SONY

4-091-567-11 (2)

Flat Panel Color TV

US

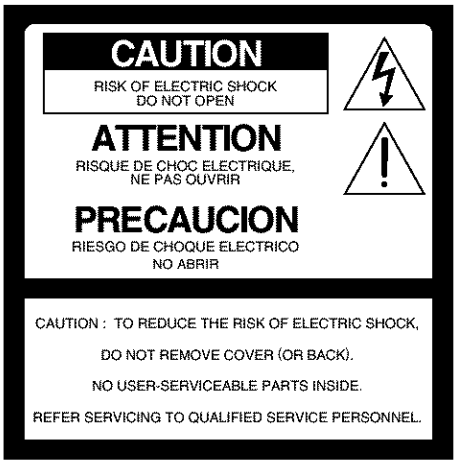
KE-32TS2U
KE-42TS2U

Operating Instructions

© 2002 Sony Corporation

WARNING

To Reduce the risk of fire or shock hazard, do not expose the TV to rain or moisture.



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

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

CAUTION

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

CAUTION

When using TV games, computers, and similar products with your 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. Continuously watching the same program can cause the imprint of station logos onto the TV screen. Theses types of imprints are not covered by your warranty because they are the result of misuse.

Note on Caption Vision

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

Notes on Cleaning the TV

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

Note on use in highlands

When used at an altitude of greater than 1900m or 6248 feet (air pressure less than 800hPa), this Plasma Display Panel may generate a low buzzing sound as a result of the difference between the interior and exterior air pressure of the panels. This is not considered a defect and is not covered under by the Limited Warranty. This buzzing sound is an inherent characteristic of any Plasma Display Panel.

Note to CATV system installer

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.
Use of this television receiver for other than private viewing of programs broadcast on UHF, VHF, transmitted by cable companies or satellite for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

NOTIFICATION

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

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

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

Safety

- Operate the TV only on 120 V AC.
- The plug is designed, for safety purposes, to fit into the wall outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- If any liquid or solid object should fall inside the cabinet, unplug the TV immediately and have it checked by qualified service personnel before operating it further.

Installing

- To prevent internal heat buildup, do not block the ventilation openings.
- Do not install the TV in a hot or humid place, or in a place subject to excessive dust or mechanical vibration.
- The AC power cord is attached to the rear of the TV with hooks. Do not attempt to remove the cord from these hooks. Doing so could cause damage to the TV.

Owner's Record

The model and serial numbers are provided on the front of this instruction manual and at the rear of the TV. Refer to them whenever you call upon your Sony dealer regarding this products.

CAUTION

The following SONY appliance(s) for use only with the following TV STAND.
Use with other TV STAND is capable of resulting in instability causing possible injury.

SONY APPLIANCE MODEL NO.
KE-32TS2U
KE-42TS2U

TV STAND MODEL NO.:
SU-TS1U
SONY ELECTRONICS INC.

Important Safeguards

For your protection, please read these instructions completely, and keep this manual for future reference.

Carefully observe and comply with all warnings, cautions and instructions placed on the set or described in the operating instructions or service manual.

WARNING

To guard against injury, the following basic safety precautions should be observed in the installation, use and servicing of the set.

Use

Power Sources

This set should be operated only from the type of power source indicated on the serial/model plate. If you are not sure of the type of electrical power supplied to your home, consult your dealer or local power company. For those sets designed to operate from battery power, refer to the operating instructions.

Grounding or Polarization

This set is equipped with a polarized AC power cord plug (a plug having one blade wider than the other), or with a three-wire grounding type plug (a plug having a third pin for grounding). Follow the instructions below:

For the set with a polarized AC power cord plug

This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug still fails to fit, contact your electrician to have a suitable outlet installed. Do not defeat the safety purpose of the polarized plug by forcing it in.

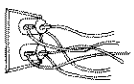
Alternate Warning

For the set with a three-wire grounding type AC plug

This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to have a suitable outlet installed. Do not defeat the safety purpose of the grounding plug.

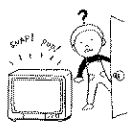
Overloading

Do not overload wall outlets, extension cords or convenience receptacles beyond their capacity, since this can result in fire or electric shock.



Always turn the set off when it is not being used. When the set is left unattended and unused for long periods of time, unplug it from the wall outlet as a precaution against the possibility of an internal malfunction that could create a fire hazard.

If a snapping or popping sound from a TV set is continuous or frequent while the TV is operating, unplug the TV and consult your dealer or service technician. It is normal for some TV sets to make occasional snapping or popping sounds, particularly when being turned on or off.



Object and Liquid Entry

Never push objects of any kind into the set through the cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the set.

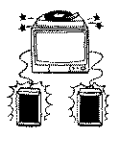
Cleaning

Unplug the set from the wall outlet before cleaning or polishing it. Do not use liquid cleaners or aerosol cleaners. Use a cloth lightly dampened with water for cleaning the exterior of the set.

Installation

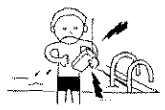
Attachments

Do not use attachments not recommended by the manufacturer, as they may cause hazards.



Water and Moisture

Do not use power-line operated sets near water — for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.



Corrosion

Use of this set near the seashore may subject the set to excessive salt, corrosion and internal damage and result in deterioration of the set's performance. If the set will be subjected to these conditions, steps should be taken to reduce the humidity and temperature of the area where the set is located.

Accessories

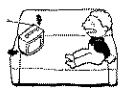
Do not place the set on an unstable cart, stand, table or shelf. The set may fall, causing serious injury to a child or an adult and serious damage to the set. Use only a cart or stand recommended by Sony for the specific model of TV. No part of the TV set should overhang any edge of the TV cart or stand; any overhanging edge is a safety hazard. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

Ventilation

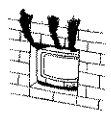
The slots and openings in the cabinet and in the back or bottom are provided for necessary ventilation. To ensure reliable operation of the set, and to protect it from overheating, these slots and openings must never be blocked or covered.

- ☐ Never cover the slots and openings with a cloth or other materials.

- ☐ Never block the slots and openings by placing the set on a bed, sofa, rug or other similar surface.



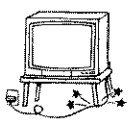
- ☐ Never place the set in a confined space, such as a bookcase or built-in cabinet, unless proper ventilation is provided.



- ☐ Do not place the set near or over a radiator or heat register, or where it is exposed to direct sunlight.

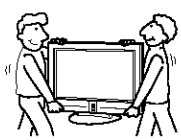
Power-Cord Protection

Do not allow anything to rest on or roll over the power cord, and do not place the set where the power cord is subject to wear or abuse.



Carrying

This set should only be moved by two or more people. If the set needs to be transported, it should be protected to insure that it is not subject to shock, vibration or excessive force.



Antennas

Outdoor Antenna Grounding

If an outdoor antenna is installed, follow the precautions below. An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits.

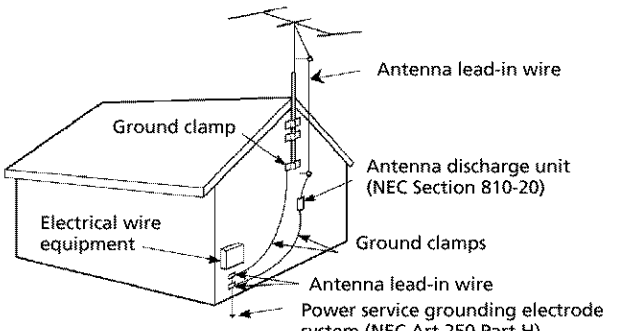
WHEN INSTALLING AN OUTDOOR ANTENNA SYSTEM, EXTREME CARE SHOULD BE TAKEN TO KEEP FROM CONTACTING SUCH POWER LINES OR CIRCUITS AS CONTACT WITH THEM IS ALMOST INVARIABLY FATAL.

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code (NEC) in USA and Section 54 of the Canadian Electrical Code in Canada provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

US

Antenna Grounding According to the NEC

Refer to section 54-300 of Canadian Electrical Code for Antenna Grounding.



NEC: National Electrical Code

Lightning

For added protection for this television receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to the receiver due to lightning and power-line surges.

Image retention

An image retention or ghost may appear on screen of the set if it a static image is displayed on the screen for a period of time. To avoid this problem, the "4:3 Default" or "Restore" mode should be used.

Refer to the operating instructions if an image retention or ghost appears.

Service

Damage Requiring Service

Unplug the set from the wall outlet and refer servicing to qualified service personnel under the following conditions:

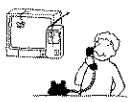
☐ When the power cord or plug is damaged or frayed.

☐ If liquid has been spilled into the set.

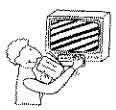
☐ If the set has been exposed to rain or water.

☐ If the set has been subject to excessive shock by being dropped, or the cabinet has been damaged.

☐ If the set does not operate normally when following the operating instructions. Adjust only those controls that are specified in the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the set to normal operation.



☐ When the set exhibits a distinct change in performance, it indicates a need for service.



Servicing

Do not attempt to service the set yourself since opening the cabinet may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Replacement Parts

When replacement parts are required, be sure the service technician certifies in writing that he has used replacement parts specified by the manufacturer that have the same characteristics as the original parts.

Unauthorized substitutions may result in fire, electric shock or other hazards.

Safety Check

Upon completion of any service or repairs to the set, ask the service technician to perform routine safety checks (as specified by the manufacturer) to determine that the set is in safe operating condition, and to so certify. When the set reaches the end of its useful life, improper disposal could result in a picture tube implosion. Ask a qualified service technician to dispose of the set.

Important Safety Instruction

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

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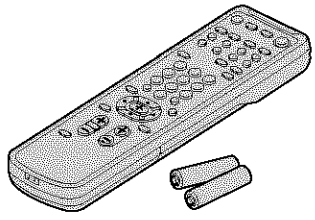
US

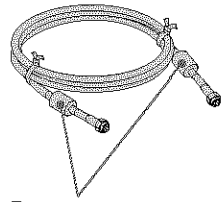
Unpacking

When you unpack this unit, make sure it includes the following:

Remote control (1) and size AA batteries (2)

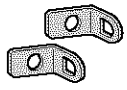


75-ohm coaxial cable (1)

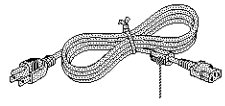


Do not remove ferrite cores.

Brackets (2)



AC power cord (1)



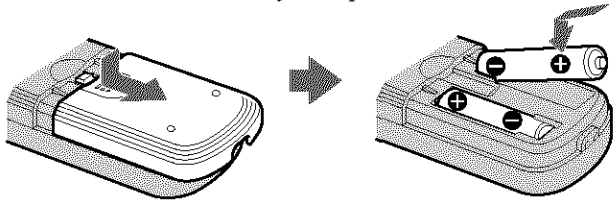
Do not remove ferrite core.

Cleaning cloth (1)

Operating Instructions (1)

Inserting Batteries into the Remote Control

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



Notes

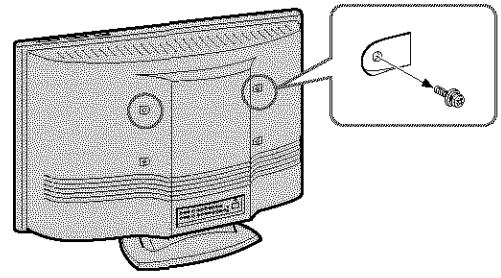
- Remove the batteries to avoid damage from possible battery leakage whenever you anticipate that the remote control will not be used for an extended period.
- Handle the remote control with care. Avoid dropping it, getting it wet, or placing it in direct sunlight, near a heater or where the humidity is high.
- Your remote control can be programmed to operate most video equipment. (See "Operating Video Equipment with Your TV Remote Control" on page 33.)

or pillar. Consult your dealer when attaching the brackets, since the screws for the brackets also hold the rear cabinet in a place.

1 Remove one of the screws attached at the rear of the TV.

Note

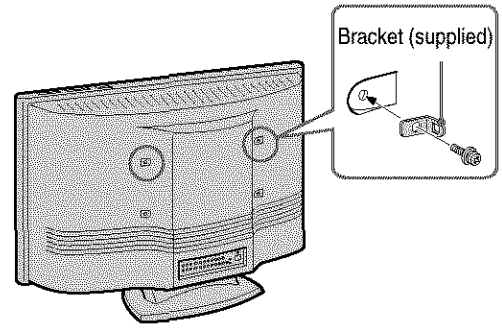
Do not remove both screws at the same time as these screws secure the rear cabinet. Never use the TV with the screws removed.



2 Attach the supplied brackets with the screw.

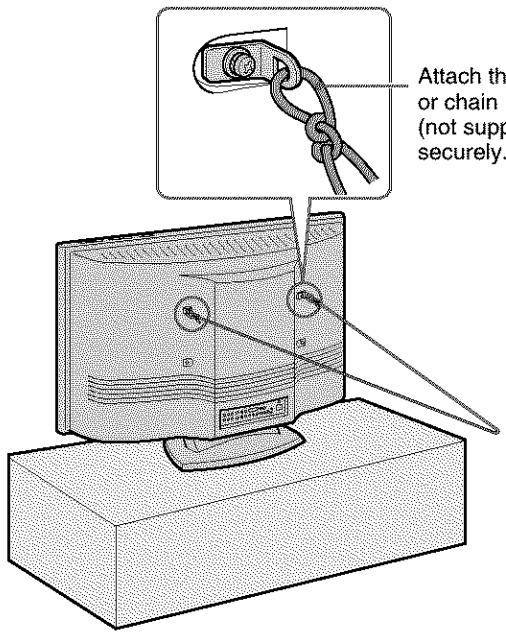
Note

Be sure to use the screw that attaches the rear cabinet. A different screw may damage the TV and result in electric shock.



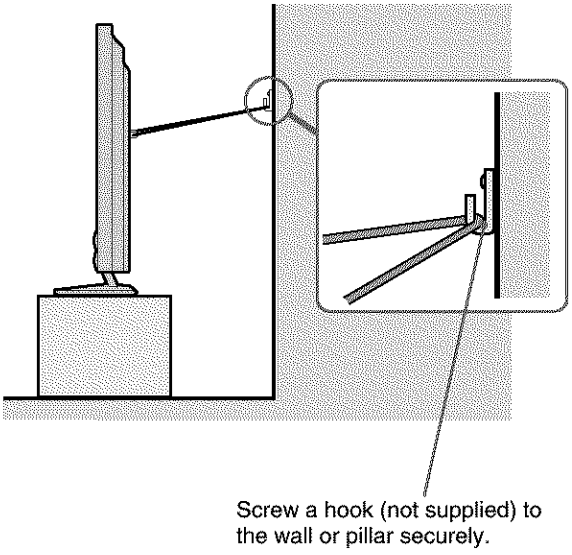
3 Repeat steps 1 and 2 to attach the other brackets.

4 Attach a sturdy cord or chain securely to each bracket on the rear of the TV.

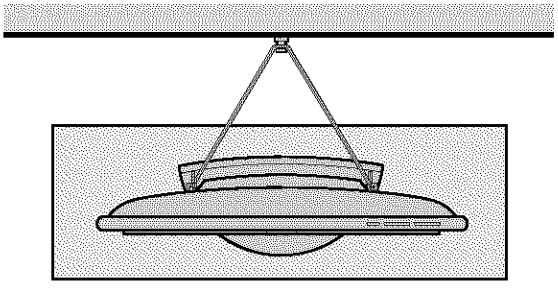


5 Attach the cord or chain to a wall or pillar.

Side view



Top view

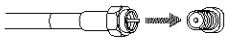


Connector Types

You may find it necessary to use some of the following connector types during set up.

Supplied 75-ohm coaxial cable

Screw-on type



Screw into connection.

S VIDEO cable

High quality video cable for enhanced picture quality

Align guides and push into connection.

AUDIO/VIDEO cable

Push into connection.

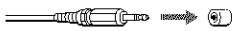
VIDEO- Yellow
AUDIO (Left) - White
AUDIO (Right) - Red

Some DVD players are equipped with the following three video connectors:

Y - Green
P_B (C_B, C_b or B–Y) - Blue
P_R (C_R, C_r or R–Y) - Red

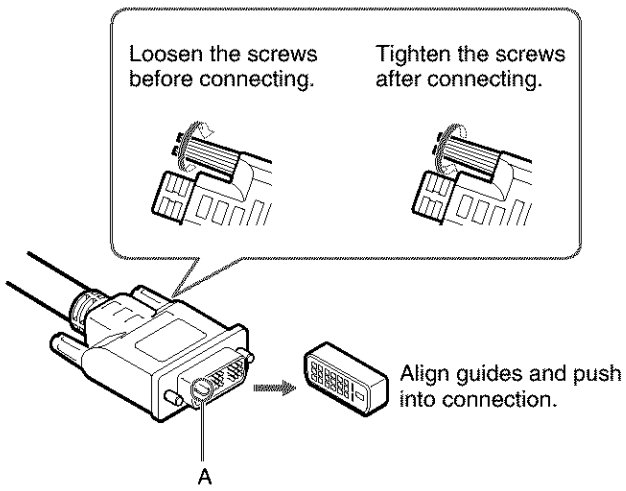
CONTROL S cable

CONTROL S connections are exclusive to Sony equipment and allow greater control of all Sony equipment.



Push into connection.

DVI-D single link cable



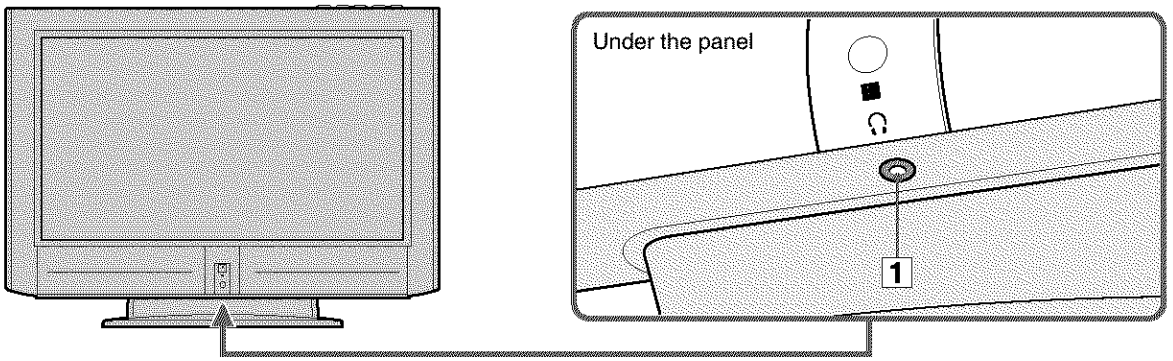
Note

The connector pin (A) of the DVI-D single link cable is "-" type. "+" type cannot be used for this connection.

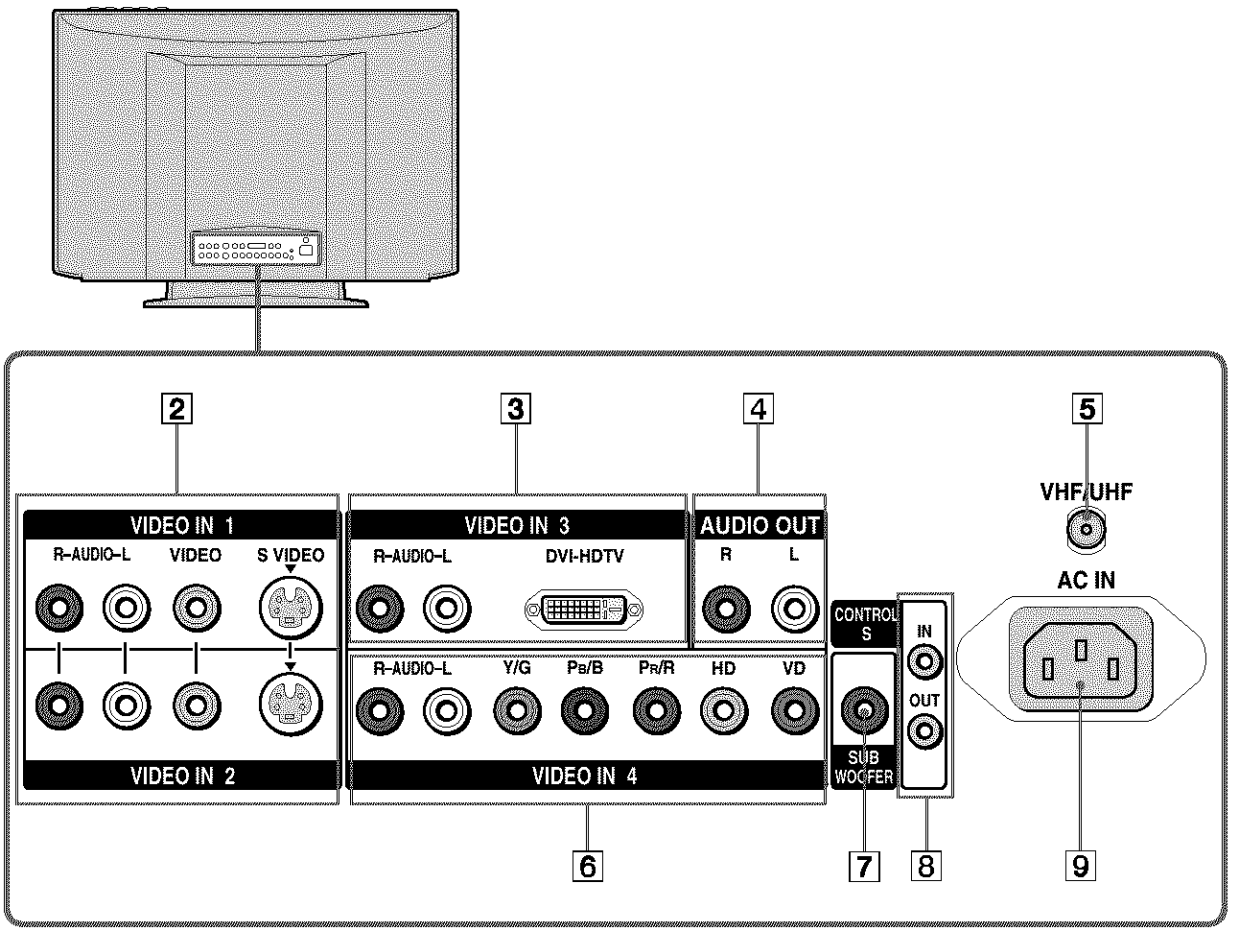
US

Identifying Front and Rear Connectors

TV front panel



Rear of TV



1 Headphones jack
Connects to your headphones.
If your headphones do not match the jack, use a suitable plug adaptor (not supplied).

2 VIDEO IN 1, 2 (pages 10 - 12, 15)
Connects to the output jacks of your VCR or other video equipment.

3 VIDEO IN 3 (DVI-HDTV connector and AUDIO (R/L) jacks) (page 16)
Accommodates a copy-protected digital connection (HDCP*) to other devices (such as digital set-top boxes) that have DVI-HDTV. The DVI-HDTV input terminal is compliant with the EIA-861 standard and is not intended for use with personal computers. See the instruction manual that came with your equipment for details about connecting and using it with the TV.
* High-bandwidth Digital Content Protection

4 AUDIO OUT (page 13)
Connects to the input jacks of your audio equipment.

5 VHF/UHF (pages 10 - 12)
Connects to your VHF/UHF antenna or cable.

6 VIDEO IN 4

AUDIO (L/R) input jacks (pages 14, 17, 19):
Connects to the audio output jacks of your DVD player or RGB equipment.

Y/G, PB/B, PR/R, HD, VD input jacks: Connecting a DVD player (page 14) or a Digital TV Receiver (page 17)
Connect with component video connectors (Y/CB/CR, Y/B-Y/R-Y or Y/PB/PR) to the Y/G, PB/B, PR/R jacks on the TV.

Connecting an RGB equipment (page 19)
Connect the RGB equipment's video/synchronized signal output terminal to the Y/G, PB/B, PR/R, HD and VD jacks on the TV.

7 SUB WOOFER (page 18)
Connects to the input jack of your sub woofer.

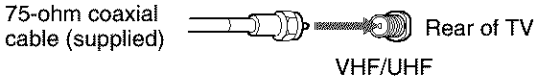
8 CONTROL S IN/OUT
To control other Sony equipment with the TV's remote control,** connect the CONTROL S IN jack of the equipment to the CONTROL S OUT jack of the TV with the CONTROL S cable.
To control the TV with a remote control for another Sony equipment, connect the CONTROL S OUT jack of the equipment to the CONTROL S IN jack on the TV with the CONTROL S cable.
** Only when the TV is turned on, or the STANDBY/SLEEP indicator lights up in red. When the TV is turned off (the STANDBY/SLEEP indicator goes off), you cannot use this function.

9 AC IN
Connects the supplied AC power cord.

Basic Connections (Connecting Cable TV or Antenna)

Connecting directly to cable or an antenna

VHF only or VHF/UHF or cable



Note
It is strongly recommended to connect the antenna using a 75-ohm coaxial cable to get optimum picture quality. A 300-ohm twin lead cable can be easily affected by radio noise and the like, resulting in signal deterioration. If you use a 300-ohm twin lead cable, keep it away as far as possible from the TV.

