SONY

4-000-704-11(2)

LCD Digital Color TV

Operating Instructions

KDL-40SL140
KDL-46SL140

BRAVIA

© 2008 Sony Corporation

Owner's Record

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

Model Name

_____

Serial No.

_____

CAUTION

To prevent electric shock, do not use this polarized AC plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

Declaration of Conformity

Trade Name: SONY
Model: KDL-40SL140/KDL-46SL140
Responsible Party: Sony Electronics Inc.
Address: 16530 Via Esprillo
San Diego, CA 92127 U.S.A.
Telephone Number: 858-942-2230

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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 to 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 antenna.
- ☐ 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.

Pursuant to FCC regulations, you are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Safety

- ☐ Operate the TV only on 120 V AC.
- ☐ Use the AC power cord specified by Sony and suitable for the voltage where you use it.
- ☐ 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.
- ☐ If you will not be using the TV for several days, disconnect the power by pulling the plug itself. Never pull on the cord.
- ☐ When disconnecting AC power cord, the power cord should be easily accessible for disconnection.
- ☐ For details concerning safety precautions, see "Safety and Regulatory Booklet".

Installing

- ☐ The TV should be installed near an easily accessible power outlet.
- ☐ 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.
- ☐ Avoid operating the TV at temperatures below 41°F (5°C).
- ☐ If the TV is transported directly from a cold to a warm location, or if the room temperature changes suddenly, the picture may be blurred or show poor color due to moisture condensation. In this case, please wait a few hours to let the moisture evaporate before turning on the TV.
- ☐ To obtain the best picture, do not expose the screen to direct illumination or direct sunlight. It is recommended to use spot lighting directed down from the ceiling or to cover the windows that face the screen with opaque drapery. It is desirable to install the TV in a room where the floor and walls are not of a reflective material.

CAUTION

Use the following Sony TVs only with the following WALL-MOUNT BRACKET or TV-stand.

	Sony TV Model No.	
	KDL-40SL140	KDL-46SL140
Sony Wall-Mount Bracket Model No.	SU-WL500	
Sony TV Stand Model No.	SU-FL300M	SU-FL300L
Sony Floor Stand Model No.	SU-FL71M	

Use with other WALL-MOUNT BRACKET or TV-stand may cause instability and possibly result in injury.

To Customers

Sufficient expertise is required for installing the specified TV. Be sure to subcontract the installation to Sony dealer or licensed contractors and pay adequate attention to safety during the installation.

Note

This television includes a QAM demodulator which should allow you to receive unscrambled digital cable television programming via subscription service to a cable service provider. Availability of digital cable television programming in your area depends on the type of programming and signal provided by your cable service provider.

For Customers in Canada

This Class B digital apparatus complies with Canadian ICES-003.

For Customers in the United States

Lamp in this product contains mercury. Disposal of these materials may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance (www.eiae.org).

Licensing Information

Macintosh is a trademark licensed to Apple, Inc., registered in the U.S.A. and other countries.

Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

This TV incorporates High-Definition Multimedia Interface (HDMI™) technology. HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC.

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

Fergason Patent Properties, LLC:
U.S. Patent No. 5, 717, 422
U.S. Patent No. 6, 816, 141

Blu-ray is a trademark.

"BRAVIA" and BRAVIA, BRAVIA Theatre Sync and [R] are trademarks or registered marks of Sony Corporation.

"PLAYSTATION" is a registered trademark and "PS3" is a trademark of Sony Computer Entertainment Inc.

DOLBY DIGITAL

HDMI

ENERGY STAR

HDTV HIGH-DEFINITION TELEVISION

SRS(●)® TruSurround XT

Contents

Welcome to the World of BRAVIA®

The Four Steps to Stunning HD Experience: Set, Sound, Source, and Setup 4

Picture Quality and Aspect Ratio 4

Getting Started

1. Installing the TV 5

How to Carry the TV 5

How to Attach the Table-Top Stand 5

Securing the TV 6

Bundling the Connecting Cables 8

Preparation for Wall-Mounting 8

Installing the Wall-Mount Bracket 9

When Installing the TV Against a Wall or Enclosed Area 11

2. Locating Inputs and Outputs 12

3. Connecting the TV 14

Cable System and/or VHF/UHF 14

HD Cable Box/HD Satellite Box 14

PC 16

Other Equipment 17

4. Setting Up the Channel List - Initial Setup 18

Exploring Fun Features

Using BRAVIA Theatre Sync™ with Control for HDMI 19

Remote Control and TV Controls/Indicators

Inserting Batteries 20

When Using the Remote Control 20

Remote Control 21

TV Controls/Indicators 25

Using TV Menus

Navigating through TV Menus 27

Menu Descriptions 27

Using the Shortcuts Menu 28

Using the Picture Menu 30

Using the Sound Menu 31

Using the Screen Menu 32

Using the Channel Menu 34

Using the Parental Lock 35

Using the Setup Menu 38

Other Information

Troubleshooting 41

Specifications 44

Index 45

Quick Setup Guide (separate volume)
Provides a variety of optional equipment connection diagrams.

Customer Support
United States http://www.sony.com/tvsupport
Canada http://www.sony.ca/support
On-line Registration
United States http://productregistration.sony.com
Canada http://www.sonystyle.ca/registration

Welcome to the World of BRAVIA®

Thank you for purchasing this Sony BRAVIA® high-definition television. The quality of the image you see on your **BRAVIA** TV is only as good as the quality of the signal it receives. To experience the stunning detail of your new **BRAVIA** TV, you need access to HD programming. Your **BRAVIA** TV can receive and display HD programming from:

- Over-the-air broadcasting via HD-quality antenna
- HD cable subscription
- HD satellite subscription
- Blu-ray Disc™ player or other external equipment

Contact your cable or satellite provider for information on upgrading to HD programming.

To learn more about HDTV, visit:
U.S.A http://www.sony.com/HDTV
Canada http://www.sonystyle.ca/hd

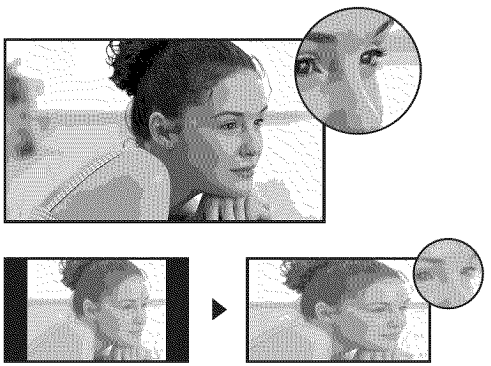
The Four Steps to Stunning HD Experience: Set, Sound, Source, and Setup

Along with your **BRAVIA** TV **set**, a complete HD system requires an HD **sound** system, a **source** of HD programming and proper **setup** connections. This manual explains basic setup connections (see page 14). The Quick Setup Guide, enclosed separately, illustrates how to connect other optional equipment.

Picture Quality and Aspect Ratio

You can enjoy crisp, clear images, smooth movement and high-impact visuals from 1080p HD signals. When you compare a high-definition signal to a standard analog signal, you will notice a big difference. The 1080p HD signals provide more than twice the vertical resolution of the standard TV signal.

High-definition and standard-definition signals are transmitted with different aspect ratios (the width-to-height ratio of the image). HDTV uses a wider screen than conventional standard-definition TV.



16:9 (high-definition) source

Most HDTV signals use a wide screen aspect ratio of 16:9. The 16:9 fills your **BRAVIA** screen, maintaining a crisp, clear, vivid picture.

4:3 (standard-definition) source

Most standard-definition signals use a boxy 4:3 aspect ratio. When a 4:3 image is displayed on an HDTV, you will see black bars on the sides. The picture quality may not be as sharp as with HD sources.

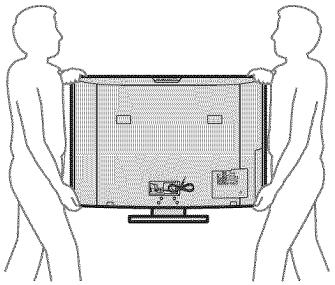
- You can use the **Wide Mode** function of the TV to adjust the 4:3 image to fit the entire screen (see pages 23 and 32).
- This TV supports signals up to 1080p only through HDMI input.

1. Installing the TV

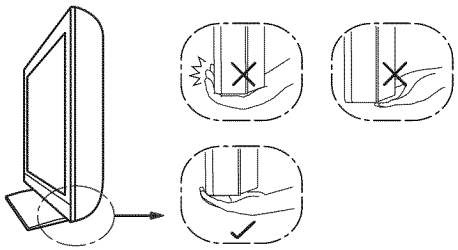
How to Carry the TV

Be sure to follow these guidelines to protect your properties and avoid causing serious injury.

- Before carrying the TV, disconnect all cables.
- Carrying the large size TV requires two or more people.
- When you carry the TV, place your hand as illustrated and hold it securely. Do not put stress on the LCD panel.
- When carrying the TV, do not subject it to shocks or vibration, or excessive force.



- Place your palm directly underneath.

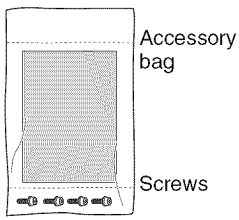


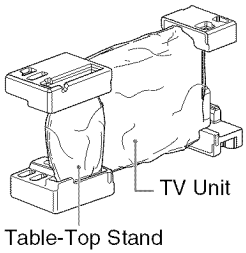
How to Attach the Table-Top Stand

The Table-Top Stand for this product is packaged separately. Install the TV unit to the Table-Top Stand before the connection and setup.

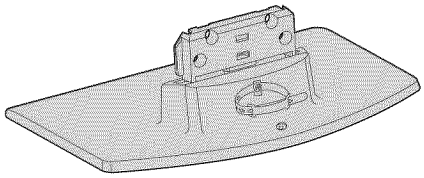
1 Take out the Table-Top Stand from the cushion and the four screws from the accessory bag.

- You will find the Table-Top Stand next to the TV unit.
- Keep the screws away from children.



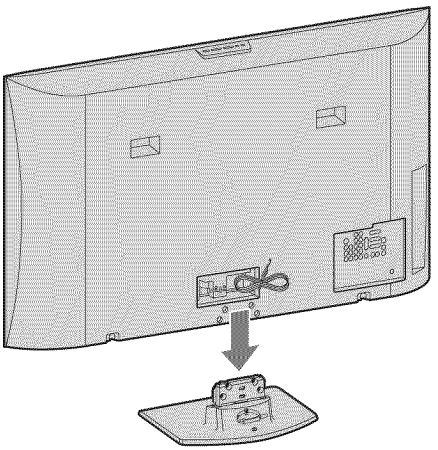


2 Place the Table-Top Stand onto a level and stable surface.



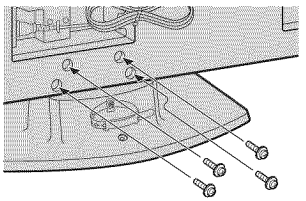
(Continued)

3 Gently slide the TV unit onto the neck of the Table-Top Stand and align the screws holes.



• When you carry the TV unit, place your hand as illustrated on page 5 and hold it securely. Do not put stress on the LCD panel or the frame around the screen.
• Be careful to not pinch your hands or the AC power cord when installing the TV unit onto the Table-Top Stand.

4 Use the supplied screws to attach the TV unit to the Table-Top Stand (refer to the "Attaching the Table-Top Stand" flyer).



•If you use an electric screwdriver, set the torque for tightening at approximately 1.5 N·m {15Kgf·cm}.

Securing the TV

Sony strongly recommends taking measures to prevent the TV from toppling over. Unsecured TVs may topple and result in property damage, serious bodily injury or even death.

Prevent the TV from Toppling

- ☐ Secure the TV to a wall and/or stand.
- ☐ Do not allow children to play or climb on furniture and TV sets.
- ☐ Avoid placing or hanging items on the TV.
- ☐ Never install the TV on:
  - slippery, unstable and/or uneven surfaces.
  - furniture that can easily be used as steps, such as a chest of drawers.
- ☐ Install the TV where it cannot be pulled, pushed, or knocked over.
- ☐ Route all AC power cords and connecting cables so that they are not accessible to children.

Use a Sony TV Stand

Use a Sony specified TV stand (see page 2) and follow the instruction manual provided with the Sony TV stand.

