

SONY®

XEL-1

OLED Digital TV
Operating Instructions

ORGANIC

PANEL

Owner's Record

The model, serial numbers and the date of manufacture are written on rating label. It is located at the bottom 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. _____

WARNING

To reduce the risk of fire or electric shock, do not expose this TV to rain or moisture.



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



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

The TV shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the TV.

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: XEL-1
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 100 - 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.
- For details concerning safety precautions, see "Important Safety Instructions" on page 6.

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.
- Use the TV at temperatures between 41°F (5°C) and 95°F (35°C).
- 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.

To Customers

Sufficient expertise is required for installing the specified TV. Be sure to subcontract the installation to a Sony dealer or licensed contractor 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.

CAUTION

Bright, stationary images, such as TV station logos or photos, displayed on your TV can become permanently imprinted onto the screen. This type of imprint is known as "Image Retention." Please take the following steps to reduce the risk of this occurring:

View a variety of program sources or programming material. Changing the program material viewed reduces the possibility that a single image will become imprinted on the TV screen.

When using video games, set-top boxes, or similar products with your TV, or when viewing a TV station whose logo always stays on the screen, select the appropriate **Picture** settings for the room brightness and set **Picture Mode** to **Standard** (see page 32 for instructions on adjusting **Picture** settings).

This TV was designed primarily for viewing TV broadcasts in wide screen mode (16:9 aspect ratio). Therefore, when viewing conventional (4:3) TV programs, select **Wide Zoom** or **Full** in the **Wide Mode**.

To reduce the risk of image retention, turn off the On Screen Display (OSD) by pressing the **DISPLAY** button, and turn off the menus of connected equipment (see page 20 and 30).

IMAGE RETENTION IS NOT COVERED BY YOUR WARRANTY. Un-repairable damage can occur and is not covered under warranty.

Trademark Information

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

Blu-ray Disc is a trademark.

"BRAVIA" and BRAVIA, ORGANIC PANEL, S-Force, DME³, Memory Stick, Memory Stick Duo, Memory Stick PRO and Memory Stick PRO Duo are trademarks or registered trademarks of Sony Corporation.

"XMB" and "XrossMediaBar" are trademarks of Sony Corporation and/or Sony Computer Entertainment Inc.

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



HDMI

DOLBY DIGITAL



MEMORY STICK™

Internet Video Link[®] READY

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Customer Support

<http://www.sony.com/tvsupport>

On-line Registration

United States

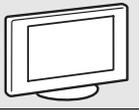
<http://productregistration.sony.com>

Canada

<http://www.SonyStyle.ca/registration>

Important Safety Instructions

In this instruction manual, most of the warnings and precautions are common for all kinds of TVs. Therefore, the illustrations of generic TVs are used with some exceptions.



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



USE

AC power cord

Observe the following to prevent the AC power cord from being damaged. If the AC power cord is damaged, it may result in a fire or an electric shock. Stop using it and ask your dealer or Sony service center to exchange it.

- Do not place the TV where the power cord is subject to wear or abuse.
- Do not pinch, bend, or twist the cord excessively. The core lines may be bared and cut, causing a short-circuit, and resulting in a fire or an electric shock.
- Do not convert or damage the power cord.
- Do not allow anything to rest on or roll over the power cord.
- Do not move the TV with the power cord plugged in.
- Keep the power cord away from heat sources.
- When you disconnect the AC power cord, disconnect it from the wall outlet first.
- Be sure to grasp the plug when disconnecting the power cord. Do not pull the power cord.
- Do not use the supplied AC power cord on any other equipment.
- Use only an original Sony AC power cord, not other brands.
- Use only the supplied AC power adapter, including the AC power cord. Otherwise, it may result in a fire or an electric shock.



Wall outlet

Do not use a poor fitting outlet.

Insert the plug fully into the outlet. If it is loose, it may cause arcing and result in a fire.

Contact your electrician to have the outlet changed.



Wiring

When connecting cables, be sure to unplug the AC power cord for your safety.

Take care not to catch your feet on the cables. It may damage the TV set.

Electric shock

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



Lightning storms

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



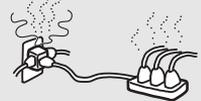
When not in use

If you will not be using the TV set for several days, the TV set should be disconnected from the AC power outlet for environmental and safety reasons. The TV set is not disconnected from the AC power source when the TV set is switched off. To disconnect the TV set completely, pull the plug from the AC power outlet. Store the TV set in a cool place in order to avoid damaging.



Overloading

This TV set is designed to operate on a 100 - 120 V AC supply only. Take care not to connect too many appliances to the same AC power outlet as this could result in a fire or an electric shock.



Optional equipment

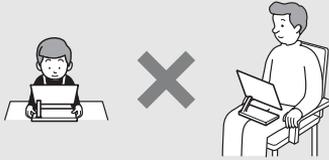
Do not install optional equipment too close to the TV set. Picture distortion and/or noisy sound may occur if the TV set is positioned in close proximity to any equipment emitting electromagnetic radiation.

Small accessories

Keep small accessories out of children's reach.

Heat-rash

Do not allow your skin to remain in contact with the TV or AC power adapter for a long period of time. Otherwise, they may get hot and cause a heat-rash or blister.



ANTENNAS

Outdoor antenna grounding

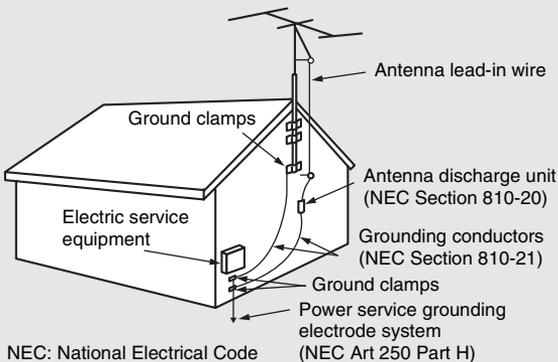
If an outdoor antenna is installed, follow the precautions below. An outdoor antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can come in contact with such power lines or circuits.

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

Be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges.

Section 810 of the National Electrical Code (NEC) in USA and Section 54 of the Canadian Electrical Code in Canada provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

Antenna grounding according to the National Electrical Code, ANSI/NFPA 70



BATTERIES

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

- Do not dispose of batteries in a fire.
- Do not short circuit, disassemble or overheat the batteries.

Disposal of used batteries

To preserve our environment, dispose of used batteries according to your local laws or regulations.

For the State of California, USA only
Perchlorate Material - special handling may apply.
See www.dtsc.ca.gov/hazardouswaste/perchlorate
Perchlorate Material: Lithium battery contains perchlorate.

CLEANING

Cleaning the cabinet of the TV set

Unplug the AC power cord when cleaning this TV. If not, it may result in electric shock. Clean the cabinet of the TV with a dry soft cloth. Stubborn stains may be removed with a cloth slightly dampened with a solution of mild soap and warm water. Never use strong solvents such as thinner or benzene for cleaning. If using a chemically pretreated cloth, please follow the instruction provided on the package. 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.



Handling and cleaning the OLED screen

The surface of the screen is specially coated to reduce image reflection. Do not scour, hit or subject the screen to impact.

- Unplug the AC power plug when cleaning the TV.
- Take care when touching the TV if it has been powered on for an extended period.
- The surface of the screen is specially coated. Do not attach stickers to it.
- The surface of the screen is specially coated. Do not touch the screen directly.
- Wipe the screen surface gently with the supplied cleaning cloth, or a soft dry cloth by supporting it with a hand on its back side, to remove dust.
- Stubborn stains may be removed with the supplied cleaning cloth, or a soft cloth slightly dampened with a mild detergent solution.
- The screen may become scratched if the cleaning cloth is dusty.
- Never use strong solvents such as thinner or benzene for cleaning.
- Do not apply detergent solution directly on the TV as damage to TV may result.
- Never use abrasive cleaner.
- If commercially available cleaning cloths are used, follow the precautions of the products.

MAGNETIC INFLUENCE

This TV contains a strong magnet in the speaker unit that generates a magnetic field. Keep any items susceptible to magnetic fields away from the speaker.

SOUND

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



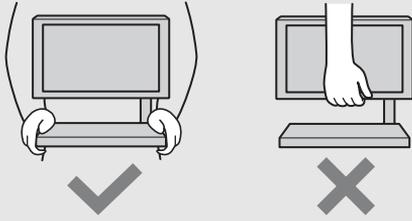
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CARRYING THE TV

Carry the TV in the specified manner

To avoid dropping the TV and causing serious injury, be sure to follow these guidelines:

- Before carrying the TV, disconnect all cables.
- When you carry the TV, place your hand as illustrated and hold it securely. Do not put stress on the screen.
- Do not carry the TV by holding the screen. It may cause damage to the TV and/or serious injury.
- When lifting or moving the TV, hold it firmly with both hands from the bottom.



- When carrying, do not subject the TV to shocks or vibration, or excessive force.

VENTILATION

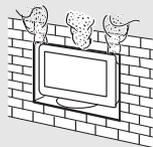
The slots and openings in the TV are provided for necessary ventilation. To ensure reliable operation of the TV and to protect it from overheating, these slots and openings must never be blocked or covered.

