## SONY.

GB

## LCD Color TV

#### Operating Instructions

▲ Before operating the TV, please read the "Safety information" section of this manual. Retain this manual for future reference.

KLV-46S200A KLV-40S200A KLV-32S200A KLV-26S200A

## BRAVIA

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#### WARNING

- To prevent the risk of electric shock, if the AC power cord or plug is damaged, do not insert the plug into the AC power outlet. This plug cannot be used and should be destroyed.
- To prevent the risk of fire or electric shock, do not expose the TV set to rain or moisture.
- Dangerously high voltages are present inside the TV set. Do not open the cabinet. Refer servicing to qualified personnel only.

#### Introduction

Thank you for choosing this Sony product. Before operating the TV, please read this manual thoroughly and retain it for future reference.

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- The illustrations used in this manual are of the KLV-32S200A unless otherwise stated.

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## Start-up Guide

# 1: Inserting batteries into the remote



#### Notes

- Observe the correct polarity when inserting batteries.
- Dispose of batteries in an environmentally friendly way. Certain regions may regulate disposal of the battery. Please consult your local authority.
- Do not use different types of batteries together or mix old and new batteries.
- Handle the remote with care. Do not drop or step on it, or spill liquid of any kind onto it.
- Do not place the remote in a location near a heat source, or in a place subject to direct sunlight, or in a damp room.

## 2: Connecting an antenna/VCR

#### Connecting an antenna only



#### Connecting an antenna and VCR

AC power cord (supplied)



→: Signal flow

\* The position of AC IN jack varies, depending on the TV size.

### **3: Bundling the cables**



# 4: Preventing the TV from toppling over



# 5: Adjusting the viewing angle of the TV

This TV can be adjusted within the angles shown below.

#### Adjust the angle left and right (swivel)



### 6: Selecting the language



- 1 Connect the TV to the AC power outlet (110-240V AC, 50/60Hz).
- 2 Press <sup>(1)</sup> on the TV (top side). When you switch on the TV for the first time, the Language menu appears on the screen. When the TV is in standby mode (the <sup>(1)</sup>/<sub>(2</sub>) (standby) indicator on the TV (front) is red), press I/<sup>(1)</sup>/<sub>(2</sub>) on the remote to switch on the TV.

**3** Press ☆/∜ to select the language displayed on the menu screens, then press ⊕.

Language	
Select language	
English	
中文	
عربي	
فارسى	
Select: <b>↑</b> ↓Set:	

The message confirming the TV start Auto Tuning appears on the screen, then go to "7: Auto Tuning the TV".

7: Auto Tuning the TV

After selecting the language, a message confirming the TV start Auto Tuning appears on the screen. You must tune the TV to receive channels (TV broadcasts). Do the following to search and store all available channels.



**1** Select "OK" and press  $\oplus$ .



The TV starts searching for all available channels. This may take some time, please be patient and do not press any buttons on the TV or remote.

Once all available channels have been stored, the TV returns to normal operation, displaying the channel stored on channel number 1.

### When a message appears for you to confirm the antenna connections

No programs are found. Check all the antenna connections and press  $\bigoplus$  to start Auto Tuning again.

- 2 The Program Sorting menu appears on the screen.
- **3** Press MENU to exit. The TV has now tuned in all the available

channels.

### To change the order in which the channels are stored on the TV

See page 26.

4 To allow this menu to appear again when you turn on the TV, press ⊕ to select "Yes".



### Safety information

#### For Safety

#### AC power cord

Be sure to connect only the appropriate supplied AC power cord with the plug that fits into the AC power outlet.

Unplug the AC power cord when moving the LCD TV. Do not move the LCD TV with the AC power cord plugged in. It may damage the AC power cord and result in fire or electric shock. If



the LCD TV has been dropped or damaged, have it checked immediately by qualified service personnel.

#### Installation

Installation of the LCD TV on the wall should be carried out by qualified service personnel. Improper installation may render the LCD TV unsafe. The LCD TV should be installed near an easily accessible AC power jack.



#### **Medical institution**

Do not place this LCD TV in a place where medical equipment is in use. It may cause malfunction of medical instruments.



Carrying the LCD TV requires two or more people. If you carry the LCD TV in a manner other than that specified, it may drop and a serious injury may be caused. Be sure two or more people carry the LCD TV. When transporting, do

not subject the LCD TV to shocks or excessive vibration. The LCD TV may fall and be damaged or cause serious injury.

When lifting the LCD TV or moving the LCD panel of the TV, hold it firmly by the bottom.



#### Installation and moving

#### Ventilation

Never cover the ventilation holes in the cabinet. It may cause overheating and result in fire. Unless proper ventilation is provided, the LCD TV may gather dust and get dirty. For proper ventilation, observe the following:

- Do not install the LCD TV turned backward or sideways.
- Do not install the LCD TV turned over or upside down.

- Do not install the LCD TV on a shelf or in a closet.
- Do not place the LCD TV on a rug or bed.
- Do not cover the LCD TV with cloth, such as curtains, or items such as newspapers, etc.

#### Vehicle and ceiling

Do not install this LCD TV in a vehicle or hang it from the ceiling. Bumping of the vehicle may cause the LCD TV to fall down and cause injury.



#### Water and moisture

Do not use this LCD TV near water - for example, near a bathtub or shower room. Also do not expose the LCD TV to rain. It may result in fire or electric shock.

#### **Optional accessories**

When installing the LCD TV, use the supplied stand or wall-mount bracket (not supplied). Be sure to attach the brackets supplied with your stand. If not, the LCD TV may fall and cause serious injury.



#### **Outdoor use**

Do not install this LCD TV outdoors. If the LCD TV is exposed to rain, it may result in fire or electric shock. If the LCD TV is exposed to direct sunlight, the LCD TV may heat up and it may damage the LCD TV.

#### Ship and vessel

Do not install this LCD TV in a ship or vessel. If the LCD TV is exposed to seawater, it may cause fire or damage the LCD TV.

#### Cord arrangement

Arrange the power cords or

connecting cords in a safe place to avoid tripping on them.

#### Fall

Place the LCD TV on a secure, stable stand. Do not hang anything on the LCD TV. The LCD TV may fall from the stand or wall-mount bracket (not supplied), causing damage or serious injury.



#### Recommended place for the LCD TV

Place the LCD TV on a stable, level surface. Otherwise, it may fall and cause injury.





Continued



**7** GB

#### Ventilation

Leave space around the LCD TV. Otherwise, adequate aircirculation may be blocked causing overheating and cause fire or damage the LCD TV.

#### When installing the LCD TV on the wall



#### Never install the LCD TV as follows:



#### When installing the LCD TV using a stand



Leave this space at least.

#### Never install the LCD TV as follows:

#### Air circulation is blocked.



#### **Power Sources**

#### Overloading

This LCD TV is designed to operate on a 110-240V AC supply for the LCD TV. Take care not to connect too many appliances to the same AC power outlet as this could result in fire or electric shock.



#### AC power outlet

Do not use a poor fitting AC power plug. Insert the plug fully into the AC power outlet. If it is loose, it may cause arcing and result in fire. Contact your electrician to have the AC power plug changed. When you disconnect the AC power cord, disconnect it from the AC outlet first.