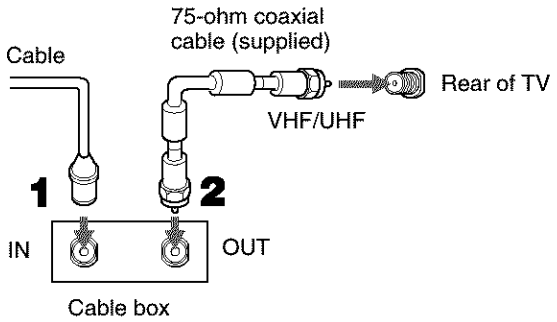
Cable box connections

Use this hookup if:

- You subscribe to a cable TV system that uses scrambled or encoded signals requiring a cable box to view all channels, and
- You do not intend to hook up any other audio or video equipment to your TV.

1 Connect the coaxial connector from your cable service to the cable box's IN jack.

2 Using the supplied 75-ohm coaxial cable, connect the cable box's OUT jack to the TV's VHF/UHF jack.



Also, set "Cable" to "On" in the (TV Setup) menu (See page 21).

Tips
- Your Sony remote control can be programmed to operate your cable box. (See "Programming the remote control" on page 33).
- To change channels using the cable box, set your TV to channel 3 or 4 depending on the cable box channel output.

US

Connecting a VCR and Cable

Use this hookup if:

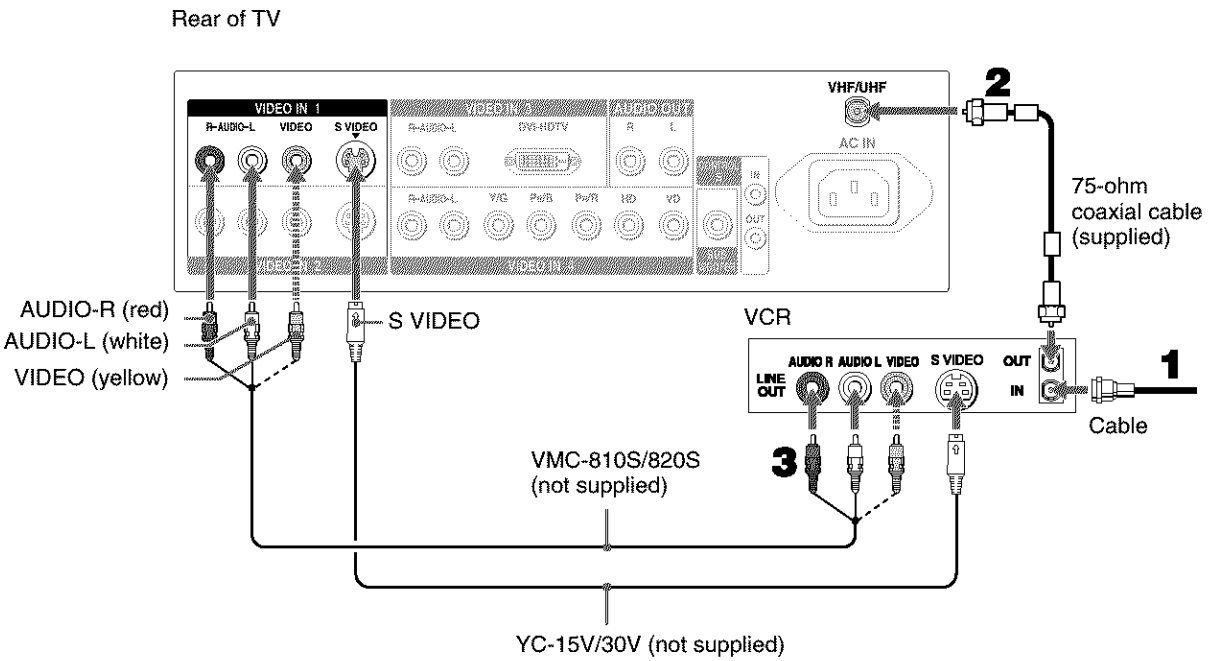
- You have cable TV that does not require a cable box.

Disconnect all power sources before making any connections.

1 Connect the cable TV cable to the VCR's IN jack.

2 Using the supplied 75-ohm coaxial cable, connect the VCR's OUT jack to the TV's VHF/UHF jack.

3 Using AUDIO and S VIDEO cables, connect the VCR's Audio and S Video OUT jacks to the TV's AUDIO and S VIDEO IN jacks.



Tip

If your VCR is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

When connecting both VIDEO OUT and S VIDEO OUT

You can select which jack the TV receives the input signal from on the menu screen. You can set it for each video input (VIDEO IN 1 and VIDEO IN 2) separately. The TV is factory set to receive S VIDEO input signals.

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

2 Press MENU.

3 Press ↑/↓ to select (Custom Setup), then press ⊕.

4 Press ↑/↓ to select "Auto YC," then press ⊕.

5 To watch the pictures input from the S VIDEO input jack:
Press ↑/↓ to select "On," then press ⊕.

To watch the picture input from the VIDEO input jack:
Press ↑/↓ to select "Off," then press ⊕.

6 Press MENU to exit the menu screen.

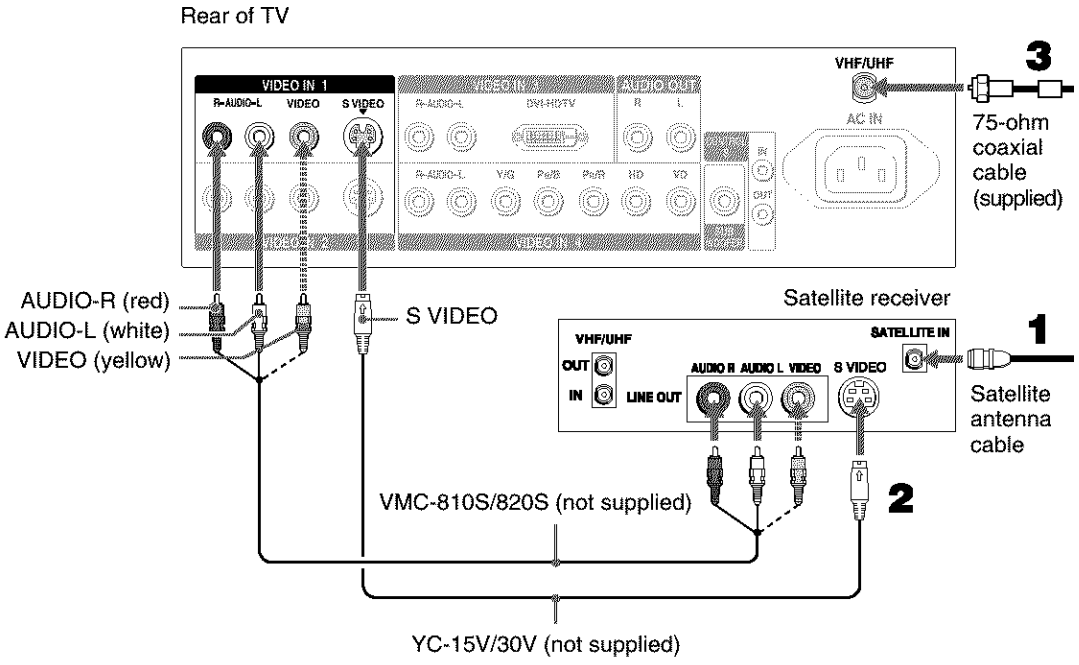
Connecting a Satellite Receiver

Disconnect all power sources before making any connections.

1 Connect the satellite antenna cable to the satellite receiver's SATELLITE IN jack.

2 Using AUDIO and S VIDEO cables, connect the satellite receiver's AUDIO and S VIDEO OUT jacks to the TV's AUDIO and S VIDEO IN jacks.

3 Connect the supplied 75-ohm coaxial cable from your cable or antenna to the TV's VHF/UHF jack.



Tip

If your satellite receiver is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

US

Connecting a Satellite Receiver with a VCR

Disconnect all power sources before making any connections.

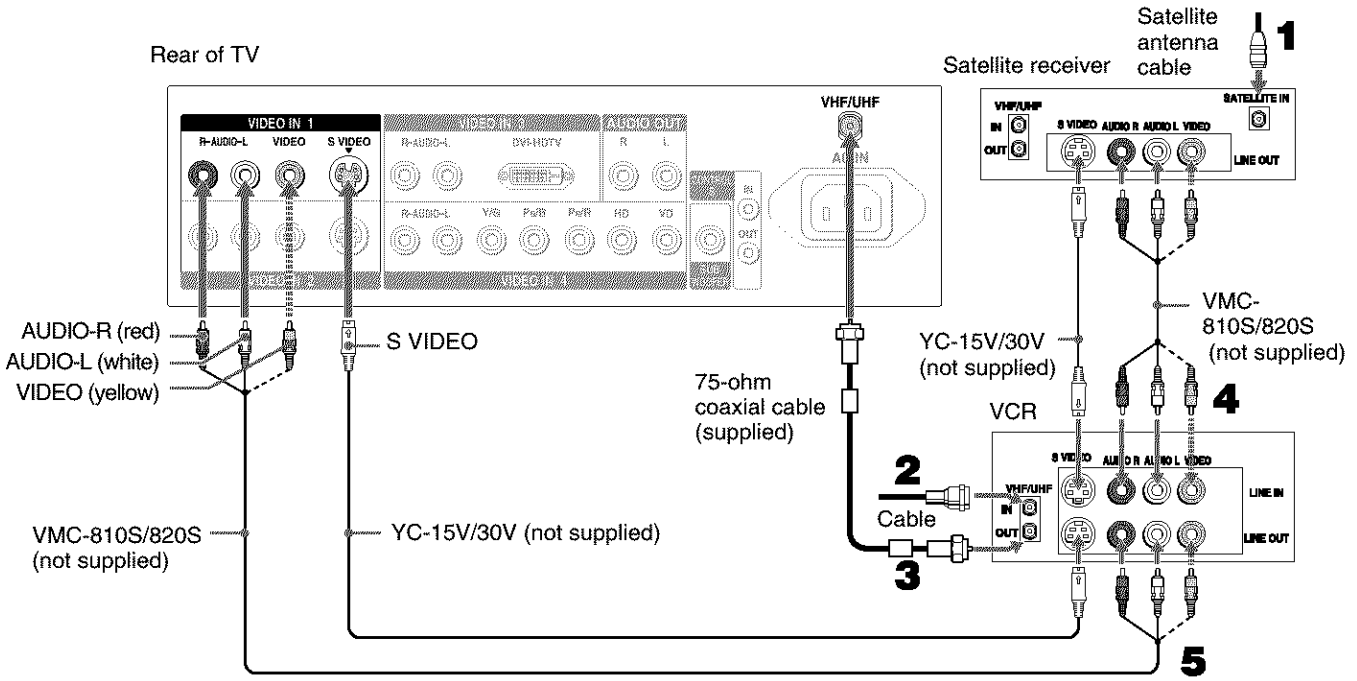
1 Connect the satellite antenna cable to the satellite receiver's SATELLITE IN jack.

2 Connect the CATV cable to the VCR's VHF/UHF IN jack.

3 Using the supplied 75-ohm coaxial cable, connect the VCR's OUT jack to the TV's VHF/UHF jack.

4 Using AUDIO and S VIDEO cables, connect the satellite receiver's AUDIO and S VIDEO OUT jacks to the VCR's AUDIO and S VIDEO IN jacks.

5 Using AUDIO and S VIDEO cables, connect the VCR's AUDIO and S VIDEO OUT jacks to the TV's AUDIO and S VIDEO IN jacks.



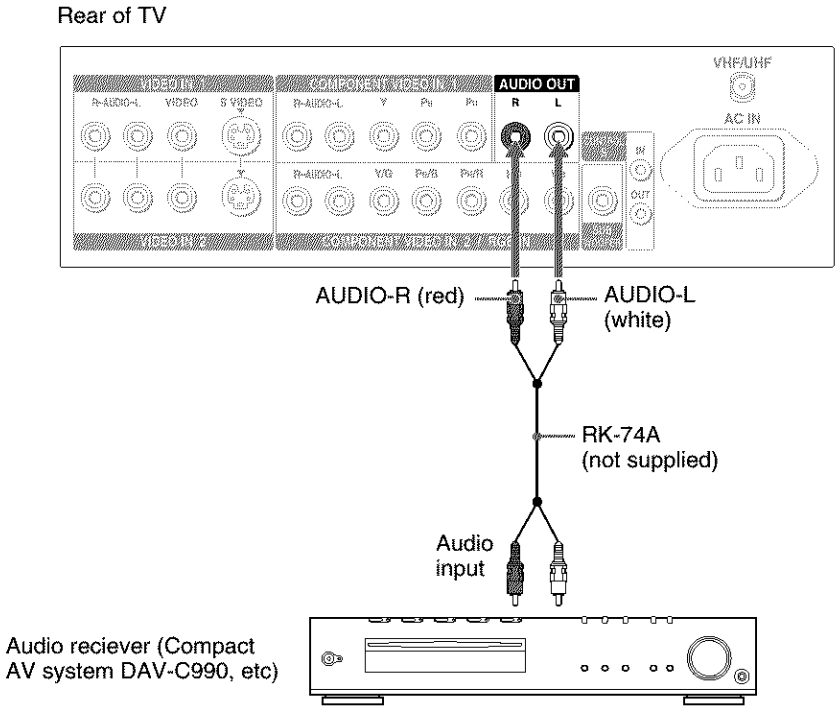
Tips

- Be sure your VCR's video input is set correctly. Consult your VCR's operating manual for instructions.
- Use TV/VIDEO on the remote to select VIDEO IN 1 to watch satellite TV or the VCR (your VCR must be turned on). Use 0-9 and ENTER or CH +/– on the remote to watch cable TV.
- If your VCR or satellite receiver is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

Connecting an Audio Receiver

Disconnect all power sources before making any connections.

Using an AUDIO cable, connect the TV's AUDIO OUT jacks to the audio receiver's AUDIO IN jacks.



When using your audio system speakers

Set "Speaker" to "Off" on the (Custom Setup) menu. The TV's sound is not output through the TV's speakers.

Tip

The sound signal of an equipment connected to the VIDEO IN 4 jacks is also output through the AUDIO OUT jacks. Note that the video signal is not output.

Note

Even though you change the TV's volume or other sound settings, the sound of your audio system does not change.

US

Connecting a DVD Player with Component Video Connectors

This is the preferred hookup to use if:

- Your DVD player has component (Y, B-Y, R-Y) jacks.

Disconnect all power sources before making any connections.

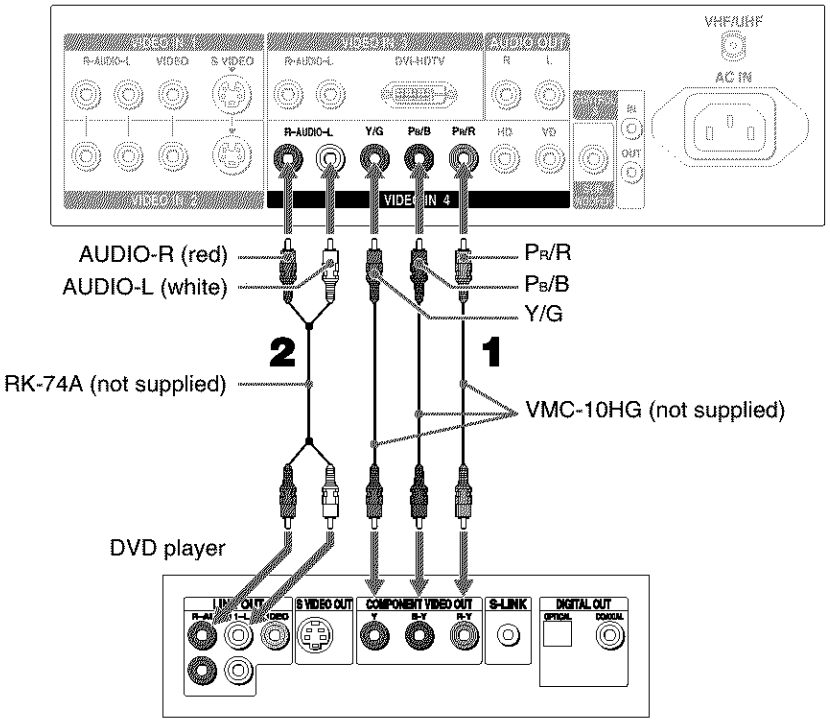
1 Using three separate component video cables, connect the DVD player's Y, B-Y and R-Y jacks to the Y/G, P_B/B and P_R/R jacks on the TV. Use the VIDEO IN 4 connections.

Tip

The Y, B-Y and R-Y jacks on your DVD player are sometimes labeled as Y, C_B and C_R, or Y, P_B and P_R. If so, connect the cables to the matching colors.

2 Using an AUDIO cable, connect the DVD player's AUDIO OUT jacks to the TV's AUDIO IN jacks. Be sure to use the same row of inputs that you used for the video connection.

Rear of TV



Note

Set "Video 4 Mode" to "Y/PB/ PR" in the (Initial Setup) menu (see page 32).

Tips

- To take advantage of the Wide Screen Modes, set the TV's aspect ratio to 16:9 on your DVD player. For details, refer to the operating instructions supplied with your DVD player.
- Some DVD players are equipped with the three component video connectorsP: Y-Green, P_B (C_B, C_b or B-Y) -Blue and P_R (C_R, C_r or R-Y) -Red.

Connecting a DVD Player with A/V Connectors

Use this hookup if:

- Your DVD player does not have component (Y, P_B, P_R) jacks.

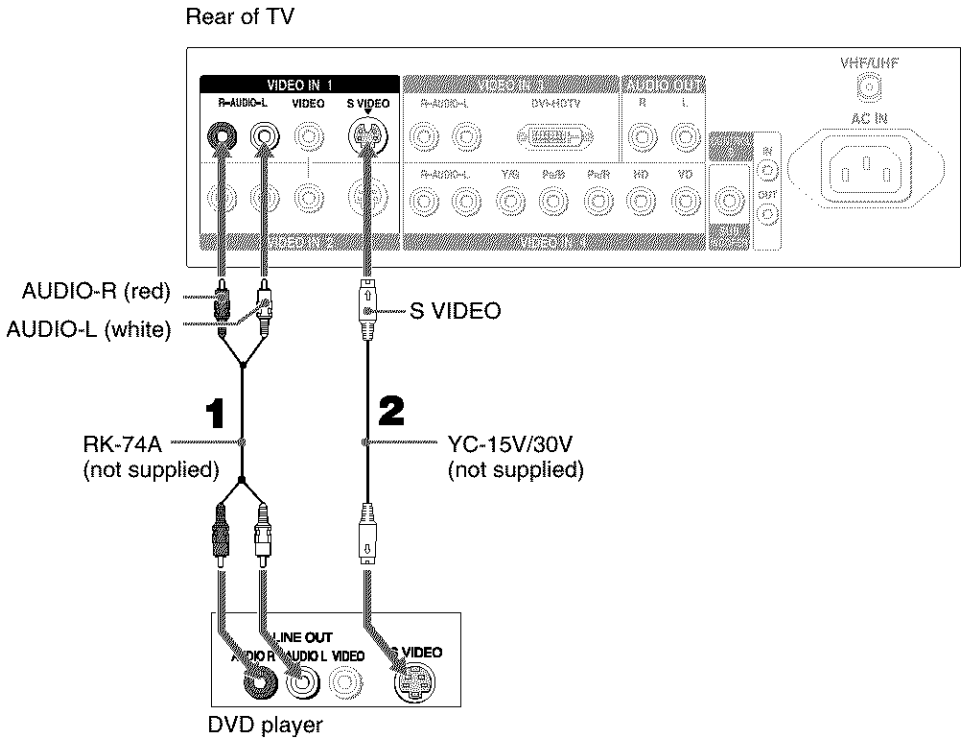
Tip

If your DVD player has video component output connectors, for best picture quality, use the connection described on page 14.

Disconnect all power sources before making any connections.

1 Using an AUDIO cable, connect the DVD player's AUDIO OUT jacks to the TV's AUDIO IN jacks.

2 Using an S VIDEO cable, connect the DVD player's S VIDEO jack to the TV's S VIDEO jack.



Note

To watch the pictures input from the S VIDEO input jack, set "Auto YC" to "On" in the (Custom Setup) menu (see page 10).

Tips

- To take advantage of the Wide Screen Modes, set the TV's aspect ratio to 16:9 on your DVD player. For details, refer to the operating instructions supplied with your DVD player.
- Use TV/VIDEO on the remote to switch between the VCR and DVD player inputs. Use 0-9 and ENTER or CH +/– on the remote to watch cable TV.
- If your DVD player is not equipped with S VIDEO, use a VIDEO cable (yellow) instead of the S VIDEO cable.

US

Connecting a Digital Satellite Receiver

Disconnect all power sources before making any connections.

1 Using a DVI-D singe link cable, connect the Digital Satellite Receiver's DVI-HDTV OUT connector to the TV's DVI-HDTV IN connector.

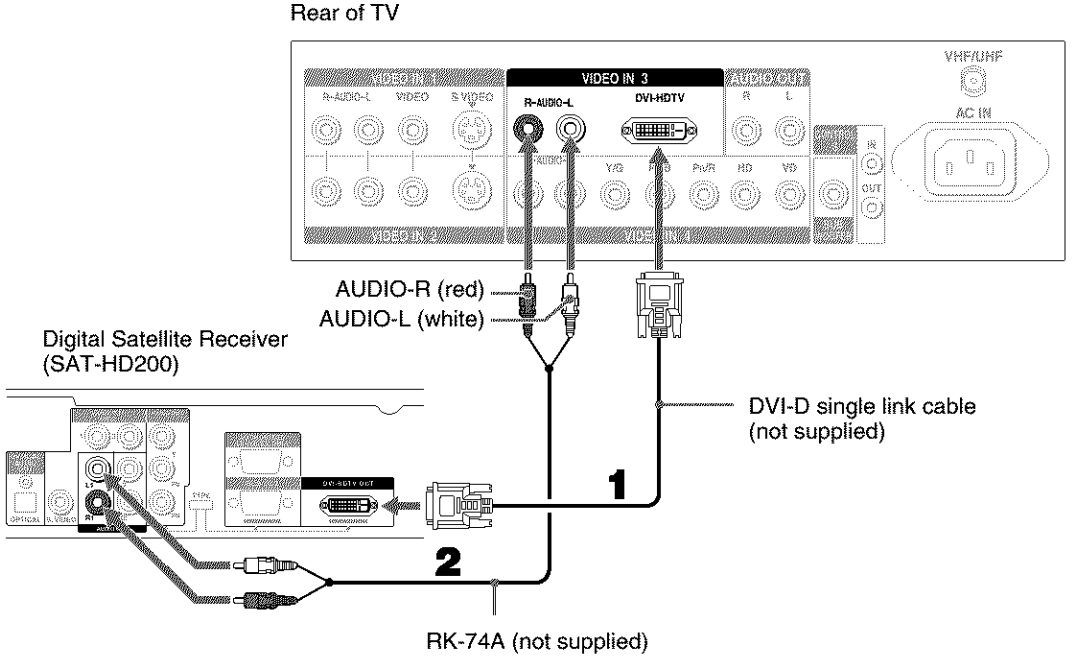
Note

DVI-HDTV connection or component video (Y, P_B, P_R) connection is necessary to view 480p, 720p, and 1080i formats. Note that this TV displays all format types of picture in a resolution of 852 dots × 1024 lines (KE-32TS2U), or 1024 × 1024 (KE-42TS2U).

2 Using an AUDIO cable, connect the Digital Satellite Receiver's Audio OUT jacks to the TV's AUDIO IN jacks.

Note

The DVI-HDTV connector does not provide audio, so audio cables must be connected to provide sound.



Connecting a Digital TV Receiver

Disconnect all power sources before making any connections.

1 Using three separate component video cables, connect the Digital TV Set-top box's Y, P_B and P_R jacks to the Y/G, P_B/B and P_R/R jacks on the TV. Use the VIDEO IN 4 connection.