Unless proper ventilation is provided, the TV may gather dust and get dirty. For proper ventilation, observe the following:

- Never block the slots and openings by covering with a cloth or placing the TV on a bed, sofa, rug or other similar surface, or too close to furniture. It may cause overheating and result in a fire, an electric shock or serious injury.

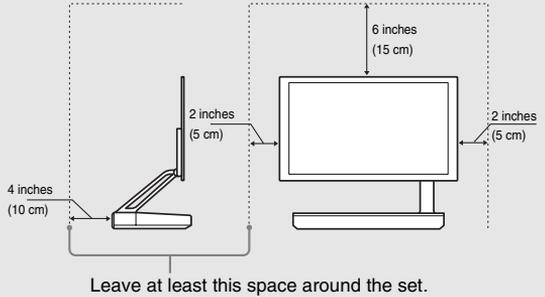


- Never place the TV in a confined space, such as a bookcase or built-in cabinet, unless proper ventilation is provided.



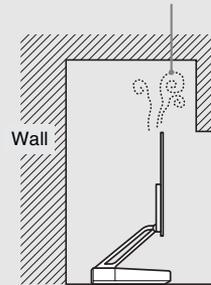
- Do not install the TV face up, down or sideways.
- Do not install the TV turned over or upside down.

Leave some space around the TV set as shown below. Otherwise, air-circulation may be inadequate and cause overheating, which may cause damage to the TV set.



Never install the TV set as follows:

Air circulation is blocked.



Objects and ventilation holes

Never push objects of any kind into the TV through the cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or an electric shock. Do not place any objects on the TV.



MOISTURE

Moisture and flammable objects

- The TV must not be exposed to dripping or splashing. Do not place objects filled with liquids, such as vases, on the TV.
- Do not use power-line operated TV sets near water — for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc. It may result in a fire or an electric shock.
- Do not let this TV get wet. Never spill liquid of any kind on the TV. If any liquid or solid object does fall through, do not operate the TV. It may result in electric shock or damage to the TV. Have it checked immediately by qualified personnel.
- To prevent fire, keep flammable objects or open flame (e.g. candles) away from the TV.



INSTALLATION

Placement

The TV should be installed near an easily accessible AC power outlet.

Observe the following in placing the TV. Otherwise the TV may fall from the stand, causing damage or serious injury.

- Place the TV on a stable, level surface.



Do not place the TV or remote control in a place subject to extreme temperature, such as in direct sunlight, near a radiator, near a heating vent or near fire. Otherwise, overheating may result and cause enclosure deformation or a malfunction. Do not install the TV in a place directly exposed to air conditioning. If the TV is installed in such a location, moisture may condense inside and cause a malfunction.

- Never place the TV in hot, oily, humid or excessively dusty places.
- Do not install the TV where insects may enter.
- Do not install the TV where it may be exposed to mechanical vibration.
- Do not install the TV in a location where it may protrude, such as on or behind a pillar, or where you might bump your head on it. Otherwise, it may result in injury.



Placement for viewing

It is recommended to watch the TV at a distance of 3 - 7 times that of the screen height, and in moderate brightness. Watching the TV for too long or in a dark room may cause eye fatigue. To obtain a clear picture, do not expose the screen to direct illumination or direct sunlight. If possible, use spot lighting directed down from the ceiling.

Outdoor use

Do not install this TV outdoors. If the TV is exposed to rain, it may result in a fire or an electric shock. Do not expose the TV to direct sunlight, it may heat up and become damaged.



Vehicle, ships and other vessels

Do not install this TV in a vehicle.

Bumping of the vehicle may cause the TV to fall down and cause injury.



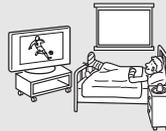
Do not install this TV in a ship or vessel. If the TV is exposed to seawater, it may cause a fire or damage the TV.



Medical institutions

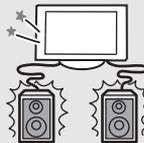
Do not place this TV in a place where medical equipment is in use.

It may cause a malfunction of medical equipment.



Attachments

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



VOLUME ADJUSTMENT

- Adjust the volume so as not to trouble your neighbors. Sound carries very easily at night. 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.

SCREEN AND CABINET

- The screen and cabinet get warm when the TV is in use. This is not a malfunction.
- Avoid spraying insect repellent with volatile material on the screen.
- Avoid prolonged contact with rubber or plastic material.
- Do not expose the OLED screen surface to direct sunlight, as doing so may damage it.
- Do not push or scratch the OLED screen, or place objects on top of the TV. The image may become distorted, or the OLED panel may be damaged.

Broken pieces

Do not throw anything at the TV.

The screen glass may break by the impact and cause serious injury.



Do not touch the broken glass with bare hands. As with any broken glass pieces, avoid skin contact and exposure to your eyes or mouth.

If the surface of the TV cracks, do not touch it until you have unplugged the AC power cord.

Otherwise electric shock may result.

The screen and cabinet get warm when the TV is in use.

Take care when you carry or move the TV.

Black dots

Non-luminous pixels may appear on the screen. This is not a malfunction. Although the OLED screen is made with high-precision technology, a few non functioning pixels may be evident. Red, green and blue dots may appear on the screen depending on the images displayed.

SERVICING

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



Replacement parts

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

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



Safety check

Upon completion of any service or repairs to the TV, ask the service technician to perform routine safety checks (as specified by the manufacturer) to determine that the TV is in safe operating condition, and to so certify. Ask a qualified service technician to dispose of the TV.



(Continued)

NOTE ON AC POWER ADAPTER (AC-ED001)

Warning

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.



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

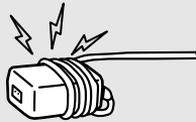


This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the TV.

To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.

Do not install this equipment in a confined space, such as a bookshelf or similar unit.

- Please ensure that the wall outlet is installed near the equipment and shall be easily accessible.
- Be sure to use the supplied AC power adapter and power cord.
- Do not use any other AC power adapter. It may cause a malfunction.
- Connect the AC power adapter to an easily accessible wall outlet.
- Do not coil the AC power cord around the AC power adapter. The core wire may be cut and/or it may cause a malfunction of the TV.
- Do not touch the AC power adapter with wet hands.
- If you notice an abnormality in the AC power adapter, disconnect it from the wall outlet immediately.
- The set is not disconnected from the AC power source as long as it is connected to the wall outlet, even if the set itself has been turned off.



- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



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

Important Safety Instructions

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

Welcome to the World of OLED TV

Thank you for purchasing this Sony XEL-1. This television is equipped with an organic light-emitting diode (OLED) display panel that produces superb picture quality. This technology brings a multitude of benefits to this television. Experience the beautiful images that OLED offers!

What is OLED?

An organic light-emitting diode (OLED) display panel includes organic materials that emit light when an electric current is passed through them. The strength of luminescence is controlled by the amount of electric current.

Benefits of OLED

High Brightness

The self-emitting nature of the OLED display panel allows for more efficient light output, creating bright and vivid images.

High Contrast Ratio

In addition to the bright and vivid images produced by the OLED display panel, black level is created by completely stopping light emission. This allows the panel to achieve a uniquely high level of contrast.

Vivid Color Reproduction

OLED display panels use separate organic layers to produce red, green, and blue light, which are filtered to achieve greater color purity. As a result, each color is vividly and clearly reproduced.

Quick Response Time

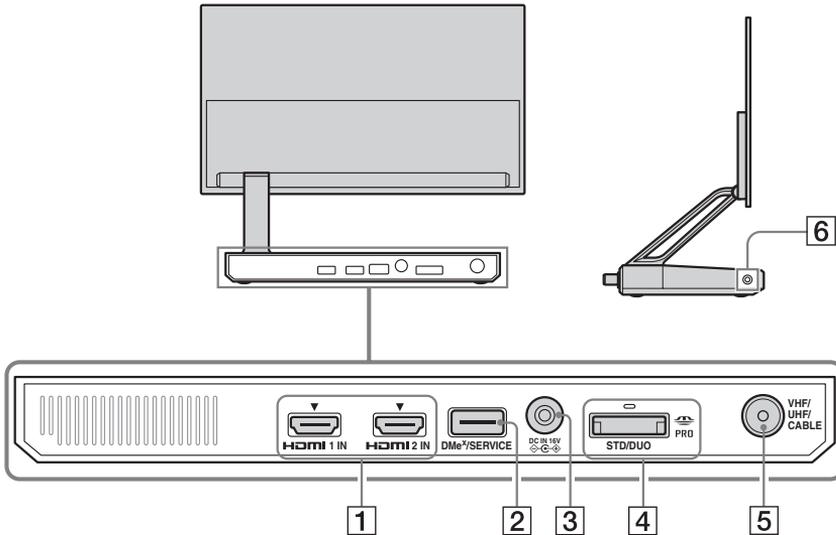
Light from the OLED display panel is emitted instantly when electricity is supplied, enabling the OLED very fast response time.