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

This TV set with CLASS 1 construction must be connected to an AC mains socket outlet with a protective earthing connection.

#### Moisture

Do not touch the AC power cord with a wet hand. If you plug/unplug the AC power cord with a wet hand, it may cause electric shock.



#### Lightning storms

For your own safety, do not touch any part of the LCD TV, AC power cord or antenna lead during lightning storms.



#### AC power cord protection

Pull out the AC power cord by the plug. Do not pull on the AC power cord itself.



#### Wiring

Unplug the AC power cord when wiring cables. Be sure to unplug the AC power cord for your safety, when hooking up.

#### Cleaning

Clean the AC power plug regularly. If the plug is covered with dust and it picks up moisture, its insulation may deteriorate and result in fire. Unplug the AC power plug and clean it regularly.



#### Grounding

To avoid electric shock, be sure to connect the supplied AC power cord to a grounded power outlet.

If the plug fails to fit, contact your electrician to have the outlet changed.

#### Use

#### Damage requiring service

If the surface of the LCD TV cracks, do not touch it until you unplug the AC power cord. Otherwise electric shock may result.

#### Servicing

Do not open the cabinet and the rear cover of the LCD TV. Refer to qualified service personnel only.



#### Ventilation holes

Do not insert anything in the ventilation holes. If metal or something flammable enters, it may result in fire or electric shock.



#### Moisture and flammable

- Do not let this LCD TV get wet. Never spill liquid of any kind on the set. If any liquid or solid object does fall through, do not operate the LCD TV. It may result in electric shock or damage to the LCD TV. Have it checked immediately by qualified personnel.
- Do not place any objects on the LCD TV. The LCD TV shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the LCD TV.



To prevent fire, keep inflammable objects or naked lights (e.g. candles) away from the LCD TV.

#### **Additional Safety Information**

#### **Electric shock**

Do not touch the LCD TV with a wet hand. Doing so may cause electric shock or damage the LCD TV.

#### **Protruding location**

Do not install the LCD TV in protruding locations. If you install the unit in the following locations, injury may result.

- Do not install the LCD TV in a location where the LCD TV protrudes, such as pillars.
- Do not install the LCD TV in a location where your face may bump.

To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

#### Placement

Never place the LCD TV in hot, humid or excessively dusty places. Do not install the LCD TV where it may be exposed to mechanical vibrations. Do not use the LCD TV where insects may enter.



#### Oils

Do not install this LCD TV in restaurants that use oil. Dust absorbing oil may enter into the LCD TV and damage the LCD TV.

#### Accessories

Secure the LCD TV from falling down.

If the LCD TV is not secured properly, it may fall and cause injury. Take measures against it using the supplied stand or a wall-mount bracket (not supplied).

#### Broken pieces

Do not throw anything at the LCD TV. The screen glass may break by the impact and cause serious injury.



#### Corrosion

If you use this LCD TV near the seashore, salt may corrode metal parts of the LCD TV and cause internal damage or fire. It may also shorten the life of the LCD TV. If the LCD TV will be subjected to any of these conditions, steps should be taken to reduce the humidity and temperature of the area where the LCD TV is located.

#### Cleaning

Unplug the AC power cord when cleaning this LCD TV. If not, it may result in electric shock.

Continued

#### AC power cord

If you damage the AC power cord, it may result in fire or electric shock.

 Do not pinch, bend, or twist the cable excessively. The core lines may be bared and cut, and cause shortcircuit, resulting in fire or electric shock.



Do not convert or damage the AC power cord.
Do not put anything heavy on



pull the AC power cord.Keep the AC power cord away from heat sources.

the AC power cord. Do not

Be sure to grasp the plug when disconnecting the AC power cord.

If the AC power cord is damaged, stop using it and ask your dealer or Sony service center to exchange it.

#### Not in use

For environmental and safety reasons, it is recommended that the LCD TV is not left in standby mode when not in use. Disconnect it from the AC power outlet.

#### **Cable wiring**

Take care not to eatch your feet on the cables. It may damage the LCD TV.

#### Installation

Do not install optional components too close to the LCD TV. Keep optional components at least 30 cm away from the LCD TV. If a VCR is installed in front or beside the LCD TV, the picture may distort.

#### Heat

Do not touch the surface of the LCD TV. It remains hot, even for some time after the LCD TV is turned off.

#### Precautions

#### On viewing the LCD TV comfortably

- To view the LCD TV comfortably, the recommended viewing position is from four to seven times of the screen's vertical length away from the LCD TV.
- View the LCD TV in a moderate light room, as viewing the LCD TV in poor light taxes your eyes. And watching the screen continuously long times taxes your eyes, too.

#### On installing the LCD TV

- Use the specified wall-mount bracket or stands.
- Do not install the display unit in places subject to extreme temperature, for example in direct sunlight, or near a radiator, or heating vent. If the display unit is exposed to extreme temperature, the display unit may heat up and it may cause deformations of the casing or malfunctions.
- Do not install the display unit in a place exposed to direct air conditioning. If the display unit is installed in such a location, moisture may condense on the panel inside the display unit. It may cause a malfunction.
- After transporting the display unit directly from a cold to a warm location, or if the room temperature has changed suddenly, pictures may be blurred or show poor color over portions of the picture. This is because moisture has condensed on the panel inside the display unit. Let the moisture evaporate before using the display unit.
- To obtain a clear picture, prevent the lighting or sun light from illuminating the screen directly. If possible, install a lighting on the ceiling right above the LCD TV so that reflection of the lighting is minimized.
- The LCD TV is not disconnected from AC power outlet when the switch is in off position. To disconnect the LCD TV completely, pull the plug from AC power outlet.
- Make sure the LCD TV is completely switched off by pressing () on the TV (top side) before unplugging the AC power cord. Unplugging the AC power cord while LCD TV is switched on or at standby mode may cause the power and standby indicators to remain lit. This does not indicate a malfunction.

#### On adjustment volume

- Adjust the volume so as not to trouble neighbors. Sound carries very easily at night time. Therefore, closing the windows or using headphones is suggested.
- When using headphones, adjust the volume so as to avoid excessive levels, as hearing damage may result.

#### On handling the remote control

- Handle the remote control with care. Do not drop or step on it, or spill liquid of any kind.
- Do not place the remote control in a location near heat source, or in a place subject to direct sunlight, or in a damp room.

#### On cleaning the screen surface/cabinet

- Be sure to unplug the AC power cord connected to the LCD TV from the AC power outlet before cleaning.
- To remove dust from the screen surface/cabinet, wipe gently with a soft cloth. If dust is persistent, wipe with a soft cloth slightly moistened with a diluted mild detergent solution.
- Note that material deterioration or screen coating degradation may occur if the display unit is exposed to a volatile solvent, such as alcohol, thinner, benzine or insecticide, or if prolonged contact is maintained with rubber or vinyl materials.
- The ventilation holes can accumulate dust over time. To ensure proper ventilation, we recommend removing the dust periodically (once a month) using a vacuum cleaner.

