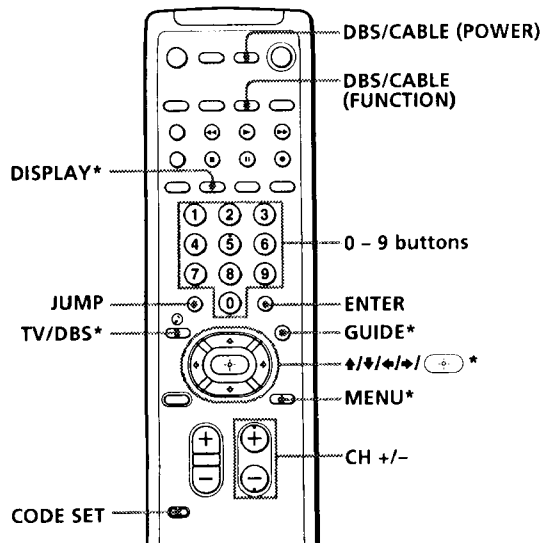
Turning off the system

You can turn off the projection TV and Sony equipment with the S-Link function, such as a VCR, together when you make the S-Link connection (see page **13** for the connection).

Press SYSTEM OFF.

SYSTEM OFF

Operating a cable box or DBS receiver

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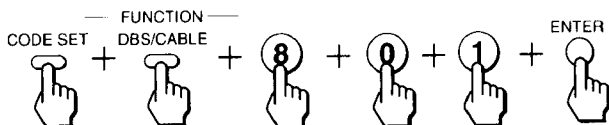

DBS/CABLE (POWER)
DBS/CABLE (FUNCTION)
DISPLAY*
0 - 9 buttons
JUMP
ENTER
TV/DBS*
GUIDE*
◆/◆/◆/◆/ ⊙ *
MENU*
CH +/-
CODE SET

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

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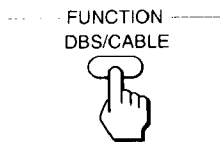
FUNCTION
DBS/CABLE

2 Press the CODE SET, DBS/CABLE (FUNCTION), and 0 - 9 buttons to enter the manufacturer's code number (see the chart), then press ENTER. For example, to program your remote commander 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.
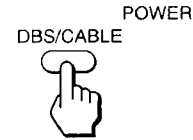
POWER
DBS/CABLE

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 commander 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 commander 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 commander)
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 commander and you may not be able to operate your equipment with the supplied remote commander. 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

After trying the methods below, if the problem persists, 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.
➡ Check to see if the TV/VIDEO setting is correct: when watching TV, set to TV, and when watching video tapes, set to VIDEO 1, 2 or 3. (page **21**)
➡ Try another channel. It could be station trouble.

Poor or no picture (screen lit), good sound
➡ Adjust PICTURE in the VIDEO menu. (page **24**)
➡ Adjust BRIGHTNESS in the VIDEO menu. (page **24**)
➡ Adjust the convergence. (page **17**)
➡ Check antenna/cable connections. (page **6**)

Good picture, no sound
➡ Press MUTING so that "MUTING" disappears from the screen. (page **20**)
➡ Check the MTS setting in the AUDIO menu. (page **28**)
➡ Make sure SPEAKER is set to ON in the AUDIO menu. (page **29**)

No color
➡ Adjust COLOR in the VIDEO menu. (page **24**)
➡ Confirm that black and white program is not being broadcast.