Getting Started

1. Locating Inputs and Outputs

Rear & Left Side



Item	Description
1 HDMI 1/2 IN	<p>HDMI (High-Definition Multimedia Interface) provides an uncompressed, all-digital audio/video interface between this TV and any HDMI-equipped audio/video equipment, such as a set-top box, DVD player, Blu-ray Disc Player as well as A/V receiver. HDMI supports enhanced, or high-definition video, plus digital audio.</p> <p></p> <ul style="list-style-type: none">• You can view 480i, 480p, 720p, 1080i and 1080p formats with an HDMI connection.• Note that this TV displays all video input signals in a resolution of 960 dots × 540 lines.• Be sure to use only an HDMI cable that bears the HDMI logo.
2 DMe^x/ SERVICE	<p>This USB port is for service only unless you are connecting the optional BRAVIA external module (DMe^x).</p>
3 DC IN	<p>Connects the supplied AC power adapter.</p>
4 Memory Stick slot	<p>For inserting Memory Stick media to view on TV. For details, see “Using Memory Stick Media” on page 26.</p> <p>ACCESS LED located above the Memory Stick slot blinks while Memory Stick is accessed.</p>
5 VHF/UHF/CABLE	<p>RF input that connects to your Cable or VHF/UHF antenna.</p>
6 Headphone jack/ DIGITAL AUDIO OUT (OPTICAL)	<p>Connects to your headphones or the optical audio input of your digital audio equipment that is PCM/Dolby Digital compatible. If your headphones or the optical audio input of your digital audio equipment do not match the jack, use a suitable plug adapter (not supplied).</p> <p></p> <ul style="list-style-type: none">• While headphones are connected, the TV speakers are muted.

2. Connecting the TV

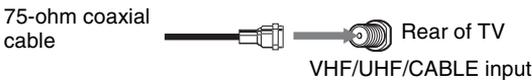
Cable System or VHF/UHF Antenna System

You can enjoy high-definition and standard-definition digital programming (if available in your area) along with standard-definition analog programming.



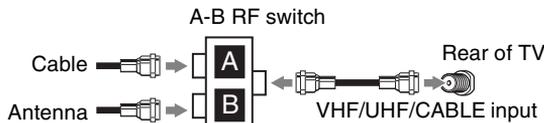
- This TV is capable of receiving unscrambled digital programming for both cable (QAM and 8VSB) and external VHF/UHF antenna (ATSC).
- It is strongly recommended that you connect the antenna/cable input using a 75-ohm coaxial cable to receive optimum picture quality. A 300-ohm twin lead cable can be easily affected by radio frequency interference, resulting in signal degradation.

Cable or VHF/UHF (or VHF only)



Cable System and VHF/UHF Antenna System

Use an optional A-B RF switch (not supplied) to switch between the cable and over-the-air antenna programming, as indicated below.

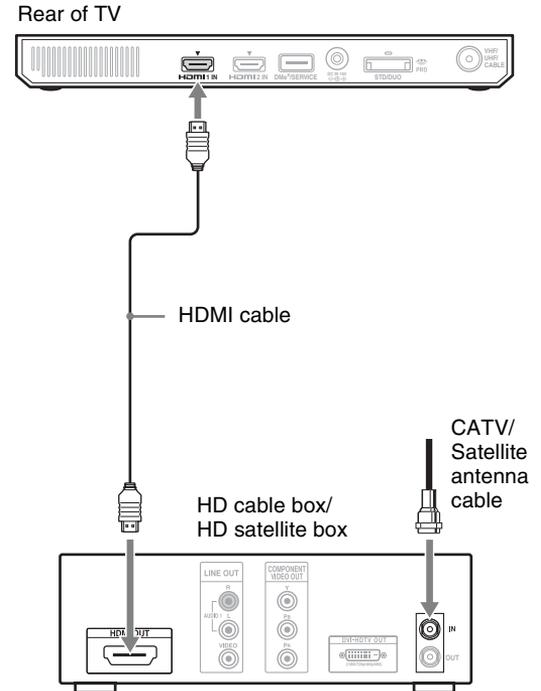


- Be sure to set the **Cable** setting to **On** or **Off** in the **Channel** settings for the type of input signal you choose (see page 37).

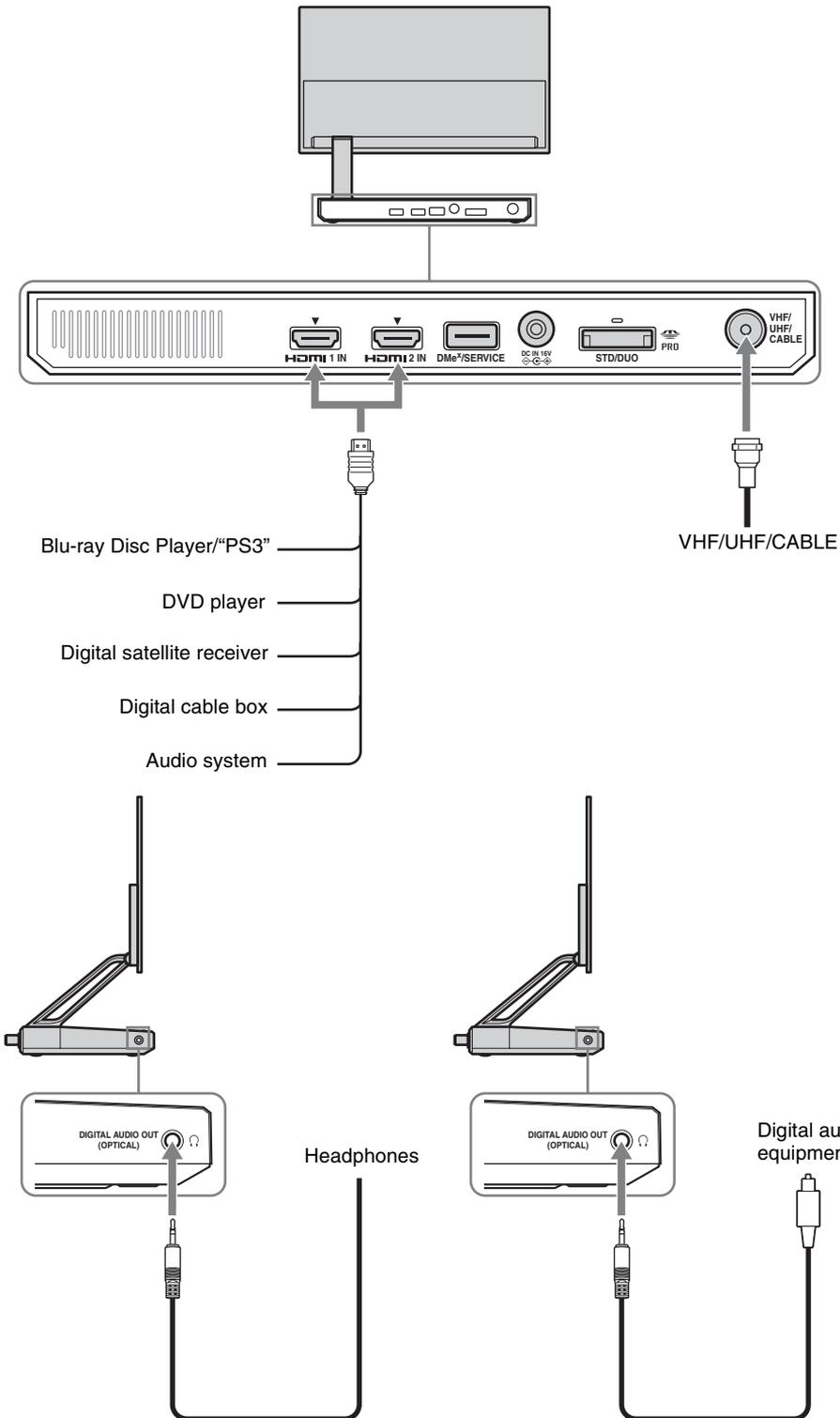
HD Cable Box/HD Satellite Box

You can also enjoy high-definition programming by subscribing to a high-definition cable service or a high-definition satellite service. Make sure you connect this equipment to your TV via the HDMI input on the back of your TV.

Shown with HDMI Connection



Other Equipment



• Optical output connection may require mini-plug adapter (POC-20AP, not supplied).

Using Control for HDMI

The Control for HDMI function allows communication between Sony TVs and Sony equipment. Only Sony equipment with Control for HDMI capability is supported.

To connect Control for HDMI equipment

Use an HDMI cable that bears the HDMI logo for connection. See the HDMI connection shown on page 16.

Setting the Control for HDMI

In order for the Control for HDMI function to operate, the TV and other Sony Control for HDMI equipment must be setup. See page 41 on how to set the **HDMI Control** to **On**. For other equipment, refer to the operating instruction for that equipment.

Control for HDMI available with your TV

Once the supported equipment is connected, the following operations are available:

- Turn off the equipment automatically when you turn off the TV.
- When the connected equipment is turned on by One-Touch-Play, the TV will automatically turn on and select the respective HDMI input.
- Automatically turn on equipment listed under the **External Inputs** on the **XMB™** (XrossMediaBar) when selected, see page 25.