#### On the screen

- Although the LCD screen is made with high-precision technology and has effective pixels of 99.99% or more, black dots may appear or bright points of light (red, blue or green) may appear constantly on the LCD screen. This is a structural property of the LCD panel and is not a malfunction.
- Do not expose the LCD screen surface to the sun. Doing so may damage the screen surface.
- Do not push or scratch the front filter, or place objects on top of this unit. The image may be uneven or the LCD panel may be damaged.
- If the unit is used in a cold place, a smear may occur in the picture or the picture may become dark. This does not indicate a failure. These phenomena improve as the temperature rises.
- Ghosting may occur when still pictures are displayed continuously. It may disappear after a few moments.
- The screen and cabinet get warm when this unit is in use. This is not a malfunction.

#### Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)



/ This symbol is on the remote control.

### **Overview of the remote**



#### • $I/\bigcirc$ – TV standby

Switches off the TV temporarily. The (standby) indicator on the front of the TV lights up. Press again to switch on the TV from the standby mode.

#### A/B – Dual Sound (page 21)

#### Colored buttons

In Text mode (page 14): Used for Fastext.

#### ④ ⊕/? – Info / Text reveal

- In TV mode: Displays information such as current channel number and screen mode.
- In Text mode (page 14): Reveals hidden information (e.g., answers to a quiz).
- ⑤ ☆/☆/☆/⇔/(⊕) (page 14, 17)

#### **6** TOOLS (page 15, 16, 29)

Enables you to access various viewing options and change/make adjustments according to the source and screen mode.

#### MENU (page 17)

#### 8 Number buttons

- In TV mode: Selects channels. For channel numbers 10 and above, enter the second digit within two seconds (available only if "1 Digit Direct" is set to "Off").
- In Text mode: Enters the three digits page number to select the page.

#### 

Returns to the previous channel watched (for more than five seconds).

#### PROG +/- (page 14)

- In TV mode: Selects the next (+) or previous (-) channel.
- In Text mode: Selects the next (+) or previous (-) page.
- 🛈 🖂 +/- Volume
- 🕑 🕸 Mute (page 14)
- 🚯 🗐 Text (page 14)
- 🕼 🔘 TV mode (page 16)

Switches to a TV display when displaying external input.

#### B RETURN

Returns to the previous screen of any displayed menu.

🚯 🖼 – Picture freeze (page 15)

Freezes the TV picture.

- 🛈 🤀 Wide mode (page 15)
- Image: Book of the select / Text hold
  Image: Book of the select / Text hold
  - In TV mode (page 16): Selects the input source from equipment connected to the TV jacks.
  - In Text mode (page 14): Holds the current page.

#### Tip

The A/B, PROG + and number 5 buttons have tactile dots. Use the tactile dots as references when operating the TV.

### **Overview of the TV buttons and indicators**



#### MENU (page 17)

#### 2 →/--- Input select/OK

- In TV mode (page 16): Selects the input source from equipment connected to the TV jacks.
- In TV menu: Selects the menu or option, and confirm the setting.

#### ❸ ⊿ +/-/\$/\$

- Increases (+) or decreases (-) the volume.
- In TV menu: Moves through the options left
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#### ④ PROG +/-/☆/ √>

- In TV mode: Selects the next (+) or previous (-) channel.
- In TV menu: Moves through the options up (
   (☆) or down (

#### 🗿 🕛 – Power

Switches the TV on or off.

#### 🗿 🕞 – Remote control sensor

#### Picture Off/Timer indicator

- Lights up in green when the picture is switched off (page 24).
- Lights up in amber when the timer is set. (page 24)

#### 🗿 🕛 – Standby indicator

Lights up in red when the TV is in standby mode.

#### I – Power indicator

- Lights up in green when the TV is switched on.
- · Blinks when remote control is operating.

#### Watching TV

### Watching TV





1 Press () on the TV (top side) to switch on the TV.

When the TV is in standby mode (the  $\bigcirc$  (standby) indicator on the TV (front) is red), press  $\checkmark \bigcirc$  on the remote to switch on the TV.

2 Press the number buttons or PROG +/- to select a TV channel.

To select channel numbers 10 and above using the number buttons, enter the second digit within two seconds (available only if "1 Digit Direct" is set to "Off").

#### **Additional operations**

То	Do this
Turn off the TV temporarily (Standby mode)	Press ✔ <sup>(</sup> ).
Turn on the TV from Standby mode without sound	Press <sup>©</sup> X. Press → +/- to set the volume level.
Turn off the TV completely	Press () on the TV (top side).
Adjust the volume	Press → + (increase)/ - (decrease).
Mute the sound	Press %. Press again to restore.
Return to the previous channel watched (for more than five seconds)	Press C.
Access the Program index table	Press MENU, select Program List by pressing $2/2^{\circ}$ , then press (+). Next, select the desired channel by pressing $2/2^{\circ}$ , then press $(+)$ .

#### Note

Even if you press the  $\bigcirc$  on the TV (top side) to turn it off, a small amount of current continues to flow. Pull the AC plug out of the wall jack to turn the TV off completely.

#### To access Text

Press . Each time you press , the display changes cyclically as follows:

Text  $\rightarrow$  Text over the TV picture (mix mode)  $\rightarrow$  No Text (exit the Text service)

To select a page, press the number buttons or PROG +/-.

To hold a page, press -> 🔄.

To reveal hidden information, press ( ?.

#### Tips

- Ensure that the TV is receiving a good signal, or some text errors may occur.
- Some TV channels broadcast a Text service. For information on the use of the service, select the index page (usually Text page 100).
- When four colored items appear at the bottom of the Text page, Fastext is available. Fastext allows you to access pages quickly and easily. Press the corresponding colored button to access the page.

#### **Picture Freeze**

Freezes the TV picture (e.g. to make a note of a telephone number or recipe).

- **1** Press M on the remote control.
- 2 Press ↔/↔/↔ to adjust the position of the window.
- **3** Press I to remove the window.

#### To change the wide mode manually

Press ∰ repeatedly to select wide mode.

#### For TV, Video, HD/DVD or HDMI (other than PC Input)

#### Wide Zoom\*



Enlarges the center portion of the picture. The left and right edges of the picture are stretched to fill the 16:9 screen.

#### Normal



Displays the 4:3 picture in its original size. Side bars are shown to fill the 16:9 screen.

#### Note

You can only select "Full" when input signals are 720p/ 1080i.

Full



Stretches the 4:3 picture horizontally, to fill the 16:9 screen.

Zoom\*



Displays cinemascopic (letter box format) broadcasts in the correct proportions.

\* Parts of the top and bottom of the picture may be cut off.

#### Tip

• Alternatively, you can set "Auto Wide" to "On". The TV will automatically select the best mode to suit the broadcast (page 22).

#### For PC Input

#### Normal



Displays the picture in its original pixel size. Bars are shown at the top, bottom, and both sides for small picture.

#### Full 1



Stretches the original picture to fill the screen vertically.

Full 2



Stretches the Full 1 picture horizontally to fill the 16:9 screen.

#### Using the Tools menu

Press TOOLS to display the following options when viewing the TV program.

Options	Description
Close	Close the Tools Menu.
Power Saving	See page 24.
Picture Mode	See page 18.
Sound Mode	See page 20.
Vertical Shift	See page 22.
Vertical Size	See page 22.
Sleep Timer	See page 24.

# Viewing pictures from connected equipment

Switch on the connected equipment, then press - > = repeatedly until the correct input symbol (see below) appears on the screen.