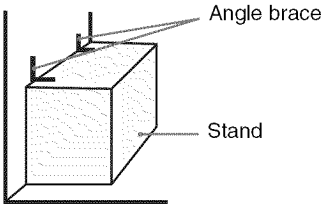
If a Sony specified TV stand is not used, consider the following recommended measures.

Recommended Measures to Secure the TV

1 Secure the stand for the TV.

Make sure the TV stand can adequately support the weight of the TV. Use two angle braces (not supplied) to secure the stand.
For each angle brace use the appropriate hardware to:

- Attach one side of the angle brace to the wall stud.
- Attach the other side to the TV stand.

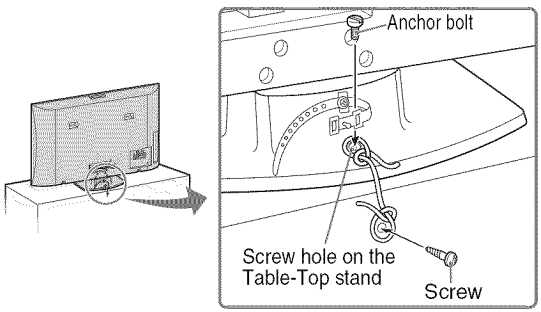


2 Secure the TV to the stand.

Use the optional hardware listed below (not supplied):

- M6 × 10-12 mm anchor bolt (screwed into the TV's Table-Top stand).
- A screw or similar (attach it to the TV stand).
- Rope or chain (strong enough to support the weight of the TV). Make sure that there is no excess slack in the rope or chain.

An alternative way to secure the TV is with an optional Sony Support Belt Kit.



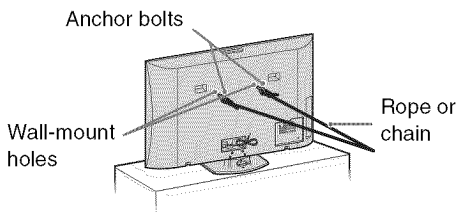
Contact Sony Customer Support to obtain the optional Support Belt Kit by providing your TV model name.

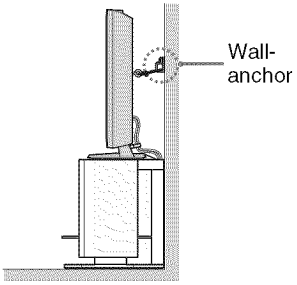
- For United States call: 1-800-488-7669 or visit: www.sony.com/accessories
- For Canada call: 1-877-899-7669

3 Anchor the TV to the Wall.

Use the hardware listed below (not supplied):

- Two M6 × 12-18 mm anchor bolts (screw into the top-most wall-mount holes located on the rear of the TV).
- Rope or chain (attach to one M6 anchor bolt).
- Wall-anchor (attach to the wall stud) strong enough to support the weight of the TV (pass the rope through the wall-anchor, then attach to the other M6 anchor bolt).



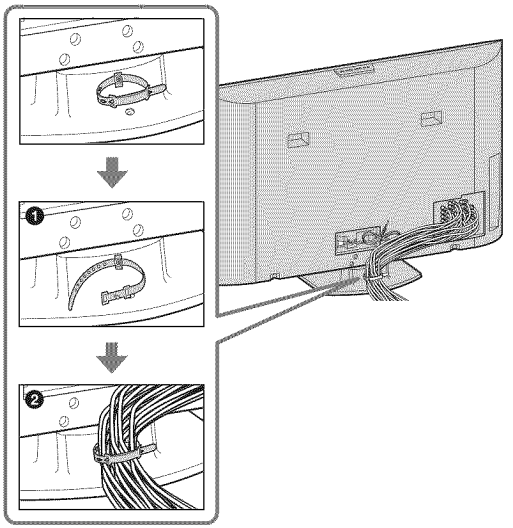


- Measure 2 provides minimal protection against the TV toppling over. For further protection, follow all three measures recommended above.

(Continued)

Bundling the Connecting Cables

You can bundle the connecting cables as illustrated below.



- Do not bundle the AC power cord with other connecting cables.

Preparation for Wall-Mounting

This TV can be installed on a wall by using a Wall-Mount Bracket (sold separately). Before mounting the TV on a wall, the Table-Top Stand must be removed from the TV.

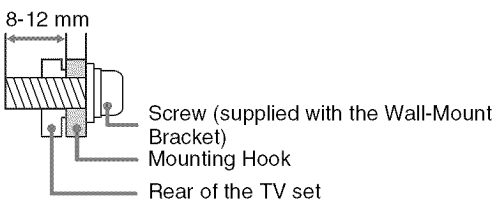
- Do not remove the Table-Top Stand for any reason other than to wall-mount the TV.
- **For product protection and safety reasons, Sony strongly recommends that you use the Wall-Mount Bracket model designed for your TV and the wall-mounting of your TV should be performed by a Sony dealer or licensed contractor.**

Use your TV with the following WALL-MOUNT BRACKET only.

	Sony TV Model No.
	KDL-40SL140 KDL-46SL140
Sony Wall-Mount Bracket Model No.	SU-WL500

- For bracket installation, refer to the instructions on page 9 and the instruction guide provided by the Wall-Mount Bracket model for your TV. Sufficient expertise is required for installing this TV, especially to determine the strength of the wall that will withstand the TV's weight.
- Be sure to store the removed screws and Table-Top Stand in a safe place until you are ready to reattach the Table-Top Stand. **Keep the screws away from children.**
- Be sure to use the screws supplied with the Wall-Mount Bracket when attaching the mounting hooks to the TV set.

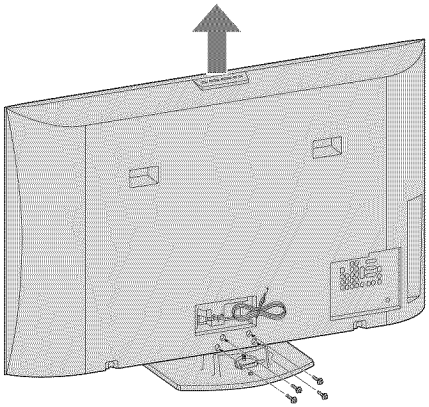
  The supplied screws are designed so that they are 8 mm to 12 mm in length when measured from the attaching surface of the mounting hook. The diameter and length of the screws differ depending on the Wall-Mount Bracket model. Use of screws other than those supplied may result in internal damage to the TV set or cause it to fall, etc.



Follow the simple steps below to remove the Table-Top Stand:

1 Disconnect all the cables from the TV.

2 Remove the four screws from behind the TV as indicated below. **Do not remove any other screws from the TV.**



3 Gently lay the TV (face down) onto a level and stable surface covered with a thick and soft cloth.

4 Secure the Mounting Hooks to the rear of the TV. For more details refer to **Install the Wall-Mount Bracket** and also the instruction guide provided by the Wall-Mount Bracket model for your TV.

• **If an electric screwdriver is used, set the torque to tighten at approximately 1.5 N·m {15Kgf·cm}.**

Installing the Wall-Mount Bracket

To Customers

Your KDL-40SL140/KDL-46SL140 can be wall-mounted using a Wall-Mount Bracket (sold separately). See table on page 8 showing the Wall-Mount Bracket model appropriate for your TV.

For product protection and safety, Sony strongly recommends that you use the Wall-Mount Bracket designed for your TV and wall-mounting is performed by a Sony dealer or a licensed contractor. Do not attempt to install it yourself. Sony is not liable for any damage or injury caused by mishandling or improper installation.

Please provide your licensed contractor with this installation information as well as instructions supplied with the Wall-Mount Bracket.

To Sony Dealers and Licensed Contractors

To avoid injury and property damage, read these instructions carefully. Periodic inspection and maintenance is highly recommended to ensure that TV is securely mounted.

Installing the Wall-Mount Bracket and Mounting Hooks

1 Open the Wall-Mount Bracket package and check for all the required parts including the instruction.

2 See the Installation Dimensions Table on page 10 to determine the best location for wall-mounting. The wall must be strong enough to support at least four times the weight of the TV. Also refer to the instruction provided with your Wall-Mount Bracket.

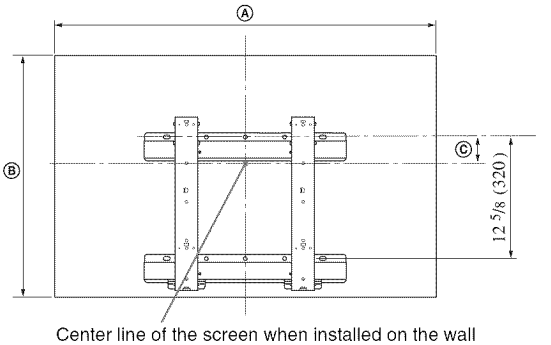
(Continued)

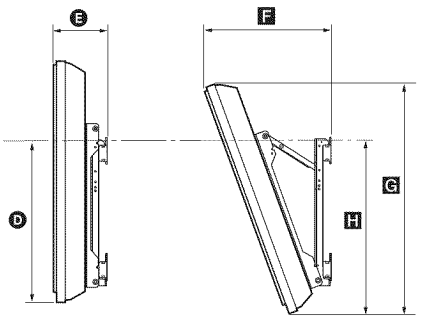
Installation Dimensions Table

Unit: inches (mm)	TV Model	KDL-40SL140	KDL-46SL140
TV dimensions	Ⓐ	44 1/8 (1,119)	49 3/8 (1,252)
	Ⓑ	24 1/4 (615)	27 1/4 (691)
Screen center dimensions	Ⓒ	4 7/8 (122)	3 3/8 (84)
Length for each mounting angle Angle (0°)	Ⓓ	17 1/4 (438)	17 1/4 (437)
	Ⓔ	6 3/4 (171)	7 (176)
Angle (20°)	Ⓕ	14 (354)	15 1/4 (385)
	Ⓖ	23 1/8 (587)	26 (659)
	Ⓗ	18 3/4 (476)	18 7/8 (477)
Weight	TV	43 lb. (19.5 kg)	57 lb. (25,5 kg)
	x4	172 lb. (78 kg)	228 lb. (102 kg)

- The installation dimensions may differ according to how the TV is installed.
- The wall must be strong enough to support at least four times the weight of the TV that you are installing.

Unit: inches (mm)





3 Install the Base Bracket on the wall. Refer to the instruction provided with your Wall-Mount Bracket.

4 Disconnect all cables and remove the Table-Top Stand. See page 8 for details.

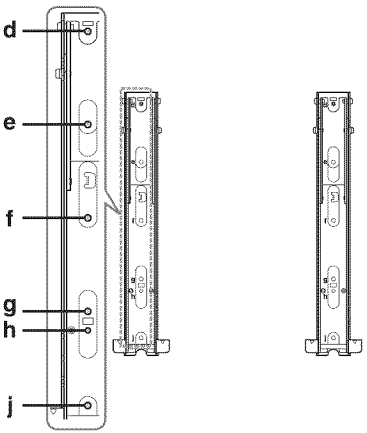
5 Install Mounting Hooks on the TV. See Screw and Hook Locations Diagram below.

Screw and Hook Locations Diagram

TV Model	Screw location	Hook location
KDL-40SL140 KDL-46SL140	d, g	b

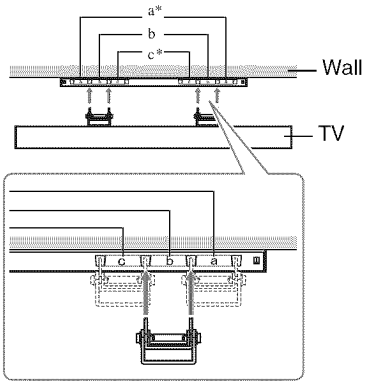
Screw location

When installing the Mounting Hooks on the TV.



Hook location

When installing the TV onto Base Bracket.

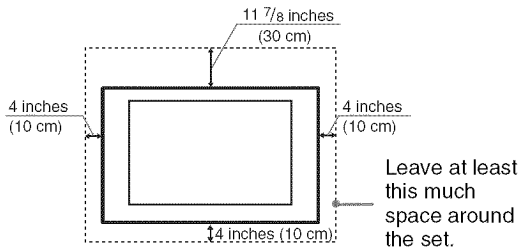


* Hook position "a" and "c" cannot be used for the models in the table above.

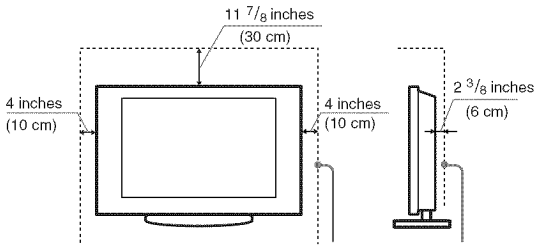
When Installing the TV Against a Wall or Enclosed Area

Make sure that your TV has adequate air circulation. Allow enough space around the TV as shown below.