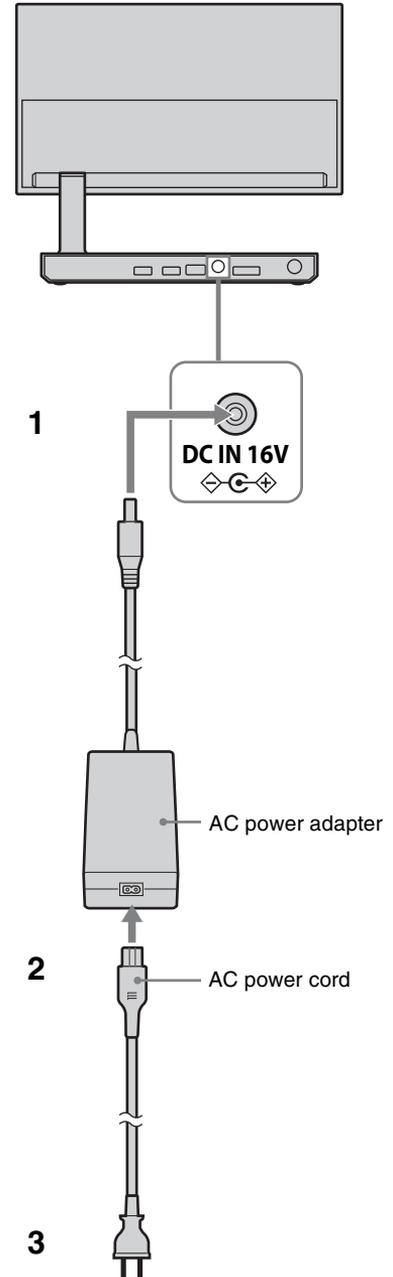


- The A/V receiver cannot be selected from the **XMB™**.

Connecting the AC Power Cord

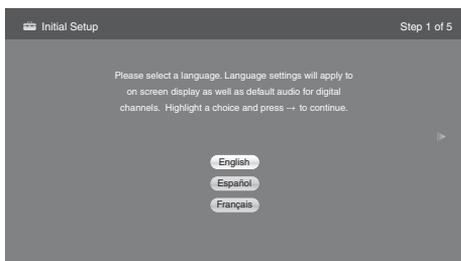
Before connecting the AC power cord to the TV, complete all connections with the equipment.

- 1 Connect the AC power adapter to the TV.
- 2 Connect the AC power adapter with the AC power cord.
- 3 Connect the AC power cord to the wall outlet.



3. Setting Up the Channel List – Initial Setup

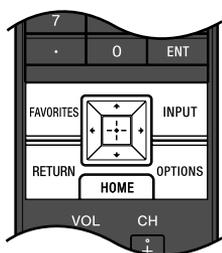
The **Initial Setup** screen appears when you turn on the TV for the first time.



After you finish connecting the TV, you can run **Initial Setup** to create a list of available analog and digital channels if you have connected an antenna or cable directly to the TV's VHF/UHF/CABLE input.

You will be prompted to select the language of your choice to be used for all the on-screen settings.

Use the remote control to navigate through the **Initial Setup**:



↑/↓ buttons:

Allow you to highlight options where applicable.

Center button:

Allows you to select the highlighted option and advance to the next screen.

← button:

Allows you to move back to the previous screen.

→ button:

Allows you to move to the next screen.

Follow the help text provided on the screen to run **Auto Program** with the connected signal source or select **Skip** to skip the **Auto Program** if you are receiving channels from a cable box or satellite receiver and the VHF/UHF/CABLE input is not connected. The **Auto Program** will scan for available channels. When the **Auto Program** is completed, the TV will display how many analog and digital channels are found.



- If you accidentally turn off the TV during the **Initial Setup** process, the **Initial Setup** will restart from the beginning when the TV is turned back on.
- The **Auto Program** may be canceled while the channels are being scanned. Press **RETURN** first then press either **←/→** on the remote control, highlight “Yes” to cancel or “No” to resume **Auto Program**.
- During the **Initial Setup** except **Auto program**, if no operation is performed for more than 5 minutes, the screen turns black and “XEL-1” appears on and off. In this case, press **↑/↓/←/→**, **Center** or **VOL +/-** to return to the previously viewed screen.

□ To Run Initial Setup Again or Auto Program at a Later Time

Select the **Initial Setup** feature under the category **Settings** from the **XMB™** (XrossMediaBar) or refer to the **Initial Setup** described on page 42. To run **Auto Program**, see page 37.

□ To Add Digital Channels

Use the **Add Digital Channels** feature as described on page 37. (Useful for antenna installations.)

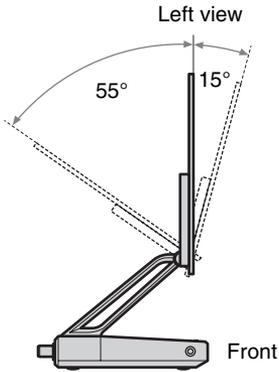
□ To Display the Picture in Your Preferred Aspect Ratio

Select the proper **Wide Mode** as described on pages 22 and 34.

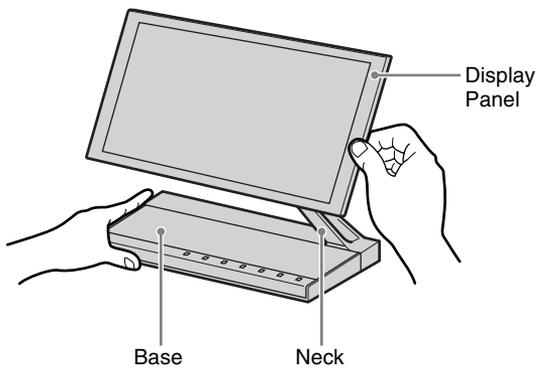
You may want to set up convenient features such as **Favorites** (see page 21), **Show/Hide Channels** (see page 37), **Edit Channel Labels** (see page 37) when **Auto Program** is completed.

4. Adjusting the Viewing Angle of the TV

This TV's display panel can be adjusted to tilt back and forth within the angles as illustrated below.



- When adjusting, do not directly touch or bend the display panel.
- When adjusting the display panel backward, take care not to catch your fingers between the panel and neck of the TV.
- When adjusting the angle, hold the right side of the display panel.



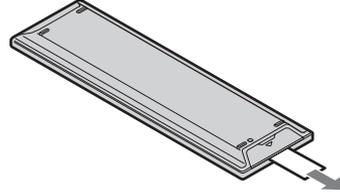
Using TV Features

Overview of the Remote Control and TV Controls/Indicators

Inserting Batteries into the Remote Control

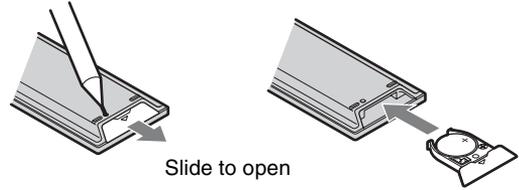
When using the remote control for the first time

Pull the insulation film out from the remote control.

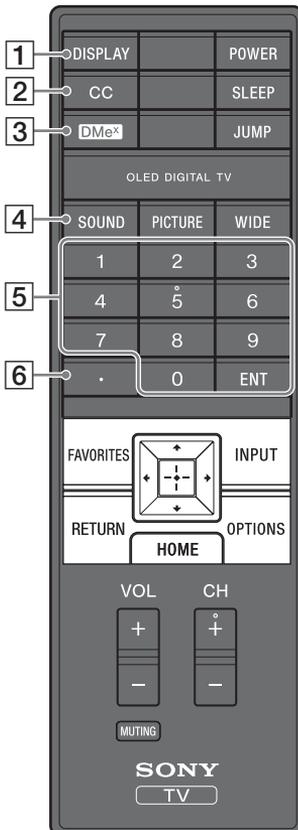


When changing the battery

Unlock the battery holder by pushing a pen tip into the hole located on the rear of the remote control. Slide the battery holder out. Replace the battery with CR2032 (lithium) battery with **+** side up in the battery holder of the remote control.