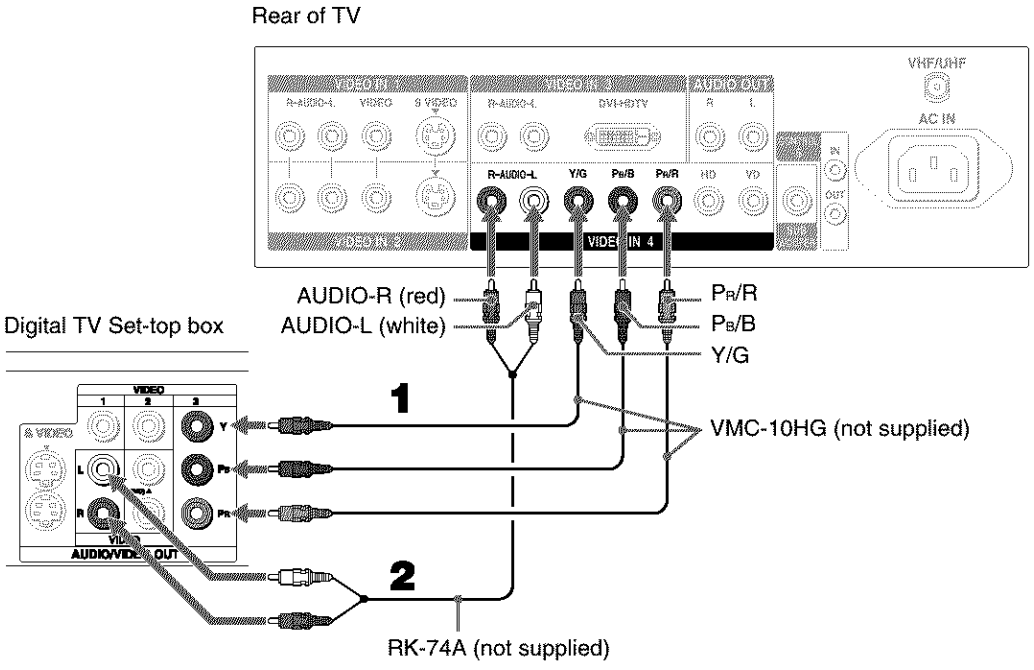
Note

DVI-HDTV connection or component video (Y, P_B, P_R) connection is necessary to view 480p, 720p, and 1080i formats. Note that this TV displays all format types of picture in a resolution of 852 dots × 1024 lines (KE-32TS2U), or 1024 × 1024 (KE-42TS2U).

2 Using an AUDIO cable, connect the Digital TV Set-top box's Audio OUT jacks to the TV's AUDIO IN jacks.

Note

The Y, P_B and P_R jacks do not provide audio, so audio cables must be connected to provide sound.



Note

Select "Video 4 Mode" in the (Initial Setup) menu, then select "Y/PB/PR" or "RGB" depending on the Digital TV Set-top box you connect (see page 32).

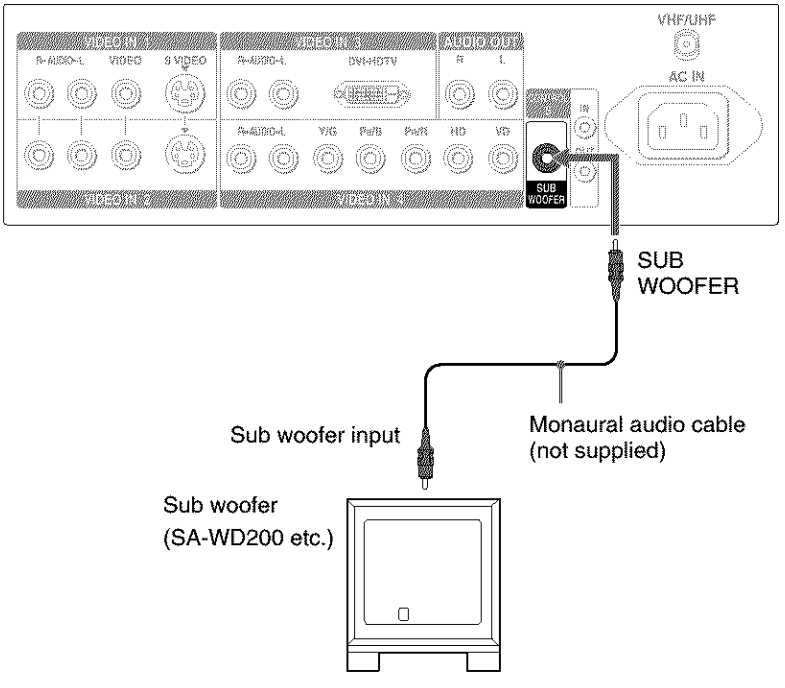
US

Connecting a Sub Woofer

Disconnect all power sources before making any connections.

Using a monaural audio cable, connect the TV's SUB WOOFER jack to the sub woofer's input jack.

Rear of TV



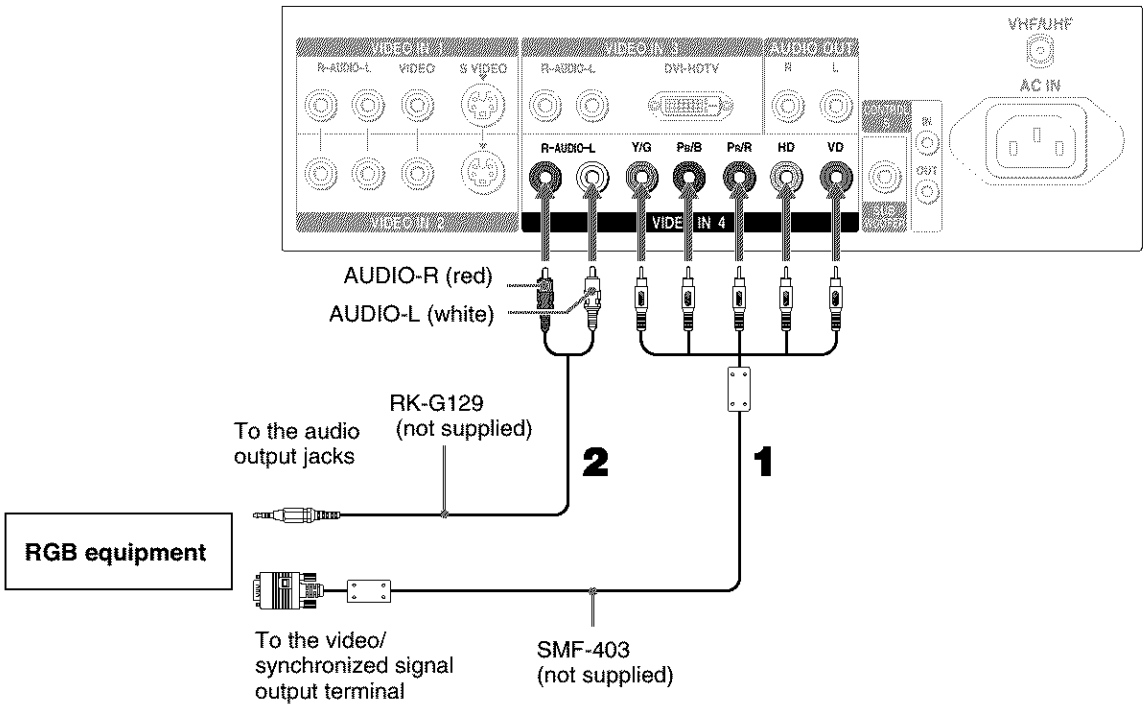
Connecting an RGB Equipment

Disconnect all power sources before making any connections.

1 Using an RGB cable, connect the RGB equipment's video/synchronized signal output terminal to the Y/G, P_B/B, P_R/R, HD, and VD jacks on the TV. Use the VIDEO IN 4 connections.

2 Using an AUDIO cable, connect the RGB equipment's AUDIO OUT jacks to the TV's AUDIO IN jacks. Be sure to use the same row of inputs that you used for the video connection.

Rear of TV



Note

Set "Video 4 Mode" to "RGB" in the (Initial Setup) menu (see page 32).

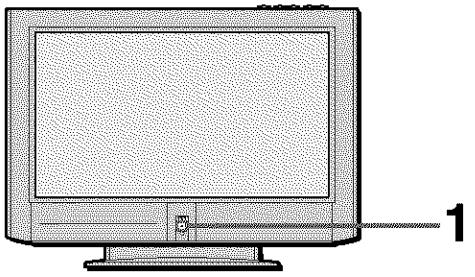
US

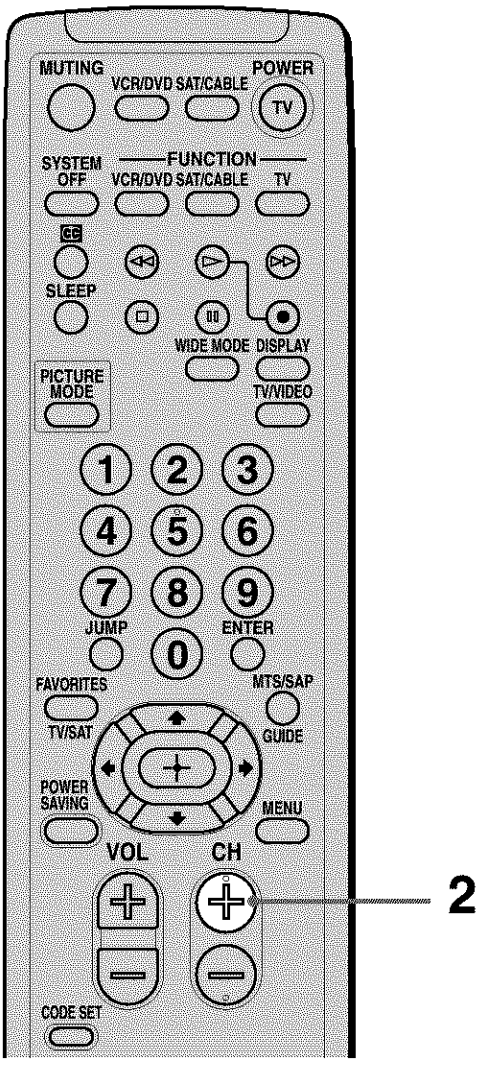
Setting the Channels

After you finish connecting your TV, you can run Auto Program to set up your channels. The Auto Program screen appears when you turn your TV on for the first time after installing it.
To change or skip channels, see page 21.

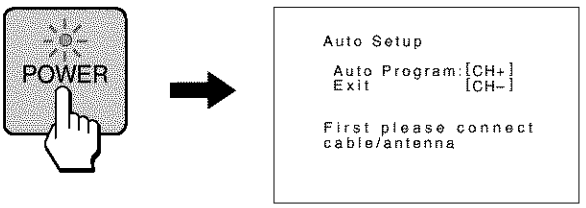
Note

The Auto Program feature does not apply for an installation that uses a cable box for all channels.





1 Press Power on the front panel of your TV. The Auto Setup menu appears.



2 Press CH+ on the remote control or on the front panel of your TV to perform Auto Program.

To perform Auto Program again

1 Press MENU.

2 Press ↑/↓ to select (TV Setup), then press ⊕.

3 Press ↑/↓ to select "Auto Program," then press ⊕.

4 Press ↑/↓ to select "OK," then press ⊕.

"Auto-Channel Set" appears and the TV starts scanning and presetting channels automatically. When all the receivable channels are stored, the lowest numbered channel will be displayed, then the (TV Setup) menu appears.

5 Press MENU to exit the menu screen.

To cancel Auto Program

While "Auto-Channel Set" appears in step 4, press MENU on the remote.

To watch CATV channels

You have to subscribe to a cable TV company. Note that cable TV cannot be received in some areas. This TV receives 1-125 cable TV channels. For details on cable TV subscription, consult your nearest cable TV company.

1 Press MENU.

2 Press ↑/↓ to select (TV Setup), then press ⊕.

3 Press ↑/↓ to select "Cable," then press ⊕.

4 Press ↑/↓ to select "On," then press ⊕.

5 Perform steps 3 and 4 on page 20.

Note

You cannot receive and set the CATV channels and UHF channels at the same time.

When you have a cable box or satellite receiver connected

The Channel Fix feature is useful when you have a cable box or satellite receiver connected. For details, see page 53.

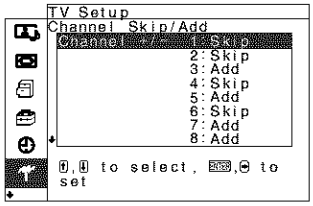
To skip channels

You can skip unnecessary channels when selecting channels using the CH +/– buttons.

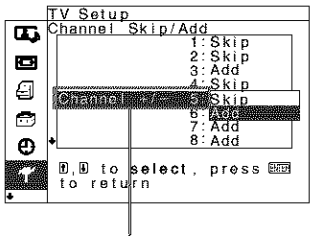
1 Press MENU.

2 Press ↑/↓ to select (TV Setup), then press ⊕.

3 Press ↑/↓ to select "Channel Skip/Add," then press ⊕.

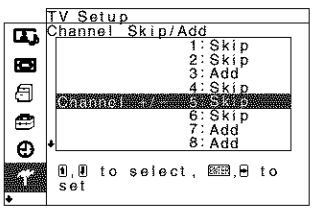


4 Press ↑/↓ to select the channel you want to skip, then press ⊕.



Example: Select this to skip channel 5.

5 Press ↑/↓ to select "Skip," then press ⊕.



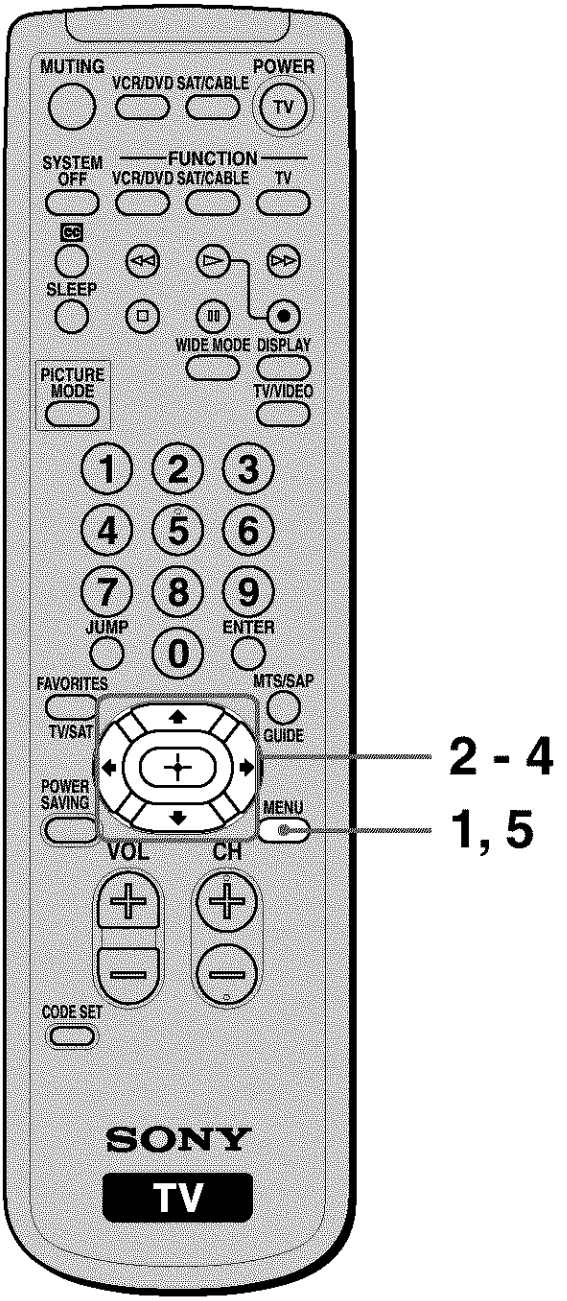
If you want to re-enter the skipped channel, select "Add."

6 Press MENU to exit the menu screen.

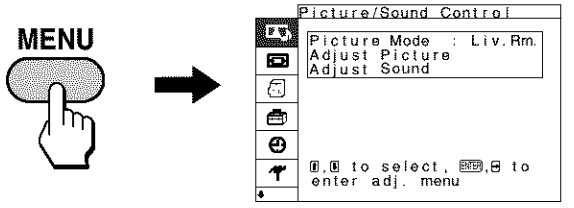
US

Selecting the On-screen Menu Language

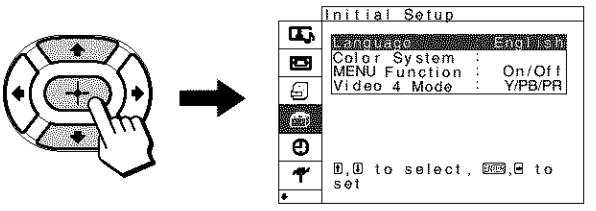
You can select the language to be displayed in all menu.



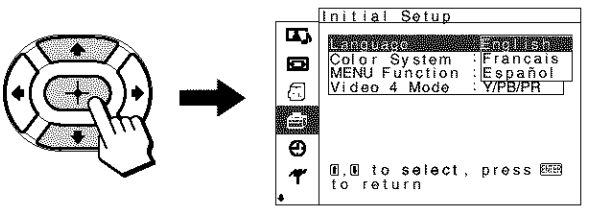
1 Press MENU.



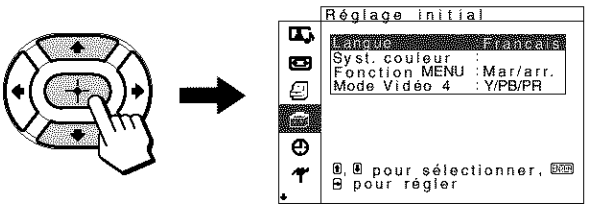
2 Press ↑/↓ to select (Initial Setup), then press ⊕.



3 Press ↑/↓ to select "Language," then press ⊕.

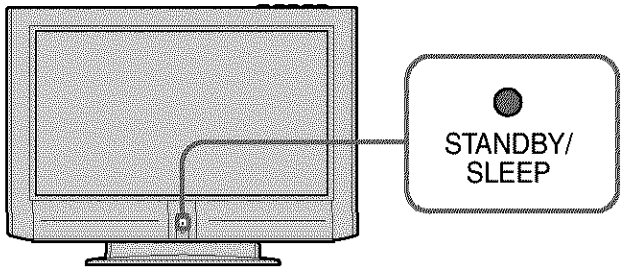


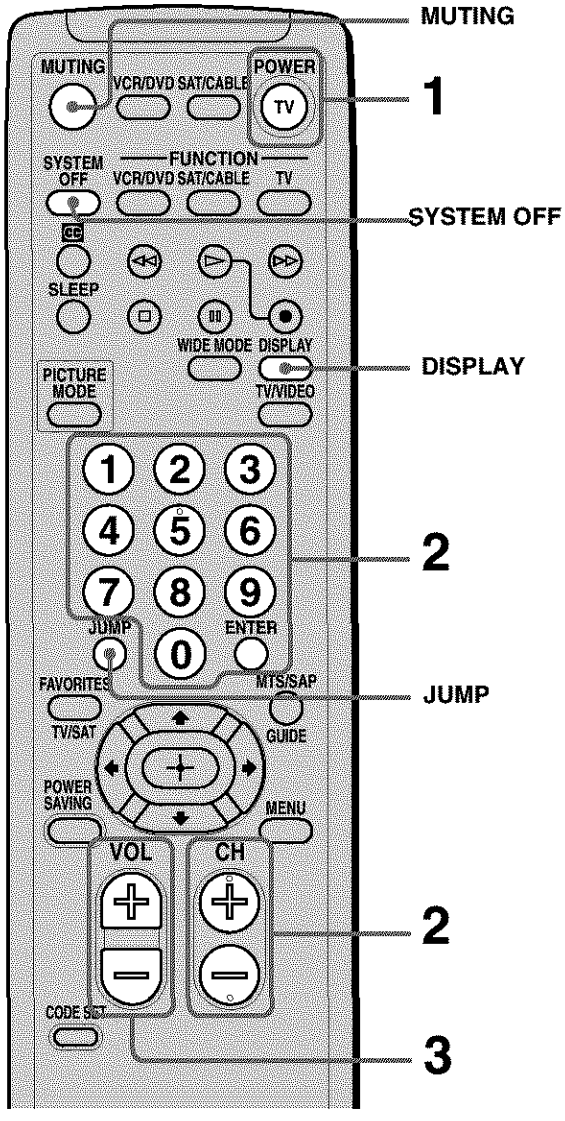
4 Press ↑/↓ to select your preferred language, then press ⊕.



5 Press MENU to exit the menu screen.

Watching the TV



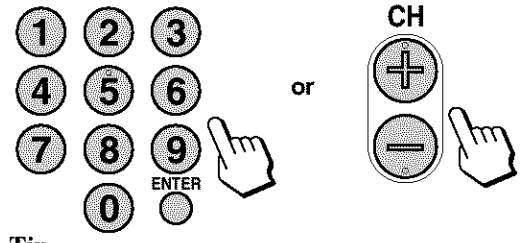


When the STANDBY/SLEEP indicator goes off, press POWER on the TV.

2 Select the desired channel using the 0-9 and ENTER buttons.

Press 0-9 to select a channel, the channel changes after 2 seconds. Press ENTER to select immediately.

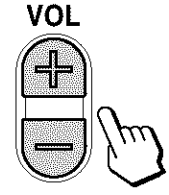
Use the CH +/– buttons to scan through the channels.



Tip

When you press and hold CH + or – the channel number will change rapidly.

3 Adjust the volume using the VOL +/– buttons.



Other button operations

Press	To
MUTING	mute the sound. Press again or press VOL + to restore sound.
SYSTEM OFF	turn off the TV and all other Sony equipment.
DISPLAY	display the current channel number. Press again to turn display off. The channel display will automatically disappear after a few minutes. To display the channel again, press again.
JUMP	jump back and forth between two channels. The TV alternates between the current channel and the last channel selected using the 0-9 buttons.

Tips

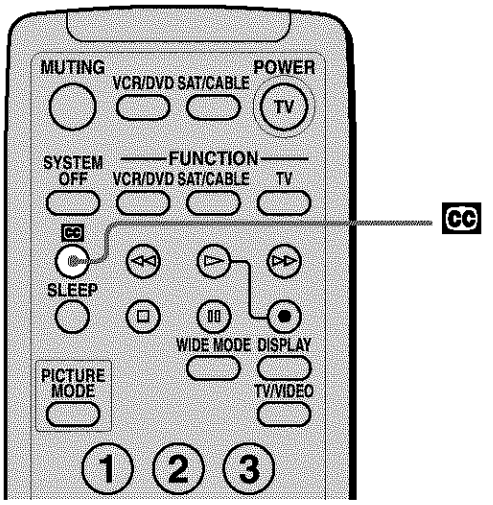
- While the STANDBY/SLEEP indicator is lit, the TV turns on automatically if you press the 0-9 and ENTER buttons or CH +/– buttons on the remote.
- You can adjust the volume by referring to the value beside the volume indication (on screen).

(Continued)

US

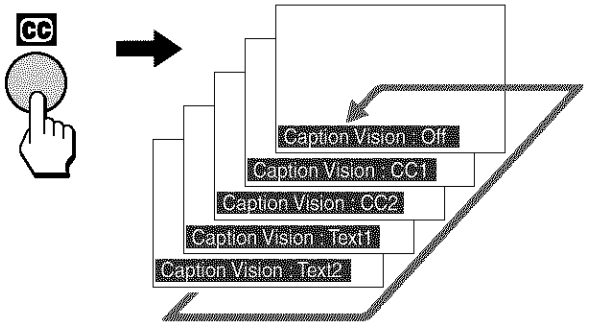
Watching with closed caption

You can display Caption Vision if the broadcaster offers this service.



Press CC repeatedly until the desired Caption Vision appears.

Each time you press the button, Caption Vision changes as follows:



Select	To
Off	turn off Caption Vision.
CC1 (Capture 1), CC2 (Capture 2)	display a printed version of the dialogue or sound effects of a program. (The mode should be set to CC1 (Capture 1) for most programs.)
Text1, Text2	display network/station information presented using either half or the whole screen.

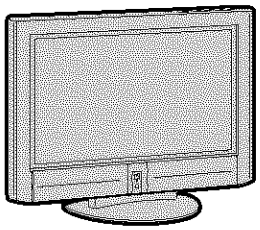
Tip

You can select Caption Vision on the menu screen. Select "Caption Vision" in the (Custom Setup) menu, then select the desired Caption Vision.

Enjoying High-quality Pictures and Sounds

To enjoy high-quality pictures and sound, refer to the following and adjust the picture and audio options to best suit the program you are watching.

When watching TV



Set Picture Mode to "Standard" (page 26)

To adjust the picture quality

Select "Liv. Rm." (Living Room) and adjust the options, referring to the following (See page 39).

- Adjust "Brightness" and "Contrast" according to the light conditions in your room.
  First, adjust the brightness. Note that increasing "Brightness" too much whitens black color. Next, adjust the contrast. If "Contrast" is reduced and there is little difference between bright and dark areas, increase "Gamma Correct." (Gamma Correction).
- If antenna reception level is too low, the picture may be noisy. In this case, increase "Noise Reduct." (Noise Reduction). If the picture is still noisy, decrease "Sharpness" to reduce any noise.
- Set "Cine Motion" to "Off" except when watching movies.

Set Sound Mode to "Standard" (page 26)

To adjust the sound quality

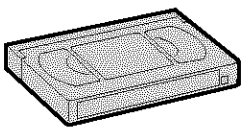
Select "Liv. Rm." (Living Room) and adjust the options, referring to the following (See pages 27, 41).

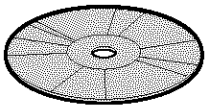
- Adjust "Treble" and "Bass" to your taste.
- Set "Effect" as follows:
  - When watching news: "Off"
  - When watching music programs: "Hall"
  - To add a surround-like effect to mono programs: "Simul." (Simulated).

Note

If "Auto Shutoff" is activated (page 53), the TV changes to the standby mode automatically when there is no broadcast. You can prevent the TV from remaining on even if you fall asleep.