On Screen Display	Input jacks
-> Video 1	Video : $1$ (Rear) $\rightarrow$ or S $\rightarrow$ $\cdots$
or	Audio : $1$ (Rear) $\rightarrow$ L(MONO)/R
S€ Video 1	
->> Video 2	Video : $2$ (Side) $\rightarrow$ or S $\rightarrow$
or	Audio : 2 (Side) - L(MONO)/R
S	
-> Video 3	Video : 3 (Rear) -
	Audio : $(Rear) \rightarrow L(MONO)/R$
- HD/DVD	l Video : $1$ (Rear) $\rightarrow \odot$ Y, P <sub>B</sub> /C <sub>B</sub> , P <sub>R</sub> /C <sub>R</sub>
	Audio : $1$ (Rear) $-$ L/R
- HD/DVD	2 Video : $2$ (Rear) $\rightarrow \odot$ Y, P <sub>B</sub> /C <sub>B</sub> , P <sub>R</sub> /C <sub>R</sub>
-	Audio : $2$ (Rear) $-2$ L/R
- 💬 HDMI	Video/Audio : (Rear) HDMI IN
	Audio : (Rear) - L/R
PC	Video : (Rear Left Side) PC - (RGB)
	Audio : (Rear) PC -

To return to normal TV operation, press  $\bigcirc$ .

#### Using the Tools menu

Press TOOLS to display the following options when viewing pictures from connected equipment other than PC.

Options	Description
Close	Close the Tools Menu.
Power Saving	See page 24.
Picture Mode	See page 18.
Sound Mode	See page 20.
Vertical Shift	See page 22.
Vertical Size	See page 22.
Sleep Timer	See page 24.

#### **Using MENU Functions**

### Navigating through menus

"MENU" allows you to enjoy various convenient features of this TV. You can easily select channels or external inputs with the remote. Also, settings for your TV can be changed easily using "MENU".

1





- **2** Press  $\Phi/\Phi$  to select an option.
- **3** Press  $\oplus$  to confirm a selected option. To exit the menu, press MENU.

Menu	Description
Program List	<ul> <li>Allows you to select TV programs from a list of channel labels.</li> <li>To watch the desired channel, select the channel, then press +.</li> <li>To assign a label to a program, see page 26.</li> </ul>
External Inputs	<ul> <li>Selects equipment connected to your TV.</li> <li>To watch the desired external input, select the input source, then press (-).</li> <li>To assign a label to an external input, see page 23.</li> </ul>
Settings	Opens the Settings menu screen where most of advanced settings and adjustments are performed. Select a menu icon, select an option and make the desired change or adjustment using $2\sqrt{\sqrt[4]{1/2}}$ . For details about settings, see page 18 to 27.

### Picture menu

Picture         Image: Inputs       View         Picture Mode       Vivid         Image: Inputs       View         Picture Mode       Vivid         Backlight       Max         Picture       Max         Picture       Max         Picture       Max         Picture       Max         Picture       Max         Color       60         Hue       Color         Color Temperature       Cool         Sharpness       18         Noise Reduction       Auto         Advanced Settings       Image: Instance	You can select the options listed below on the Picture menu. To select options in "Settings", see "Navigating through menus" (page 17).
Target Inputs	Selects whether to apply settings made in the Picture menu to all inputs, or only to the input currently being watched. "All": Applies settings to all inputs. "Viewing Only": Applies settings only to the current input.
Picture Mode	Selects the picture mode. "Vivid": For enhanced picture contrast and sharpness. "Standard": For standard picture. Recommended for home entertainment. "Custom": Allows you to store your preferred settings.
Reset	Resets all picture settings except "Target Inputs" and "Picture Mode" to the factory settings.
Backlight	Adjusts the brightness of the backlight.
Picture	Increases or decreases picture contrast.
Brightness	Brightens or darkens the picture.
Color	Increases or decreases color intensity.
Hue	Increases or decreases the green tones. <b>Tip</b> "Hue" can only be adjusted for a NTSC color system (e.g., U.S.A. video tapes).
Color Temperature	Adjusts the whiteness of the picture. "Cool": Gives the white color a blue tint. "Neutral": Gives the white color a neutral tint. "Warm1"/"Warm2": Gives the white color a red tint. "Warm2" gives a redder tint than "Warm1". <b>Tip</b>

Sharpness	Sharpens or softens the picture.
Noise Reduction	Reduces the picture noise (snowy picture) in a weak broadcast signal. "Auto": Automatically reduces the picture noise. "High"/"Medium"/"Low": Modifies the effect of the noise reduction. "Off": Turns off the Noise Reduction feature.
Advanced Settings	Customizes the Picture function in more detail. When you set "Picture Mode" to "Custom", you can set/change these settings. "Reset": Resets all the advanced video settings to the factory settings. "Black Corrector": Enhances black areas of the picture for stronger contrast. "Contrast Enhancer": Automatically adjusts "Picture" to the most suitable settings judging from the brightness of the screen. This setting is especially effective for dark images, increasing vibrancy in the picture. "Gamma": Adjusts the balance between bright and dark areas of the picture. "Clear White": Emphasizes white colors. "Live Color": Makes colors more vivid and reproduces clear skin tones. "MPEG Noise Reduction": Reduces the picture noise in MPEG-compressed video.

### Sound menu

Sound		Οτν
R	Target Inputs	Viewing only
Þ	Reset Treble	+11
æ	Bass Balance	+11
12	Intelligent Volume Volume Offset	Off 0i
	Surround BBE	Off High
	Dual Sound	Stereo
	Select: 🛧 🖶 Set: 🛨	Exit: MENU

You can select the options listed below on the Sound menu. To select options in "Settings", see "Navigating through menus" (page 17).

Target Inputs	Selects whether to apply settings made in the Sound menu to all inputs, or only to the input currently being watched. "All": Applies settings to all inputs. "Viewing Only": Applies settings only to the current input.	
Sound Mode	Selects the sound mode. "Dynamic": Enhances treble and bass. "Standard": For standard sound. Recommended for home entertainment. "Custom": Flat response. Also allows you to store your preferred settings.	
Reset	Resets all the sound settings except "Target Inputs", "Sound Mode" and "Dual Sound" to the factory settings.	
Treble	Adjusts higher-pitched sounds.	
Bass	Adjusts lower-pitched sounds.	
Balance	Emphasizes left or right speaker balance.	
Intelligent Volume	Keeps a constant volume level even when volume level gaps occur (e.g., adverts tend to be louder than programs).	
Volume Offset	Increases or decreases the sound level.	
Surround	Selects the surround mode. "TruSurround XT": For surround sound (for stereo program only). "Simulated Stereo": Adds a surround-like effect to mono programs. "Off": For normal stereo or mono reception.	
BBE	Gives sound more impact by compensating for phase effects in speakers using the "BBE High Definition Sound System". "High": The sound is reproduced with more impact. "Low": The sound is reproduced with impact. "Off": For normal stereo or mono reception.	

#### **Dual Sound**

Selects the sound from the speaker for a stereo or bilingual broadcast. The selection varies, depending on the Broadcasting.