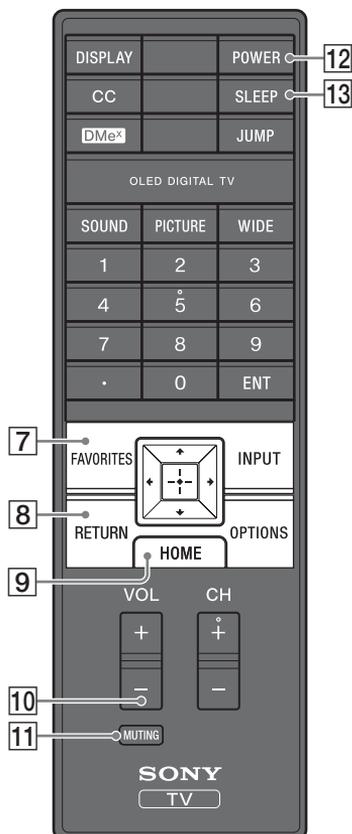


Remote Control



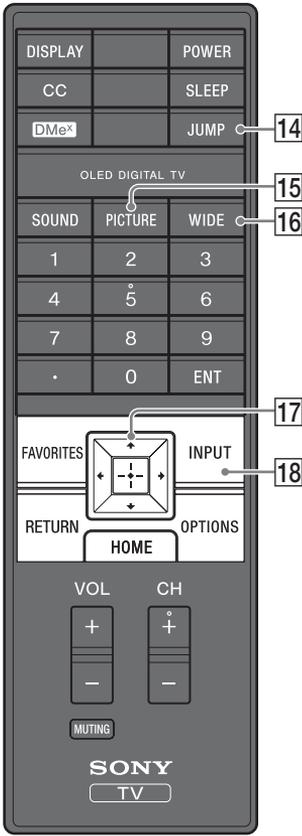
- This remote control cannot be programmed to use with other equipment.
- The **5** button and **CH +** have a tactile dot. Use them as a reference when operating the remote control.
- This remote control is designed to operate at fairly close range from the TV. If you use with other Sony TVs, operate it near the TV you want to 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. You can also set the display to show minimal information. See Info Banner on page 41.
2 CC	Press to turn on and off the Closed Captions (CC). To change or customize the CC Display , see page 38.
3 DMe ^x	Press to access features in the optional BRAVIA external module (e.g. DMX-NV1). See your dealer or www.sony.com/bravia for more information. The module may not be available in your region.
4 SOUND	Press to cycle through different sound settings: Dynamic for enhancing treble and bass, Standard for spoken dialog and Custom for flat setting (see page 34).
5 0-9 ENT	Press 0-9 to select a channel; the channel changes after two seconds. Press ENT to change channels immediately.
6 .	Use with 0-9 and ENT to select digital channels. For example, to enter 2.1, press 2 , . , 1 and ENT .

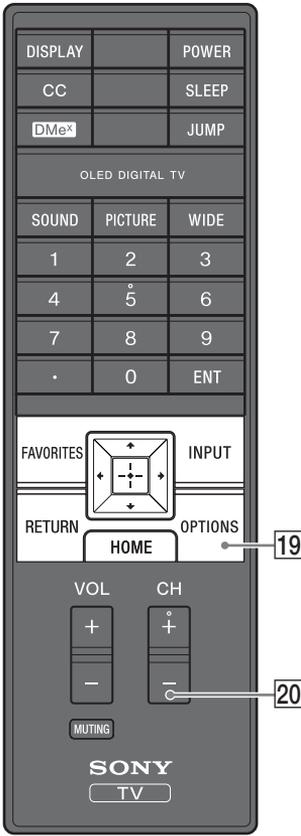


Button	Description
7 FAVORITES	<p>Press once to display the stored favorite channel list. You can store up to 30 channels in your Favorites list.</p> <p>How to Add to Favorites</p> <p>While tuned to the channel you want to add to the list, press OPTIONS and highlight “Add to Favorites”, then press [+]. A confirmation message of “Channel added to Favorites” will appear for a few seconds.</p> <p>How to Remove from Favorites</p> <p>While tuned to a channel that exists in the Favorites list, press OPTIONS and highlight “Remove from Favorites”, then press [+]. A confirmation message of “Channel removed from Favorites” will appear for a few seconds.</p> <p></p> <ul style="list-style-type: none"> Your Favorites list will be cleared each time you run Auto Program (see pages 18 and 37 for Auto Program).
8 RETURN	Press to go back to the previous screen.
9 HOME	Press to display the TV Home Menu/XMB™ (XrossMediaBar) to access the TV Home Menu items such as the TV Settings , Photo , Music , TV channels and External Inputs list (see page 25).
	
	<p></p> <ul style="list-style-type: none"> If the TV Home Menu is displayed, and no operation is performed (such as switching the channels or adjusting the volume control) for more than 2 to 3 minutes, the screen returns to the previously viewed screen.
10 VOL +/-	Press to adjust the volume.
11 MUTING	<p>Press to mute the sound. Press again or press VOL + to restore the sound.</p> <p></p> <ul style="list-style-type: none"> If no operation is performed (such as switching the channels or adjusting the volume control) for more than 5 minutes, “Muting” disappears from the screen. Press ▲/▼/◀/▶ or [+] to display it again.
12 POWER	Press to turn on and off the TV.
13 SLEEP	Press repeatedly until the TV displays the time in minutes (Off , 15min , 30min , 45min , 60min , 90min or 120min) that you want the TV to remain on before shutting off. To cancel Sleep Timer , press SLEEP repeatedly until Off appears.

(Continued)



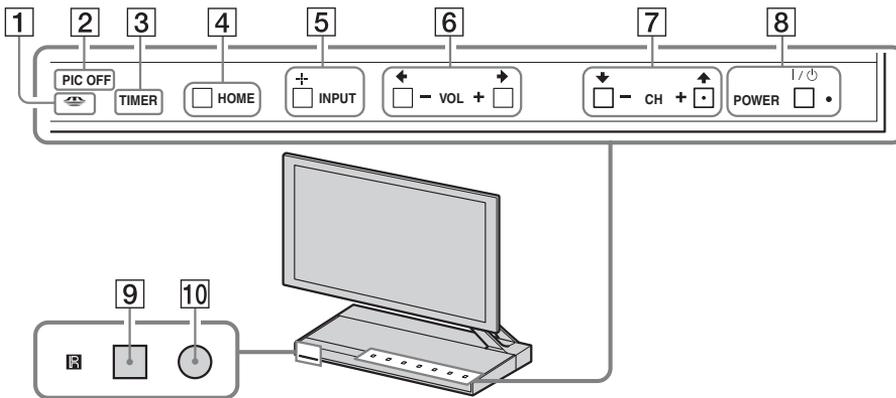
Button	Description												
14 JUMP	Press to jump back and forth between two channels. The TV alternates between the current channel and the last channel that was selected. 												
15 PICTURE	Press repeatedly to cycle through the available picture modes: Vivid, Standard, Custom, Photo . (Available options depend on the current mode.) The picture modes can also be accessed in the Picture settings. For details, see Picture settings on page 32.												
16 WIDE	Press repeatedly to step through the Wide Mode settings: Wide Zoom, Normal, Full, Zoom . The Wide Mode settings can also be accessed in the Screen settings (see page 34). Changing the Wide Screen Mode <table border="1" data-bbox="619 618 1224 1167"> <thead> <tr> <th>4:3 Original source Standard-definition source</th> <th>16:9 Original source High-definition source</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> <tr> <td>Wide Zoom </td> <td>Wide Zoom </td> </tr> <tr> <td>Normal </td> <td>Normal This mode is not available</td> </tr> <tr> <td>Full </td> <td>Full </td> </tr> <tr> <td>Zoom </td> <td>Zoom </td> </tr> </tbody> </table> <ul style="list-style-type: none"> When the TV receives a 720p, 1080i or 1080p signal, Normal cannot be selected. 	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
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 												
17	Press /// to move the on-screen cursor. Press to select/confirm an item.												
18 INPUT	Press once to display the External Inputs list. Press repeatedly to toggle through the HDMI inputs, then press to select/confirm an item.												



Button	Description
19 OPTIONS	Press to display a list of convenient functions and menu shortcuts. The OPTIONS menu items vary based on input and content. <ul style="list-style-type: none"> If the OPTIONS menu is displayed for more than 2 to 3 minutes, and no operation is performed (such as switching the channels or adjusting the volume control), the screen returns to the previously viewed screen.
20 CH +/-	Press to scan through channels. To scan quickly through channels, press and hold down either +/- .

Menu Item	Reference Page
Picture	See page 32
Sound	See page 34
Add to Favorites/ Remove from Favorites	See page 21
MTS	See page 36
Alternate Audio	See page 36
Digital Rating	See page 39
Screen	See page 34
Menus for Photo	See page 27
Menus for Music	See page 27