When watching movies on videotapes or DVD





Set Picture Mode to "Movie" (page 26)

To adjust the picture quality

Select "Movie" and adjust the options, referring to the following (See page 39).

- Set "Cine Motion" to "Auto" for smoothest presentation of movies on screen (24 frame per second).
- If there is too much noise when watching a rental videotape, increase "Noise Reduct." (Noise Reduction). If the picture is still noisy, decrease "Sharpness" to reduce noise.
- To enjoy high-level picture quality of DVD, increase "Sharpness" to a degree where the picture appears clear, but not overly sharp (See page 40).

Set Sound Mode to "Movie" (page 26)

To adjust the sound quality

Select "Movie" and adjust the options, referring to the following (See page 27).

- For surround sound, set "Effect" to "TS" (TruSurround) (See page 27).

Tip

Caption Vision is displayed if you activate the Closed Caption feature (See page 24).

Notes on Image Retention

If the 1-5 images (below) are displayed for an extended period of time, image retention (afterimage) in areas of the screen may result due to the characteristics of the Plasma Display Panel. It is possible to reduce image retention by following steps A-C.

Situations which can result in burn-in and picture retention

1 Black bars at the top and bottom that appear with wide video source (Letter box picture)
2 Black bars to the left and right that appear with 4:3 video source (conventional TV broadcast)
3 Video game sources
4 DVD on-screen menu displays
5 On-screen menus, channel numbers, etc., of connected equipment such as DSS, Cable box, video decks, etc.

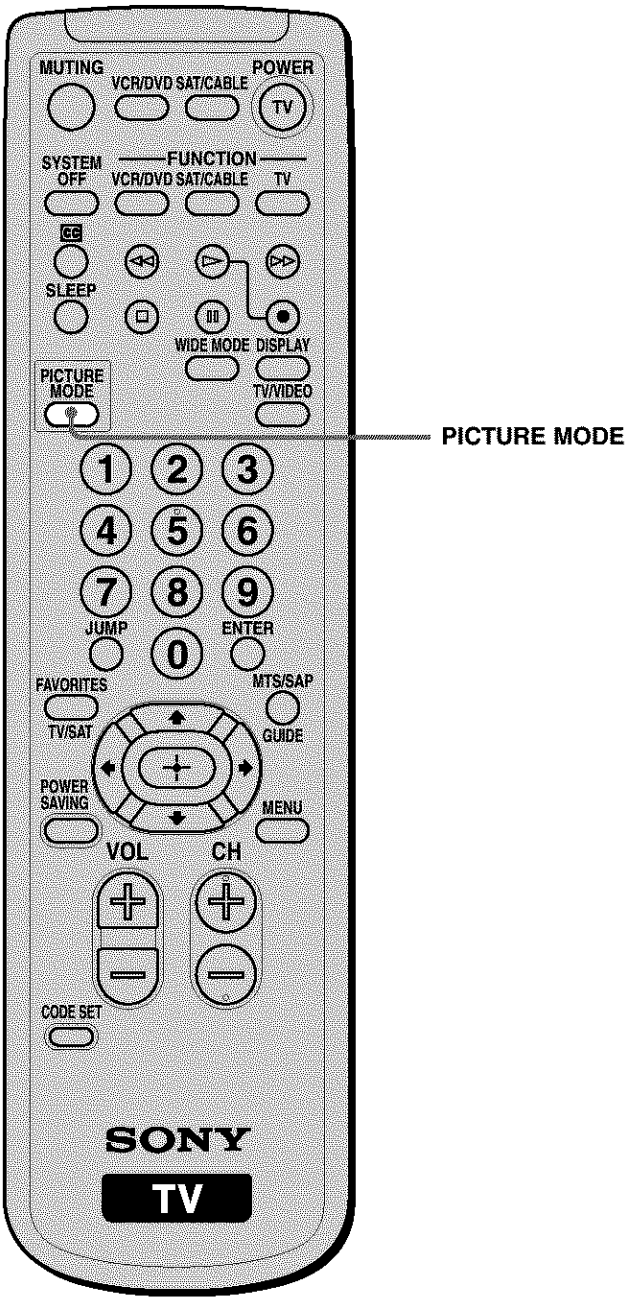
Precautions to avoid/reduce burn-in and picture retention

A Use the automatic orbiting Screen Saver function.
B Avoid displaying channel numbers, on-screen menus etc. of connected equipment such as DSS, Cable box, video decks, etc. To erase channel numbers, on-screen menus, refer to the user manual of connected equipment.
C Reduce brightness of the picture and/or display video source in Wide Zoom or Full Mode.

US

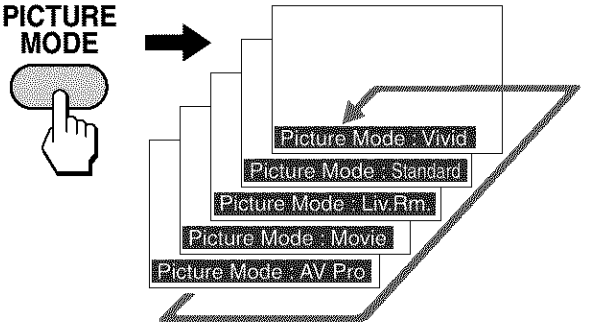
Selecting the Picture Mode

You can select one of the five different picture modes that best suits the program you are watching. You can also adjust the picture quality for the Liv.Rm. (Living Room), Movie, and AV Pro modes to suit your taste (See page 39).
When selecting Picture Mode, see "Enjoying High-quality Pictures and Sounds" on page 25.
You can set a different Picture Mode for each picture signal format and store them in memory.



Press PICTURE MODE repeatedly until the desired mode appears.

If you press the button once, the current Picture Mode appears. Each time you press the button, the Picture Mode changes as follows.



Vivid
Select for enhanced picture contrast and sharpness.

Standard
Select to display a picture with contrast to suit your room's lighting conditions.

Liv.Rm. (Living Room)
Select to display a picture with moderate contrast, which may better suit the living room's lighting conditions.
Adjust the options to your taste (See pages 39, 41).

Movie
Select to display a finely detailed picture. The sound automatically changes to "TS" (TruSurround) (See page 28).
Adjust the options to your taste (See pages 39, 41).

AV Pro
Use this mode for your own custom settings (See pages 39, 41).

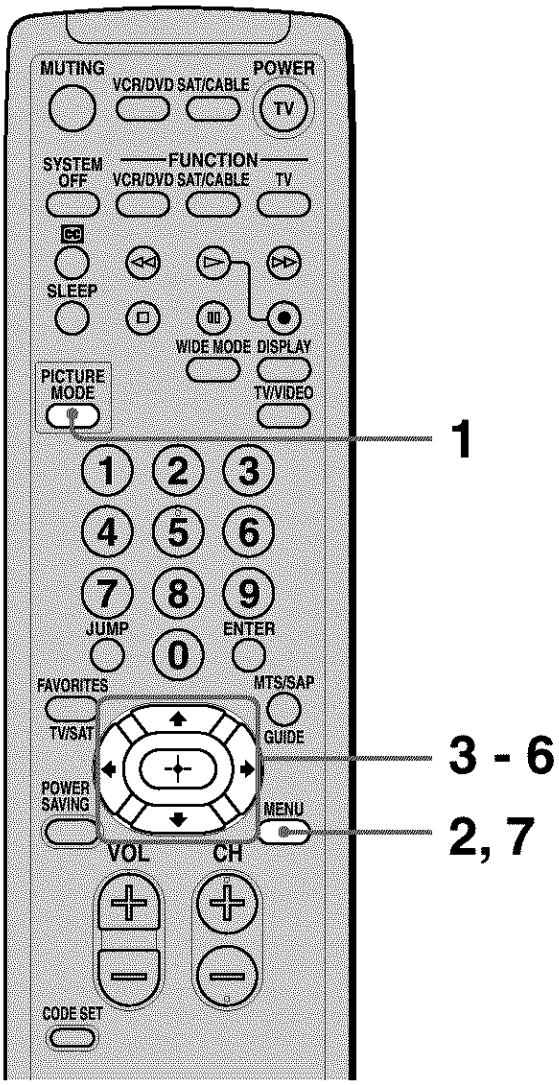
Selecting the Effect Mode

You can select one of the three different Effect modes that best suits the program you are watching. You can select the Effect mode, when watching the picture of connected equipment as well.
TruSurround* produces a virtual surround effect, and enables you to enjoy the sound effects of a movie theater.
You can set a different Effect mode for each picture signal format and store them in memory.

* TruSurround and the (●) symbol are trademarks of SRS Labs, Inc.
TruSurround technology is incorporated under license from SRS Labs, Inc.

Tip

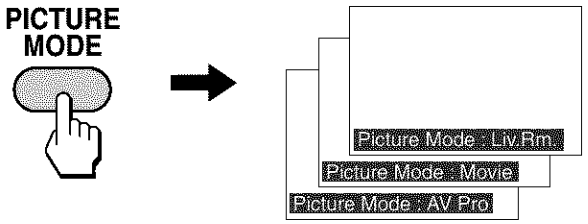
You can adjust other sound options. For details, see "Using the Sound Control Option" on page 41.



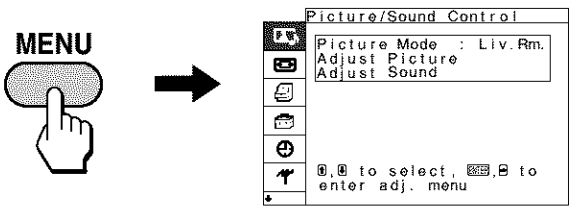
1 Press PICTURE MODE repeatedly to select "Liv.Rm." (Living Room), "Movie," or "AV Pro."

Note

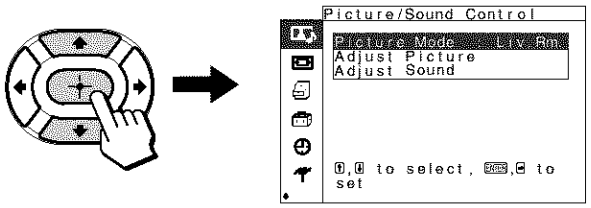
Effect mode cannot be set for the "Vivid" and "Standard" modes (See page 26).



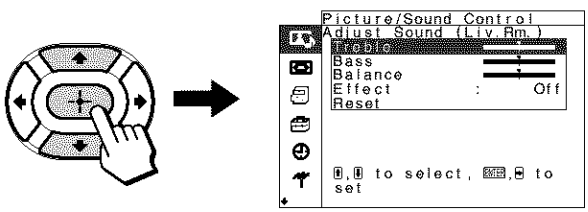
2 Press MENU.



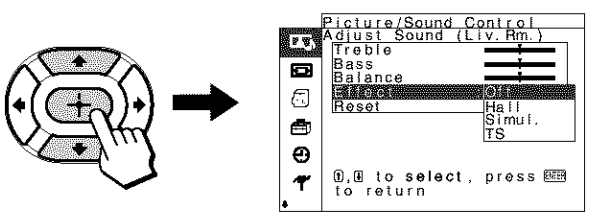
3 Press ↑/↓ to select (Picture/Sound Control), then press ⊕.



4 Press ↑/↓ to select "Adjust Sound," then press ⊕.



5 Press ↑/↓ to select "Effect," then press ⊕.



(Continued)

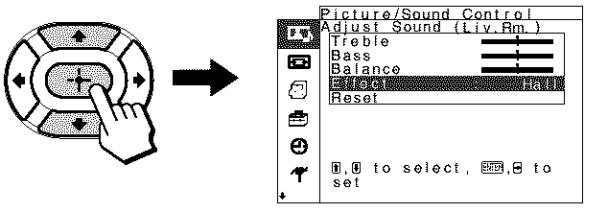
US

6 Press ↑/↓ to select "Hall," "Simul." (Simulated), or "TS" (TruSurround), then press ⊕.

Hall
Select for movies and music programs.

Simul. (Simulated)
Select for normal broadcast. It adds a surround-like effect to mono programs.

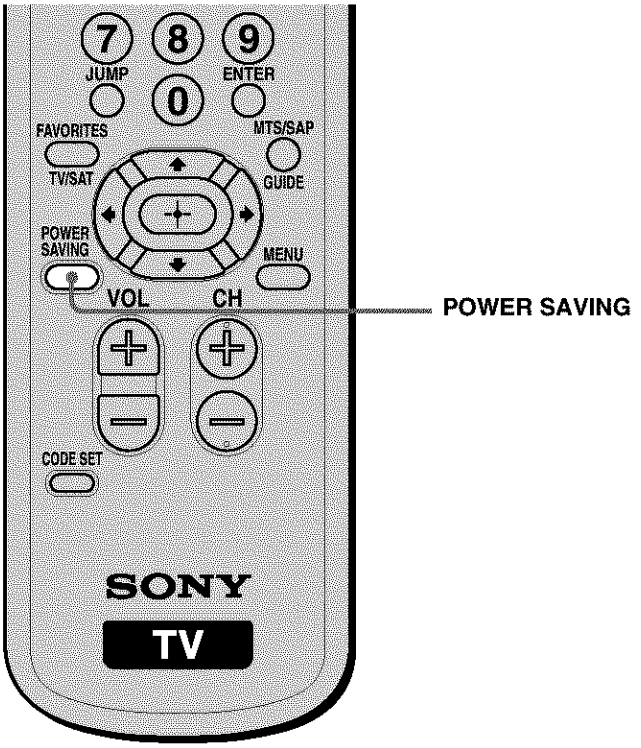
TS (TruSurround)
Select for surround sound (for example, DVD software). It produces a virtual surround effect.



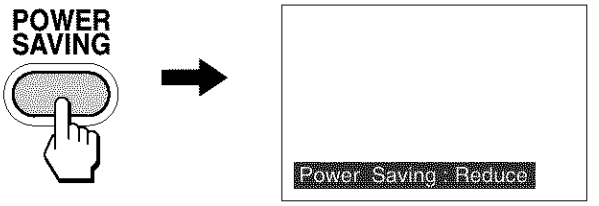
7 Press MENU to exit the menu screen.

Saving the Power Consumption

You can save the power consumption of the TV.



Press POWER SAVING.



To cancel the Power Saving mode

Press POWER SAVING again.
"Power Saving: Standard" appears.

Tips

- If you turn off the TV while the Power Saving mode is on, the mode stays on next time you turn on the TV.
- You can set the Power Saving mode to on using the menu screen. Select "Power Saving" in the (Custom Setup) menu, then set it to "Standard" or "Reduce."
- If you select "Liv.Rm." (Living Room), "Movie" or "AV Pro" using the PICTURE MODE button, you can adjust the picture option even if the Power Saving mode is set to on (page 39). Note that if you increase "Contrast" or "Brightness," the power consumption is not reduced.

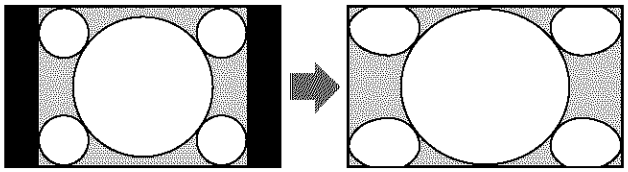
Using the Wide Screen Mode

Changing the Wide Screen Mode automatically

The Auto Wide Mode lets you watch 4:3 normal broadcasts or other sizes of the picture such as movies in several Wide Screen Modes (16:9 aspect ratio). The following example shows the default settings. (The "Auto Wide" screen mode is set to "Mode2," and "4:3 Default" is set to "Widezoom."

Widezoom

Original Picture **Auto Wide**

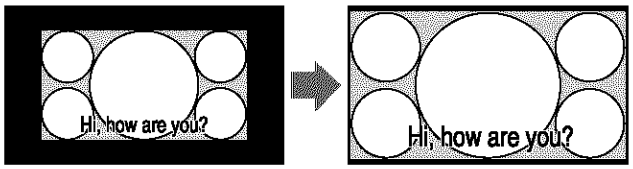


- Normal 4:3 aspect ratio picture
- DTV 4:3 aspect ratio picture

"Widezoom" enlarges the 4:3 picture to fill the 16:9 screen, keeping the original image as much as

Zoom

Original Picture **Auto Wide**

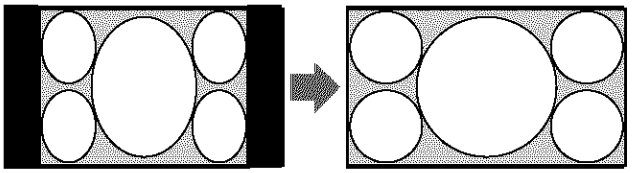


- Letterbox movie of a video tape or a DVD disc

"Zoom" enlarges the 4:3 picture horizontally and vertically to an equal aspect ratio that fills the 16:9 screen. Useful for watching Letterbox

Full

Original Picture **Auto Wide**

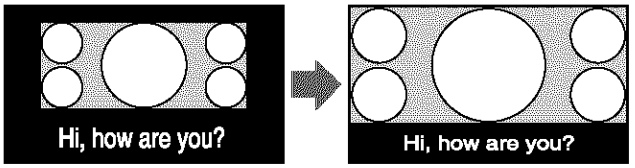


- 4:3 squeezed video camera or DVD picture
- DTV 16:9 aspect ratio picture

"Full" stretches the 4:3 picture horizontally only, to fill the 16:9 screen.

Subtitle

Original Picture **Auto Wide**

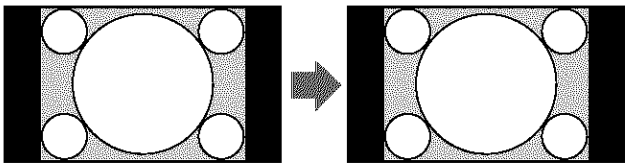


- Letter box movies with subtitles outside the picture (2.35:1 aspect ratio)

"Subtitle" enlarges the picture horizontally and vertically to an equal aspect ratio that fills the screen, while the subtitle area is compressed to fit

Normal

Original Picture **Auto Wide**



- Normal 4:3 aspect ratio picture
- DTV 4:3 aspect ratio picture

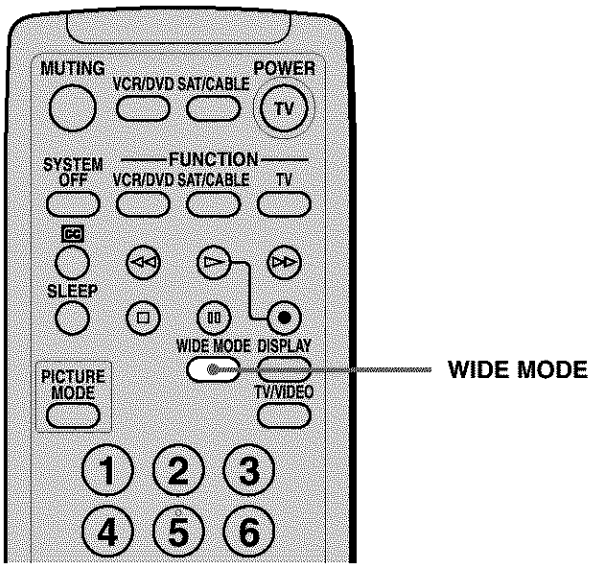
"Normal" returns the 4:3 picture to its original size.

US

(Continued)

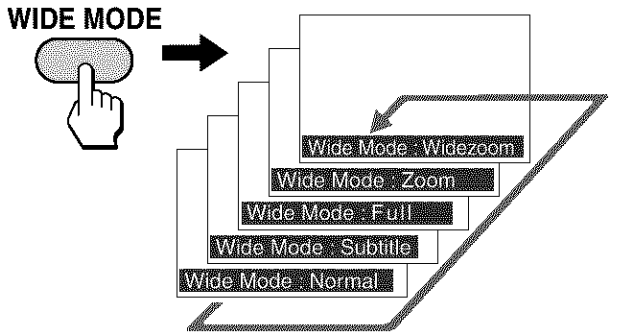
Changing the Wide Screen Mode manually

You can change the Wide Screen Mode manually with the WIDE MODE button. When the antenna reception is low, or the picture is too dark, the Auto Wide function may not work properly. In this case, set the Wide Screen Mode manually.



Press WIDE MODE repeatedly until the desired Wide Screen Mode appears.

Pressing the WIDE MODE button once lets the TV select the best Wide Screen Mode, and the selected Wide Screen Mode appears.* Each time you press the button, Wide Screen Mode changes as follows. For details on Wide Screen Mode, see page 29.



* When "Auto Wide" in the (Screen Control) menu is set to "Mode2," and the "4:3 Default" is set to "Normal" (page 31), the picture remains 4:3 aspect ratio ("Normal").

Tip

Set "Auto Wide" to "Off" when changing the Wide Screen Mode manually (See page 31).

Changing the Wide Setup

Auto Wide setting has two options: "Mode1" and "Mode2."

Auto Wide: "Mode1"

Normal broadcast (4:3 aspect ratio) transmits the control signal together with the picture signal. Some video equipment, such as camcorders, transmit the control signal*[1] as well. In "Mode1," the TV detects the control signal and displays the picture with its original aspect ratio. Note that black bands may appear near the frame, or part of the picture may not appear, if you select the Wide Screen Mode manually while watching the picture without the control signal.

Auto Wide: "Mode2"

In "Mode2," the TV selects the best Wide Screen Mode automatically to fit the wide screen, regardless of the control signal.

The factory setting of this TV is:
"Auto Wide" is set to "Mode2," and "4:3 Default" is set to "Widezoom."

*[1] Control signal which returns the picture to its original aspect ratio. The following include the control signal.
- Pictures from camcorder with specified aspect ratio
- Broadcasts with the 4:3 aspect ratio signal

How Wide Screen Mode works in Auto Wide "Mode1" and "Mode2"

	Wide Screen Mode	
Original picture	**Auto Wide: "Mode1"**	**Auto Wide: "Mode2"**
Normal broadcasts	Wide Screen Mode selected with the WIDE MODE button	"Widezoom" or "Normal"*2
Broadcasts with the 4:3 aspect ratio signal*3	"Normal"	"Widezoom" or "Normal"*2
Letterbox movies with subtitles inside the picture	Wide Screen Mode selected with the WIDE MODE button	"Zoom"
Letterbox movies with subtitles outside the picture	Wide Screen Mode selected with the WIDE MODE button	"Subtitle"
Pictures from camcorder or DVD software with the 16:9 aspect ratio signal*3	"Zoom" or "Full"	
Pictures from camcorder or DVD software with the 4:3 aspect ratio signal*3	"Normal"	"Widezoom" or "Normal"*2

*2 Set it on the menu screen (See below right). When purchasing, it is set to "Widezoom."
*3 Pictures with control signal (page 30).

Tips

- If you select the Wide Screen Mode manually (page 30), the Wide Screen Mode may not change as noted above.
- If you press the WIDE MODE button (page 30) with Auto Wide set to on, Auto Wide functions noted above. If you press the WIDE MODE button repeatedly, Wide Screen Mode changes as follows (according to the control signal).
  - If the TV receives a picture with control signal, Wide Screen Mode changes according to the control signal.
  - If the TV receives a picture without control signal, Auto Wide does not function even if "Auto Wide" is set to "Mode2." Note that it functions again when you select other channels or inputs, or turn the TV off and on again.
- This TV features superior presentation of movie films by identifying movie signals and processing them accordingly.

When Wide Screen Mode changes automatically with Auto Wide set to on

- The TV receives the picture with a control signal and selects the best Wide Screen Mode automatically to fit the wide screen (See page 29).
- While "Auto Wide" is set to "Mode2," the picture size may change during commercial breaks. This is because the TV selects the best Wide Screen Mode automatically for each program (See page 29).

Notes on Wide Screen Mode

- The Wide Screen Mode function of this TV allows for various display options: select the appropriate Wide Screen Mode for the original aspect ratio of the picture you are watching.
- If you change the screen size using the WIDE MODE feature with the TV installed in a public space for commercial use or public purpose, it might be an infringement of copyright.
- If you select "Widezoom" when watching the picture with 4:3 aspect ratio, par of the picture is transformed. You can watch the picture with its original aspect ratio in "Normal" mode.
- The upper and lower parts may not appear or subtitles may not go in the screen according to the size of the original picture. In this case, adjust the size or position (See page 38).

Changing the Auto Wide setting

For details on Auto Wide, see page 29.

1 Press MENU.

2 Press ↑/↓ to select (Screen Control), then press ⊕.

3 Make sure that "Wide Setup" is selected, then press ⊕.

If not, press ↑/↓ to select "Wide Setup," and then press ⊕.

4 Press ↑/↓ to select "Auto Wide," and then press ⊕.

5 To set "Auto Wide" to "Off":
Press ↑/↓ to select "Off," then press ⊕.
(Go to step 8.)

To set "Auto Wide" to "Mode1":
Press ↑/↓ to select "Mode1," then press ⊕.
(Go to step 8.)

To set "Auto Wide" to "Mode2":
Press ↑/↓ to select "Mode2," then press ⊕.