Installed on the wall

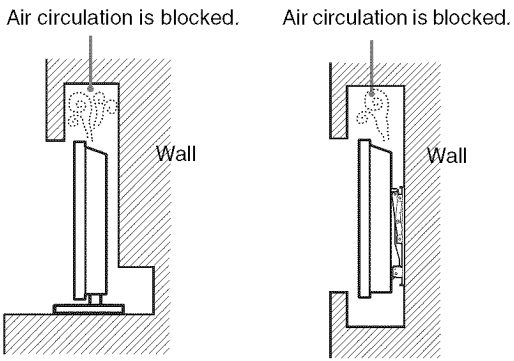


Installed with stand



Leave at least this much space around the set.

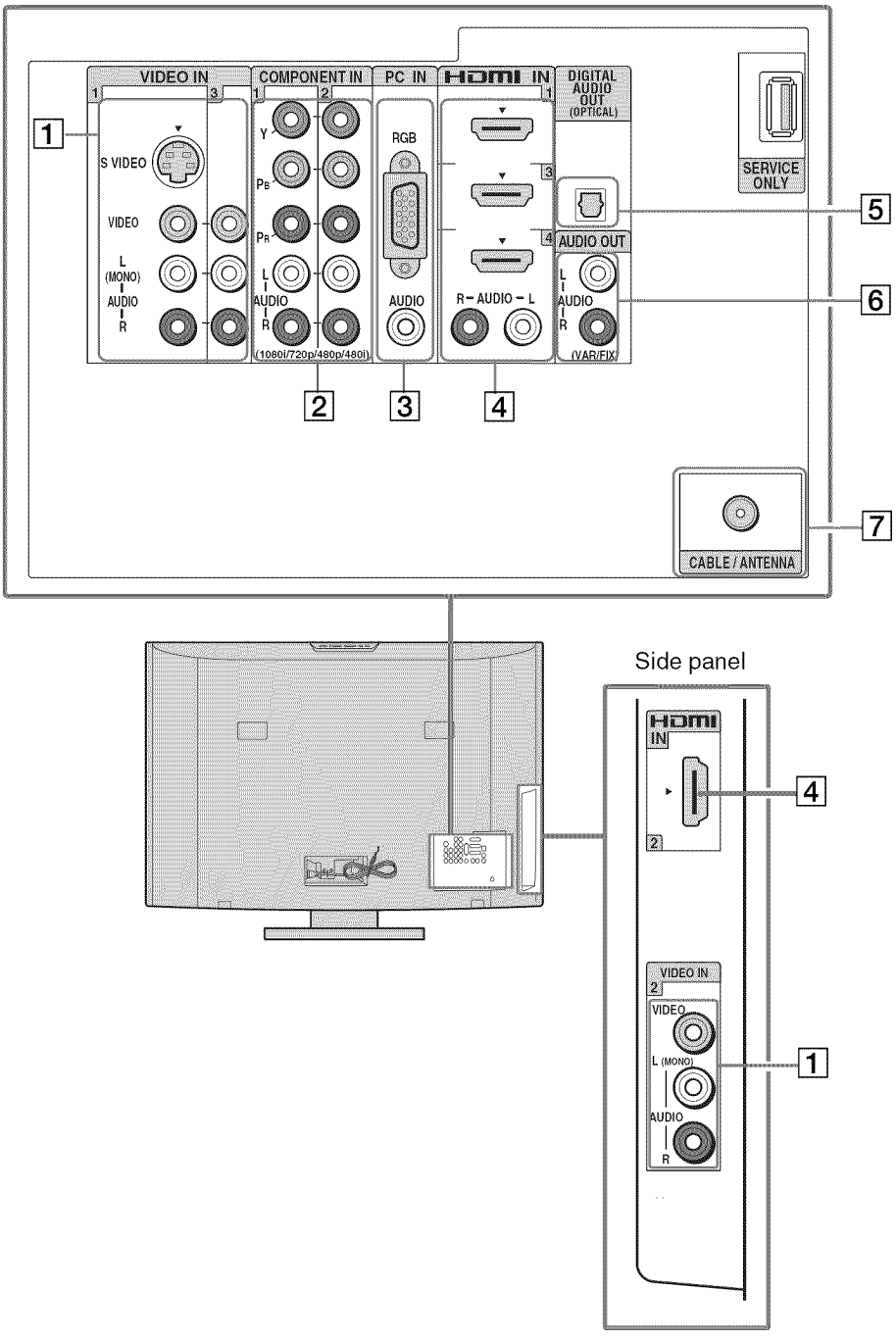
Never install the TV set as follows:

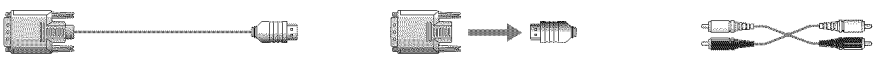


- Inadequate air circulation can lead to overheating of the TV and may cause damage to your TV or cause fire.

2. Locating Inputs and Outputs

Rear of TV



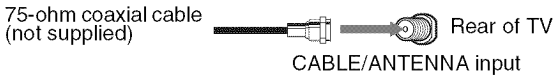
Item		Description
1	**VIDEO IN 1 S VIDEO**	Connects to the S VIDEO output jack of your DVD or other video equipment that has S VIDEO which provides better picture quality than composite video. The S VIDEO does not provide sound; you will need to connect the audio cables.
	VIDEO IN 1/2/3 VIDEO/ L(MONO)-AUDIO-R	Connects to the composite video and audio output jacks on your A/V equipment such as a DVD player or other video equipment. VIDEO IN 2 input is located on the left side panel of the TV.
2	**COMPONENT IN 1/2 (1080i/ 720p/480p/480i)/ L-AUDIO-R**	Connects to your DVD player's or digital set-top box's component video ($Y P_B P_R$) and audio (L/R) jacks. Component video provides better picture quality than the S VIDEO or the composite video connections (1).
3	**PC IN (RGB/AUDIO)**	Connects to a personal computer's video output connector using an HD15-HD15 cable (analog RGB, not supplied). See "PC Input Signal Reference Chart" on page 16 for the signals that can be displayed. • For some Apple Macintosh computers, it may be necessary to use an adapter (not supplied). If this is the case, connect the adapter to the computer before connecting the HD15-HD15 cable.
4	**HDMI IN 1/2/3/4 R-AUDIO-L**	HDMI (High-Definition Multimedia Interface) provides an uncompressed, all-digital audio/video interface between this TV and any HDMI-equipped A/V equipment. HDMI supports enhanced, or high-definition video, plus digital audio. If the equipment has a DVI jack and not an HDMI jack, connect the DVI jack to any HDMI IN (with DVI-to-HDMI cable or adapter) jack, and connect the audio jack to the AUDIO IN (L/R) jacks below the HDMI IN 4.  DVI-to-HDMI cable DVI-to-HDMI adapter Audio cable • Be sure to use only an HDMI cable that bears the HDMI logo. • When connecting a DVI-equipped PC to an HDMI jack, also connect an Audio cable between the PC and R-AUDIO-L jack. • The HDMI input has been fitted to suit A/V equipment such as DVD players for 480i, 480p, 720p, 1080i and 1080p signals. PC generated signals may not be rendered as expected due to scaling factors. For better PC view, use the PC IN (RGB IN) input. Note that this TV displays all video input signals in a resolution of 1,920 dots × 1,080 lines.
5	**DIGITAL AUDIO OUT (OPTICAL)**	Connects to the optical audio input of a digital audio equipment that is PCM compatible.
6	**AUDIO OUT (VAR/FIX) L-AUDIO-R**	Connects to the left and right audio input jacks of your audio or video equipment. You can use these outputs to listen to your TV's audio through your stereo system. • Audio Out level is VARIABLE while **Speakers** are **On**, when **Speakers** control is turn **Off** the level in the Audio Out is FIXED (see page 31).
7	**CABLE/ ANTENNA**	RF input that connects to your cable or VHF/UHF antenna.

• Component video ($Y P_B P_R$) connection are necessary to view 480i, 480p, 720p and 1080i video formats.
• HDMI input supports signals up to 1080p.
• 1080p format can only be supported through HDMI inputs.
• This TV displays all video input signals in a resolution of 1,920 dots × 1,080 lines.

3. Connecting the TV

Cable System and/or VHF/UHF

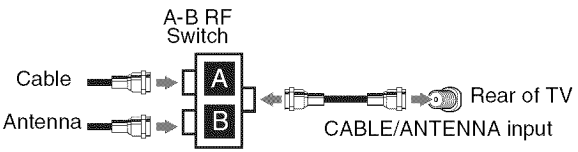
Cable or VHF/UHF (or VHF only)



- It is strongly recommended that you connect the antenna/cable input using a 75-ohm coaxial cable (not supplied) to receive optimum picture quality. A 300-ohm twin lead cable can be easily affected by radio frequency interference, resulting in signal degradation.

Cable and VHF/UHF (or VHF only)

If you want to watch both cable and antenna (over-the-air) programming, you will need to use an optional A-B RF Switch (not supplied) to switch between the cable and over-the-air antenna programming, as shown.

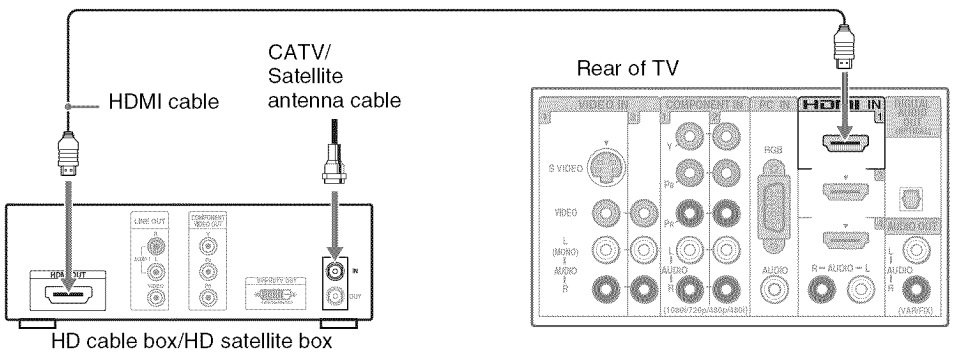


- Be sure to set **Cable** setting to **On** or **Off** in **Channel** menu for the type of input signal you choose (see page 34 for more details).

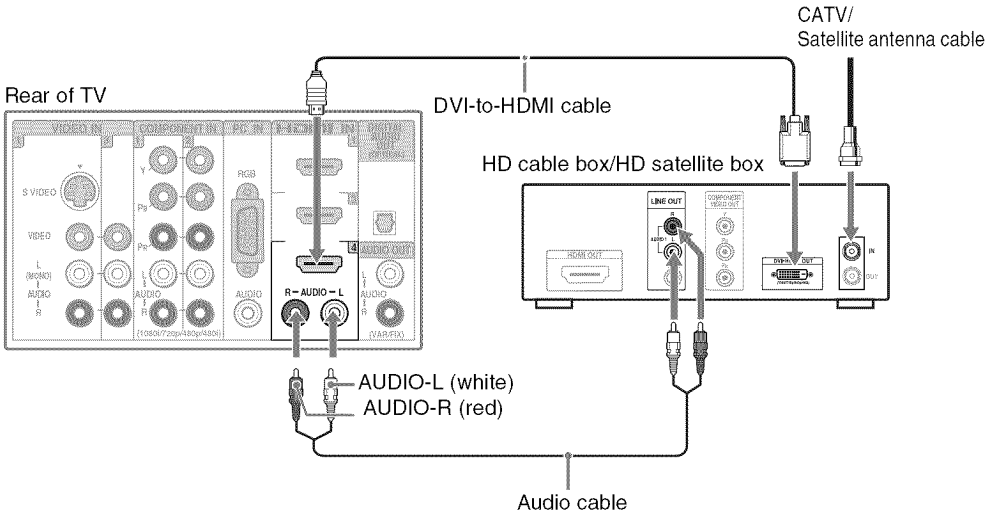
HD Cable Box/HD Satellite Box

You can also enjoy high-definition programming by subscribing to high-definition cable service or high-definition satellite service. For the best possible picture, connect these components to your TV via the HDMI or component video (with audio) input on the back of your TV.