Buttons and Indicators on the Base



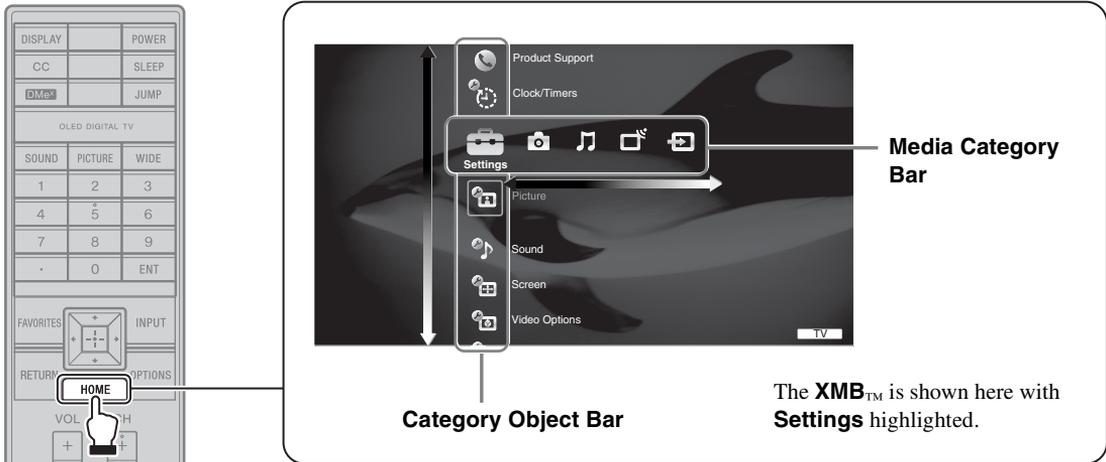
Item	Description
1 LED	Lights up in orange when the Memory Stick is inserted.
2 PIC OFF LED	Lights up in green when the Picture Off feature is activated (see page 41).
3 TIMER LED	When the timer is set, this LED will remain lit even if the TV is turned off. For details, see page 32.
4 HOME	Press to display the TV Home Menu/XMB™ (XrossMediaBar) to access the TV Home Menu items such as TV Settings, Photo, Music, TV channels and External Inputs list (see page 25).
5 INPUT/+	When INPUT is lit, External Inputs can be switched. If the HOME button is pressed, and + is lit, the INPUT button functions as (see page 22).
6 VOL +/-	When VOL +/- are lit, the volume control can be adjusted. If the HOME button is pressed, and are lit, the buttons will act as to select an item on the TV Home Menu/XMB™ (XrossMediaBar).
7 CH +/-	When CH +/- are lit, the channels can be switched. If the HOME button is pressed, and are lit, the buttons will act as to select an item on the TV Home Menu/XMB™ (XrossMediaBar) (see page 23).
8 POWER	Lights up in green when the TV is turned on. <ul style="list-style-type: none"> To the right of the POWER button is a Self-Diagnosis LED. If the LED flashes in red, the TV requires service. Count how many times it flashes red within a two second period, and call the Sony service center or your dealer for further assistance.
9 Light Sensor	Senses room light level and adjusts the screen brightness accordingly (see page 41).
10 (IR) Infrared Receiver	Receives IR signals from the remote control.



- The **CH +** has a tactile dot. Use it as a reference when operating the TV.
- Do not place any objects in front of the light sensor or IR receiver, as their function may be affected.
- Do not block the ventilation openings or speakers by placing any objects on the base. It may cause a malfunction.

Overview of the TV Home Menu (XMB™)

The **HOME** button allows you to access the **TV Home Menu** on the **XMB™** (XrossMediaBar) as well as a variety of TV features. The **XMB™** displays the Media Category icons (horizontally) and available features (vertically) with the highlighted icon.



- 1 Press **HOME** to display the **XMB™**.
- 2 Press **←/→** to select a Media Category icon.
- 3 Press **↑/↓** to select a Category Object icon, and then press **□**.



- If the **TV Home Menu/XMB™** is displayed and no operation is performed (such as switching the channels or adjusting the volume control) for more than 2 to 3 minutes, the screen returns to the previously viewed screen.

Media Category Icons



Settings

Adjusting TV Settings

Customize the TV settings with various options. Explanations of different **Settings** start from page 32.



Photo

Viewing Photos

Enables you to view the photo files contained in a Memory Stick or the **Samples** folder as thumbnails and lets you choose the files you want to display (see page 26).



Music

Enjoying Music

Play music in a Memory Stick or the **Samples** folder. The music files of a Memory Stick or the **Samples** folder are listed on the screen (see page 26).



TV

Watching TV

Select a channel. You can also select a TV channel using the number **0-9** or **CH+/-** buttons (see remote control section pages 20 and 23).



External Inputs

Accessing the Equipment Connected to Your TV

Watch a movie or play a game with HDMI IN(1, 2) connection.

Enjoying Photos and Music from a Memory Stick

The XEL-1 offers easy access to photos and music files stored on Sony Memory Stick media (not supplied).

Enjoy the benefits of the Memory Stick index feature which displays JPEG and MP3 files into accessible thumbnails.

View JPEG Photos (see page 27)

- in standard or slideshow view
- in 3 rotational directions

Play MP3 Music files (see page 27)

- with your slideshow
- in shuffle or repeat track mode

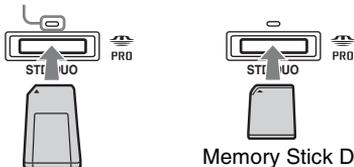
Using Memory Stick Media

The Memory Stick slot accommodates Memory Stick, Memory Stick PRO, Memory Stick PRO Duo and Memory Stick Duo.

Inserting Memory Stick Media

The Memory Stick slot is located on the rear of the TV's base. Gently insert the Memory Stick media into the slot in the correct direction as shown below.

ACCESS LED



Memory Stick

Memory Stick Duo

When inserted properly, it should slide in with little resistance and click into place. While the TV is accessing files, the ACCESS LED will illuminate. Do not remove during this time.

Removing Memory Stick Media

Exit the Memory Stick index menu. Once the ACCESS LED is off, gently push in the Memory Stick media and release. Easily slide the Memory Stick media out of the Memory Stick slot.



- Never forcefully pull the Memory Stick media from the TV's base.
- Never forcefully insert the Memory Stick media into the slot. This could cause damages to it and/or the TV.
- Using an adapter is not necessary for Memory Stick PRO Duo or Memory Stick Duo. It may damage the adapter and/or the Memory Stick slot.
- Inserting other objects other than Memory Stick media into the Memory Stick slot may damage the TV.

- Removing Memory Stick media while the ACCESS LED is lit may damage the Memory Stick media or files.

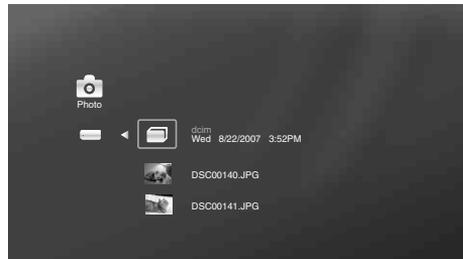
Accessing Photo and Music Files

Access the **Photo** or **Music** icon on the **XMB™** to access the Memory Stick index. The Memory Stick index displays up to 1000 thumbnails in the order they are filed on the Memory Stick media.

- 1 Press **HOME**.
- 2 Press **◀/▶** to highlight the **Photo** or **Music** icon.



- 3 Press **▲/▼** to highlight the **Memory Stick** icon and press **□**.
- 4 Press **▲/▼** to highlight a file or folder and press **□**. If selecting a folder, highlight an available file within the folder to display, and press **□**.



- Photo images may appear magnified, grainy or not full-screen depending on the quality of the file. The size and display of the photo image depends on the resolution or aspect ratio of the file.
- Some still images may take time to display depending on the image dimensions, the file size and the number of files.
- If no operation is performed (such as switching channels or adjusting the volume control) for more than 5 minutes while displaying still or motionless images, the screen saver starts and "XEL-1" appears on and off. Press **▲/▼/◀/▶**, **□** or **VOL +/-** to return to previously viewed screen.
- While displaying a file or folder list, if no operation is performed (such as switching the channels or adjusting the volume control) for more than 2 to 3 minutes, the screen returns to the previously viewed screen.

Viewing Photos

Use the remote control keys to navigate through the photo files from your Memory Stick media.

While Displaying Photo

Press	To
	Pause/Play
RETURN	Stop or return to the list of files and folders
	Play the previous file
	Play the next file

Configuring Photo Viewing Settings

Press **OPTIONS** from the remote control for quick access to **Photo** feature options.

Option	To
Picture	Select to adjust Picture settings (see page 32).
Sound	Select to adjust Sound settings (see page 34).
Display Size	Select to view photos in Standard view or select Expanded to fill the TV screen.
Photo Settings	Select to customize slideshow and still image settings.
Repeat	Select On or Off to repeat the slideshow.
Shuffle	Select to shuffle still images.
Slideshow Speed	Select to set the slideshow speed to Fast , Medium , or Slow .
Slideshow Music	Select to play a music file during slideshow.
Slideshow Effect	Select to set slideshow effects to Simple , Motion , Sepia , Monochrome , Slide , or Fade .
Display Preference	Select to customize display preferences. Select Optimize for Speed or Optimize for Quality .
Display Size	Select to view photos in Standard view or select Expanded to fill the TV screen.
Rotate	Select to rotate still images 90° left, 90° right, or 180°.
Rotate and Save	Select to rotate still images 90° left, 90° right, or 180° and save the selection.

Option	To
Information	Select to display photo information such as File Number , Folder Name , File Name , Date/Time , Resolution , Protection and Format .

When the Memory Stick index is displayed and **OPTIONS** is selected from the remote control, the following options are also available.

Option	To
File Order	Select to sort folders or files.
Thumbnail View/List View	Select to display files in Thumbnail View or List View .
View	Select to display the highlighted photo.
Start Slideshow	Select to display photos as a slideshow.



- When folders are added for slideshow, a different folder may be played if the folder and/or file order has been changed in the Memory Stick.
- When a folder is selected and the **Total Items** of the **Information** screen displays “+”, some files may not be displayed on this TV’s screen (see page 44).