6 If you set "Auto Wide" to "Mode2," press ↑/↓ to select "4:3 Default," then press ⊕.

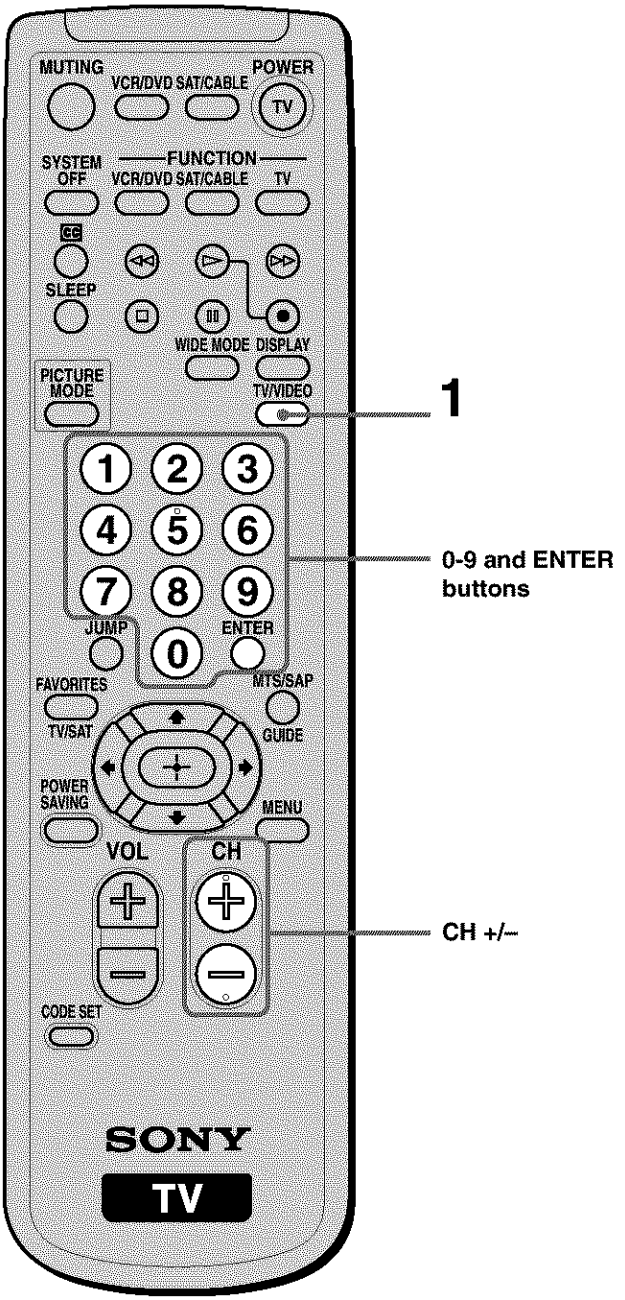
7 Press ↑/↓ to select "Normal" or "Widezoom," then press ⊕.

8 Press MENU to exit the menu screen.

US

Setting the Video Inputs

You can enjoy images (and sound) from optional video equipment connected to this unit by selecting the appropriate input. For details on connection, see pages 9 through 19.



Tip

You can select the inputs by using the INPUT button on the TV. Each time you press the button, the input changes as follows:

TV→VIDEO1/S VIDEO1*→VIDEO2/S VIDEO2*
↑ ↓
VIDEO 4 ← VIDEO 3

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

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

Select	Display indication
• TV	TV
• VIDEO IN 1	VIDEO1*
• VIDEO IN 2	VIDEO2*
• VIDEO IN 3	VIDEO3
• VIDEO IN 4	VIDEO4

* If a video equipment is connected to S VIDEO input and "Auto YC" in the (Custom Setup) menu is set to "On" (page 10), "S VIDEO1," or "S VIDEO2" appears.

2 Operate the selected optional equipment.

For details, see "Operating Video Equipment with your TV Remote Control" on page 33, or refer to the instructions supplied with each equipment.

When connecting optional video equipment to VIDEO IN 4

1 Press MENU.

2 Press ↑/↓ to select (Initial Setup), then press ⊕.

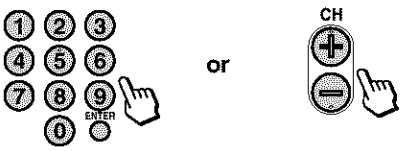
3 Press ↑/↓ to select "Video 4 Mode," then press ⊕.

4 Press ↑/↓ to select "Y/PB/PR" or "RGB," then press ⊕.

5 Press MENU to exit the menu screen.

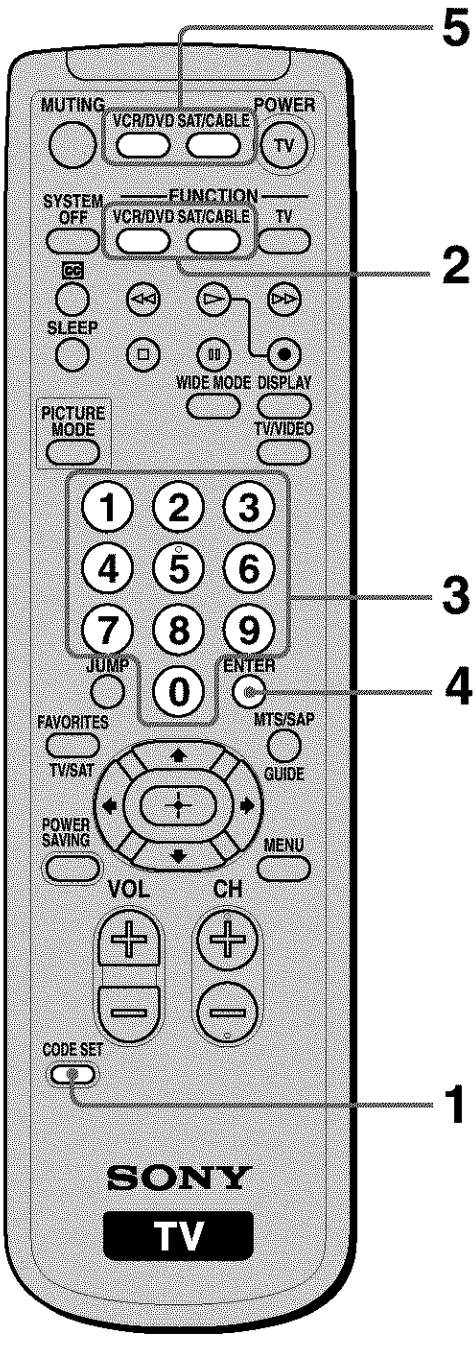
To watch the TV

Press the 0-9 and ENTER buttons or CH +/–.



Operating Video Equipment with Your TV Remote Control

Programming the remote control



The remote control is preset to operate Sony brand video equipment.

Sony equipment	Programmable code number
Beta, ED Beta VCRs	303
8mm VCR	302
VHS VCR	301
DV VCR	348
DVD player	751

If you have video equipment other than Sony brand that you want to control with the TV's remote control, use the following procedures to program the remote control.

Note

The equipment must have infrared (IR) remote capability in order to be used with this remote control.

From the "Manufacturer's codes" listed on page 34, select the three-digit code number for the manufacturer's code of your equipment. If more than one code number is listed, start with the number listed first. Use the code number to complete the following procedure.

1 Press CODE SET.

2 Press the function button you want to program.

To program a cable box or a satellite receiver
Press SAT/CABLE (FUNCTION).

To program video equipment
Press VCR/DVD (FUNCTION).

3 Enter the three-digit manufacturer's code number using the 0-9 buttons.

4 Press ENTER.

5 To check if the code number works, aim the TV's remote control at the equipment and press the VCR/DVD and/or SAT/CABLE (POWER) button that corresponds with that equipment. If it responds, the programming is completed. If not, try using the other codes listed for that manufacturer.

Tips

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

US

(Continued)

Manufacturer's codes

VCRs

Manufacturer	Code
Sony	301
Admiral (M. Ward)	327
Aiwa	338, 344
Audio Dynamic	314, 337
Broksonic	319, 317
Canon	309, 308
Citizen	332
Craig	302, 332
Criterion	315
Curtis Mathes	304, 338, 309
Daewoo	341, 312, 309
DBX	314, 336, 337
Dimensia	304
Emerson	319, 320, 316, 317, 318, 341
Fisher	330, 335
Funai	338
General Electric	329, 304, 309
Go Video	322, 339, 340
Goldstar	332
Hitachi	306, 304, 305, 338
Instant Replay	309, 308
JC Penney	309, 305, 304, 330, 314, 336, 337
JVC	314, 336, 337, 345, 346, 347
Kenwood	314, 336, 332, 337
LXI (Sears)	332, 305, 330, 335, 338
LG	332
Magnavox	308, 309, 310
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	308, 309, 310
Pioneer	308
Quasar	308, 309, 306
RCA/PROSCAN	304, 305, 308, 309, 311, 312, 313, 310, 329
Realistic	309, 330, 328, 335, 324, 338
Sansui	314
Samsung	322, 313, 321
Sanyo	330, 335
Scott	312, 313, 321, 335, 323, 324, 325, 326
Sharp	327, 328
Shintom	315
Signature 2000 (M. Ward)	338, 327
SV2000	338
Sylvania	308, 309, 338, 310
Symphonic	338
Tashiro	332
Tatung	314, 336, 337
Teac	314, 336, 338, 337
Technics	309, 308
Toshiba	312, 311
Wards	327, 328, 335, 331, 332
Yamaha	314, 330, 336, 337
Zenith	331

DVD Players

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

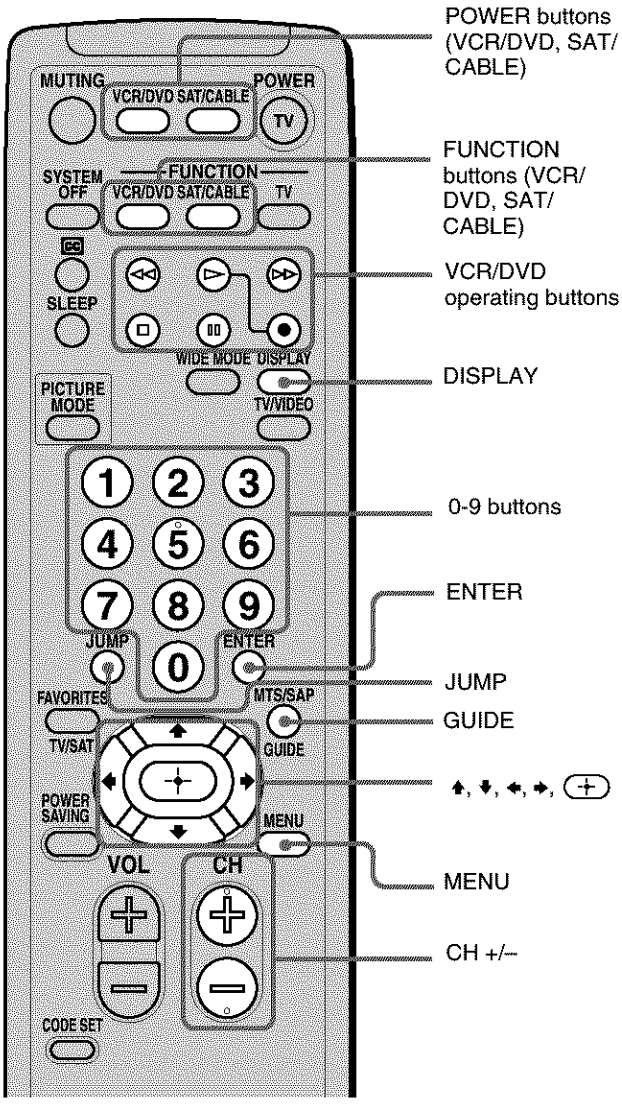
Cable Boxes

Manufacturer	Code
Sony	230
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

Satellite Receivers

Manufacturer	Code
Sony	801
General Electric	802
Hitachi	805
Hughes	804
Panasonic	803
RCA/PROSCAN	802, 808
Toshiba	806, 807

Operating optional equipment



Operating a VCR

To	Press
Turn on/off	VCR/DVD (POWER)
Control a VCR	VCR/DVD (FUNCTION)
Change channels	CH +/–
Record	▷ and ● simultaneously
Play	▷
Stop	□
Fast forward	▷▷
Rewind the tape	◁◁
Pause	▯▯ (press again to resume normal playback)
Search the picture forward or backward	▷▷ or ◁◁ during playback (release to resume normal playback)

Operating a DVD player

To	Press
Turn on/off	VCR/DVD (POWER)
Control a DVD player	VCR/DVD (FUNCTION)
Play	▷
Stop	□
Pause	▯▯ (press again to resume normal playback)
Step through different tracks of an audio disc	▷▷ to step forward or ◁◁ to step backward
Step through different chapters of a video disc	CH + to step forward or CH – to step backward
Select tracks directly	0-9 buttons
Display the menu (Setup)	MENU
Operate the DVD menu	↑, ↓, ←, →, ⊕

Operating a cable box

To	Press
Turn on/off	SAT/CABLE (POWER)
Select cable box	SAT/CABLE (FUNCTION)
Select a channel	0-9 buttons, ENTER
Change channels	CH +/–
Go to previous channel	JUMP

Operating a satellite receiver

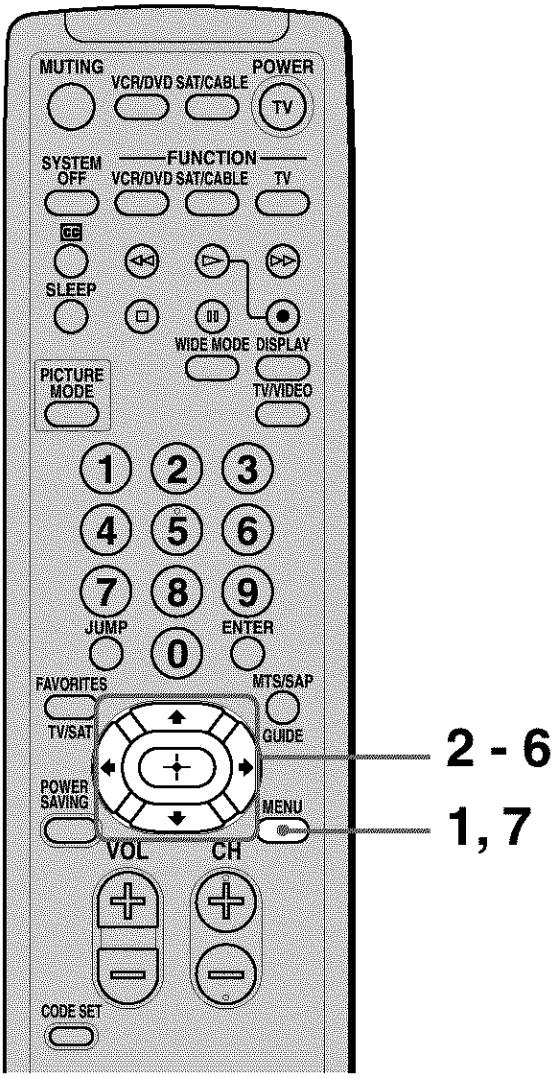
To	Press
Turn on/off	SAT/CABLE (POWER)
Select satellite receiver	SAT/CABLE (FUNCTION)
Select a channel	0-9 buttons, ENTER
Change channels	CH +/–
Go to previous channel	JUMP
Display channel number	DISPLAY
Display DBS guide	GUIDE
Display DBS menu	MENU
Move highlight (cursor)	↑, ↓, ←, →,
Select item	⊕

US

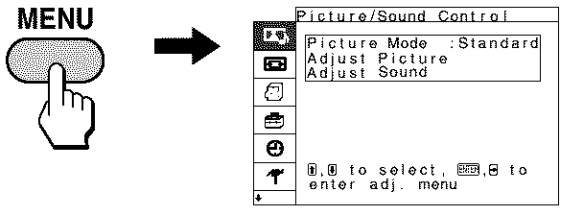
Using Favorite Channels

You can select programs from a list of favorite channels that you preset.

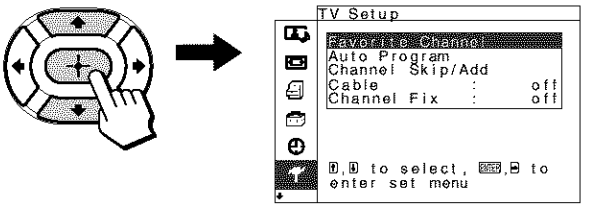
Setting your favorite channels



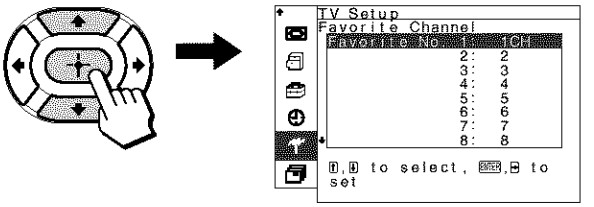
1 Press MENU.



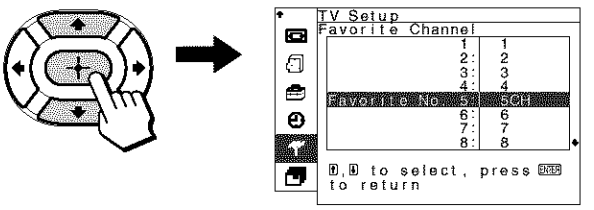
2 Press ↑/↓ to select (TV Setup), then press ⊕.



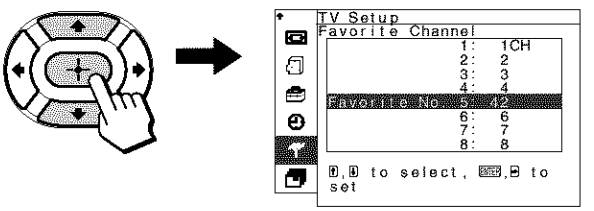
3 Press ↑/↓ to select "Favorite Channel," then press ⊕.



4 Press ↑/↓ to select the position you want to change, then press ⊕.



5 Press ↑/↓ to select the desired channel, then press ⊕.

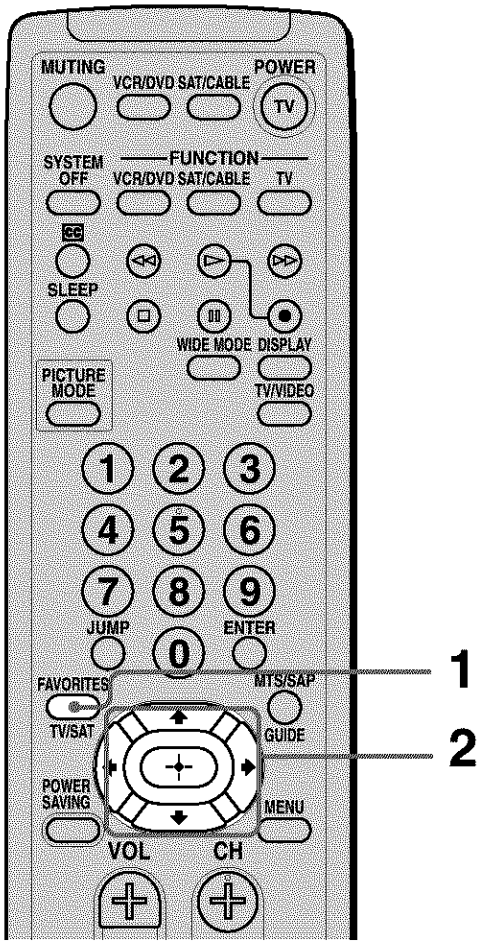


You have now selected a favorite channel for the position selected in step 4.

6 Repeat steps 4 and 5 to program other favorite channels.

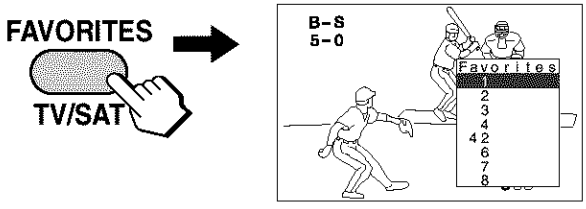
7 Press MENU to exit the menu screen.

Watching Favorite Channel



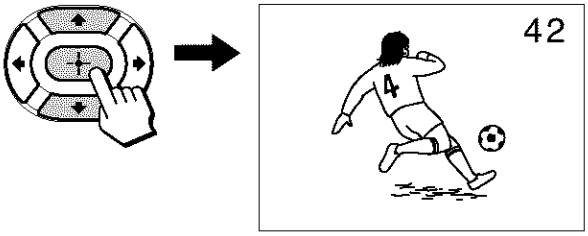
1 Press FAVORITES.

The Favorite Channel options appear.



2 Press ↑/↓ to select the desired channel, then press ⊕.

The selected channel will be displayed.



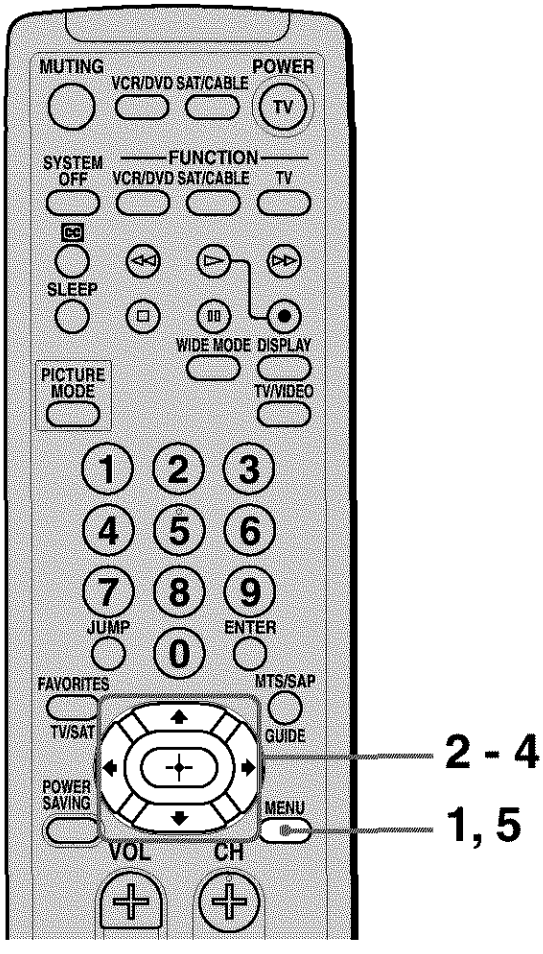
US

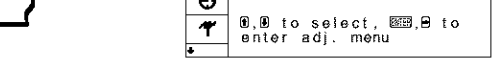
Adjusting the Picture Size/Position

You can adjust the size and position of the picture for each Wide Screen Mode (page 29) in the following cases:

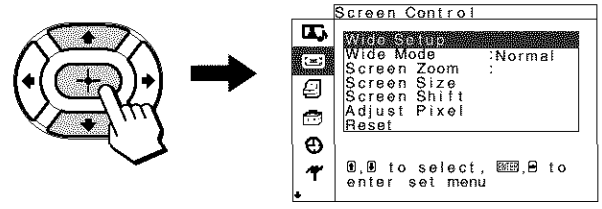
- To move the position of the picture in "Widezoom" and "Zoom" modes
- When subtitles may not go in the screen in "Subtitle" mode

"H Size" (Horizontal Size) and "H Shift" (Horizontal Shift) cannot be adjusted in "Widezoom."





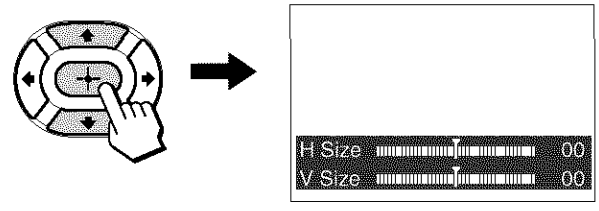
2 Press ↑/↓ to select the (Screen Control), then press ⊕.



3 Press ↑/↓ to select the option you want to adjust.

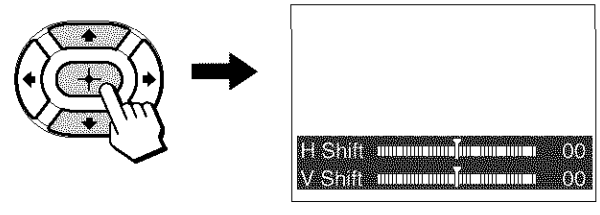
To adjust screen size

Press ↑/↓ to select "Screen Size," then press ⊕.



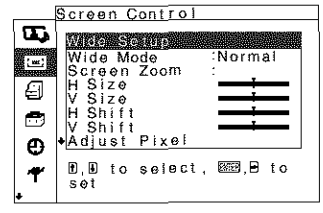
To adjust screen position

Press ↑/↓ to select "Screen Shift," then press ⊕.



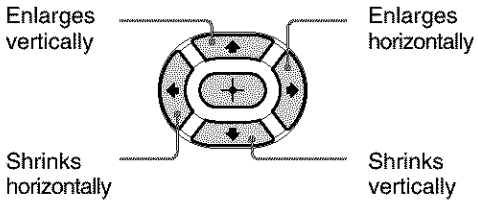
Note

The menu screen changes as follows when "Menu Function" is set to "Return" in the (Initial Setup) menu.