Shown with HDMI Connection

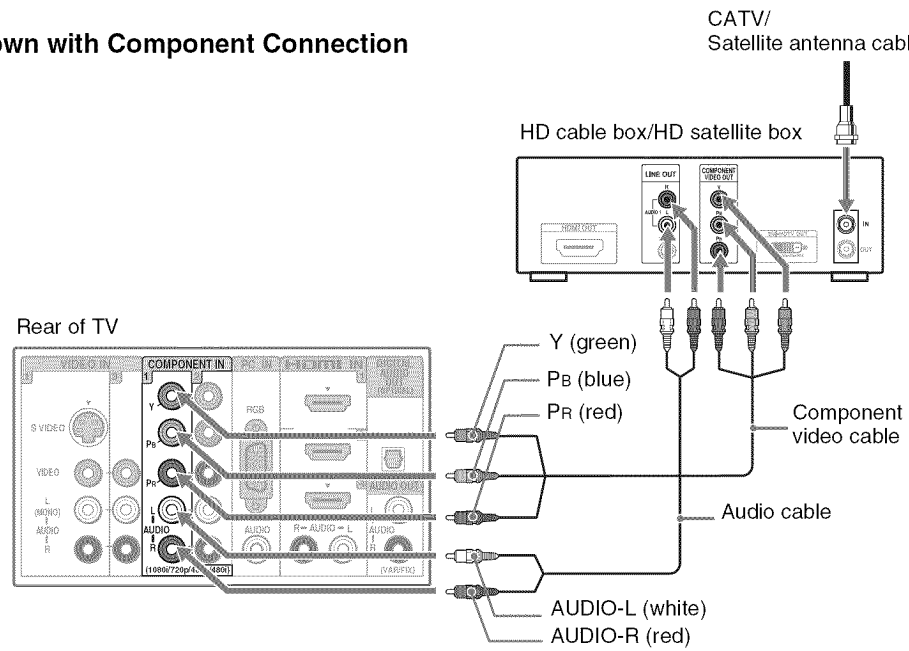


Shown with DVI Connection



- If the equipment has a DVI jack and not an HDMI jack, connect the DVI jack to any HDMI IN (with DVI-to-HDMI cable or adapter) jack and connect the audio jack to the AUDIO IN (L/R) jacks below the HDMI IN 4. For details, see page 13.

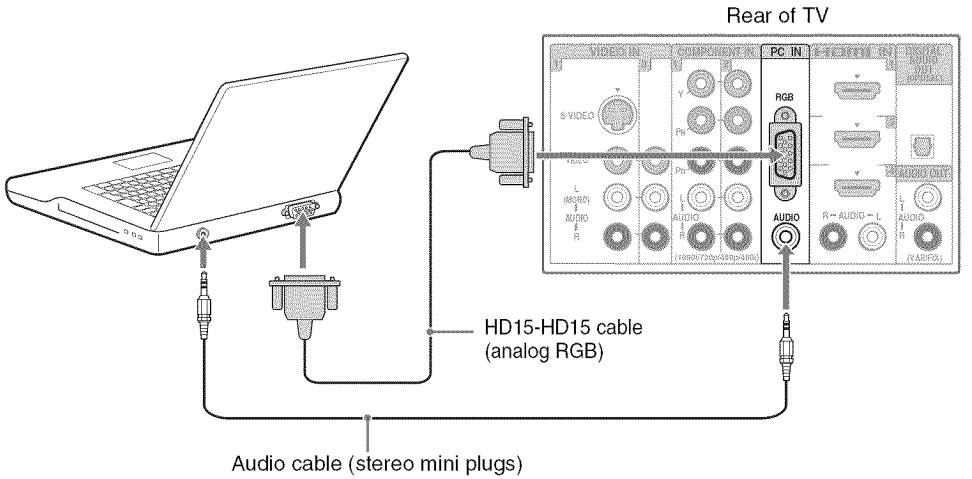
Shown with Component Connection



(Continued)

PC

Use the TV as a monitor for your PC by connecting an HD15-HD15 cable as shown below. This TV can also be connected to a PC with a DVI or HDMI output. (Refer to the separate Quick Setup Guide.)



- Connect the PC IN jack to the PC using an HD15-HD15 cable with ferrite core (analog RGB) and audio cable (page 13).
- The PC IN does not support 1080p format.

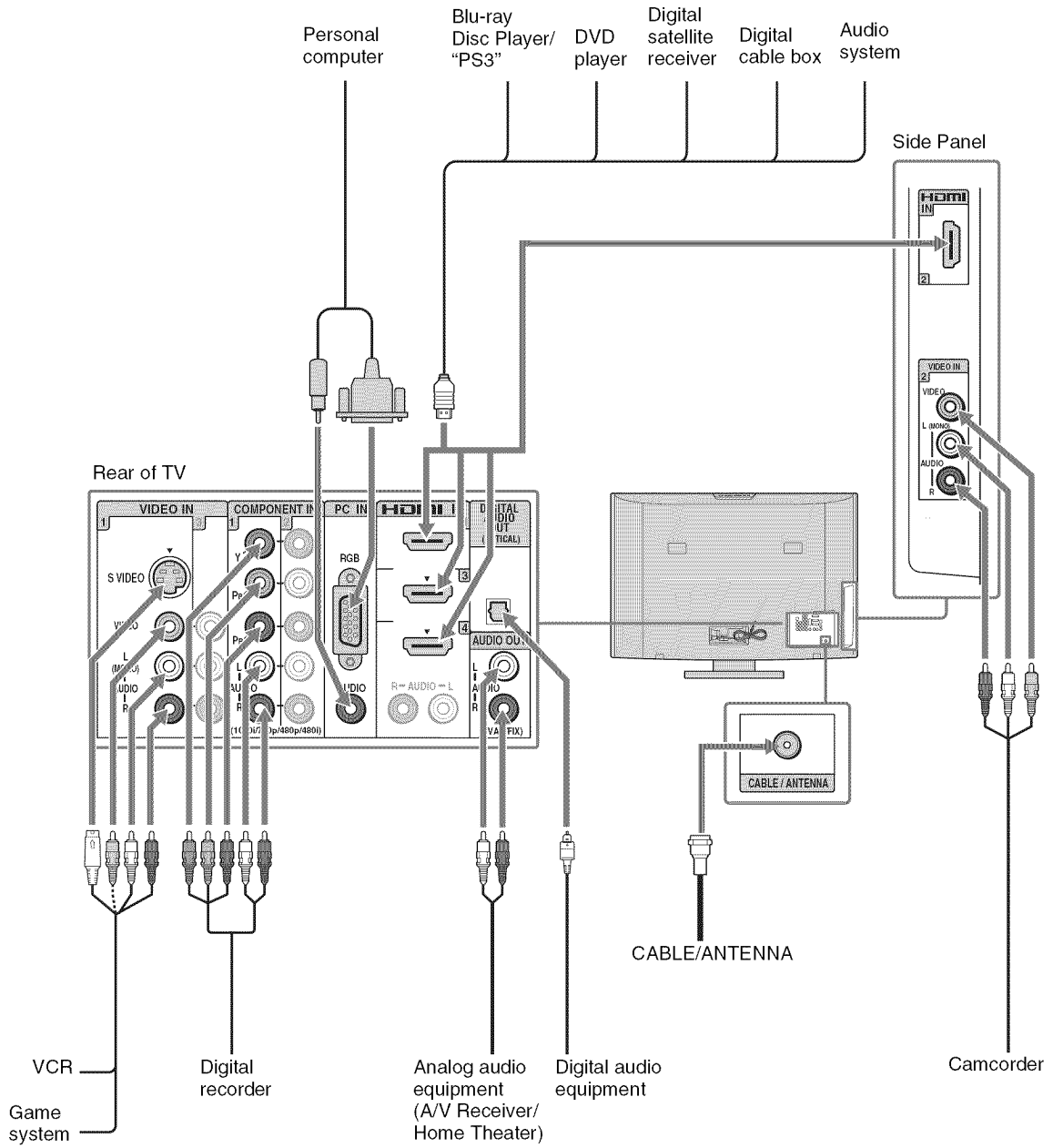
PC Input Signal Reference Chart

After connecting the PC to the TV, set the output signal from the PC according to the chart below.

Signals	Resolution Horizontal (Pixel)	×	Vertical (Line)	Horizontal frequency (kHz)	Vertical frequency (Hz)	Standard
VGA	**640**	×	**480**	**31.5**	**60**	**VGA**
	640	×	480	37.5	75	VESA
SVGA	**800**	×	**600**	**37.9**	**60**	**VESA Guidelines**
	800	×	600	46.9	75	VESA
XGA	**1,024**	×	**768**	**48.4**	**60**	**VESA Guidelines**
	1,024	×	768	56.5	70	VESA
	1,024	×	768	60.0	75	VESA
WXGA	**1,280**	×	**768**	**47.8**	**60**	**VESA**
	1,360	×	**768**	**47.7**	**60**	**VESA**

- This TV's PC input does not support Sync on Green or Composite Sync.
- This TV's PC VGA 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 60 Hz vertical frequency from a personal computer. In plug and play, signals with a 60 Hz vertical frequency will be detected automatically. (PC reboot may be necessary.)
- 1080p format can only be supported through HDMI inputs.

Other Equipment



• Refer to the Quick Setup Guide (supplied) when connecting other equipment to your TV.

4. Setting Up the Channel List - Initial Setup

After you finish connecting your TV, you need to run **Initial Setup**, which automatically sets up available channels. The **Initial Setup** screen appears when you turn on your TV for the first time. If you do not want to set up the channels at this time, you can do it later by selecting the **Auto Program** option in the **Channel** menu (see page 34).

1 Press POWER ⏻ to turn on the TV.

The **Initial Setup** screen appears.

2 Press ↑/↓ to highlight the desired language, then press ⊕.

3 Connect cable or antenna, then select **Yes** to run **Auto Program**.

- If you want to run **Auto Program** at a later time, select **No**.
- If you have cable and antenna available, please connect cable first.
- **IMPORTANT: You must perform Auto Program after the cable or antenna is connected. If you cancel Auto Program before completion some channels may not be available.**

4 Follow the help text provided on the screen to run **Auto Program**. The **Auto Program** will scan for available channels from the signal source directly connected to the TV's CABLE/ANTENNA input.

5 When the **Auto Program** is complete, select **OK** to finish the **Auto Program** process.

To run Auto Program at a later time

❑ Use the **Auto Program** feature at **Channel** menu as described on page 34.

To display the picture in your preferred aspect ratio

❑ Select the proper **Wide Mode** as described on pages 23 and 32.

- You may want to set up convenient features such as **Favorites** (see page 28, 34), **Show/Hide Channels** (see page 34), **Label Channels** (see page 34) when **Auto Program** is completed.

Using BRAVIA Theatre Sync™ with Control for HDMI

This TV is equipped with BRAVIA Theatre Sync™. The **Control for HDMI** function enables BRAVIA Theatre Sync to allow communication between Sony TV's and Sony equipment. Only Sony equipment with **Control for HDMI** capability is supported.

To connect Sony equipment with Control for HDMI

Use an HDMI cable that bears the HDMI logo for connection. See pages 14 to 17 or see the HDMI connection shown in the Quick Setup Guide provided with the TV documentation.

Setting the Control for HDMI

In order for the function of **Control for HDMI** to operate, the TV and other Sony equipment with **Control for HDMI** function must be setup (see page 39). For other equipment, refer to the operating instruction for that equipment.

Control for HDMI available with your TV

The following operations are available after you connect the Sony equipment with **Control for HDMI** function to your TV:

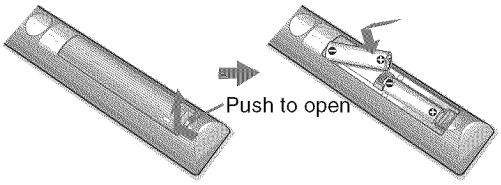
- Automatically turn off the connected equipment when you turn off the TV.
- The TV will automatically turn on and tunes to the respective HDMI input when the connected equipment is turned on by One-Touch-Play.
- Equipment listed under **External Inputs** will turn on automatically when selected.

When connecting a Sony A/V receiver with the BRAVIA Theatre Sync function to your TV, the following operation is possible:

- Pressing THEATER on the remote control turns on and searches for an external audio system that supports BRAVIA Theatre Sync. When the Theatre Sync audio system is on, the internal speakers of the TV will turn off and the **Picture Mode** will change automatically to **Cinema**.