Selection
NICAM (stereo sound)
Mono (regular sound)
NICAM Main (main sound)
NICAM Sub (sub sound)
Mono (regular sound)
NICAM Main (main sound)
Mono (regular sound)
Mono (regular sound)
Stereo (stereo sound)
Main (main sound)
Sub (sub sound)

#### Notes

- If the signal is very weak, the sound becomes monaural automatically.
- If the stereo sound is noisy when receiving a NICAM program, select "Mono". The sound becomes monaural, but the noise is reduced.
- The "Mono" setting is memorized for each program position.
- You cannot receive a stereo broadcast signal when "Mono" is selected for the program position.
- You cannot receive stereo or dual sound when "Low" or "High" is selected in "Audio Filter" (page 27).

#### Tips

- NICAM is receivable in following countries/regions. Hong Kong, Singapore, New Zealand, Malaysia, Thailand, etc.
- A2 (German) is receivable in following countries/regions. Australia, Malaysia, Thailand, etc.
- If you select other equipment connected to the TV, set "Dual Sound" to "Stereo", "Main" or "Sub".

### Screen menu

Screen Target Inputs Wide Mode Auto Wide 4:3 Default Display Area Horizontal Shift Vertical Shift Vertical Shift Vertical Size Select: $\uparrow \$ Set: #	Viewing only Wide Zoom Off Normal 0 Exit: ©IIIV		
Target Innuts	Selects whether to apply settings made in the Screen menu to all inputs or only to		
iarget inputs	the input currently being watched.		
	"All": Applies settings to all inputs.		
	viewing Only : Applies settings only to the current input.		
Wide Mode	For details about the wide mode, see page 15.		
Auto Wide	Automatically changes the screen format according to the broadcast signal. To keep your setting, select "Off".		
	<ul> <li>Tips</li> <li>Even if you have selected "On" or "Off" in "Auto Wide", you can always modify the format of the screen by pressing ## repeatedly.</li> <li>"Auto Wide" is available for PAL, SECAM and NTSC signals only.</li> </ul>		
4:3 Default	Selects the default screen mode for use with 4:3 broadcasts.		
	"Wide Zoom": Displays conventional 4:3 broadcasts with an imitation wide screen		
	"Normal": Displays conventional 4:3 broadcasts in the correct proportions. "Off": Keeps the current "Wide Mode" setting when the channel or input is changed.		
	<b>Tip</b> This option is available only if "Auto Wide" is set to "On".		
Display Area	Adjusts the screen area displaying the picture.		
	"Normal": Displays the picture in the original size.		
	-1 / $-2$ : Enlarges the picture to have the edge of the picture.		
Horizontal Shift	Adjusts the horizontal position of the picture for each screen format.		
Vertical Shift	Adjusts the vertical position of the picture when the screen format is set to "Zoom".		
Vertical Size	Adjusts the vertical size of the picture when the screen format is set to "Zoom" or "Wide Zoom".		

### Setup menu

Setup		OTV
R	Auto Startup	English
Þ	Video Labels	Englion
	Timer Settings	
<u>E2</u>	Power Saving Settings Light Sensor	Off
222	Quiet Power On Speaker	Off
	Audio Out	
	Product Information	Auto
Gh	All Reset	
	Select: 🕈 🖊 Set: 🖬	Exit: MENU

You can select the options listed below on the Setup menu. To select options in "Settings", see "Navigating through menus" (page 17).

Auto Startup	Starts the "first time operation menu" to tune in all the available channels. Usually you do not need to do this operation because the channels are already tuned when the TV was first installed (page 5, 6). However, this option allows you to repeat the process (e.g., to retune the TV after moving house, or to search for new channels that have been launched by broadcasters).	
Language	Selects the language in which the menus are displayed.	
Video Labels	<ul> <li>Assigns a name to any equipment connected to the side and rear jacks. The name will be displayed briefly on the screen when the equipment is selected. You can skip an input source that is not connected to any equipment.</li> <li>1 Press ☆/☆ to select the desired input source, then press ⊕.</li> <li>2 Press ☆/☆ to select the desired option below, then press ⊕. Equipment labels: Uses one of the preset labels to assign a name to connected equipment.</li> <li>"Edit:": Creates your own label. Follow steps 2 to 4 of "Program Labels" (page 26). "Skip": Skips an input source that is not connected to any equipment when you press ⊕ to select the input source.</li> </ul>	
Auto S Video	Selects the input signal from S video sockets S-+ when S-+ 1/2 sockets are both connected.	

Continued

Timer Settings	Sets the timer to turn on/off the TV.
	Sleep Timer
	Sets a period of time after which the TV automatically switches itself into standby
	mode. When the "Sleep Timer" is activated, the ④ (Timer) indicator on the TV (front) lights up in amber.
	<ul> <li>Tips</li> <li>If you switch off the TV and switch it on again, "Sleep Timer" is reset to "Off".</li> <li>"TV will soon turn off by Sleep Timer" appears on the screen one minute before the TV switches to standby mode.</li> </ul>
	On Timer
	Sets the timer to turn on the TV. "Day": Selects the day on which you want to activate the On Timer. "Time": Sets the time to turn on the TV. "Duration": Selects the time period after which the TV automatically switches to
	"Volume Setup": Sets the volume when the timer turns on the TV.
	Clock Set
	Allows you to adjust the clock manually.
Power Saving Settings	<b>Power Saving</b> Selects the power saving mode to reduce the power consumption of the TV. When "Picture Off" is selected, the picture is switched off and the 🔀 (Picture Off)
	indicator on the TV (front) lights up in green. The sound remains unchanged.
	Power Consumption
	When "Display" is selected, power consumption level will be displayed on the screen when you press $(\mathbf{H})$ (?) or turn on the TV.
Light Sensor	Automatically optimizes the picture settings according to the ambient light in the room.
Quiet Power On	Sets the volume control at a low level when the TV is first turned on, gradually increasing the sound to a preset level.
Speaker	Switches on/off the TV's internal speakers. "On": The TV speakers are turned on in order to listen to the TV's sound through TV's speakers. "Off": The TV speakers are turned off in order to listen to the TV's sound only through your external audio equipment connected to the audio output jacks.
Audio Out	Sets the method used to adjust the volume from the connected audio system. This option can be selected only when "Speaker" is set to "Off". "Variable": The audio output level from the connected audio system can be
	<ul><li>"Fixed": The audio output level from the connected audio system can be controlled by the TV's remote.</li><li>"Fixed": The audio volume is fixed on the TV. Adjust the volume (and the audio settings) on the audio system.</li></ul>
Color System	Selects the color system ("Auto", "PAL", "SECAM", "NTSC3.58", "NTSC4.43", or "PAL60") according to the input signal from the input source.
Product Information	Displays the serial number and model name of your TV.
All Reset	Resets all the Setup settings to the factory settings and then launches the Auto Startup screen.