Only snow and noise appear on the screen
➡ Check the CABLE setting in the SET UP menu. (page **18**)
➡ Check the antenna/cable connections. (page **6**)
➡ Make sure the channel is broadcasting programs.
➡ Press TV (black button) to change the input mode. (page **21**)

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 black, you cannot select it. Press TV/VIDEO correctly.
➡ Check the CABLE setting in the SET UP menu. (page **18**)

Cannot receive upper channels (UHF) when using an antenna
➡ Check if CABLE is OFF in the SET UP menu. (page **18**)
➡ Use AUTO PROGRAM to add receivable channels that are not presently in the memory. (page **19**)

Cannot receive any channels when using cable TV
➡ Check if CABLE is ON in the SET UP menu. (page **18**)
➡ Use AUTO PROGRAM to add receivable channels that are not presently in the memory. (pages **19**)

Remote commander does not operate
➡ Battery could be weak. Replace the battery. (page **14**)
➡ Make sure the projection TV's power cord is connected securely to wall outlet.
➡ Press TV (FUNCTION) when operating your projection TV.
➡ Are fluorescent lights too close to the projection TV? Move lights at least 3 – 4 feet away from the projection TV.
➡ Check the S-Link connection. (page **13**)

Commander's power, channel up/down, channel buttons do not function
➡ Press TV (FUNCTION) or CABLE (FUNCTION).

Cannot gain enough volume when using a cable box
➡ Increase the volume at the cable box. Then press TV (FUNCTION) and adjust the projection TV's volume.

Projection TV malfunctions when using the S-Link function
➡ Make sure the projection TV's power cord is connected securely to the wall outlet.
➡ Check the S-Link connection. (page **13**)

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 liquidcooling system

Projection lenses   High performance, large-diameter hybrid lens F1.0

Screen size (measured diagonally)

KP-46V35	46 inches
KP-53V35	53 inches
KP-61V35	61 inches

Screen brightness

KP-46V35	1500 cd/m^2
KP-53V35	1200 cd/m^2
KP-61V35	1000 cd/m^2

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
S VIDEO IN (4-pin mini DIN):
Y: 1 Vp-p, 75-ohms unbalanced, sync negative
C: 0.286 Vp-p (Burst signal), 75 ohms
VIDEO (phono jack):
1 Vp-p, 75-ohms unbalanced, sync negative
AUDIO (phono jacks):
500 mVrms (100% modulation)
Impedance : 47 kilohms
VIDEO INPUT 2 and VIDEO IN 3
VIDEO (phono jacks):
1 Vp-p, 75-ohms unbalanced, sync negative
AUDIO (phono jacks):
500 mVrms (100% modulation)
Impedance: 47 kilohms

VIDEO OUT 3
VIDEO (phono jack): 1 Vp-p, 75 ohms unbalanced, sync negative
AUDIO (phono jack):
500 mVrms (100% modulation),
Impedance: 10 kilohms
MONITOR OUT
VIDEO (phono jack): 1 Vp-p, 75 ohms unbalanced, sync negative
AUDIO (phono jacks):
500 mVrms (100% modulation),
Impedance: 10 kilohms
AUDIO (VAR/FIX) OUT (phono jacks): 900 mVrms (100% modulation)
Impedance: 5 kilohms

Speaker   Full range speaker:
100 mm (3.9 inches)
Subwoofer speaker:
130 mm (5.1 inches)

Speaker output   Front: 15 W × 2
Subwoofer: 40 W × 1

Power requirement
120 V, 60 Hz

Power consumption
Max. 330 W
Standby mode: 4 W

	Dimensions (W/H/D)	Mass
KP-46V35	1,066 × 1,336 × 698 mm (42 × 52 $^5/_8$ × 27 $^1/_2$ inches)	88 kg (193 lbs 10 oz)
KP-53V35	1,218 × 1,442 × 698 mm (48 × 56 $^3/_4$ × 27 $^1/_2$ inches)	94 kg (207 lbs 1 oz)
KP-61V35	1,338 × 1,619 × 774 mm (52 $^3/_4$ × 63 $^3/_4$ × 30 $^1/_2$ inches)	151 kg (332 lbs 14 oz)

Supplied accessories
Remote commander RM-Y137 (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
High-contrast protective screen
SCN-46X1 *(For KP-46V35)*
SCN-53X1 *(For KP-53V35)*

Design and specifications are subject to change without notice.

EN

Index

Names of controls