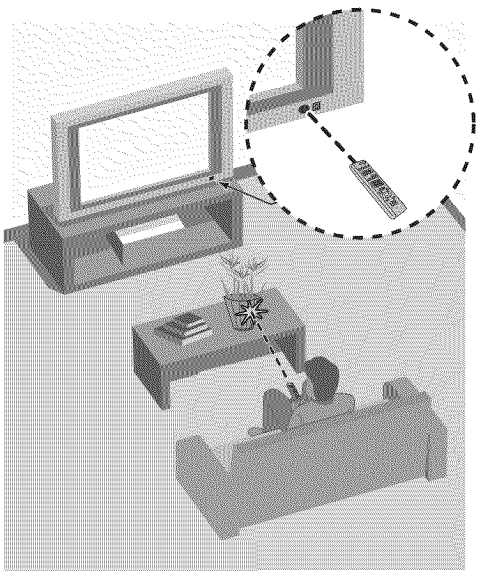
- When using BRAVIA Theatre Sync or other BRAVIA Sync features, the included remote control will change some of the buttons functions to accommodate control over the device. If the device does not support this feature, some buttons will remain without function.

Inserting Batteries



Insert two size AA batteries (supplied) by matching ⊕ and ⊖ on the batteries to the diagram inside the battery compartment of the remote control.

When Using the Remote Control



Follow the guidelines below

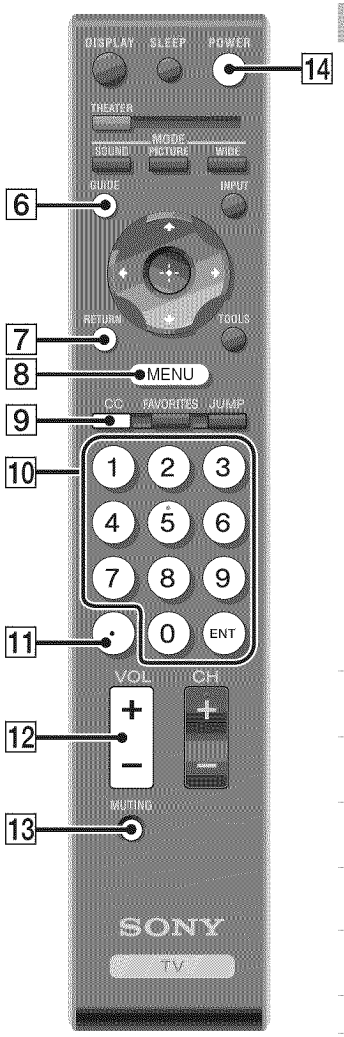
- Point your remote control directly at the IR sensor located on your TV.
- Make sure that no objects are blocking the path between the remote control and IR sensor on your TV.
- Fluorescent lamps can interfere with your remote control; try turning off the fluorescent lamps.
- If you are having troubles with the remote control, reinsert or replace your batteries and make sure that they are correctly inserted.

Remote Control

Button	Description
1 **DISPLAY**	Press once to display the information pertaining to the channel and/or program when available. The OSD (On Screen Display) will time out in a few seconds or press again to immediately turn off the display.
2 **SLEEP**	Press repeatedly until the TV displays the time in minutes (**Off**, **15**, **30**, **60** or **120 minutes**) that you want the TV to remain on before shutting off. To cancel **Sleep Timer**, press SLEEP repeatedly until **Off** appears.
3 **THEATER**	Press to turn on and off the **Theater Mode**. The picture settings will be set for a cinema-like experience and the audio will be switched to the audio output of the attached speakers of your BRAVIA Theatre Sync audio system. Your BRAVIA Theatre Sync audio system must be connected by an HDMI connection to your TV (see page 14 for details).
4 **SOUND**	Press repeatedly to step through the **Sound Mode** settings: **Dynamic**, **Standard**, **Game**, **Clear Voice**, **Custom**. These **Sound Mode** settings can be also accessed in the **Sound** menu (see page 31).
5 **PICTURE**	Press repeatedly to cycle through the available picture modes: **Vivid**, **Standard**, **Cinema**. The picture modes can also be accessed in the **Picture** menu. For details, see page 30.

- The **5** and **CH +** buttons have a tactile dot. Use them as a reference when operating the TV.

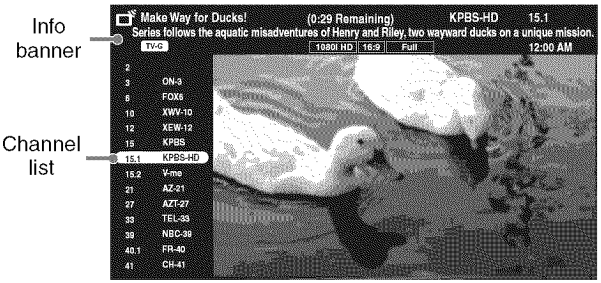
(Continued)



Button	Description
6 **GUIDE**	Press to display the Guide when you are watching channels (if it is available from the station).

Using the Guide

The Guide allows you to select the channels from a channel list and also provides information about the current program being shown on each channel.



- Program information in the guide is provided by the broadcasters. As a result, it may sometimes include only the channel number, without a program title or description.

7 **RETURN**	Press to go back to the previous screen or exit from the screen when displaying menu items and settings.
8 **MENU**	Press to display the menu with TV functions and settings. See "Using TV Menus" on page 27.
9 **CC**	Press to turn on and off the **Closed Captions (CC)**. To change or customize the **CC** display, see page 38.
10 **0-9/ENT**	Press 0-9 to select a channel; the channel changes after few seconds. Press ENT to change channels immediately.
11 ·	Use with 0-9 and ENT to select digital channels. For example, to enter 2.1, press 2, ·, 1 and ENT.
12 **VOL +/–**	Press to adjust the volume.
13 **MUTING**	Press to mute the sound. Press again or press **VOL +** to restore the sound.
14 **POWER**	Press to turn on and off the TV.

Button	Description
15 **WIDE**	Press repeatedly to step through the **Wide Mode** settings: **Wide Zoom**, **Normal**, **Full**, **Zoom**. The **Wide Mode** settings can be also accessed in the **Screen** menu (see page 32).

Changing the Wide Screen Mode

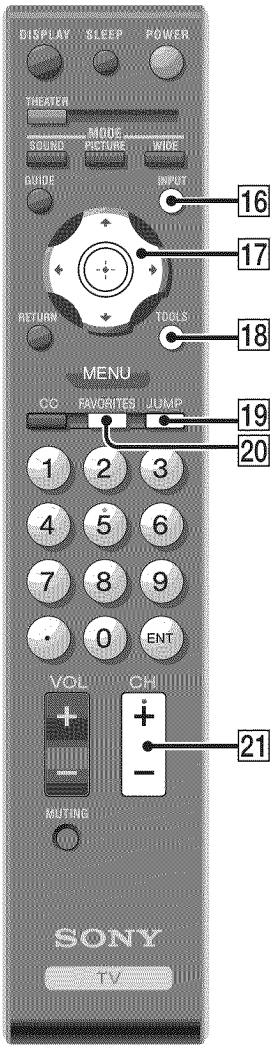
4:3 Original source Standard-definition source	**16:9 Original source** High-definition source
↓	↓
Wide Zoom	**Wide Zoom**
Normal	**Normal** This mode is not available
Full	**Full**
Zoom	**Zoom**

- **Normal** is available with 480i or 480p sources only.
- **Full Pixel** is only available with 1080p source.

Changing the Wide Screen Mode for PC Timing

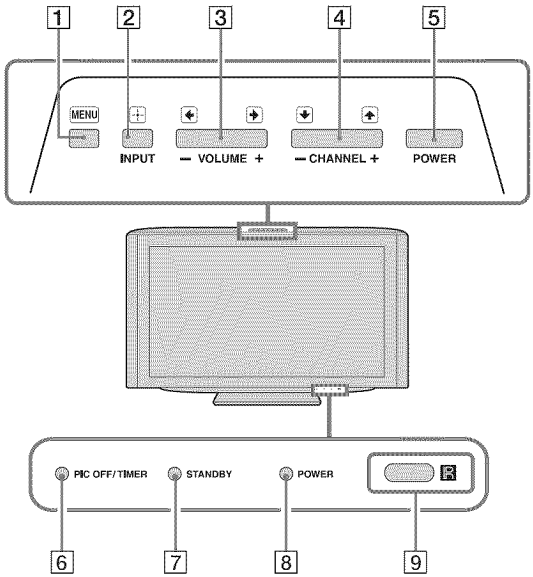
Incoming PC signal 800 × 600	**Incoming PC signal** 1,280 × 768
↓	↓
Wide Zoom	**Wide Zoom**
Normal	**Normal**
Full	**Full**
Zoom	**Zoom**

(Continued)



Button	Description
16 **INPUT**	Press to display the list of **External Inputs** and TV mode. Press repeatedly to toggle through the inputs. • See page 38 (**Label Inputs**) on setting up the **External Inputs** labels.
17 ↑/↓/←/→ ⊕	Press ↑/↓/←/→ to move the on-screen cursor. Press ⊕ to select/confirm an item.
18 **TOOLS**	This button supports different functions depending on the condition. When PC input is active, press TOOLS to view a channel at the same time as a **PIP** (picture in picture) screen (see page 29 for details). When antenna input is active and the broadcast includes Regional Digital Ratings, press TOOLS to view the list of special ratings. When an HDMI controlled equipment is active, press TOOLS to access the equipment menu, if the equipment supports the function.
19 **JUMP**	Press to alternate between two channels. The TV will alternate between the current channel and the last channel tuned with the buttons 0-9 and · on the remote control.
20 **FAVORITES**	This feature lets you create and choose a list of up to eight favorite channels or inputs. Press ↑/↓ to select the option **Add to Favorites**, and press ⊕ to add the current channel or input to your **Favorites** list. • Your **Favorites** list will be cleared each time you run **Auto Program** (see pages 18 and 34).
21 **CH +/–**	Press to scan through channels. To scan quickly through channels, press and hold down either **+/–**.

TV Controls/Indicators



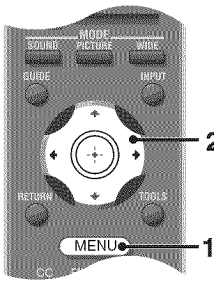
Item	Description
1 **MENU**	Press to display the menu with TV functions and settings (see "Using TV Menus" on page 27).
2 **INPUT**	Press to display the **External Inputs** list, toggle through the list and select your desired input. In the menu screen, this button serves as confirming the selection or setting.
3 **– VOLUME +**	Press to adjust the volume. In the menu screen, these buttons serve as left/right buttons.
4 **– CHANNEL +**	Press to scan through channels. In the menu screen, these buttons serve as up/down buttons.
5 **POWER**	Press to turn on and off the TV.
6 **PIC OFF/TIMER LED**	Lights up in amber when the **Timer** or **Sleep** functions are set. When the timer is set, this LED will remain lit even if the TV is turned off. For details, see page 39. If the LED blinks in red continuously, this may indicate the TV needs servicing (see contacting Sony information on the back cover). Lights up in green when the **Backlight** feature is activated (see page 31).
7 **STANDBY LED**	Light up in red when your TV is in PC standby mode.
8 **POWER LED**	Lights up in green when the TV is turned on.
9 **(IR) Infrared Receiver**	Receives IR signals from the remote control.
Light Sensor	Senses room light level and adjusts the screen brightness accordingly (see page 30 for details). Do not put anything near the sensor, as its function may be affected.

- Make sure that the TV is turned off before unplugging the power cord. Unplugging the power cord while the TV is turned on may cause the POWER LED to remain lit for up to 20 seconds or may cause the TV to malfunction.

Using TV Menus

MENU provides one button access for controlling your TV. It enables you to perform a variety of tasks intuitively with a control panel on the screen.

Navigating through TV Menus



1 Press MENU on the remote control to display the menu options.

2 To highlight a menu option press ←, then press ↑/↓ to go through the menus.

3 To select an option press ⊕ or →.

4 Press ↑/↓ to select or adjust your desired option, then press ⊕.

5 To exit press MENU.

• The buttons (↑/↓/←/→ ⊕) can be used to control other devices in BRAVIA Theatre Sync mode.