PC Settings	PC You can select the options listed below on the PC Settings menu. To select options in "Settings" see	
Wide Mode     Norm       Reset     Auto Adjustment       Phase     0       Pitch     0       Horizontal Shift     0       Vertical Shift     0       Power Management     Off	"Navigating through menus" (page 17).	
Select: 🛧 🖶 Set: 🖬	Exit: MEND	
Wide Mode	Selects a screen mode for displaying input from your PC. "Normal": Displays the picture in its original size. "Full1": Enlarges the picture to fill the display area, keeping its original horizontal- to-vertical aspect ratio. "Full2": Enlarges the picture to fill the display area.	
Reset	Resets all the PC settings to the factory settings.	
Auto Adjustment	Automatically adjusts the display position and phase of the picture when the TV receives an input signal from the connected PC. <b>Tip</b> Auto Adjustment may not work well with certain input signals. In such cases, manually adjust "Phase", "Pitch", "Horizontal Shift" and "Vertical Shift".	
Phase	Adjusts the phase when the screen flickers.	
Pitch	Adjusts the pitch when the picture has unwanted vertical stripes.	
Horizontal Shift	Adjusts the horizontal position of the picture for each screen format.	
Vertical Shift	djusts the vertical position of the picture for each screen format.	
Power Management	Switches the TV to standby mode if no signal is received for 30 seconds.	

### **Channel Setup menu**

Channel S	etup		OTV
	1 Digit Direct Auto Tuning Program Sorting Program Labels Program Block Manual Program Prese	Off	
	Select: 🕈 🖶 Set: 👫		Exit: MENU

You can change/set the Channel settings using the Channel Setup menu. To select options in "Settings", see "Navigating through menus" (page 17).

Select: 🕈 🗣 Set: 🎦	Exit: (MEND)	
1 Digit Direct	<ul> <li>When "1 Digit Direct" is set to "On", you can select a channel using one preset number button (0 - 9) on the remote.</li> <li>Note</li> <li>When "1 Digit Direct" is set to "On", you cannot select channel numbers 10 and above entering two digits using the remote.</li> </ul>	
Auto Tuning	Tunes in all the available channels. Usually you do not need to do this operation because the channels are already tuned when the TV was first installed (page 5, 6). However, this option allows you to repeat the process (e.g., to retune the TV after moving house, or to search for new channels that have been launched by broadcasters).	
Program Sorting	<ul> <li>Changes the order in which the channels are stored on the TV.</li> <li>1 Press ☆/小 to select the channel you want to move to a new position, then press ⊕.</li> <li>2 Press ☆/小 to select the new position for the channel, then press ⊕.</li> </ul>	
Program Labels	<ul> <li>Assigns a channel name of your choice up to five letters or numbers. The name will be displayed briefly on the screen when the channel is selected.</li> <li>1 Press ☆/∜ to select the channel you want to name, then press ⊕.</li> <li>2 Press ☆/∜ to select the desired letter or number ("_" for a blank space), then press ¢.</li> <li>If you input a wrong character</li> <li>Press ¢/♦ to select the wrong character. Then, press ☆/◊ to select the correct character.</li> <li>To delete all the characters</li> <li>Select "Reset", then press ⊕.</li> <li>3 Repeat the procedure in step 2 until the name is complete.</li> <li>4 Select "OK", then press ⊕.</li> </ul>	
Program Block	<ul> <li>Blocks an individual channel from being watched.</li> <li>Press ☆/∿ to select the channel you want to block, then press ⊕.</li> <li>Press ☆/∿ to select "Block", then press ⊕. To watch the channel, select "Allow".</li> </ul>	

#### Manual Program Preset

Before selecting "Label"/"AFT"/"Audio Filter"/"Skip", press PROG +/- to select the program number with the channel. You cannot select a program number that is set to skip.

#### Program/TV System/VHF or UHF

Presets program channels manually.

- **1** Select "Program", then press  $\oplus$ .
- 2 Press ☆/☆ to select the program number you want to manually tune (if tuning a VCR, select channel 00), then press RETURN.
- **3** Press  $\Phi/\Phi$  to select "TV System", then press  $\oplus$ .
- 4 Press  $^{A}/^{D}$  to select the best received TV broadcast systems, then press  $^{+}$ .
- 5 Press ☆/☆ to select either "VHF Low", "VHF High" or "UHF", then press ↔.

#### Note

The frequency range indication ("VHF Low", "VHF High" or "UHF") switches automatically.

6 Tune the channels as follows:

Press  $\Leftrightarrow /\Rightarrow$  to search for the next available channel. When a channel has been found, the search will stop. To continue searching, press  $\Leftrightarrow /\Rightarrow$ .

Repeat the procedure above to preset other channels manually.

#### Label

Assigns a name of your choice, up to five letters or numbers, to the selected channel. This name will be displayed briefly on the screen when the channel is selected. To input characters, follow steps 2 to 4 of "Program Labels" (page 26).

#### AFT

Allows you to fine-tune the selected program number manually if you feel that a slight tuning adjustment will improve the picture quality.

You can adjust the fine tuning over a range of -15 to +15. When "On" is selected, the fine tuning is performed automatically.

#### **Audio Filter**

Improves the sound for individual channels in the case of distortion in mono broadcasts. Sometimes a non-standard broadcast signal can cause sound distortion or intermittent sound muting when watching mono program.

If you do not experience any sound distortion, we recommend that you leave this option set to the factory setting "Off".

#### Note

You cannot receive stereo or dual sound when "Low" or "High" is selected.

#### Skip

Skips unused channels when you press PROG +/- to select channels (you can still select a skipped channel using the number buttons).

### **Connecting optional equipment**

You can connect a wide range of optional equipment to your TV. Connecting cables are not supplied.

#### Connecting to the TV (side)



#### Connecting to the TV (rear)



\*1 Use an HDMI cable (be sure to use only an HDMI cable that bears the HDMI logo), HDMI-to-DVI cable, or adaptor (not supplied).

\*2When using an HDMI cable, it is not necessary to connect the audio cable. When using an HDMI-to-DVI cable or an adaptor, it is necessary to connect the audio cable.

To connect	Do this
S VHS/Hi8/DVC camcorder or video game equipment	Connect to the S video jack $S-\underbrace{0}{2}$ or the video jack $-\underbrace{2}$ , and the audio jacks $-\underbrace{2}$ . To avoid picture noise, do not connect the camcorder to the video jack $-\underbrace{2}$ and the S video jack $S-\underbrace{0}{2}$ at the same time. If you connect mono equipment, connect to the L (MONO) jack $-\underbrace{2}$ .
Headphones <b>B</b>	Connect to the $\bigcirc$ jack to listen to sound from the TV on headphones.
PC C	Connect to the PC - (RGB) jack and the audio jack - (RGB). It is recommended to use a PC cable with ferrites.
Digital satellite receiver or digital terrestrial receiver	Connect only to the HDMI IN jack. The digital video and audio signals are input from the digital satellite receiver. <b>Tip</b> If the digital satellite receiver has an HDMI jack, connecting via an HDMI cable will provide the best results. <b>Note</b> When using an HDMI-to-DVI cable or an adaptor, be sure to connect the DVI output connector first; then connect to the HDMI jack on the TV.
Video game equipment, DVD player without component video output, or VCR	Connect to the S video jack S- $\textcircled{\mbox{\ensuremath{\leftarrow}\ensuremath{\circ}\ensu$
DVD recorder or VCR	Connect to the video output jacks to record the image from the TV. Connect to the audio output jacks $\rightarrow$ to record the sound from the TV on the DVD recorder or VCR. To turn off the sound of the TV speakers, set "Speaker" to "Off" (page 24).
DVD player with component video output <b>G</b>	Connect to the component jacks 1, 2 and the audio jacks 1, 2. For better picture quality, component connection is recommended if your DVD player has a component video output.