Listening to Music

Use the remote control keys to navigate through the music files from your Memory Stick media.

While Playing Music

Press	To
	Pause/Play
RETURN	Stop or return to the list of files and folders
Hold down 	Scan the files quickly
	Move to the beginning of current file*
	Play the next file

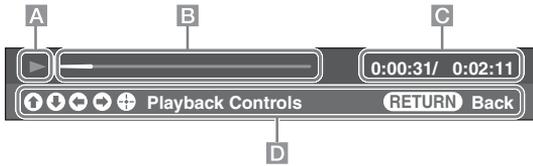
* If it is within 3 seconds after a music starts, move to the previous file.

(Continued)

Information Panel

Information panel shows playback status or playback time. Press **DISPLAY** to open or close information panel*.

* Information panel cannot be displayed while displaying a still image in the **Photo** menu.



A Play Status Display

B Progress Bar

The progress bar will not be displayed if the total time of a file is not recognized.

C Playing Time/ Song Length

D Operating Guide

The Operating Guide displays the corresponding remote control buttons needed to control playback. It will disappear after 5 seconds.

Configuring Music Listening Settings

Press **OPTIONS** from the remote control for quick access to **Music** feature options.

Option	To
Sound	Select to adjust Sound settings (see page 34).
Information	Select to display music information such as File Number, Title, File Name, Size, Duration, Bit Rate, and Format .

When the Memory Stick index is displayed and **OPTIONS** is selected from the remote control, the following options are also available.

Option	To
Omit from Slideshow	Select to clear a file or folder from Slideshow.
Repeat All	Select On or Off to repeat the music files.
File Order	Select to sort folders or files.
Thumbnail View/ List View	Select to display files in Thumbnail View or List View .

Option	To
Play	Select to play music files.
Shuffle	Select to shuffle music.
Play & Repeat Track	Select to repeat music file.
Add for Slideshow	Select to add music to slideshows.



- When folders are added for slideshow, a different folder may be played if the folder and/or file order has been changed in the Memory Stick.
- When a folder is selected and the **Total Items** of the **Information** screen displays "+", some files may not be displayed on this TV's screen (see page 44).

About Memory Stick

This TV is compatible with the following Sony brand Memory Stick media types:

- Memory Stick and Memory Stick PRO Media
- Memory Stick Duo and PRO Duo Media (can be used without the Memory Stick adapter)

CAUTION

The Memory Stick slot on your TV has been designed to accommodate standard and compact versions (Duo) of Memory Stick. **It is not necessary to use an adapter for Memory Stick Duo or Memory Stick PRO Duo media as it may damage the adapter or the Memory Stick slot.**

- Memory Stick Media with Memory Select Function



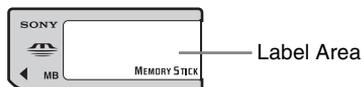
- This TV has been tested to support up to 8 GB Memory Stick media capacity.

Memory Stick Precautions

When using Memory Stick media, follow these precautions:

- To avoid permanent damage to still image data, do not turn off the TV or remove Memory Stick media from the insertion slot while data is being read (as indicated by the ACCESS LED blinking on the rear of the TV).
- Avoid touching the terminal of Memory Stick media or bringing it into contact with a metal object.
- Do not drop, bend, or submit Memory Stick media to external shock.

- Do not disassemble or modify Memory Stick media.
- Avoid getting liquid on Memory Stick media.
- Apply labels only within the designated label area.



- Avoid permanent damage to still image data. Do not use or store Memory Stick media in a location that is subject to high temperatures (such as near a heater or inside a hot car), high humidity, direct sunlight, corrosive substances, magnetic fields, excessive dust, static electricity or electric noise, or electric surges.
- Store and carry Memory Stick media in its original case to ensure protection of stored data.
- Save a backup of stored data.

Memory Stick Functionality

Sony cannot guarantee or assure the Memory Stick functionality on this TV in the following cases:

- Use of non-Sony brand Memory Stick media.
- Use of video or audio clips processed on a computer.
- Use of files obtained from the Internet or from a printed film processing center.
- Use of a Memory Stick formatted on a personal computer.

Sony recommends backing up all data stored on Memory Stick media to avoid potential data corruption prior to using the TV's Memory Stick Viewer. Sony cannot accept responsibility for lost or damaged data recorded on Memory Stick media.

The Memory Stick functionality on this TV is designed to be compatible with various Sony brand digital cameras, but not all. Sony cannot guarantee or assure compatibility with all formats or products.

For certain non-Sony brands Memory Stick media, images can be viewed on the TV. An error message will occur if any of these operations are attempted. This is a result of the unique file directory structure on these particular flash memory media and is not a malfunction of the TV.

Protecting the TV Screen

Precautions to Protect the Screen from Damage

Prolonged display of still images over time may cause permanent image retention (image burn). Avoid displaying images that cause image burn and take the following measures to protect the screen.

Image Retention

Due to the characteristics of the material used in an OLED screen for its high-precision image, permanent image retention may occur if still images are displayed in the same position on the screen continuously, or repeatedly over extended periods.

Images that may cause image retention

- wide screen sources with black bars at the top and bottom (Letterboxed Image)
- 4:3 screen sources with black bars at the left and right
- non-moving images such as photo
- game sources
- on-screen tickers, such as those used for news and headlines.
- on-screen menus, program guides, channel numbers, etc., of connected equipment such as a set-top box, video recorder, disc player, etc.

To reduce the risk of image burn

- **Fill the entire screen with images**

Set **Wide Mode** to **Wide Zoom** or **Full** in the **Screen** settings (see page 34).

- **Turn off the OSD (On Screen Display)**

Press the **DISPLAY** button to turn off the OSD. Turn off the menus of connected equipment. For details, see the operating instructions supplied with the equipment.

- **Select the appropriate Picture settings for the room brightness**

Setting **Picture Mode** to **Standard** in the **Picture** settings is recommended for home entertainment and when viewing a channel that often displays the station logo (see page 32).



- **Auto Brightness Control** adjusts the brightness of the image automatically when highly contrasting images are displayed on the screen for a long period of time (see page 41).
- This TV has a function to reduce the risk of image retention by slightly shifting the picture position on the display automatically after a set time has elapsed.

Screen Saver

If still or motionless images are displayed and no operation is performed (such as switching the channels or adjusting the volume control) for more than 5 minutes, the screen saver starts automatically. It protects the screen from image burn damage and reduces power consumption.

Under the following conditions the XEL-1 screen saver may appear:

- a photo from Memory Stick
- thumbnails of photos from Memory Stick
- a music file with an image from Memory Stick
- some settings screens

Press **▲/▼/◀/▶**, **+** or **VOL +/-** to return to the previously viewed images, or just press another button(s) to operate another function(s).

The screen will gradually fade to dark

If no operation is performed (such as switching the channels or adjusting the volume control) for more than 5 minutes, the screen fades to dark gradually. Press **HOME** or **OPTIONS** to deactivate the screen saver.

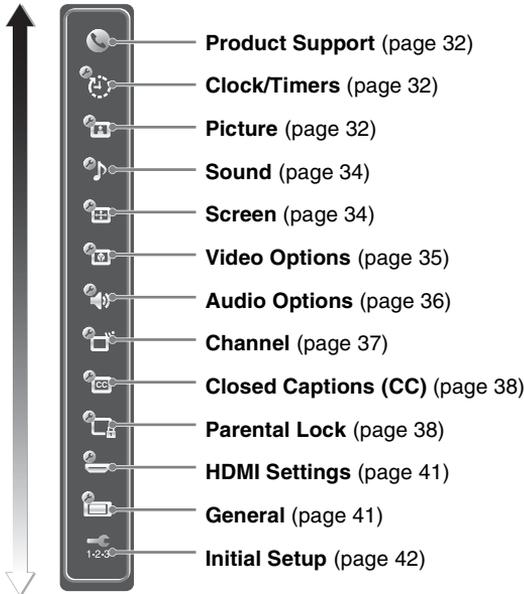
Images that may darken the screen

- still or motionless images displayed by HDMI connection
- a still or motionless broadcast image

Customizing the TV Settings

Adjusting the Settings Menu

- 1 Press **HOME** to display the **XMB™**.
- 2 Press **←/→** to select **Settings**.
- 3 Press **↑/↓** to move within the Category Object Bar.



- 4 Press **+** when desired item is highlighted.
- 5 Press **+** or **↑/↓** to select the highlighted item.
- 6 Press **RETURN** to display the previous screen or **HOME** to display the **XMB™** again.



- The available options vary depending on the situations and conditions applied. Unavailable options are grayed out or not displayed.

TV Settings Descriptions



Product Support

Contact Sony

Sony contact information is available from this screen for your convenience. Your TV's specific information such as Model Name, Serial Number, Software Version and downloadable ratings if available from the TV are displayed here.

Signal Diagnostics

Press **[+]** to display the diagnostics information for the current signal.



Clock/Timers Settings

Current Time

Set the current time (day, hour, minutes, and AM/PM). The **Timer** feature will not be available until you set the **Current Time**.