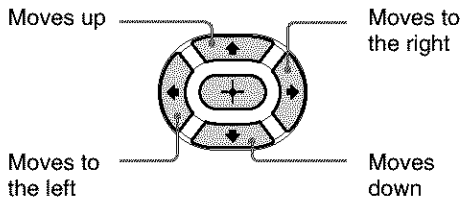


4 Press ↑/↓/←/→ to adjust each option, then press ⊕.

To adjust the "Screen Size"



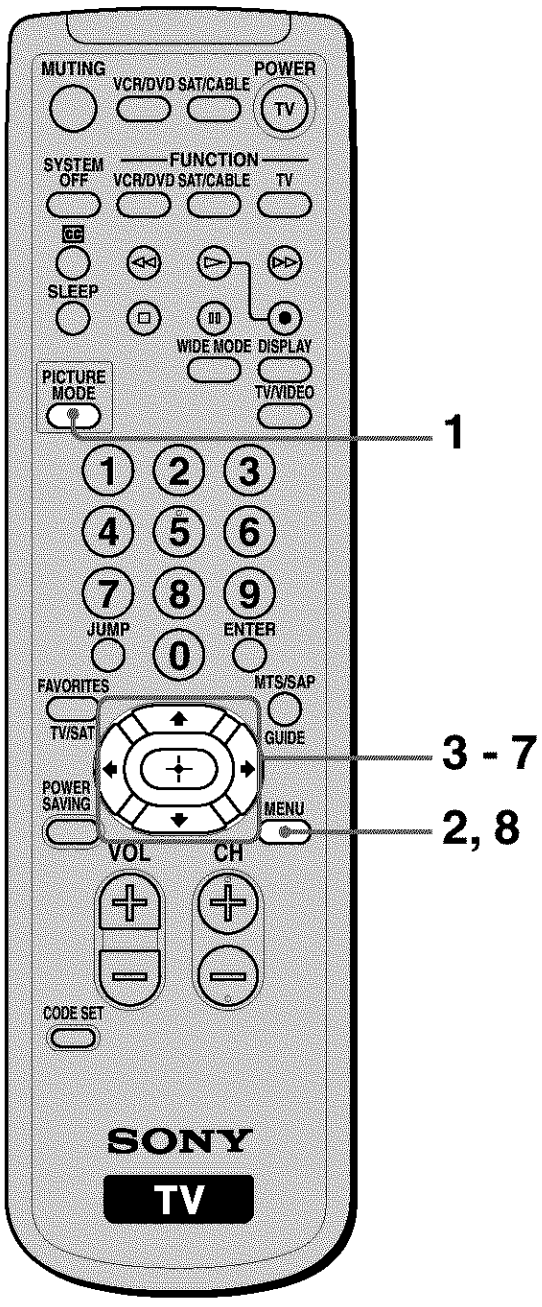
To adjust the "Screen Shift"



5 Press MENU to exit the menu screen.

Using the Picture Control Mode Option

You can precisely set the picture quality with "Liv.Rm." (Living Room), "Movie," or "AV Pro" (selected with the PICTURE MODE button). You can set a different picture control option for each picture signal format and store them in memory.



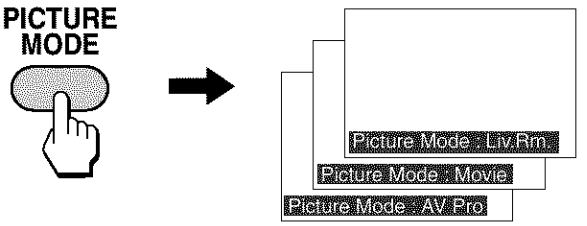
(Continued)

US

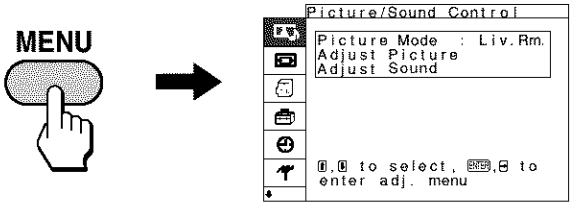
1 Press PICTURE MODE repeatedly until "Liv.Rm." (Living Room), "Movie," or "AV Pro" appears.

Note

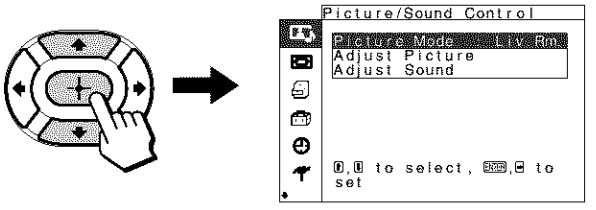
The picture control option cannot be adjusted in "Vivid" or "Standard" modes (See page 26).



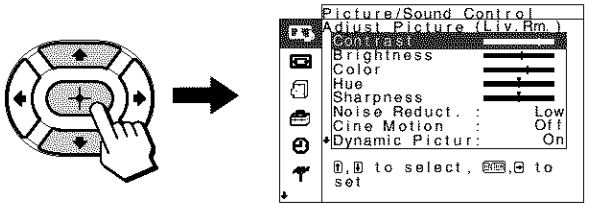
2 Press MENU.



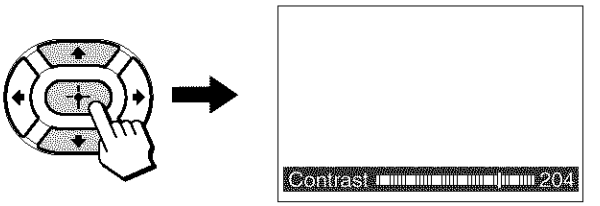
3 Press ↑/↓ to select (Picture/Sound Control), then press ⊕.



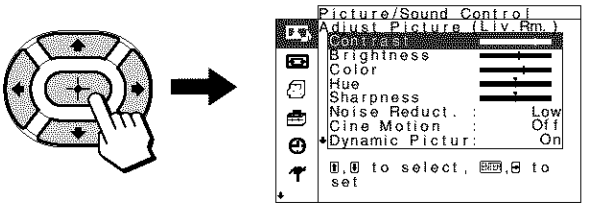
4 Press ↑/↓ to select "Adjust Picture," then press ⊕.



5 Press ↑/↓ to select the option you want to adjust, then press ⊕.



6 Press ↑/↓/←/→ to make the desired adjustment, then press ⊕.



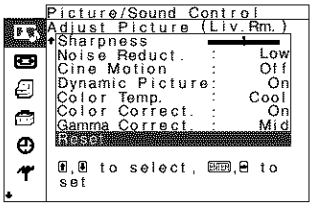
Adjustable options

Option	Press ↓/←	Press ↑/→
Contrast	To reduce picture contrast	To enhance picture contrast
Brightness	To darken the picture	To brighten the picture
Color	To decrease color intensity	To increase color intensity
Hue	To decrease the green tones	To increase the green tones
Sharpness	To soften the picture	To sharpen the picture

Tip

Option adjustments are indicated by a numerical value.

If you press and hold ↓, the following options appear.



Adjustable options

Option	Description	Setting
Noise Reduct. (Noise Reduction)	Select to reduce the noise level of equipment connected to the VHF/ UHF, VIDEO IN* jacks. It is most effective on the signal from the VHF/ UHF jack.	Off/Low/ Mid (Middle)/ High
Cine Motion	Obtains a smooth picture movement that approaches the original film-like quality when reproducing movies or other video sources on 24 frame per second films.	Auto/Off
Dynamic Picture	Select to enhance the picture contrast.	On/Off
Color Temp. (Color Temperature)	Select to give bright colors a red tint (Setting variable from "Cool" to "Warm").	Cool/Neutral/ Warm/ USER1**/ USER2**/ USER3**
Color Correct. (Color Correction)	Select to emphasize reds and blues.	On/Off
Gamma Correct. (Gamma Correction)	Select to adjust the balance between bright and dark areas of the picture.	High/ Mid (Middle)/ Low

* You cannot adjust "Noise Reduct." (Noise Reduction) for an equipment connected only to the RGB (Y/G, P_B/B, P_R/ R) input.

** For details on these settings, see page 51.

7 Repeat steps 5 and 6 to adjust other options.

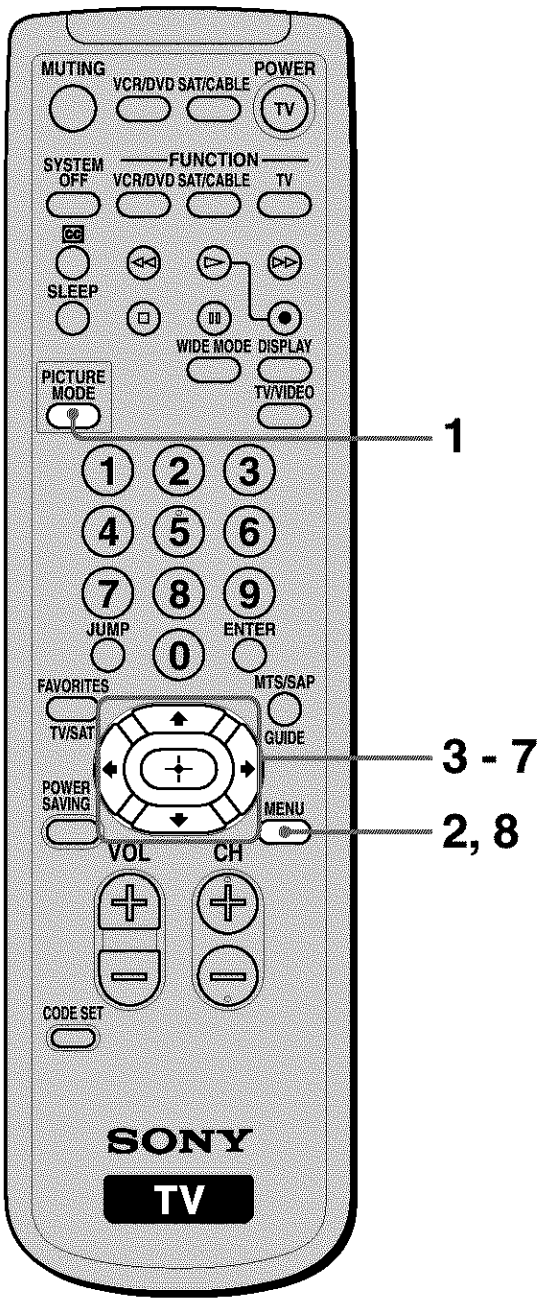
8 Press MENU to exit the menu screen.

To reset to the factory settings

Select "Reset" in step 5, then press ⊕.

Using the Sound Control Option

You can precisely adjust the sound settings for "Liv.Rm." (Living Room), "Movie," or "AV Pro" (selected with the PICTURE MODE button).
You can set a different sound control option for each picture signal format and store them in memory.
For details on Effect mode, see page 27.



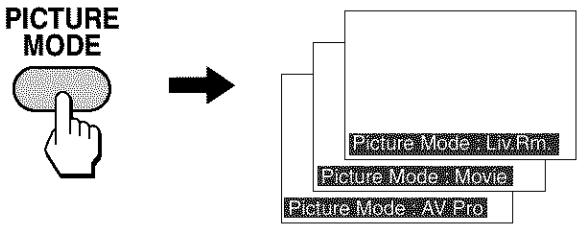
(Continued)

US

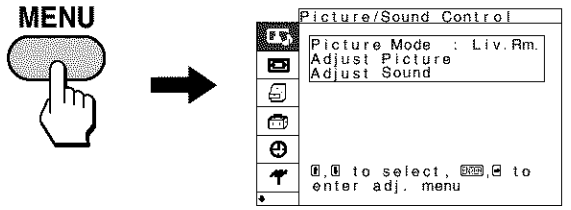
1 Press PICTURE MODE repeatedly until "Liv.Rm." (Living Room), "Movie," or "AV Pro" appears.

Note

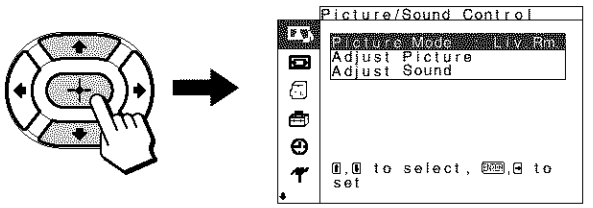
The sound control option cannot be adjusted in "Vivid" or "Standard" modes (page 26).



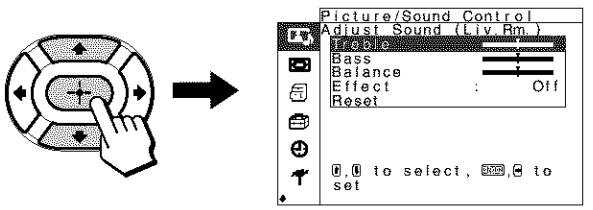
2 Press MENU.



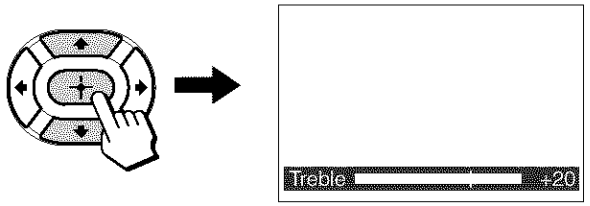
3 Press ↑/↓ to select (Picture/Sound Control), then press ⊕.



4 Press ↑/↓ to select "Adjust Sound," then press ⊕.



5 Press ↑/↓ to select the option you want to adjust, then press ⊕.



6 Press ↑/↓/←/→ to make the desired adjustment, then press ⊕.

Option	Press ↓/←	Press ↑/→
Treble	To decrease higher-pitched sounds.	To increase higher-pitched sounds.
Bass	To decrease lower-pitched sounds.	To increase lower-pitched sounds.
Balance	To emphasize the left speaker.	To emphasize the right speaker.
Effect	See page 27.	

Tip

Option adjustments are indicated by a numerical value.

7 Repeat steps 5 and 6 to adjust other options.

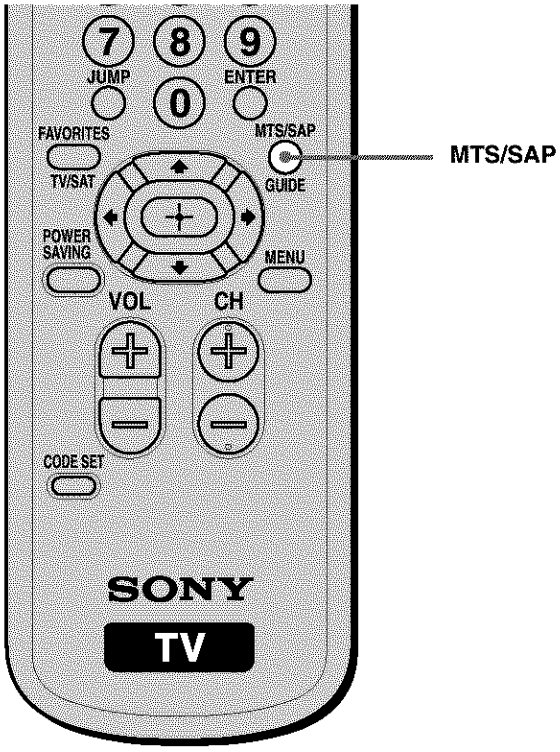
8 Press MENU to exit the menu screen.

To reset to the factory settings

Select "Reset" in step 5, then press ⊕.

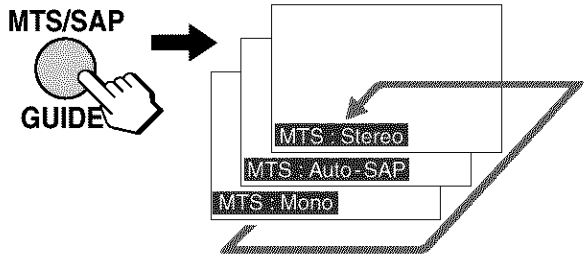
Selecting Stereo or Bilingual Programs

You can enjoy stereo, bilingual and mono programs.



Press MTS/SAP repeatedly until the desired sound indication appears.

Each time you press the button, the sound indication changes as follows:



Sound indication	Description
Stereo	Select for stereo reception when viewing a program broadcast in stereo.
Auto-SAP	Select to automatically switch the TV to second audio programs when a signal is received. (If no SAP signal is present, the TV remains in Stereo mode.)
Mono	Select for mono reception. (Use to reduce noise during weak stereo broadcasts.)

Using the Parental Control Feature

The TV programs and movies shown on TV are given a rating signal based on the following rating systems.

In U.S.A.: U.S. Television Parental Guidelines to rate television programs (U.S. TV ratings), and Motion Picture Association of America (MPAA) Guidelines to rate movies including those shown on TV (movie ratings).

In Canada: Canadian English Language ratings to rate television programs in English, and Canadian French Language ratings to rate those in French.

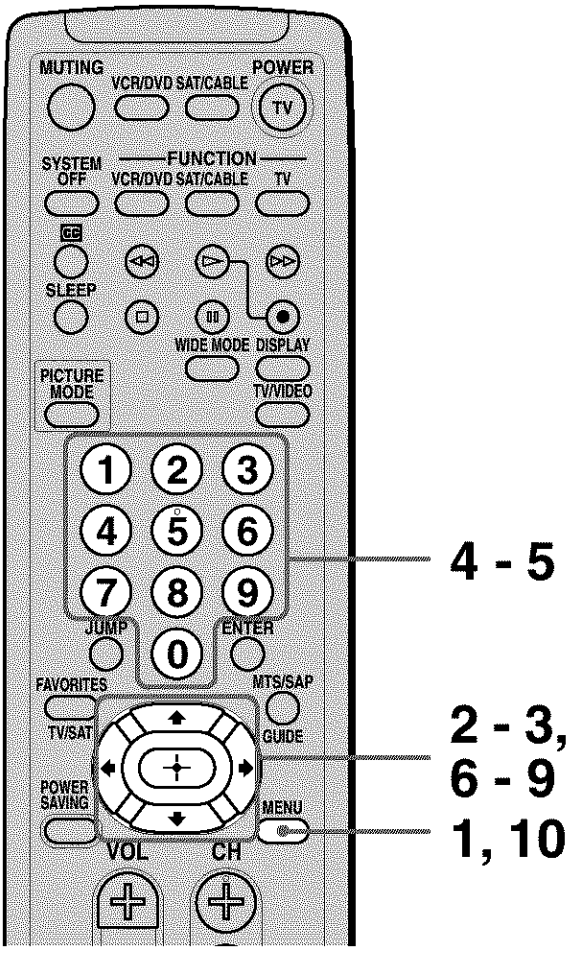
To block programs you feel are unsuitable for your children, you need to set the TV for the desired rating systems. Sony's predetermined ratings are also available. See page 48 for a description of the ratings.

The TV's Parental Control feature functions by receiving the rating signal from your local broadcasting station or cable service provider.

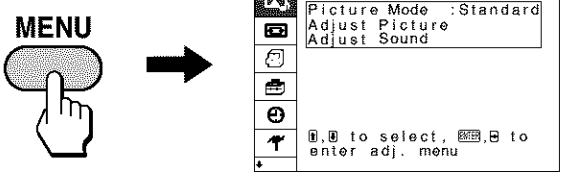
(Continued)

US

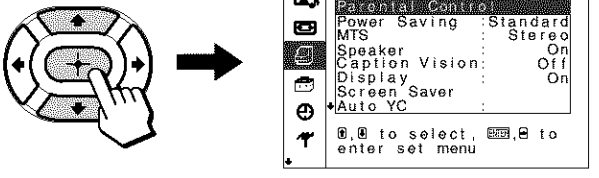
Activating the Parental Control feature



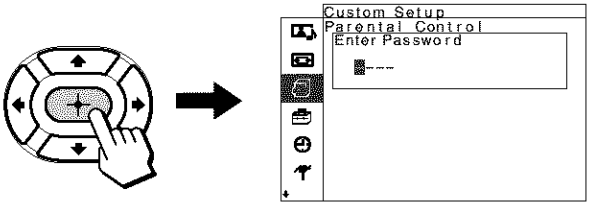
1 Press MENU.



2 Press ↑/↓ to select (Custom Setup), then press ⊕.

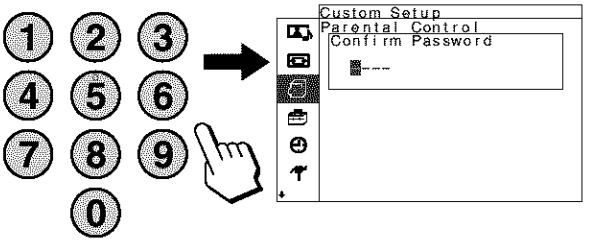


3 Make sure that "Parental Control" is selected, then press ⊕.



4 Enter a four digit password using the 0-9 buttons.

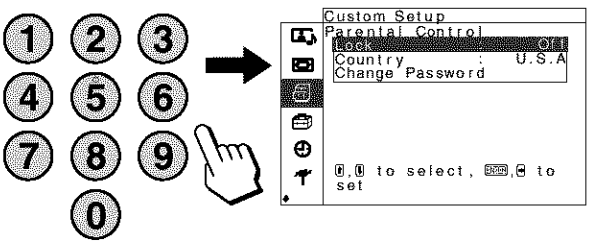
The factory preset password is "0000."



Note

Do not enter "4357" corresponding to "HELP" on a phone number pad (See page 45).

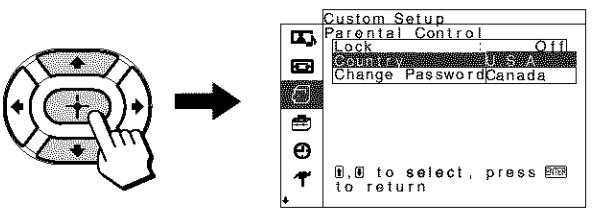
5 Confirm your password by entering it again. Your password is stored and the Parent menu options appear.



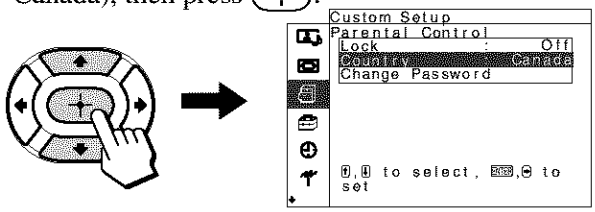
Tips

- You need to enter the password here for any feature access into the Parental Control menu. If you lose your password, see "Tip" on page 45.
- If you want to change the password, see page 45.

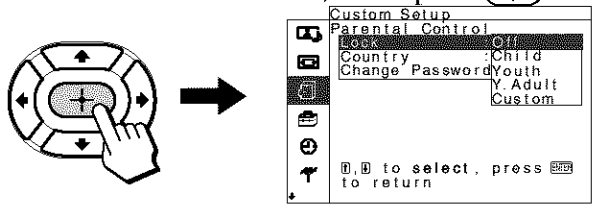
6 Press ↑/↓ to select "Country," then press ⊕.



7 Press ↑/↓ to select your country (U.S.A. or Canada), then press ⊕.

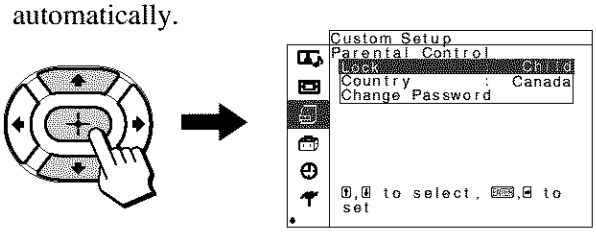


8 Press ↑/↓ to select "Lock," then press ⊕.



9 Press ↑/↓ to select a desired rating , then press ⊕.

If you select "Child," "Youth," or "Y.Adult" (Young Adult), the Parental Control is activated automatically.



If you want to select the ratings from "Custom," see "Selecting a Custom Rating" on page 46.

10 Press MENU to exit the menu screen.

Viewing blocked programs

You can view a blocked programs by entering the password.

1 Press ENTER to display the "Password" screen.

2 Enter your password using the 0-9 buttons.

The Parental Control feature will be canceled ("Lock" set to "Off") until you turn the TV off.

To deactivate the Parental Control feature

Set "Lock" to "Off" in the Parental Control menu.

To change the password

1 Select "Parental Control" from the (Custom Setup) menu (See page 44).

2 Enter your four digit password using the 0-9 buttons.

The "Parental Control" menu appears.

3 Press ↑/↓ to select "Change Password," then press ⊕.

4 Enter a new four digit password using 0-9 buttons.

5 Enter the password set in step 4 again to confirm, then press ⊕.

6 Press MENU to exit the menu screen.

Tip

If you have forgotten your password, enter the master password "4357" (corresponding to "HELP" on a phone number pad) in step 2. You can then store a new password.