To connect	Do this
Hi-Fi audio equipment <b>H</b>	Connect to the audio output jacks G→ to listen to the sound from the TV on the Hi-Fi audio equipment. To turn off the sound of the TV speakers, set "Speaker" to "Off" (page 24).

#### Using the Tools menu in PC input mode

Press TOOLS to display the following options when viewing pictures input from the connected PC.

Options	Description
Close	Close the Tools Menu.
Power Saving	See page 24.
Picture Mode	See page 18.
Sound Mode	See page 20.
Auto Adjustment	See page 25.
Horizontal Shift	See page 25.
Vertical Shift	See page 25.

#### **Additional Information**

### **Specifications**

#### **Display Unit**

Power Requirements: 110-240 V AC, 50/60 Hz Screen Size: KLV-46S200A: 46 inches KLV-40S200A: 40 inches KLV-32S200A: 32 inches KLV-26S200A: 26 inches **Display Resolution:** 1,366 pixels (horizontal) × 768 lines (vertical) Power Consumption: Indicated on the rear of the TV. Dimensions  $(w \times h \times d)$ : KLV-46S200A: Approx.  $1120 \times 805 \times 334$  mm (with stand) Approx.  $1120 \times 755 \times 116$  mm (without stand) KLV-40S200A: Approx.  $988 \times 716 \times 334$  mm (with stand) Approx.  $988 \times 664 \times 103$  mm (without stand) KLV-32S200A: Approx.  $792 \times 593 \times 219$  mm (with stand) Approx.  $792 \times 546 \times 99$  mm (without stand) KLV-26S200A: Approx.  $658 \times 516 \times 219$  mm (with stand) Approx.  $658 \times 470 \times 94$  mm (without stand) Weight: KLV-46S200A: Approx. 35 kg (with stand) Approx. 29 kg (without stand) KLV-40S200A: Approx. 28 kg (with stand) Approx. 22 kg (without stand) KLV-32S200A: Approx. 18 kg (with stand) Approx. 16 kg (without stand) KLV-26S200A: Approx. 14 kg (with stand) Approx. 12 kg (without stand) Panel System LCD (Liquid Crystal Display) Panel TV System I, D/K, B/G, M Color System PAL, PAL60, SECAM, NTSC 4.43, NTSC 3.58

#### Antenna

75 ohm external terminal

#### **Channel Coverage**

B/G VHF: E2 to E12 / UHF: E21 to E69 / CATV: S01 to S03, S1 to S41 VHF: 0 to 12, 5A, 9A / UHF: 28 to 69 / CATV: S01 to S03, S1 to S41(Australia only) VHF: 1 to 11 / UHF: 21 to 69 / CATV: S01 to S03, S1 to S41(New Zealand only) I UHF: B21 to B68 / CATV: S01 to S03, S1 to S41 D/K VHF: C1 to C12, R1 to R12 / UHF: C13 to C57, R21 to R60 / CATV: S01 to S03, S1 to S41, Z1 to Z39 М VHF: A2 to A13 / UHF: A14 to A79 / CATV: A-8 to A-2, A to W+4, W+6 to W+84 Terminals S VIDEO 1/2: S→→ S VIDEO (4-pin mini DIN): S-500 Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal), 75 ohms VIDEO IN 1/2/3/: -> VIDEO: 1 Vp-p, 75 ohms unbalanced, sync negative AUDIO: ->>> 500 mVrms Impedance: 47 kilohms HD/DVD IN 1/2: ------Y, PB/CB, PR/CR (Component Video) : Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative Рв/Св: 0.7 Vp-p, 75 ohms PR/CR: 0.7 Vp-p, 75 ohms Signal format : 480i, 576i, 480p, 576p, 720p,1080i AUDIO: ->>> 500 mVrms Impedance: 47 kilohms VIDEO OUT: C> VIDEO: C+ 1 Vp-p, 75 ohms unbalanced, sync negative AUDIO: 🕞 More than 1 Vrms at the maximum volume setting (Variable) More than 500 mVrms (Fixed) HDMI IN Video: 1080i, 720p, 576p, 576i, 480p, 480i Audio: Two channel linear PCM 32, 44.1 and 48 kHz, 16, 20 and 24 bits,  $PC: \rightarrow \bigcirc$ D-sub 15-pin, analogue RGB, 0.7 Vp-p, 75 ohms, positive See the PC input signal Reference chart on page 31 AUDIO : ->>> Stereo minijack, 0.5 Vrms, 1 kilohm Headphones () Stereo minijack

#### Sound Output

10 W + 10 W

#### **Optional Accessories**

Wall-Mount bracket SU-WL51 (for KLV-46S200A/KLV-40S200A) SU-WL31 (for KLV-32S200A/KLV-26S200A) SU-WL53 (for KLV-46S200A/KLV-40S200A/KLV-32S200A)

Design and specifications are subject to change without notice.

#### PC input signal Reference chart

Signals	Horizontal (Pixel)	Vertical (Line)	Horizontal frequency (kHz)	Vertical frequency (Hz)	Standard
VGA	640	480	31.5	60	VGA
	640	480	37.5	75	VESA
	720	400	31.5	70	VGA-T
SVGA	800	600	37.9	60	VESA Guidelines
	800	600	46.9	75	VESA
XGA	1024	768	48.4	60	VESA Guidelines
	1024	768	56.5	70	VESA
	1024	768	60	75	VESA
WXGA	1280	768	47.4	60	VESA
	1280	768	47.8	60	VESA
	1360	768	47.7	60	VESA

• This TV's PC input does not support Sync on Green or Composite Sync.

• This TV's PC input does not support interlaced signals.

• For the best picture quality, it is recommended to use the signals (boldfaced) in the above chart with a 60Hz vertical frequency from a personal computer. In plug and play, signals with a 60Hz vertical frequency will be selected automatically.

### Troubleshooting

Check whether the  $\bigcirc$  (standby) indicator is flashing in red.

#### When it is flashing

The self-diagnosis function is activated.

- Measure how many times the <sup>(1)</sup> (standby) indicator blinks. For example, the indicator blinks six times, and stops blinking for three seconds.
- 2 Press () on the TV (top side) to switch it off, disconnect the AC power cord and inform your dealer or Sony service center of how the indicator flashes (duration and interval).

#### When it is not flashing

- 1 Check the items in the tables below.
- 2 If the problem still persists, have your TV serviced by qualified service personnel.