Menu Descriptions

Shortcuts	The **Shortcuts** menu lets you select the **External Inputs** and **Favorites** list. It also allows quick access to **Wide Mode**, **Clock/Timers**, **Parental Lock**, **Closed Captions (CC)**, **Cable** and **PC-PIP** functions.	**Channel**	The **Channel** menu is used to provide maintenance to the channel options. Select from: **Favorites**, **Cable**, **Add Digital Channels**, **Auto Program**, **Show/Hide Channels**, **Label Channels** or **Diagnostics**.
Picture	The **Picture** menu is used to fine tune the image quality and allows you to customize several parameters for optimal viewing. Select from: **Picture Mode**, **Backlight**, **Picture**, **Brightness**, **Color**, **Hue**, **Color Temp** (Color Temperature), **Sharpness**, **Advanced Settings** or **Reset**.	**Parental Lock**	The **Parental Lock** feature allows you to set up the TV to block programs according to their content and rating levels; use 0-9 on the remote control to enter a four-digit password. The first time you create a password, confirm the password by entering it again.
Sound	The **Sound** menu allows you to fine tune and change audio. Select from: **Sound Mode**, **Effect**, **Steady Sound**, **Treble**, **Bass**, **Balance**, **Volume Offset**, **Speakers**, **Backlight** or **Alternate Audio/MTS**.	**Setup**	The **Setup** menu provides you additional features like: **Closed Captions (CC)**, **Info Banner**, **Label Inputs**, **Skip Inputs**, **Clock/Timers**, **Language**, **Auto Sort Control**, **Control for HDMI**, **Update Control for HDMI List** or **Product Support**.
Screen	The **Screen** menu allows you to change the proportions of the screen. Select from: **Wide Mode**, **Auto Wide**, **4:3 Default**, **Vertical Center**, **Vertical Size** or **Phase**.		

(Continued)

Using the Shortcuts Menu

External Inputs

This feature lets you select the external inputs connected to your TV.

1 Press ▲/▼ to choose an external input from the list of eleven inputs.

2 To select press ⊕.

- To exit from external inputs list, press MENU.
- To change external inputs again, repeat steps 1-2.
- To go back to channels, press **CH +/–** to go through the channels or repeat steps 1-2 and select TV; or press FAVORITES to select a channel from your **Favorites** list.
- You can also access the **External Inputs** list directly by pressing INPUT without having to navigate through the Menu.

Favorites

This feature lets you create and choose a list of up to eight favorite channels or inputs. Press ▲/▼ to select the option **Add to Favorites** and press ⊕ to add the current channel or input to your **Favorites** list.

- You can also press FAVORITES to see your **Favorites** list.

Wide Mode

This option is a direct shortcut to the **Screen** menu to adjust the picture size in the **Wide Mode** option (see page 32).

- **Wide Mode** can also be accessed by pressing WIDE on the remote control.
- See **WIDE** button description on page 23 for accessing the **Wide Mode**.

Clock/Timers

This option is a shortcut to adjust **Clock/Timers** on **Setup** menu (see page 39).

Parental Lock

This option is a shortcut to the **Parental Lock** menu which allows you to enter a password to block channels (see page 35).

Closed Captions (CC)

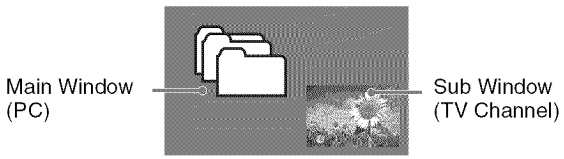
This option is a shortcut to **Closed Captions (CC)** screen on **Setup** menu (see page 38).

Cable

This option is a shortcut to adjust **Cable** settings on **Channel** menu (see page 34).

PC-PIP

The **PIP** (Picture In Picture) feature allows you to view two pictures simultaneously on the TV by displaying the PC input signal in the Main Window and a TV channel in the Sub Window.



- You need a PC input signal to use **PC-PIP** function.
- **PIP** window is only supported for the PC resolutions described on the PC Input Signal Reference Chart (page 16).
- To turn on or off the Sub Window on the screen press TOOLS from the remote control while using the PC input.
- You can also select **PC** input from the **External Inputs** list. Press MENU, select **External Inputs**, then select **PC** input from the list.

To change channels in the Sub Window

Press **CH +/–** to change the channels or enter the channel number using the 0-9 numeric buttons.

To Exit from PC-PIP (PC input)

1 Press MENU and select **External Inputs** on the **Shortcuts** menu.

2 From **External Inputs** list, select **TV** input to return to TV Channels.

- To exit from **PC-PIP**, you can also select a channel from your **Favorites** channels list on the **Shortcuts** menu.
- When the PC input signal is selected with the Sub Window active, you can only see TV channels; other external inputs are not available for this view (like VCR/DVD).
- **Closed Captions (CC)** is not available in the Sub Window.
- **Parental Lock** feature will work in the Sub Window, a padlock will appear on the blocked channels.

- When **Auto Sort Control** is set to **On** the last item selected within this menu will be listed at the top of the **Shortcuts** menu list (see page 39).

(Continued)

Using the Picture Menu

Picture Mode *For Video*	**Vivid**	For enhanced picture contrast and sharpness.
	Standard	For standard picture settings. Recommended for home entertainment.
	Cinema	For viewing film-based content. Most suitable for viewing in a theater-like environment.
For PC Timings	**Text**	This option is available for PC timing (HDMI or PC input) signal to enhance the text shown on the screen.
	Video	This option is available for PC timing (HDMI or PC input) signal to enhance the video shown on the screen.
	Game	This option is available for PC timing (HDMI or PC input) signal to enhance the game shown on the screen.
	✍ • **Picture Mode** for all inputs can also be accessed by pressing PICTURE on the remote control to directly toggle the modes. • The options for **Picture Mode** may vary depending on the input.	
Backlight	Press ◆/◆ to brighten or darken the backlight, then press ⊕ to set.	
Picture	Press ◆/◆ to increase or decrease picture contrast, then press ⊕ to set.	
Brightness	Press ◆/◆ to brighten or darken the picture, then press ⊕ to set.	
Color	Press ◆/◆ to increase or decrease color intensity, then press ⊕ to set.	
Hue	Press ◆/◆ to increase or decrease the green or red tones, then press ⊕ to set.	
Color Temp (Color Temperature) *White Adjustment*	**Cool**	Gives the white colors a bluish tint.
	Neutral	Gives the white colors a neutral tint.
	Warm 1, 2	Gives the white colors a reddish tint.
Sharpness	Press ◆/◆ to sharpen or soften the picture, then press ⊕ to set.	
Advanced Settings	**Noise Reduction**	Reduces the noise level of connected equipment, and the CABLE/ANTENNA input.
	Advanced C.E. (Advanced Contrast Enhancer)	Automatically optimizes the backlight and contrast. This setting is especially effective for dark picture scenes.
	Gamma	Adjusts the balance between the light and dark areas of the picture.
	Clear White	Emphasizes white and light colors.
	Live Color	Makes colors more vivid and reproduces clear skin tones.
	Light Sensor	Select **On** to enable the automatic picture (screen) brightness control. The light sensor measures the room brightness which allows the TV to automatically adjust the backlight brightness based on the picture settings and the ambient room light conditions. ✍ • Be sure not to put anything around the sensor, as its function may be affected. • In low light the range of the backlight control is reduced when **Light Sensor** is set to **On**.
Reset	Resets the current **Picture Mode** setting to factory default values.	

Using the Sound Menu

Sound Mode	**Dynamic**	Enhances the sound of action movies, sports events and musical videos.
	Standard	Standard sound optimized for home use.
	Game	Enhances the video games sound.
	Clear Voice	Enhances the voice sound; recommended for television news and documentary programs.
	Custom	Allows you to customize **Treble** and **Bass** sound settings.
Effect	**Off**	Turns off **TruSourround XT** effect.
	TruSurround XT	Produces realistic surround sound experience.
Steady Sound	**On**	Stabilizes the volume across all programs and commercials.
	Off	Turns off **Steady Sound**.
Treble	Press ◆/◆ to increase or decrease higher-pitched sounds, then press ⊕ to set.	
Bass	Press ◆/◆ to increase or decrease lower-pitched sounds, then press ⊕ to set.	
Balance	Press ◆/◆ to emphasize left or right speaker balance, then press ⊕ to set.	
Volume Offset	Adjusts the volume level of the current input (TV or video input) relative to other inputs.	
Speakers	Select to turn on or off the internal speakers. • Audio Out level is VARIABLE while **Speakers** are **On**, when **Speakers** control is turn **Off** the level in the Audio Out is FIXED.	
Backlight	**On**	The **Backlight** is turned on.
	Off	Turns off the **Backlight** to reduce the power consumption while the audio is left on.
Alt. Audio/MTS *Alternate Audio/MTS*	This Audio feature for current program lets you select an alternate audio (if it is available). • Alternate audio is disabled for analog signals and for digital signals that do not have audio streams.	
	Mono	Select for mono reception. Use to reduce noise during weak stereo broadcasts.
	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.
	• **MTS** is available only for analog programs.	

• To customize **Treble** and **Bass** sound settings, you must select **Custom** on **Sound Mode**.

(Continued)

Wide Mode — These options allow you to change the proportion of the screen.

Wide Zoom	Fills the screen with minimum distortion.
Normal	Select to display 4:3 pictures in original aspect ratio when the original source is 4:3.

- **Normal** is available with 480i or 480p sources only.
- **Normal** is replaced by **Full Pixel** when you are watching 1080p source.

Full	Select to enlarge the picture horizontally to fill the screen when the original source is 4:3 (standard-definition source). When the original source is 16:9 (high-definition source), select this mode to display 16:9 picture in original size.
Zoom	Select to enlarge the original picture horizontally and vertically to fill the screen while maintaining the aspect ratio.
Full Pixel	Displays the picture for 1080p sources in its original size.

- **Wide Mode** can also be accessed by pressing WIDE on the remote control.
- See **WIDE** button description on page 23 for accessing the **Wide Mode**.

Auto Wide

On	Select to have the screen automatically change to the screen mode based upon program's content. Typically this requires special setup on the DVD equipment's menu. If frequent screen changes are disturbing to you, select **Off**.
Off	Select to turn off the **Auto Wide** option. Choose a screen mode from the **Wide Mode** option.

4:3 Default — Select the default Screen Mode to use for 4:3 sources.

Wide Zoom	Select to enlarge the 4:3 picture to fill the 16:9 screen, keeping the original image as much as possible, with minimal distortion.
Normal	Select to display the 4:3 picture in its original size.
Full	Select to enlarge the picture horizontally to fill the screen when the original source is 4:3 (standard-definition source).
Zoom	Select to enlarge the original picture without distorting the aspect ratio.
Off	To turn **Off** automatic size for 4:3.

- If **4:3 Default** is set to anything but **Off**, the **Wide Mode** setting applies only to the current channel. When you change channels (or inputs), **Wide Mode** is automatically replaced with the **4:3 Default** setting for 4:3 sources. To retain the current **Wide Mode** setting as channels and inputs are changed, set **4:3 Default** to **Off**.

Vertical Center — Allows you to move the position of the picture up and down.

Vertical Size — Allows you to adjust the vertical size of the picture.

Phase — Adjusts to fine tune overall sharpness.

- **Phase** is disabled when the TV is receiving a different video input than PC.

Screen settings for PC timings and HDMI-PC (PC input) differ from all other input modes and are shown below.

Wide Mode	**Wide Zoom**	Fills the screen with minimum distortion.
	Normal	Select to display the picture in its original resolution and aspect ratio.
	Full	Select to enlarge the picture to fill the screen.
	Zoom	Select to enlarge the picture to fill the screen, while maintaining its original aspect ratio.

- **Wide Mode** can also be accessed by pressing WIDE on the remote control.
- See **WIDE** button description on page 23 for accessing the **Wide Mode**.

(Continued)

Using the Channel Menu

Favorites

Lets you set up a list of up to eight of your favorite channels or inputs.
Press ↑/↓ to select the **Add to Favorites** option and press ⊕ to add the current channel or input to your **Favorites** list.
To select a favorite channel or input from the list, press ↑/↓ to go through the list and ⊕ to select.

- To exit press MENU.
- To quickly access the **Favorites** list, press FAVORITES when there is no menu on the screen.

Cable

On Select if you are receiving cable channels via cable TV provider.

Off Select if you are using an antenna.

Add Digital Channels

Select to add digital channels without replacing the original channel list. Be sure to set **Cable** setting to **On** or **Off** in **Channel** menu for the correct type of input signal you choose.