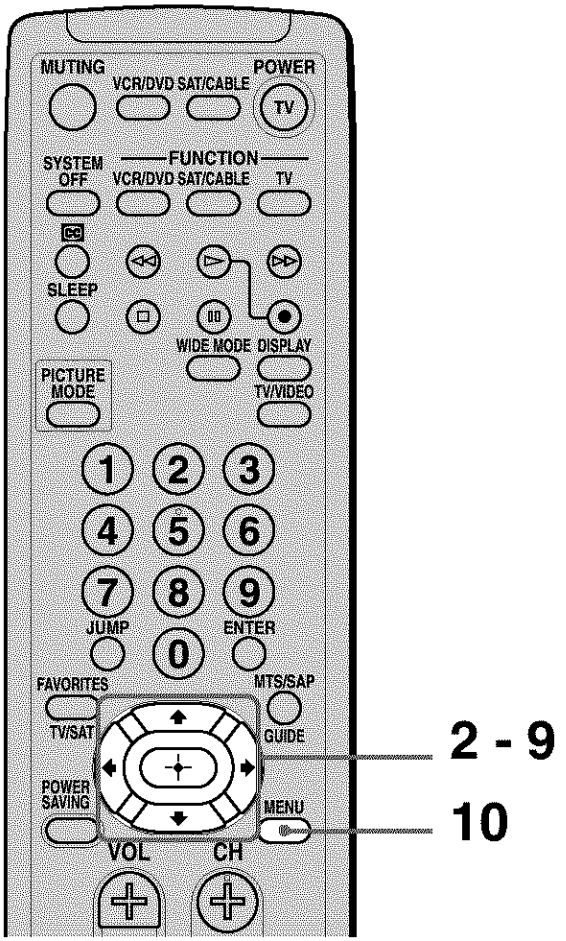
Notes

- If you entered "4357" as your password the first time, you cannot store a new password (See step 4 of "Activating the Parental Control feature" on page 44).
- When you select a Parental Control program and the ☐ indicator is displayed on the screen, you cannot view that program even if you enter "4357." (See "Viewing blocked programs" on the left.)

US

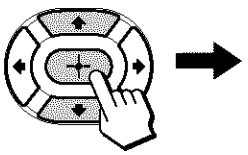
Selecting a Custom Rating

If you want to select the ratings to be blocked from Custom once you have activated the Parental Control feature (page 44), follow the procedure below.
For a detailed description of each rating, see "What the Ratings Mean" on page 48.

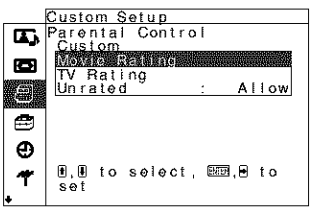


1 Perform the steps 1 to 8 in "Activating the Parental Control feature" on page 44 to display the Parental Lock options.

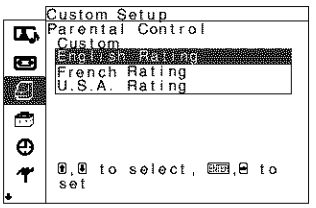
2 Press ↑/↓ to select "Custom," then press ⊕.



In U.S.A.

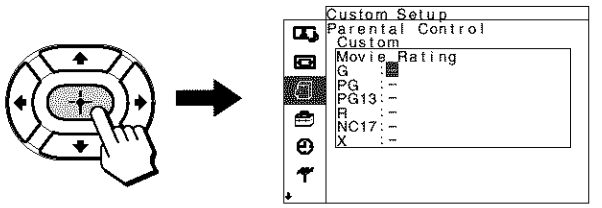


In Canada



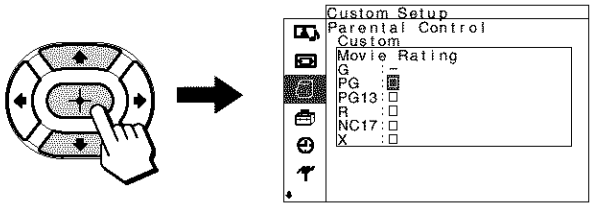
To select a rating in Canada, go to step 6.

3 Make sure that "Movie Rating" is selected, then press ⊕.

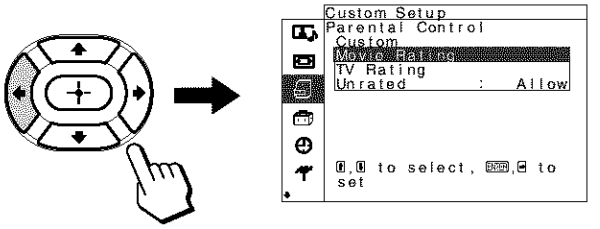


4 Press ↑/↓ to select the rating to be blocked, then press ⊕.

The ☐ indication automatically appears beside the selected rating and all "higher" ratings, indicating that the programs that match the ratings will be blocked.

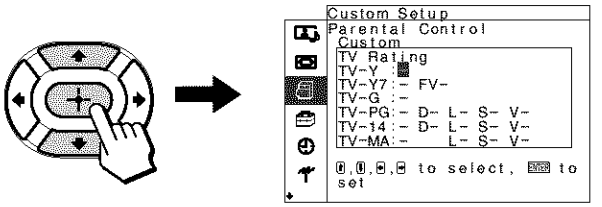


5 Press ← to return to the "Custom" menu.



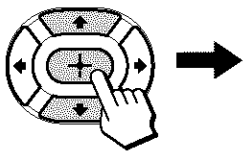
6 To select a TV rating in U.S.A.:

Press ↑/↓ to select "TV Rating," then press ⊕.

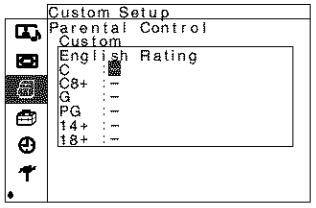


To select a TV ratings in Canada:

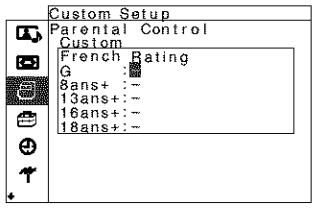
Press ↑/↓ to select "English Rating," "French Rating," or "U.S.A. Rating," then press ⊕.



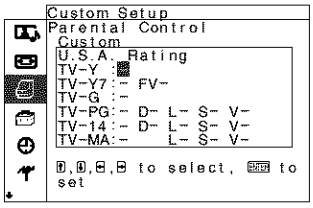
English Rating



French Rating



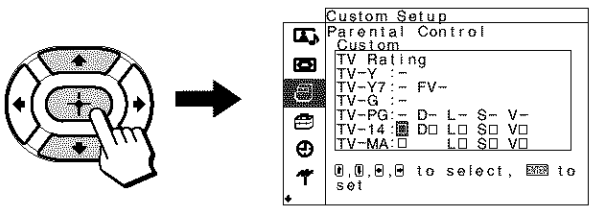
U.S.A. Rating



7 Press ↑/↓ to select the TV rating to be blocked, then press ⊕.

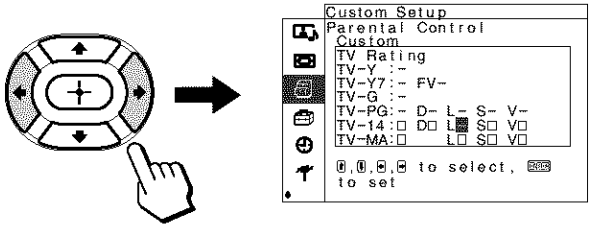
The ☐ indication automatically appears beside the selected rating and all "higher" ratings, indicating that the programs that match the ratings will be blocked.

Example: TV rating in U.S.A.



Some U.S.TV ratings have additional content ratings called "extenders." The extenders are defined as follows: D (sexually suggestive Dialog), FV (Fantasy Violence), L (coarse Language), S (Sexual situations) and V (Violence). By setting the extenders, you can define additional viewing limits. For more details of extenders, see page 49.
All of the extenders included in the selected ratings will be blocked. If you wish to allow any of them to be viewed, go to step 8.

8 Press ←/→ to select the extender to be viewed, then press ⊕.



"–" appears beside the selected extender, indicating that the programs that match the extender can be viewed.
If you re-press ⊕, ☐ is displayed to show that the programs that match the extender will be blocked again.

9 Repeat step 8 for other extenders.

All programs that match the ratings you select and higher, except for the extenders that were canceled, will be blocked.

10 Press MENU to exit the menu screen.

To block TV programs and/or movies for which a rating is not given (NR and N/A)

For a description of the NR and N/A ratings, see page 48.

1 Perform steps 1-2 of "Selecting a Custom Rating" on page 46.

2 Press ↑/↓ to select "Unrated," then press ⊕.

3 Press ↑/↓ to select "Block," then press ⊕.

4 Press MENU to exit the menu screen.

US

What the Ratings Mean

Ratings in the U.S.A.

Sony's predetermined ratings

These are original ratings that Sony has predetermined according to the viewer's age. Each rating allows for viewing of certain programs, as follows. (See the next column for a description of TV and movie ratings.)

Option	Description
CHILD:	Suitable for children under the age of 6. Viewable U.S. movie ratings: G, NR, and N/A Viewable U.S. TV ratings: TV-Y, TV-G, and TV-NR
YOUTH:	Suitable for children aged 7 and older. Viewable U.S. movie ratings: G, PG, NR, and N/A viewable U.S. TV ratings: TV-Y, TV-Y7, TV-G, TV-PG, and TV-NR
YOUNG ADULT:	Suitable for children aged 13 and older. Viewable U.S. movie ratings: G, PG, PG-13, NR, and N/A Viewable U.S. TV ratings: TV-Y, TV-Y7, TV-G, TV-PG, TV-14, and TV-NR

U.S. movie ratings

U.S. movie ratings are for movies (including those shown on TV) rated according to the Motion Picture Association of America (MPAA) Guidelines.

Option	Description
G (General Audiences—All Ages Admitted):	In G-rated films no strong words are used, the violence is at a minimum, nudity and sex scenes are not present, nor is there any drug use.
PG (Parental Guidance Suggested. Some Material May Not Be Suitable For Children):	This is a film which may need to be monitored first by parents.
PG-13 (Parents Strongly Cautioned. Some Material May Be Inappropriate For Children Under 13):	Parents are alerted to be very careful about the attendance of their under-teenage children when viewing.
R (Restricted, Under 17 Require Accompanying Parent Or Adult Guardian):	This film includes hard language, tough violence, nudity, drug abuse or other elements of concern.
NC-17 or X (No One 17 Or Under Admitted.):	This is a film that most parents would consider not suitable for children aged 17 and under. There may be violence, sex, abhorrent behavior, drug abuse or other elements of concern.
NR (Not Rated):	This is a film that a producer has not rated, intending to have his film widely released.
N/A (Not Applicable):	This is a film that a producer considers outside the scope of the MPAA ratings.

Note

NR and N/A ratings are shown together as "Unrated" in the menu.

U.S. TV ratings

U.S. TV ratings are for TV programs rated according to the U.S. Television Parental Guidelines.

Option	Description
TV-Y (All Children):	This program is designed for young children aged 2–6 and is appropriate for all children.
TV-Y7 (Directed to Older Children):	This program is designed for children aged 7 and above. Themes and elements in this program may include mild fantasy violence or slapstick violence, or may frighten children under the age of 7.
TV-G (General Audience):	Most parents would find this program suitable for all ages. It contains little or no violence, no strong language and little or no sexual dialog or situations.
TV-PG (Parental Guidance Suggested):	This program contains some material that parents may find unsuitable for younger children.
TV-14 (Parents Strongly Cautioned):	This program contains some material that many parents would find unsuitable for children under the age of 14.
TV-MA (Mature Audience Only):	This program is specifically designed to be viewed by adults and therefore may be unsuitable for children under the age of 17.
TV-NR (Not Rated/Unrated):	This is a program broadcast without any rating, such as news, news flashes or sports.

Note

The TV-NR rating is shown as "Unrated" in the menu.

About the extenders of U.S. TV ratings

TV-Y7, TV-PG, TV-14 and TV-MA ratings have additional content ratings called "extenders" to define additional viewing limits. The extenders are defined as follows:

Option	Description
D (sexually suggestive Dialog):	Programs containing suggestive dialog, or sexual innuendo
FV (Fantasy Violence):	Programs containing cartoon violence occurring in TV-Y7 programs only
L (coarse Language):	Programs containing coarse language
S (Sexual situations):	Programs containing sexual content
V (Violence):	Programs containing violence There may be some profanity, violence or brief nudity in these programs.

Ratings in Canada

Sony's predetermined ratings

These are original ratings that Sony predetermined according to the viewer's age. Each rating allows you to view the certain programs, as follows.
See the next column for a description of each rating.

Option	Description
CHILD:	Suitable for children under the age of 7. Viewable Canadian English Language ratings: C and G Viewable Canadian French Language ratings: G Viewable U.S. TV ratings: TV-Y, TV-G, and TV-NR
YOUTH:	Suitable for children aged 8 and older. Viewable Canadian English Language ratings: C, G, C8+ and PG Viewable Canadian French Language ratings: G and 8 ans+ Viewable U.S. TV ratings: TV-Y, TV-Y7, TV-G, TV-PG, and TV-NR
YOUNG ADULT:	Suitable for children aged 14 and older. Viewable Canadian English Language ratings: C, G, C8+, PG and 14+ Viewable Canadian French Language ratings: G, 8 ans+, 13 ans+ Viewable U.S. TV ratings: TV-Y, TV-Y7, TV-G, TV-PG, TV-14, and TV-NR

US

(Continued)

Canadian English Language ratings

The Canadian English Language Ratings are for TV programs in English broadcast in Canada.

Option	Description
C (Programming intended for children under age 8):	There will be no realistic scenes of violence or no offensive language, nudity or sexual content. Careful attention is paid to themes, which could threaten children's sense of security and well-being.
C8+ (Programming generally considered acceptable for children 8 years and over to watch on their own):	Violence will not be portrayed as the preferred, acceptable, or only way to resolve conflict; or encourage children to imitate dangerous acts which they may see on television. There will be no profanity, nudity or sexual content.
G (General Audience):	Will contain very little violence, either physical or verbal or emotional. There may by some inoffensive slang, no profanity and no nudity.
PG (Parental Guidance):	Programming intended for a general audience but which may not be suitable for younger children. Parents may consider some content inappropriate for unsupervised viewing by children aged 8 – 13.
14+ (Programming contains themes or content which may not be suitable for viewers under the age of 14):	Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens.
18+ (Adult):	May contain violence integral to the development of the plot, character or theme, intended for adult audiences. May contain graphic language and explicit portrayals of nudity and/or sex.
E (Exempt):	Exempt programming includes: news, sports documentaries and other information programming: talk shows, music videos, and variety programming.

Note

The E (Exempt) rating is not shown in the menu.

Canadian French Language ratings

The Canadian French Language Ratings are for TV programs in French broadcast in Canada.

Option	Description
G (General):	Programming intended for audience of all ages. Contains no violence, or the violence it contains is minimal or is depicted appropriately with humor or caricature or in an unrealistic manner.
8 ans+ (8+ General - Not recommended for young children):	Programming intended for a broad audience but contains light or occasional violence that could disturb young children. Viewing with an adult is recommended for young children (under the age of 8).
13 ans+ (Programming may not suitable for children under the age of 13):	Viewing with an adult is strongly recommended for children under 13.
16 ans+ (Programming is not suitable for children under the age of 16):	Contains frequent scenes of violence or intense violence.
18 ans+ (Programming restricted to adults):	Contains constant violence or scenes of extreme violence.
E (Exempt):	Exempt programming.

Note

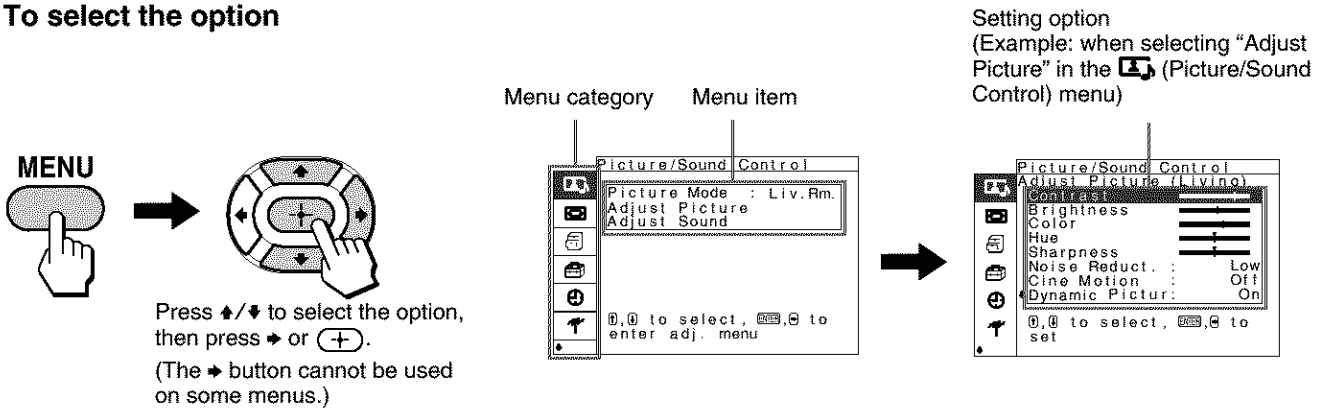
The E (Exempt) rating is not shown in the menu.

Adjusting Advanced AV Setting Options

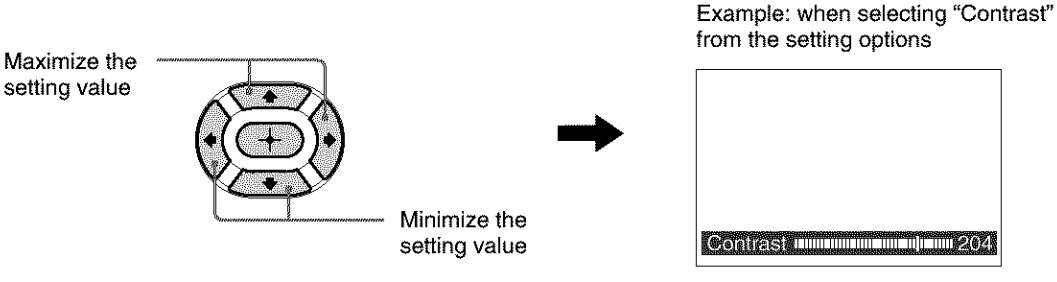
Advanced AV settings can be optimally set on the menu screen.

- Items which appear in yellow are selected.
- You cannot select items which appear in pale color.

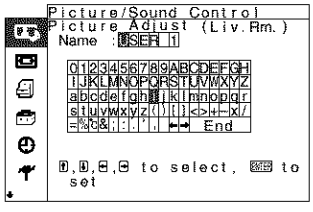
To select the option



To adjust the setting



Menu category	Menu item	Setting option
Picture/Sound Control	Adjust Picture	"USER1," "USER2," and "USER3" of "Color Temp." (Color Temperature): Select to customize the "Color Temp."(Color Temperature) by adjusting "Red Gain," "Green Gain," and "Blue Gain" (tint) in the range of "-127" – "+126," and store these 3 settings as the user setting. Name Set: Select to name your original settings. Press ↑/↓/←/→ to select the letter, then press ⊕. To correct the letter, select ← on the screen to go back. If you set "Menu Function" to "Return" in the (Initial Setup) menu (page 53), you can select letters by ↑/↓ buttons.



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US

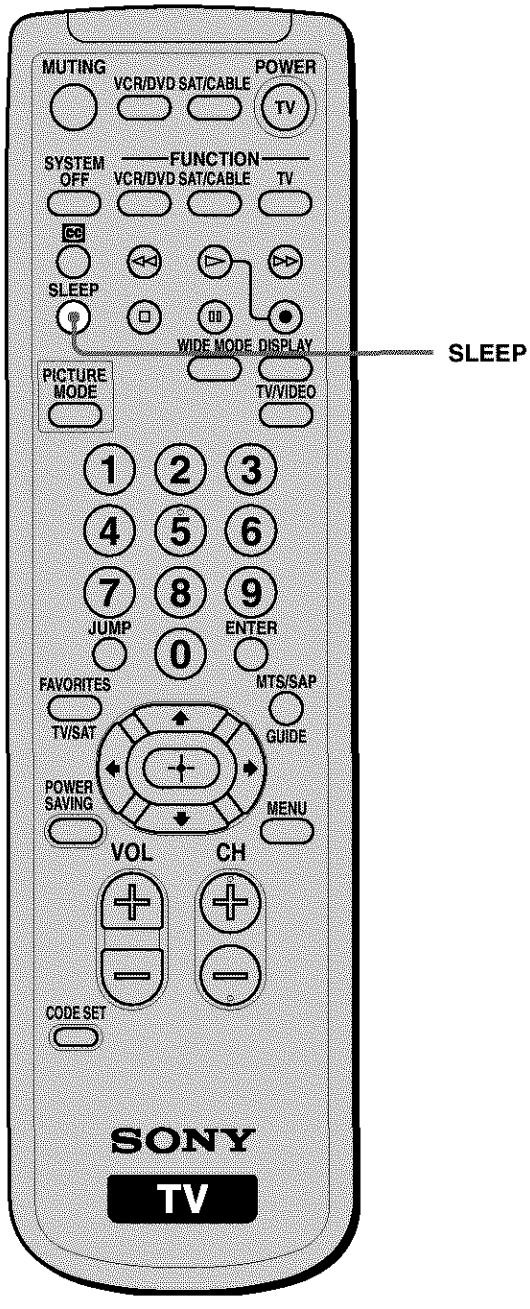
Menu category	Menu item	Setting option
Screen Control	Screen Zoom	Select to enlarge the picture with the center position fixed (only when "Wide Mode" is set to "Full"). Select from "Standard" (normal size), "×2" (doubled), "×3" (tripled), or "×4" (quadrupled).
	Adjust Pixel	Select to adjust the picture from an RGB equipment. Auto Adjust: Select "OK" to make best possible adjustment for the input signal automatically. Note that it may not be adjusted perfectly depending on the input signal condition or picture pattern. In this case, perform "Auto Adjust" again. Dot Phase: Adjust in the range of "01" – "62" if part of a displayed text or image is not clear. Total H Pixel (Total Horizontal Pixel): Adjust when the letter or picture is not clear as a whole. Reset: Reset to the factory settings.
Custom Setup	Display	Select "On" to display which input is selected.
	Screen Saver	Select to reduce image retention. Pic. Orbit (Picture Orbit) (To prevent image retention) Move the picture position to reduce image retention. This does not prevent image retention completely if the same picture is displayed for an extended period of time. Orbit: Select "On" or "Off" to set the Pic. Orbit. The factory setting is "On." A stop-start moving picture goes around the screen edge (one cycle per hour). The picture shifts a little once every one to two minutes. This is because the "Orbit" option is set to "On" to prevent image retention. When the "Orbit" option is set to "Off," note that displaying the same patterned signals or 4.3 aspect ratio pictures for a long time may result in image retention.
	Color Matrix	Select to give the picture a neutral tint, if the output signal from the DVD player connected to the VIDEO IN 4 jacks is 525p (480p), 1125i (1080i), or 750p (720p) signal format. Adjust this only when the picture tint goes out of tune. Select the signal format for each input, then set it to "Y/C_B/C_R," or "Y/P_B/P_R." When purchasing, all formats are set to "Y/P_B/P_R."
	RGB Mode	Select if an equipment which outputs the RGB signal is connected to the Y/G, P_B/B, P_R/R jacks of the VIDEO IN 4 jacks. DTV: Select when a digital tuner with RGB signal is connected. Others: Select when other RGB equipment is connected.
	Sync Mode	Set according to the input signal from the HD jack of the VIDEO IN 4 jacks. H/Comp: Select when the input signal is a horizontal synchronized signal or a composite signal. Video: Select when the input signal is a video signal.

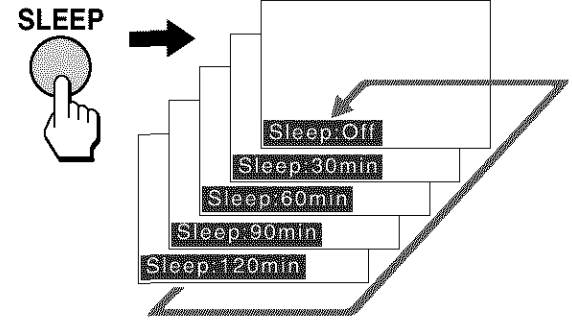
Menu category	Menu item	Setting option
Initial Setup	Color System	Select when the picture from a VCR of other television system is not very good. You can adjust the setting only when the VIDEO input is selected.
	Menu Function	Select how the MENU button on the remote functions. On/Off: If the MENU button is pressed, the menu screen appears. If the button is pressed again, the menu screen disappears. (factory setting) Return: If the MENU button is pressed, the menu screen appears. If the button is pressed while the menu screen appears, the menu returns to the previous screen. Some menu operation changes.
Timer/Clock	Auto Shutoff	Select to set the TV to change to the standby mode automatically if there is no broadcast or input signal through the connected equipment. Off: "Auto Shutoff" does not function. 5min: Changes to the standby mode after 5 minutes if there is no broadcast or input signal. 10min: Changes to the standby mode after 10 minutes if there is no broadcast or input signal.
TV Setup	Channel Fix	Select this when you have a cable box or satellite receiver connected. 2-6: Select this to 'fix' your TV's channel setting to 2-6 and use the cable box or satellite receiver to change channels. Select one of these settings if you have connected the equipment to the VHF/UHF jack. Video 1: Select this if you have connected the equipment to the AUDIO and VIDEO IN jacks. Select "Off" to turn off the Channel Fix feature. Notes • When you select Channel Fix, the Favorite channel cannot be used. • When you select Channel Fix, you cannot use Channel Skip/Add or Auto Program in the TV Setup menu. To use them, set Channel Fix to "Off."
Unit Status	Model Name	Model name of this TV.
	Serial Number	Serial number allocated for each TV
	Temperature	If "NG" flashes, follow the procedure in "Self-diagnosis function" (See page 58).
	Fan	If "NG" flashes, follow the procedure in "Self-diagnosis function" (See page 58).