#### **Picture**

Problem	Cause/Remedy
No picture (screen is dark) and no sound	<ul> <li>Check the power cord, antenna, and VCR connection.</li> <li>The TV is not turned on. Press <sup>(1)</sup>/<sub>(2</sub> on the TV (top side).</li> <li>If the <sup>(1)</sup>/<sub>(2</sub> (standby) indicator lights up in red, press <sup>(1)</sup>/<sub>(2</sub>).</li> </ul>
No picture	• The picture off feature is activated. (The ⊠() (Picture Off/Sleep Timer) indicator lights up in green.) Press any button except for → +/-, I/(), 0% to cancel the picture off feature.
No picture or no menu information from equipment connected to the video input jack	<ul> <li>Check that the optional equipment is on and press -&gt; (=) repeatedly until the correct input symbol is displayed on the screen.</li> <li>Check the connection between the optional equipment and the TV.</li> </ul>
Distorted picture	<ul> <li>Check if any connected optional equipment is installed in front of the TV or beside the TV. When installing optional equipment, leave some space between the optional equipment and the TV.</li> <li>When changing programs or selecting Text, turn off any equipment connected to the video input jack on the rear of the TV.</li> <li>Broadcast signals are too strong. Turn off or disconnect the booster if it is in use.</li> </ul>
Double images or ghosting	<ul> <li>Check antenna/cable connections.</li> <li>Check the antenna location and direction. Contact a Sony dealer for advice.</li> <li>Broadcast signals are reflected by nearby mountains or building. Use the fine tuning ("AFT") function (page 27). Otherwise, use a highly direction antenna.</li> <li>Use of a booster is inappropriate. Turn off or disconnect the booster if it is in use.</li> </ul>
Snowy picture and noisy sound	<ul> <li>The antenna connection is loose or the antenna cable is damaged. Check the cable and connection on the TV, VCR, and on the wall (page 4).</li> <li>Channel presetting is inappropriate or incomplete. Perform "Manual Program Preset" in the "Channel Setup" menu to preset the channel again (page 27).</li> <li>The antenna type is inappropriate. Check the antenna type (VHF/UHF). Contact a Sony dealer for advice.</li> <li>Adjust the antenna direction. Contact a Sony dealer for advice.</li> <li>Signal transmission is low. Try using a booster.</li> </ul>

Problem	Cause/Remedy
Only snow and noise appear on the screen	<ul> <li>Check if the antenna is broken or bent.</li> <li>Check if the antenna has reached the end of its serviceable life (three to five years in normal use, one to two years at the seaside).</li> </ul>
Picture (dotted lines or stripes) noise	<ul> <li>Keep the TV away from electrical noise sources such as cars, motorcycles, or hair-dryers, etc.</li> <li>Make sure that the antenna is connected using the antenna cable (supplied).</li> <li>Keep the antenna cable away from other connecting cables.</li> <li>Do not use a 300-ohm twin lead cable as interference may occur.</li> <li>Adjust the antenna direction for the minimum interference. Contact a Sony dealer for advice.</li> </ul>
Picture noise when viewing a TV channel	<ul> <li>Select "Manual Program Preset" in the "Channel Setup" menu and adjust "AFT" to obtain better picture reception (page 27).</li> <li>Select "Noise Reduction" in the "Picture" menu to reduce the noise in the picture (page 19).</li> </ul>
Stripe noise during playback/ recording of a VCR	<ul> <li>Video head interference. Keep your VCR away from the TV.</li> <li>Leave a space of 30 cm between your VCR and the TV to avoid noise.</li> <li>Avoid installing your VCR in front of the TV or beside the TV.</li> </ul>
Good picture, but noisy sound	• The TV system setting is inappropriate. If the sound of all the channels are noisy, perform "Auto Tuning" in the "Channel Setup" menu to preset the channel again (page 26). If the sound of some channels is noisy, select the channel, then perform "Manual Program Preset" in the "Channel Setup" menu, and select the appropriate TV system ("TV System") (page 27).
Good picture, but no sound	<ul> <li>The volume level is too low. Press → + to increase the volume level.</li> <li>The sound is muted. Press n, or → + to cancel the muting.</li> </ul>
Some tiny black points and/or bright points on the screen	• The picture of a display unit is composed of pixels. Tiny black points and/or bright points (pixels) on the screen do not indicate a malfunction.
No color on programs	• Select "Reset" in the "Picture" menu to return to the factory settings (page 18).
No color	<ul><li>The color intensity setting is too low. Select "Color" in the "Picture" menu to adjust the color intensity (page 18).</li><li>Adjust the antenna direction. Contact a Sony dealer for advice.</li></ul>
Lines moving across the TV screen	• There is interference from external sources, e.g., heavy machineries, broadcast station nearby. Use the fine tuning ("AFT") function (page 27).
No color or irregular color when viewing a signal from the Y, PB/CB, PR/CR jacks of → )/ → 1, 2	<ul> <li>Check the connection of the Y, PB/CB, PR/CR jacks of -1, 2.</li> <li>Make sure that the Y, PB/CB, PR/CR jacks of -1, 2 are firmly seated in their respective jacks.</li> </ul>
Picture flashes initially when changing to HDMI mode or switching on the TV with HDMI mode	• It might due to authentication process between HDMI equipment and TV. This does not indicate a malfunction.

Continued

#### Sound

Problem	Cause/Remedy
No sound, but good picture	<ul> <li>Press → +/- or ☆ (Mute).</li> <li>Check that "Speaker" is set to "On" in the "Setup" menu (page 24).</li> </ul>
Noisy sound	• See the "Picture (dotted lines or stripes) noise" cause/remedy on page 33.
"High" is selected in "Audio Filter" when you use "Mono".	• Set to "Low".
Stereo broadcast sound switches on and off, or is distorted; The sound switches between stereo and monaural frequently	<ul> <li>The antenna connection is loose or the antenna cable is damaged. Check the cable and connection on the TV, VCR, and on the wall (page 4).</li> <li>Adjust the antenna direction for the minimum interference. Contact a Sony dealer for advice.</li> <li>Signal transmission is low. Try using a booster. Otherwise, use the fine tuning ("AFT") function (page 27).</li> </ul>
No sound from the computer	• Check the connection of the audio cable (page 28).

#### General

Problem	Cause/Remedy
The TV turns off automatically (the TV enters standby mode)	<ul><li>Check if the Sleep function is activated (page 24).</li><li>"Power Management" is set to "On" when a PC is connected.</li></ul>
Some input sources cannot be selected	• Select "Video Labels" in the "Setup" menu and cancel "Skip" of the input source (page 23).
The remote does not function	• Replace the batteries.
The wide screen mode changes spontaneously when "Auto Wide" is "On"	<ul> <li>During a transition between two programs, the TV detects the optimum wide screen mode. During this period, an irregular wide screen mode may appear.</li> <li>The wide mode is switched automatically according to the revised signal with a Wide ID signal.</li> <li>The Auto Wide feature stops working temporarily when you press ##, and resumes after a while. To fix in the manually selected wide screen mode, set "Auto Wide" to "Off" in the "Screen" menu (page 22).</li> </ul>
Text display is incomplete or garbled	<ul> <li>Your area may not be able to receive Text. Text is displayed only in the area that is covered by Text services.</li> <li>The antenna connection is loose or the antenna cable is damaged. Check the cable and connection on the TV, VCR, and on the wall (page 4).</li> <li>Adjust the antenna direction. Contact a Sony dealer for advice.</li> <li>Signal transmission is too low. Try using a booster.</li> <li>Using the fine tuning ("AFT") function may improve the picture (page 27).</li> </ul>
Cannot play shooting games	• Some shooting games which involve pointing a light beam at the TV screen with an electronic gun or rifle cannot be used with your TV. For details, see the instruction manual supplied with the video game software.
The TV cabinet creaks	• Changes in room temperature sometimes make the TV cabinet expand or contract, causing a noise. This does not indicate a malfunction.
Static discharge is felt when touching the TV cabinet	• This is the same static discharge that is felt when touching metal door handles or car doors especially when the air is dry, for example in winter. This does not indicate a malfunction.

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Printed in Vietnam