Auto Program

Automatically sets up the channel list on the TV for all receivable channels (Digital and Analog).

- Before starting **Auto Program**, be sure to select **On** or **Off** for the **Cable** option under the **Channel** menu. When it is **On**, the TV will search for cable channels; when it is **Off**, the TV will search for over-the-air signals with an antenna connection.
- If you are using an A-B RF switch (not supplied) to switch between cable or antenna connection, be sure to select the correct **Cable** option to **On** or **Off** in the **Channel** Menu.

1 Select **Auto Program**.

2 Select **OK** to start **Auto Program**. When **Auto Program** is done, select **OK**.

- **IMPORTANT: You must perform Auto Program after cable or antenna is connected. If you cancel Auto Program before completion, some channels may not be available.**

Show/Hide Channels

Allows you to show or hide channels that appear when you use the **CH +/–** button.

1 Press ↑/↓ to scroll through the channels until you find the channel you want to show or hide.

2 Press ⊕ to determine if the channel will be shown or hidden.

- To show or hide more channels, repeat steps 1-2.

Label Channels

Allows you to assign labels to channel numbers.

1 Press ↑/↓ to scroll through the channel numbers. Then press ⊕ to select the channel number that you want to assign a label.

2 Press ←/→/↑/↓ to move through the label characters (A-Z, 0-9) and press ⊕ to select it. To move to the next character press ←/→/↑/↓. Repeat to add up to 7 characters to the label. Then select Enter on screen to set it. To assign labels to more channels, repeat steps 1-2.

- To delete a character select ⌫ on screen.
- To have a space between characters select ␣ on screen.
- To exit press RETURN.

Diagnostics

Allows to confirm the current signal performance.

Using the Parental Lock

The **Parental Lock** feature allows you to block programs according to their content and rating levels and block channels (regardless of the programs). Password is necessary in setting up blocking. Use ⓪-⑨ on the remote control to enter a four digit password. The first time you create a password, confirm the password by entering it again.

To View Blocked Programs

Press ENT when tuned to a blocked program, then enter the password. To reactivate the **Parental Lock** settings, turn off and on the TV.

Rating	**Off**	Turn **Parental Lock Off**. No programs are blocked from viewing based on their rating.
	Child	Maximum ratings permitted are: **U.S**: TV-Y, TV-G, G **Canada**: C, TV-Y
	Youth	Maximum ratings permitted are: **U.S**: TV-PG, PG **Canada**: C8+, PG, 8 ans+, TV-PG
	Young Adult	Maximum ratings permitted are: **U.S**: TV-14, PG-13 **Canada**: 14+, 13 ans+, TV-14
	Custom	Select to set ratings manually: **U.S**: See page 37 for details. **Canada**: See page 37 for details.
	✍ • If you are not familiar with the **Parental Guideline** rating system, you should select **Child**, **Youth** or **Young Adult** to help simplify the rating selection. To set more specific ratings, select **Custom**.	
Digital Rating *(Available only in U.S.A. where advanced ratings exist)*	**Off**	Select to **Digital Rating** off. No programs containing digital ratings are blocked from viewing.
	Custom	Select to customize the **Parental Lock** with downloadable digital ratings.
	Clear All	Select to clear the downloaded ratings.
Unrated *(Available only when **Country** is set to **U.S.A.**)*	**Allow**	Allows programs and movies that are broadcast without a rating.
	Block	Blocks all programs and movies that are broadcast without a rating.
	✍ • If you block unrated TV programs, be aware that the following types of programs may be blocked: programs broadcast from another country, emergency broadcasts, political programs, sports, news, public service announcements, religious programs and weather.	

(Continued)

Channel Block	Allows you to block channels regardless of program ratings. The password needs to be set up prior to blocking channels. The blocked channel can only be viewed by entering the correct password. **To block a channel** Press ↑/↓ to go through the channels and press ⊕ to **Block** or **Allow** channels. **To view a blocked channel** Press ENT when tuned to a blocked program, then enter the password. To reactive the **Parental Lock** settings, turn off and on the TV.	
External Input Block	Allows you to block individual video inputs. Press ↑/↓ to scroll through the video inputs and press ⊕ to **Block** or **Allow**.	
Change Password	Select to change your password. Use 0-9 buttons to select a four digit password; to confirm password enter it again. • You need your password for any future access into the **Parental Lock** settings. If you lose your password, see "Lost Password" on page 43.	
Select Country	**U.S.A.**	Select to use U.S.A. ratings.
	Canada	Select to use Canadian ratings.

Custom Rating System Chart

US Models: Selecting Custom Parental Lock Rating Options

To select custom rating options for the U.S., select **U.S.A.** in the **Select Country** setting (see page 36).

Movie Rating	**G**	All children and general audience.
	PG	Parental guidance suggested.
	PG-13	Parental guidance for children under 13.
	R	Restricted viewing, parental guidance is suggested for children under 17.
	NC-17 and **X**	No one 17 or under allowed.
TV Rating	Age-Based Ratings	
Block programs by their rating, content or both	**TV-Y**	All children.
	TV-Y7	Directed to children age 7 and older.
	TV-G	General audience.
	TV-PG	Parental guidance suggested.
	TV-14	Parents strongly cautioned.
	TV-MA	Mature audience only.
	Content-Based Ratings	
	FV	Fantasy violence.
	D	Suggestive dialogue.
	L	Strong language.
	S	Sexual situations.
	V	Violence.

✍

• To ensure maximum blocking capability, set the Age-Based Ratings.

Canadian Models: Selecting Custom Parental Lock Rating Options

To select custom rating options for Canada, select **Canada** in the **Select Country** setting (see page 36).

English Rating	**C**	All children.
	C8+	Children 8 years and older.
	G	General programming.
	PG	Parental guidance.
	14+	Viewers 14 and older.
	18+	Adult programming.
French Rating	**G**	General programming.
	8 ans+	Not recommended for young children.
	13 ans+	Not recommended for ages under 13.
	16 ans+	Not recommended for ages under 16.
	18 ans+	Programming restricted to adults.
U.S.A. Rating	See **TV Rating** under **U.S.A.** above for details.	

(Continued)

Closed Captions (CC) Allows you to select from several closed captions modes (for programs that are broadcasted with closed captioning).

Off	Disables **Closed Captions (CC)**.
On	Enables **Closed Captions (CC)**.
Program	Select to program **Closed Captions (CC)**.

If you select the **Program** option under **Closed Captions**, you can change the following settings:

Basic	Allows you to select basic closed caption options (EIA-608).	
	CC1, **CC2**, **CC3**, **CC4**	Displays a printed version of the dialog or sound effects of a program (should be set to **CC1** for most programs).
	Text1, **Text2**, **Text3**, **Text4**	Displays network/station information presented using either half of the whole screen (if available).
Digital CC	Allows you to set digital closed captioning to **Basic** (digital EIA-608) or **Advanced** (digital EIA-708).	
Advanced	Allows you to select advanced digital (EIA-708) closed caption options. Select from the available options.	
Advanced Settings	Customize the **Closed Captions (CC)** displays with **Character Style**, **Character Color**, **Character Size**, **Character Opacity**, **Character Align**, **Edge Color**, **Edge Type**, **Background Color**, **Background Opacity** or **Window Color**.	

- **Closed Captions (CC)** can be turned on and off by pressing the CC button on the remote control.

Info Banner Select **On** to display the program information such as program title and the remaining time (if the broadcaster offers this service). The **Info Banner** displays for a few seconds when the channel is changed. If you don't want to display the **Info Banner**, select **Off**.

Label Inputs Allows you to identify A/V equipment you connected to the TV, such as a VCR, DVD, etc. For example, if you have a DVD player connected to the VIDEO 1 input, you can select the label **DVD** for the VIDEO 1 input. Then when you press INPUT to change inputs, the label you assigned to that input appears on screen.

1 Press ↑/↓ to highlight the input (from 1 to 9) to which you want to assign a label, then press ⊕ to select it.

2 Press ↑/↓ to highlight one of the displayed labels, then press ⊕ to select it.

You can select from the following labels for each input:
DVD, **VCR**, **Blu-ray**, **Cable Box**, **Satellite**, **DVR**, **Game**, **Camcorder** or **Custom** (to customize, follow the same steps of **Label Channels** on page 34).

Skip Inputs Useful to disable inputs to which no equipment is connected.

Clock/Timers	**Sleep**	Set the time in minutes (**Off**, **15**, **30**, **60** or **120 minutes**) that you want the TV to remain on before shutting off automatically.
	Timer	You can use the **Timer** to tune to a specific channel at a scheduled time. Select **Off** to turn off the **Timer** (previous settings are saved). Select **On** to turn on the **Timer** (previous settings are saved) or select **Program** to set the timer by **Time**, **Duration**, **Days**, **Source**, **Channel** and **Volume**. If you select **Program**, press ↑/↓ (change the values) or ←/→ (move through the options) to set the hour, minutes, AM/PM, duration, days, source, channel and volume. You can also set a channel by pressing ⓪-⑨ (numeric values) and ⊙ (if the channel is digital) on the remote control. To replace a channel press → on the remote control, then press ← to go back to the channel selection and enter a new channel number. ✍ • **Timer** feature will not be available until you set the **Current Time**.
	Current Time	Select to set the current time (day, hour, minutes and AM/PM). **1** Press ⊕ to select **Current Time**. **2** Press ↑/↓/←/→ to set day, hour, minutes and AM/PM. **3** Press MENU to exit.
Language		Select the language of your choice for displaying all the on-screen settings: **English**, **Español** (Spanish), **Français** (French).
Auto Sort Control		Select **On** to sort the **Shortcuts** menu and **Inputs** list, based on the most frequent selections; select **Off** if you don't want to sort.
Control for HDMI		Allows your TV to communicate with other equipment that supports **Control for HDMI** function (see page 19).
Update Control for HDMI List		Update equipments list connected to the HDMI input.
Product Support		Sony Contact information is available from this screen for your convenience. This option also provides specific information such as Model Name, Serial Number and Software Version. Select **OK** to reset the TV to factory default values, or **Cancel** if you do not want to reset the TV to factory default values. WARNING: The reset will clear all of your customized settings. **Parental Lock** password may be required if it has been created.

Troubleshooting

If you have additional questions, service needs, or required technical assistance related to the use of your Sony TV, please visit our website or call one of the following numbers:

http://www.sony.com/tvsupport for US Support
http://www.sony.ca/support for Canadian Support
1-800-222-SONY(7669) for US Support
1-877-899-SONY(7669) for Canadian Support

Condition	Explanation/Solution
No picture	
No picture.	❑ Check the **Backlight** settings (page 31). ❑ Confirm your external inputs list and make sure you select TV (cable/antenna channels). See page 28 for more details. ❑ Perform the **Auto Program** to add receivable channels that are not presently in the TV's channel list (page 34). ❑ If there is no signal, the screen saver will appear.
Cannot receive or select channels.	❑ To receive or select cable channels, make sure that **Cable** under **Channel** menu is set to **On**. To receive or select UHF channels over an antenna, make sure **Cable** is set to **Off**. Perform the **Auto Program** to add receivable channels that are not presently in the TV's channel's list (page 34). ❑ Make sure the power cord is connected securely. ❑ Turn on the power of the TV. ❑ Check the antenna/cable connections. ❑ Perform the **Auto Program** to add receivable channels that are not presently in the TV's channel list (page 34). • **IMPORTANT: You must perform Auto Program after cable or antenna is connected. If you cancel Auto Program before completion, some channels may not be available.**
TV is locked to one channel.	❑ Perform the **Auto Program** to add available channels that are not presently in the TV's channel's list (page 34).
The TV turns off automatically.	❑ Check if **Sleep** is activated, or confirm the **Duration** setting of **Timer** (page 39). ❑ If there is no signal, the TV will turn off automatically.
No picture from some video sources.	❑ Check the connection between the optional video equipment and the TV. ❑ Press INPUT on the remote control (page 24). ❑ Press MENU on the remote control. Select your desired input from the **External Inputs** list.
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. ❑ If using 300 ohm twin lead, move the excess lead away from the TV or try using a 75 ohm coaxial cable instead.