US

Turning Off the TV Automatically

You can set the TV to turn off automatically after a predetermined period of time (30, 60, 90 or 120 minutes).





To cancel the Sleep timer

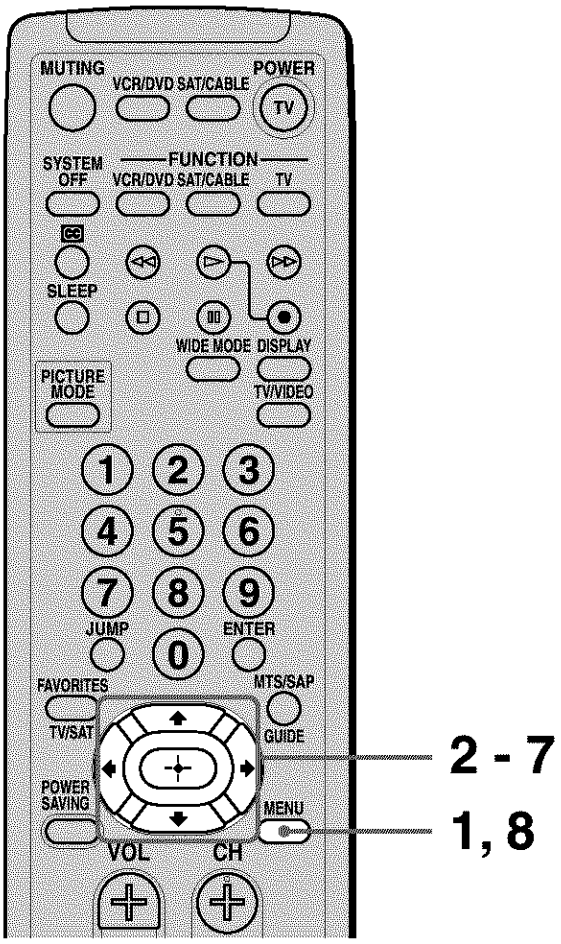
Press SLEEP repeatedly until "Sleep: Off" appears.

Tips

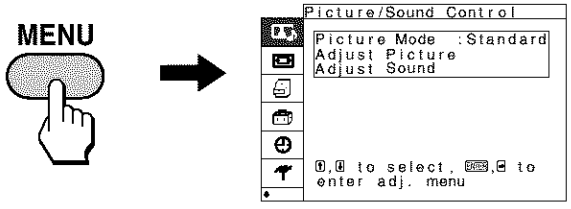
- If you press the SLEEP button while the Sleep timer is activated, the remaining time appears for a few seconds.
- If you turn off and on the TV, the Sleep timer returns to "Off."
- You can set the Sleep timer on the menu screen. Select "Sleep" in the ⏲ (Timer/Clock) menu, then set the desired period of time.

Setting the Current Time

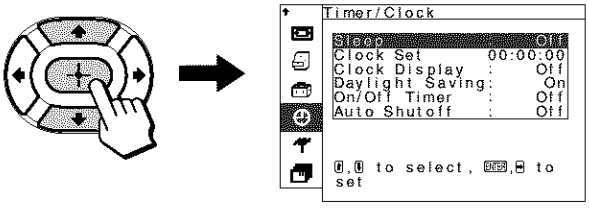
The error range of the built-in clock is ± 30 seconds a month.



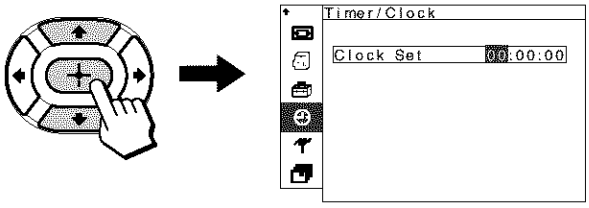
1 Press MENU.



2 Press ↑/↓ to select ⊕ (Timer/Clock), then press ⊕.



3 Press ↑/↓ to select "Clock Set," then press ⊕.



4 Set the current time.

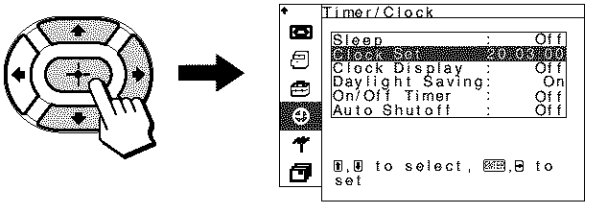
1 Press ↑/↓ to set the hour, then press ⊕.

2 Press ↑/↓ to set the minute, then press ⊕.

If you want to set the second to "00," press ↑/↓ to set the second, then press ⊕.

3 Press ⊕ or → at the time signal.

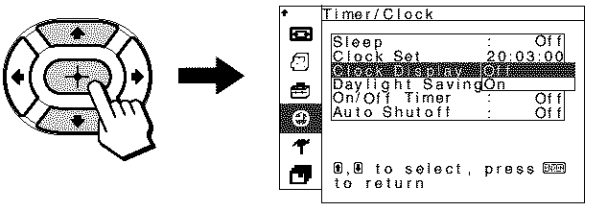
The clock starts.



Tip

Pressing and holding the ↑/↓ buttons moves the hours or minutes quickly.

5 Press ↑/↓ to select "Clock Display," then press ⊕.



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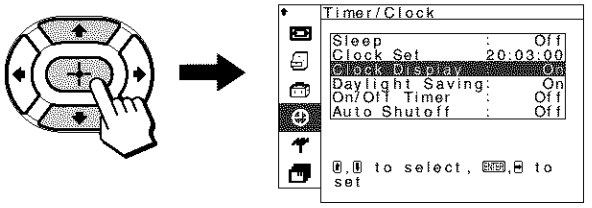
6 Press ↑/↓ to select "On," then press ⊕.



To cancel Clock Display, select "Off."

7 Press MENU to exit the menu screen.

Note

The clock display will automatically disappear after 5 minutes. To display the clock again, select "On" for the "Clock Display" in the menu screen.

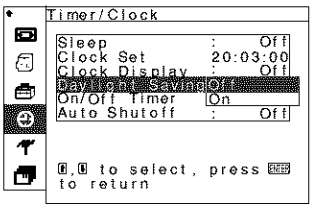
Setting the daylight saving

The clock adjusts the time for daylight-saving time automatically.

1 Press MENU.

2 Press ↑/↓ to select ⏲ (Timer/Clock), then press ⊕.

3 Press ↑/↓ to select "Daylight Saving," then press ⊕.



4 Press ↑/↓ to select "On" or "Off," then press ⊕.

Daylight-saving setting	Description
On	Select to compensate for daylight-saving time in spring. The current time automatically moves ahead one hour.
Off	Select at the end of daylight-saving time in fall. The current time moves back one hour.

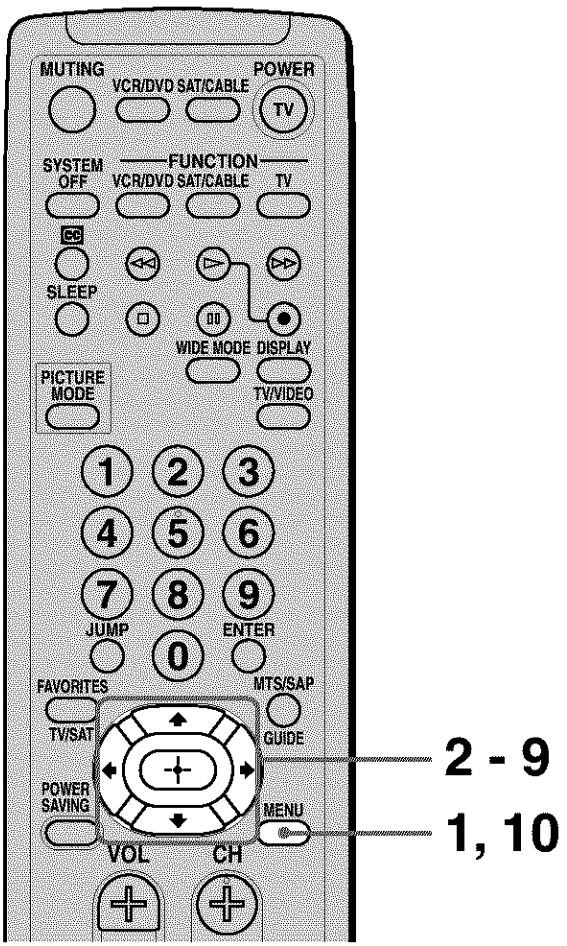
5 Press MENU to exit the menu screen.

Controlling Power On/ Off Automatically

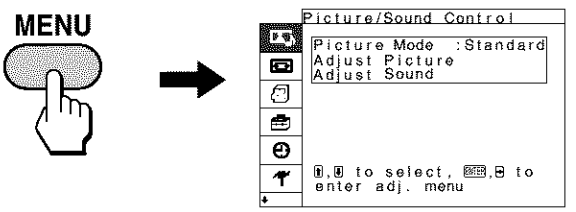
You can turn the TV on and off at a specified time automatically. To use this function, set the clock in advance (page 55).

Note

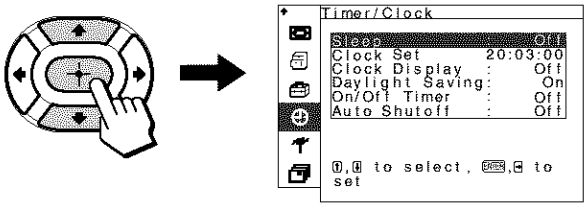
When using this function, do not turn off the TV with the POWER button on the TV as the On Timer function will not work.



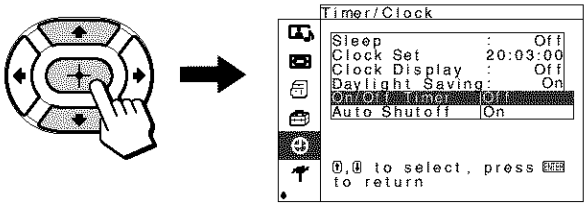
1 Press MENU.



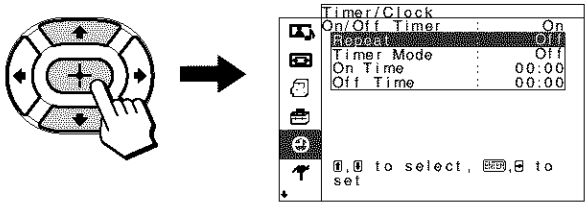
2 Press ↑/↓ to select (Timer/Clock), then press ⊕.



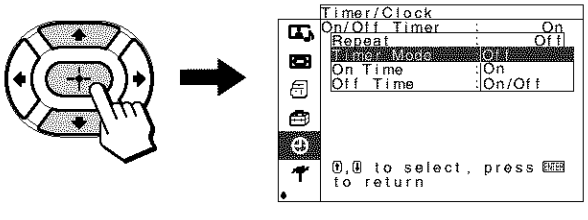
3 Press ↑/↓ to select "On/Off Timer," then press ⊕.



4 Press ↑/↓ to select "On," then press ⊕.

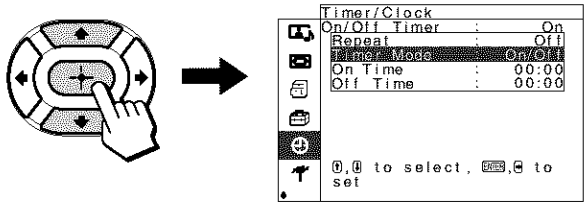


5 Press ↑/↓ to select "Timer Mode," then press ⊕.



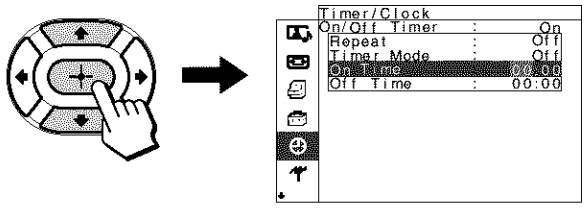
6 Press ↑/↓ to select "Off," "On," or "On/Off," then press ⊕.

Timer Mode	Description
Off	Select to set the time to turn off the TV.
On	Select to set the time to turn on the TV.
On/Off	Select to set the time to turn on and off the TV.



7 To set the time to turn off the TV:
Press ↑/↓ to select "Off Time," then press ⊕.

To set the time to turn on the TV:
Press ↑/↓ to select "On Time," then press ⊕.

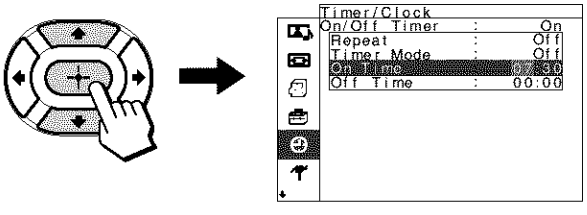


8 Set the time.

1. Press ↑/↓ to set the hour, then press ⊕.
2. Press ↑/↓ to set the minute, then press ⊕.
3. Press ←.

Tip

Pressing and holding the ↑/↓ buttons moves the hours or minutes quickly.



9 If you select "On/Off" in step 6, repeat steps 7 and 8 to set both "Off Time" and "On Time."

10 Press MENU to exit the menu screen.

To turn the TV on and off at a specified time everyday

After step 4, do the following, then go to step 5.

1. Press ↑/↓ to select "Repeat," then press ⊕.
2. Press ↑/↓ to select "On," then press ⊕.

   To cancel, select "Off."
3. Go to step 5.

To cancel On/Off Timer

Select "Off" in step 4.

Tip

You can set the TV to turn off automatically after a certain period if there is no broadcast or input signal (Auto Shutoff, see page 53).

US

Troubleshooting

If, after reading the following instructions, you have additional questions related to the use of your Sony TV, please call one of the following numbers (English only).
Customers in the continental United States contact the Direct Response Center at:
1-800-222-SONY (7669)
Customers in Canada contact the Customer Relations Center at:
(416) 499-SONY (7669)

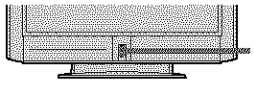
Self-diagnosis function

The TV is equipped with a self-diagnosis function. If there is a problem with your TV, the STANDBY/SLEEP indicator on the front panel will flash repeatedly. Counting the number of flashes helps you inform qualified Sony personnel of the TV's condition.

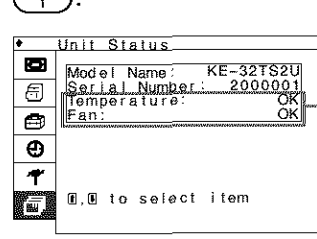
Case1:

When the picture turns off and the STANDBY/SLEEP indicator on the front panel flashes

1 Count how many times the STANDBY/SLEEP indicator flashes in total. It flashes at 3 second intervals. If, for example, the indicator flashes twice, stops flashing for 3 seconds, and flashes twice again, that counts as twice.

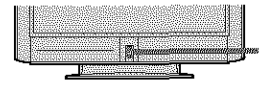

STANDBY/SLEEP indicator

2 Press POWER on the TV to turn it off, and disconnect the AC power cord, then inform qualified Sony personnel or the above Direct Response Center of the number of flashes.



3 Check the indication of "Temperature" and "Fan" columns.

If "NG" lights in red, and the STANDBY/SLEEP indicator flashes, press POWER on the TV to turn off the TV, and disconnect the AC power cord.


STANDBY/SLEEP indicator

Case 2-a: If "NG" appears in the "Temperature" column
Install the TV in a cool location so that the temperature of the TV fells.

If the ventilation openings are blocked
The ventilation openings must never be blocked or covered. Install the TV in a well ventilated place to allow adequate air circulation.

Make sure that the STANDBY/SLEEP indicator stops flashing. If the STANDBY/SLEEP indicator still flashes, consult your nearest Sony dealer or Direct Response Center (See the left column).

Case 2-b: If "NG" appears in the "Fan" column
Consult your nearest Sony dealer or Direct Response Center (See the left column).

Trouble symptoms and remedies

Problem	Possible remedies
No picture.	
Cannot receive any channels.	• Make sure the power cord is connected securely. • Turn on the power of the TV. • Check antenna/cable connections.
Cannot receive certain channels.	• Set the channels again (page 20).
The TV turns off automatically. (The TV enters the standby mode.)	• Check that the Sleep timer is activated (page 54). • Check that the On/Off Timer is activated (page 56). • Check that Auto Shutoff is activated (page 53).
Some video sources do not appear. "No Sync" appears, or the STANDBY/SLEEP indicator lights up in red.	• Check the connection between the optional video equipment and the TV. • Press TV/VIDEO on the remote (page 32). • If you connect the video equipment to the S VIDEO input of the TV, set "Auto YC" in the (Custom Setup) menu to "On" (page 10).
Poor picture.	
Double images or ghosts.	• Check antenna/cable connections. • Check the antenna location and direction.
Only snow and noise appear on the screen.	• Check if the antenna is broken or bent. • Check if the antenna has reached the end of its serviceable life. (3-5 years in normal use, 1-2 years at the seaside)
Dotted lines or stripes	• Keep the TV away from noise sources such as cars, motorcycles, or hair-dryers.
No color. Color is not correct. Dark picture.	• Press PICTURE MODE to select the desired Picture Mode (page 26). • Adjust the picture mode options in the (Picture/Sound Control) menu. • If you set the POWER SAVING function to "Reduce," the picture may become dimmer (page 28).
Some tiny black points and/ or bright points on the screen.	• The picture of a flat panel display is composed of pixels. Tiny black points and/or bright points (pixels) on the screen, this does not indicate a malfunction.
The screen flickers when turning on the TV.	• This is caused by the Plasma Display Panel feature, and does not indicate a malfunction.
The picture is too bright.	• Press PICTURE MODE to select the desired Picture Mode (page 26).
Picture (stripe) noise.	• Make sure that the antenna is connected using the supplied 75-ohm coaxial cable. • Keep the antenna cable away from other connecting cords. • Do not use 300-ohm twin lead cables as interference may occur.
Distorted picture and noisy sound.	• Check if the connected optional equipment are installed in front of the TV or at the side of the TV. When installing optional equipment, leave some space between the optional equipment and TV.
Striped noise during playback/recording of a VCR.	• Video head interference. Keep your VCR away from the TV. • Leave a space of 30 cm (11 7/8 inch) between your VCR and the TV to avoid noise. • Avoid installing your VCR in front of the TV or at the side of the TV.
The whole screen is green when VIDEO 4 input is selected.	• Y, PB/CB, PR/CR signal is applied to the VIDEO IN 4 jacks. Set "Video 4 Mode" to "Y/ PB/PR" in the (Initial Setup) menu.
The whole screen reddens when VIDEO 4 input is selected.	• RGB signal is applied to the VIDEO IN 4 jacks. Set "Video 4 Mode" to "RGB" in the (Initial Setup) menu.

(Continued)

US

Problem	Possible remedies
Moving pictures.	
The picture moves a little.	• The"Orbit" option of "Screen Saver" in the (Custom Setup) menu (page 52) is set to "On" by the default. This setting moves the picture position periodically to prevent image retention and this is not a malfunction. If this screen movement bothers you, set "Orbit" to "Off." When the "Orbit" option is set to "Off," note that displaying the same patterned signals or 4.3 aspect ratio pictures for a long time may result in image retention.
No sound./Noisy sound.	
Good picture, no sound.	• Check the volume control. • Press MUTING or VOL + so that "Muting" disappears from the screen (page 23). • Disconnect your headphones. • Set "Speaker" to "On" in the (Custom Setup) menu (page 13). If it is set to "Off," sound is not output from the TV's speakers regardless of the TV's volume control.
Audio noise.	• Make sure that the antenna is connected using the supplied 75-ohm coaxial cable. • Keep the antenna cable away from other connecting cords. • Do not use 300-ohm twin lead cables as interference may occur. • Press MTS/SAP to select "MONO" (page 43). • Communication problems may occur if the infrared communication equipment (e.g., infrared cordless headphones) is used near the TV. Please use headphones other than infrared cordless headphones. Also, if you use the infrared communication equipment other than infrared cordless headphones, move the infrared transceiver away from the TV until the noise is eliminated, or move the transmitter and receiver of the infrared communication equipment closer together.
The TV fan noise becomes bigger.	• The ventilation holes can accumulate dust over a period of time. The accumulated dust may make the cooling function of the built-in fan less effective. To prevent this, we recommend removing the dust periodically (once a month) using a vacuum cleaner.
Cannot operate the menu.	• If the item you want to select appears in a pale color, you cannot select it.
Wide Screen Mode changes automatically.	
Wide Screen Mode changes automatically while Auto Wide is set to on.	• The picture size may change when the program has commercial breaks, because the TV selects the best Wide Screen Mode automatically for each program (See page 29). • The TV receives the picture with control signal and selects the best Wide Screen Mode automatically to fit the wide screen (See page 29). • When you change the channel or input, the TV selects the best Wide Screen Mode automatically. If you want to fix the Wide Screen Mode selected with the WIDE MODE button, set "Auto Wide" to "Off" in the (Screen Control) menu (page 31).
Strange sound.	
The TV cabinet creaks.	• Changes in room temperature sometimes causes the TV cabinet to expand or contract, which can make slight noises. This does not indicate a malfunction.
The TV whirs.	• The TV's fan setting is working. This does not indicate a malfunction.
The TV ticks.	• An electrical circuit inside the TV is activated when the TV is turned on. This does not indicate a malfunction.
The TV buzzes.	• There might be a surge sound when turning on the TV. This does not indicate a malfunction.
Remote control does not operate.	• The batteries could be weak. Replace the batteries. • Check the polarity of the batteries. • If the STANDBY/SLEEP indicator on the TV does not light in red, press POWER on the TV. • Point the remote control at the remote control sensor of the TV. • Install the TV away from fluorescent lights.

Specifications

Television system:
American TV standard

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

Antenna:
75 ohm external terminal for VHF/UHF

Screen size (measured diagonally):
32 inches (KE-32TS2U)
42 inches (KE-42TS2U)

Panel System:
Plasma Display panel

Display resolution:
852 dots (horizontal) × 1024 lines (vertical) (KE-32TS2U)
1024 dots (horizontal) × 1024 lines (vertical) (KE-42TS2U)

VIDEO IN 1/2:
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 IN 3:
DVI-HDTV : 1 terminal, 3.3V T.M.D.S., 50 ohms
DVI-HDTV input terminal is compliant with the EIA-861 standard and is not intended for use with personal computers.
AUDIO (phono jacks):
500 mVrms (100% modulation), Impedance: 47 kilohms

VIDEO IN 4:
Y:1 Vp-p, 75 ohms, 0.3 V negative sync
P_B:0.7 Vp-p, 75 ohms
P_R:0.7 Vp-p, 75 ohms
or
G:0.7 Vp-p, 75 ohms, Sync on Green
B:0.7 Vp-p, 75 ohms, Sync on Green
R:0.7 Vp-p, 75 ohms, Sync on Green
or
G:0.7 Vp-p, 75 ohms, non Sync on Green
B:0.7 Vp-p, 75 ohms, non Sync on Green
R:0.7 Vp-p, 75 ohms, non Sync on Green
HD:1–5 Vp-p
VD:1–5 Vp-p
AUDIO (phono jacks):
500 mVrms (100% modulation), Impedance: 47 kilohms

SUB WOOFER: phono jack

AUDIO OUT (phono jacks):
500 mVrms (100% modulation)

Headphones: Stereo minijack

CONTROL S IN/OUT:
minijacks

Speaker: 50 × 130 mm (2 × 5 1/8 inches) × 2

Speaker output: 7W × 2 (KE-32TS2U)
9W × 2 (KE-42TS2U)

Power requirement:
120 V AC, 60 Hz

Power consumption:
In use (Max.): KE-32TS2U:300W
KE-42TS2U:415W
In standby: KE-32TS2U:1.7W
KE-42TS2U:2.9W

Dimensions (W/H/D):
856 × 627 × 132 mm (33 3/4 × 24 3/4 × 5 1/4 inch) (KE-32TS2U)
1,056 × 764 × 124 mm (41 5/8 × 30 1/8 × 5 inch) (KE-42TS2U)

Mass: 26 kg (57 lbs 3 oz.) (KE-32TS2U)
37.5 kg (82 lbs 7 oz.) (KE-42TS2U)

Supplied accessories
Remote control RM-928Y (1)
Batteries size AA (2)
75-ohm coaxial cable (1)
AC power cord (1)
Brackets (2)
Cleaning cloth (1)
Operating instructions (1)

Optional accessories
Note that some optional accessories may be out of stock.

Headphones plug adapter
Connecting cables
VMC-810S/820S, YC-15V/30V, RK-74A, VMC-10HG, SMF-403

Design and specifications are subject to change without notice.

US

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Printed in Japan