(Continued)

Condition	Explanation/Solution
No color/Dark picture/Color is not correct/The picture is too bright.	❑ Press PICTURE to select the desired picture mode (page 21). ❑ Adjust the **Picture Mode** options in the **Picture** menu (page 30).
Noisy picture.	❑ Make sure that the antenna is connected using a 75-ohm coaxial cable (not supplied). ❑ Keep the antenna cable away from other connecting cords. ❑ To avoid TV interference, make sure to use an undamaged antenna cable.
Blurry picture/Poor color.	❑ Transporting the TV from a cold to a warm location or a sudden change in room temperature may cause moisture condensation, resulting in a blurry picture or poor color. Turn off your TV and wait a few hours before powering on again.
No sound/Noisy sound	
Good picture, no sound.	❑ Check the volume control. ❑ Press MUTING or **VOL +** so that "Muting" disappears from the screen (page 22). ❑ Set **Speakers** to **On** in the **Sound** menu (page 31). If it is set to **Off**, sound is not output from the TV's speakers regardless of the TV's volume control. ❑ When using HDMI input with Super Audio CD or DVD-Audio, DIGITAL AUDIO OUT (OPTICAL) may not provide an audio signal. ❑ When tuned to a digital channel with **Alternate Audio**, the broadcaster may not be broadcasting your preferred **Alternate Audio** language.
Audio noise.	❑ Make sure that the antenna is connected using a 75-ohm coaxial cable (not supplied). ❑ Keep the antenna cable away from other connecting cords. ❑ To avoid TV interference, make sure to use an undamaged antenna cable.
PC Input	
No Picture/No Signal.	❑ Confirm the PC is correctly connected to the TV in the PC IN (HD15 cable not supplied). ❑ Ensure the output signal from the PC is one of the formats listed on page 16. ❑ Turn the PC off. Confirm the PC connection and restart the PC. Plug and play will auto-detect the TV and correctly set up the PC timing. ❑ Check the standby mode of your PC. The TV automatically will enter to standby mode if there is no signal input.
Poor picture.	❑ Adjust the resolution (page 16). ❑ Adjust **Phase** (page 32).
BRAVIA Theatre Sync	
Cannot find connected BRAVIA Theatre Sync HDMI device.	❑ Make sure that the **Control for HDMI** is set up on both the TV and the optional device compatible with BRAVIA Theatre Sync (page 19).
Cannot control second AV receiver.	❑ Only one A/V receiver may be used with the BRAVIA Theatre Sync and **Control for HDMI** functions at one time (page 39).
General	
Wide Mode changes automatically.	❑ The current **Wide Mode** setting is automatically replaced with the **4:3 Default** setting when you change the channel or video input, if **4:3 Default** in the **Screen** menu is set to other than **Off**. If you want to lock in the **Wide Mode** selected with WIDE on the remote control, set **4:3 Default** to **Off** in the **Screen** menu (page 32). ❑ Turn off the **Auto Wide** option in the **Screen** menu (page 32).

Condition	Explanation/Solution
Suddenly the picture gets smaller.	❑ The picture gets smaller during the commercials, this is due to the method the provider broadcasts their contents. When HD content channels switch to SD definition content (commercials), the picture may be small with a black border. ❑ **Auto Wide** will not expand the picture during these content changes since the content information is regulated by the channel signal provider. You can manually change the **Wide Mode** if you prefer (page 23). This setting will remain in effect until you change the channel or input or manually change the **Wide Mode** again.
"Black box" on screen.	❑ You have selected a text option and no text is available (page 38). To turn off this feature, set the **Closed Captions** option to **Off**. If you were trying to select closed captioning, select **CC1** instead of **Text1-4**.
Black bands appear at the top and bottom of the screen.	❑ Some wide screen programs are filmed in aspect ratios that are greater than 16:9 (this is especially common with theatrical releases). Your TV will show these programs with black bands at the top and bottom of the screen. For more details, check the documentation that came with your DVD (or contact your program provider). ❑ Programs in 4:3 aspect ratio will have bands on left and right sides of the screen. To select full size see page 32. ❑ Programs broadcasted in HD formats (720p and 1080i) with 4:3 content will commonly have black bands on the left and right sides of the screen which are added by the broadcaster. ❑ **Auto Wide** will not expand the picture when the black bands on the sides of the screen are added by the broadcaster. You can manually change the **Wide Mode** to **Wide Zoom** or **Zoom** to fill the screen, which will remain in affect until you change the channel or input or manually change the **Wide Mode** again.
Certain programs on DVD or other digital sources display a loss of detail, especially during fast-motion or dark scenes.	❑ The compression used by certain digital broadcasts and DVDs may cause your TV's screen to display less detail than usual, or cause artifacts (small blocks or dots, pixelations) to appear on your screen. This is due to your TV's large screen and ability to show very fine detail, and is normal for certain digitally recorded programs.
Remote control does not operate.	❑ Check the polarity of the batteries or replace the batteries. ❑ Point the remote control at the remote control sensor of the TV. ❑ Fluorescent lamps can interfere with your remote control operation; try turning off the fluorescent lamps. ❑ Keep the remote control sensor area clear from obstacles.
Some digital cable channels are not being displayed.	❑ Certain cable companies have limitations on the broadcast of digital cable channels. Check with your cable company for more information. ❑ The digital cable channel may be set to **Hidden** in the **Show/Hide Channels** setting (page 34).
Lost password.	❑ Select the **Parental Lock** menu, then enter the following master password: 4357. The master password clears your previous password and allows you to enter a new password (page 35).
How to reset the TV to factory settings.	❑ Turn on the TV. While holding down ⬆ on the remote control, press **POWER** on the TV. Release the ⬆ button. ❑ Select **OK** on the **Product Support** option under **Setup** menu (page 39). WARNING: The reset will clear all of your customized settings including the **Parental Lock** setting.

Specifications

Model	KDL-40SL140	KDL-46SL140
System		
Television system	NTSC: American TV standard ATSC (8VSB terrestrial): ATSC compliant 8VSB QAM on cable: ANSI/SCTE 07 2000 (Does not include CableCARD functionality)	
Channel coverage	Analog terrestrial: 2 - 69 / Digital terrestrial: 2 - 69 Analog Cable: 1-125 / Digital Cable: 1-135	
Panel system	LCD (Liquid Crystal Display) Panel	
Speaker output	10 W + 10 W	
Input/Output jacks		
Antenna	75-ohm external terminal for VHF/UHF	
VIDEO IN 1/2/3	S VIDEO (4-pin mini DIN)(VIDEO 1 only): Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative / C: 0.286 Vp-p (Burst signal), 75 ohms VIDEO: 1 Vp-p, 75 ohms unbalanced, sync negative AUDIO: 500 mVrms (100% modulation) / Impedance: 47 kilohms	
COMPONENT IN 1/2	YPBPR (Component Video): Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative / PB: 0.7 Vp-p, 75 ohms / PR: 0.7 Vp-p, 75 ohms / Signal format: 480i, 480p, 720p, 1080i AUDIO: 500 mVrms (100% modulation) / Impedance: 47 kilohms	
HDMI IN 1/2/3/4	HDMI: Video: 480i, 480p, 720p, 1080i, 1080p / Audio: Two channel linear PCM 32, 44.1 and 48 kHz, 16, 20 and 24bits AUDIO: 500 mVrms (100% modulation) / Impedance: 47 kilohms	
DIGITAL AUDIO OUT (OPTICAL)	PCM optical signal	
AUDIO OUT (VAR/FIX)	500 mVrms (Typical)	
PC IN	D-sub 15-pin, analog RGB, 0.7 Vp-p, 75 ohms, positive See the PC Input Signal Reference Chart on page 16.	
PC AUDIO INPUT	Stereo mini jack, 500 mVrms, 47 kilohms	
Power and others		
Power requirement	120 V AC, 60 Hz	
Power consumption		
in use	220 W	300 W
in standby	All models less than 1 W	
Screen size (inches measured diagonally)	40	46
Display resolution (horizontal × vertical)	1,920 dots × 1,080 lines	
Speaker/Full range (2)	146 × 35 mm 5 3/4 × 1 3/8 inches	
Dimensions (W × H × D)		
with stand mm	1,119 × 654 × 276	1,252 × 734 × 276
(inches)	(44 1/8 × 25 3/4 × 10 7/8)	(49 3/8 × 29 × 10 7/8)
without stand mm	1,119 × 615 × 111	1,252 × 691 × 116
(inches)	(44 1/8 × 24 1/4 × 4 3/8)	(49 3/8 × 27 1/4 × 4 5/8)
wall-mount hole pattern (mm)	300 × 300	300 × 300
Mass		
with stand (kg/lb.)	22.0 kg / 49.0 lb.	28.0 kg / 62.0 lb.
without stand (kg/lb.)	19.5 kg / 43.0 lb.	25.5 kg / 57.0 lb.
Supplied accessories	Remote control RM-YD026 (1) / Size AA batteries (2) / Cable holder (1 attached to the Table-Top Stand) / Operating Instructions (1) / Quick Setup Guide (1) / Warranty Card (1) / Safety and Regulatory Booklet (1) / Attaching the Table-Top Stand (1) / Screws (4)	
Optional accessories	Connecting cables / Wall-Mount Bracket: SU-WL500 / Support Belt Kit / TV Stand: SU-FL300M (KDL-40SL140), SU-FL300L (KDL-46SL140) / Floor Stand: SU-FL71M	

• Design and specifications are subject to change without notice.

Index

0-9 button 22
4:3 Default 32

A

Add Digital Channels 34
Advanced Settings 30
Alt. Audio/MTS 31
AUDIO OUT jack, described 13
Auto Program 18, 34
Auto Sort Control 39
Auto Wide 32

B

Backlight 30, 31
Balance 31
Bass 31
BRAVIA Theatre Sync 19
Brightness 30

C

Cable 28, 34
Cable holder 8
CABLE/ANTENNA input, described 13
Canadian Models 37
CC button 22
CH+/– button 24, 25
Change Password 36
Channel Block 36
Clock/Timers 28, 39
Closed Captions (CC) 28, 38
Color 30
Color Temp (Color Temperature) 30
COMPONENT IN jack (1080i/720p/480p/480i), described 13
Control for HDMI 39

D

Diagnostics 34
DIGITAL AUDIO OUT (OPTICAL), described 13
Digital Rating 35
DISPLAY button 21

E

Effect 31
English Rating 37
ENT button 22
External Input Block 36
External Inputs 28

F

Favorites 28, 34
FAVORITES button 24
French Rating 37

G

GUIDE button 22

H

HDMI IN jack, described 13
Hue 30

I

Info Banner 38
Infrared Receiver (IR) 25
Initial Setup 18
INPUT button 24, 25
Installing the TV on a wall 8, 9, 10

J

JUMP button 24

L

Label Channels 34
Label Inputs 38
Language 39
Light Sensor
  Described 25

M

Menu
  Channel 34
  Parental Lock 35
  Picture 30
  Screen 32
  Setup 38
  Shortcuts 28
  Sound 31
MENU button 22, 25
Movie Rating 37
MUTING button 22

P

Parental Lock 28, 35
PC IN 13
PC-PIP 29
Phase 32
PIC OFF/TIMER LED 25
Picture 30
PICTURE button 21
Picture Mode 30
POWER button 22, 25
POWER LED 25
Product Support 39

R

Rating 35
Remote Control 21, 22, 23, 24
Reset 30, 43
RETURN button 22

S

S VIDEO jack, described 13
Select Country 36
Setting up channels 18
Sharpness 30
Show/Hide Channels 34
Skip Inputs 38
SLEEP button 21
SOUND button 21
Sound Mode 31
Speakers 31
STANDBY LED 25
Steady Sound 31

T

THEATER button 21
TOOLS button 24
Treble 31
Troubleshooting 41, 42, 43
Turning on/off the TV 22, 25
TV Rating 37

U

U.S.A. Rating 37
Unrated 35
Update Control for HDMI List 39
US Models 37

V

Vertical Center 32
Vertical Size 32
VOL+/– button 22, 25
Volume Offset 31

W

WIDE button 23
Wide Mode 28, 32, 33

For Your Convenience

Please contact Sony Customer Support directly if you:

- Have questions on the use of your television after reading your Operating Instruction manual and Quick Setup Guide
- Experience difficulty operating your television

For United States

http://www.sony.com/tvsupport

or to speak with a support representative: 1-800-222-SONY (7669)

For Canada

http://www.sony.ca/support

or to speak with a support representative: 1-877-899-SONY (7669)

Sony will work to resolve your questions more quickly than your retailer or place of purchase.

Please Do Not Return the Product to the Store

On-line Registration Available:

Be sure to register your TV.

United States

http://productregistration.sony.com

Canada

http://www.sonystyle.ca/registration

40%

4000704112

http://www.sony.net/

Printed in U.S.A.