- 1 Use the **▲/▼/◀/▶** button to highlight the **Clock/Timers** icon and press **[+]**.
- 2 Use the **▲/▼/◀/▶** button to set the current time.
- 3 Press **RETURN** to display the confirmation screen.
- 4 Select **Yes** or **No** to save changes you made. Selecting **Yes** will save your settings and exit the **Current Time** setting screen.

Timer

After the **Current Time** is set, you can set the **Timer** to automatically turn the TV on and off and tune to a specific channel at a scheduled time.

- 1 Use the **▲/▼/◀/▶** button to highlight the **Timer** icon and press **[+]**.
- 2 Press **[+]** to select **On** to set the timer.
- 3 Use the **▲/▼/◀/▶** button to set the following: **Day of the Week**, **Time**, **Duration**, **Channel**, and **TV On Volume**.
- 4 Press **RETURN** to display the confirmation screen.
- 5 Select **Yes** or **No** to save changes you made. Selecting **Yes** will save your settings and will light up the **TIMER LED**. Exit the **Timer** setting screen.

Sleep Timer

Sets the time in minutes (**Off**, **15min**, **30min**, **45min**, **60min**, **90min**, or **120min**) that you want the TV to remain on before shutting off automatically. This can also be set using the **SLEEP** button on the remote control (see page 21).



Picture Settings

Picture Mode

Vivid

For enhanced picture contrast and sharpness.

Standard

For standard picture settings. Recommended for home entertainment and when viewing a channel that often displays the station logo.

Custom

Allows you to store your preferred settings.

Photo

This option is available instead of **Custom**, when viewing photos.



- **Picture Mode** can also be accessed by pressing **PICTURE** on the remote control to directly toggle the modes (see page 22).

Reset	Resets the current Picture Mode setting to the default values.
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.
Color Temperature <i>White adjustment</i>	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.



• **Picture Mode** settings determines the available **Color Temperature** options:

Color Temperature options	Picture Mode			
	Vivid	Standard	Custom	Photo*
Cool	yes	yes	yes	yes
Neutral	yes	yes	yes	yes
Warm1, 2	n/a	yes	yes	yes

Sharpness	Sharpens or softens the picture.
Noise Reduction	Reduces the noise level of connected HDMI equipment, and the VHF/UHF/CABLE input.
MPEG Noise Reduction	Reduces the mosaic effect in MPEG-compressed video. Useful for DVDs and Digital TV channels.

Advanced Settings	Advanced Settings are available for the following conditions:				
		Vivid	Standard	Custom	Photo*
	Advanced Settings	n/a	yes	yes	yes

Reset	Resets all the advanced settings to the default values.
Black Corrector	Enhances black areas of the picture for stronger contrast.
Gamma	Adjusts the balance between the light and dark areas of the picture.
Clear White	Emphasizes white and light colors.
Color Space	Selects the range of color reproduction from Wide or Normal .
Live Color	When Color Space is set to Wide , this option makes colors more vivid and reproduces realistic skin tones.

* **Photo** is available instead of **Custom**, when viewing photos.



• **Picture** settings for all inputs can also be accessed by pressing **OPTIONS** on the remote control, then selecting **Picture** from the **OPTIONS** menu.

Sound Settings

Available **Sound** settings depend on the headphone/DIGITAL AUDIO OUT (OPTICAL) connection.

Sound Mode	Dynamic	Enhances treble and bass.
	Standard	Suitable for spoken dialog.
	Custom	Customizes the sound settings including the Sound Booster setting.
		
	• Sound Mode can also be accessed by pressing OPTIONS on the remote control.	
Reset	Resets the current Sound Mode setting to the default values.	
Treble	Increases or decreases higher-pitched sounds.	
Bass	Increases or decreases lower-pitched sounds.	
Balance	Emphasizes left or right speaker balance.	
Surround	S-FORCE Front Surround	Provides a virtual surround sound experience made possible using just two front speakers.
	Off	Select for normal stereo or mono reception.
Sound Booster	The Sound Booster provides a fuller sound with a greater sense of depth and width, by emphasizing the High and Low frequency sounds. Select High or Low for the amount of boost you desire while in the Custom Sound Mode . Selecting Off will bypass the emphasis.	
		
	• The Sound Booster is automatically in the High position for Dynamic Sound Mode and Low position for Standard Sound Mode .	
Steady Sound	On	Stabilizes the volume across all programs and commercials.
	Off	Turns off Steady Sound .
Volume Offset	Adjusts the volume level of the current input (TV or HDMI input) relative to other inputs.	



- Only **Reset** and **Volume Offset** options are available when headphones are connected.

Screen Settings

Wide Mode	Wide Zoom	Fills the screen with minimum distortion.
	Normal	Displays the 4:3 picture in its original aspect ratio when the original source is 4:3.
		
	• Normal is not available when you are watching 720p, 1080i or 1080p sources.	
	Full	Enlarges 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 the 16:9 picture in its original size.
	Zoom	Select to enlarge the picture horizontally and vertically to fill the screen while maintaining the aspect ratio.
		
	• Wide Mode can also be accessed by pressing the WIDE button (see page 22).	
	• See WIDE button description and “Changing the Wide Screen Mode” chart on page 22 for easy access to Wide Mode .	

Auto Wide	On	Automatically changes Wide Mode setting based upon content. If frequent screen changes are disturbing to you, select Off .
	Off	Turns off the Auto Wide option. Choose a screen mode from the Wide Mode option.
4:3 Default <i>Select the default screen mode to use for 4:3 sources</i>	Wide Zoom	Enlarges the 4:3 picture to fill the 16:9 screen, displaying as much of the original image as possible.
	Normal	Displays the 4:3 picture in its original aspect ratio.
	Full	Select to enlarge the 4:3 picture horizontally only, to fill the screen.
	Zoom	Select to enlarge the picture horizontally and vertically to fill the screen while maintaining the aspect ratio.
	Off	Select to continue using the current Wide Mode setting when the channel or input is changed.



- This option is not available if **Auto Wide** is set to **Off**.
- 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**.

Display Area	Normal	Displays the picture in its original size.
	-1/-2	Enlarges the picture to hide the edge of the picture.

Screen Position Adjust the **Vertical** positioning by pressing the **▲/▼** buttons. Press the **◀/▶** buttons to adjust the **Horizontal** positioning.



- **Screen Position** option is available for standard-definition signals only. Vertical adjustment is available only when **Wide Mode** is set to **Zoom**.
- **Screen Position** feature is useful if the TV is connected to game equipment.

Vertical Size Adjusts the vertical size of the picture. (Available only in **Wide Zoom** and **Zoom**.) Press **◀/▶** and press **⊕** to adjust.



- Only **Wide Mode**, **Auto Wide** and **Display Area** options are available for high-definition signals from HDMI connections.



Video Options Settings

CineMotion Select **Auto** to automatically detect film content and apply a reverse 3-2 pulldown process. Moving pictures will appear cleaner and more natural looking. The **CineMotion** feature can be set separately for each external input. Select **Off** to disable the detection.



Audio Options Settings

MTS <i>Enjoy stereo, bilingual and mono programs</i>	Stereo	For stereo reception when viewing a TV program broadcast in stereo.
	Auto SAP	Automatically switches the TV to second audio programs when a SAP signal is received. If no SAP signal is present, the TV remains in Stereo mode.
	Mono	For mono reception. Use to reduce noise during weak stereo broadcasts.



- **MTS** is available only for analog programs.
-



- **Alternate Audio** feature is available only for digital programs. If the program you are watching is also available in other languages from the audio tracks, and if that language is what you have selected in the **Language** setting, your TV will automatically switch to the matching language with the **Alternate Audio** feature. The **Alternate Audio** option may be accessed by pressing the **OPTIONS** button on the remote control when alternate audio stream is available from the broadcaster.



Channel Settings

Cable	On	For receiving cable channels via cable TV provider.
	Off	For using an antenna.
		<ul style="list-style-type: none">You should run Auto Program after changing the Cable setting.
Auto Program		Automatically sets up the channel list on the TV for all receivable channels. Channel scanning will be based on the Cable On/Off setting. <ol style="list-style-type: none">Select Auto Program.Select OK to start Auto Program. When Auto Program is completed, the screen will display the number of channels found.Press RETURN to exit the Auto Program.  <ul style="list-style-type: none">Running Auto Program will clear Favorites list.If you run Auto Program again, previously scanned channels will be overwritten with the newly scanned channels.
Add Digital Channels		Select to add digital channels. Be sure to have the Cable option selected appropriately for the signal source. (Useful for antenna installations.)
Show/Hide Channels		Allows you to show or hide channels when you surf with the CH +/- button or in the TV channel list on the XMB™ . <ol style="list-style-type: none">Press ▲/▼ to scroll through the channels until you highlight the channel to show or hide.Press [+] to select Shown or Hidden. To show or hide more channels, repeat steps 1-2.  <ul style="list-style-type: none">Hidden channels can be accessed by entering the channel number with 0-9 buttons on the remote control.
Edit Channel Labels		Assigns labels (such as station call letters) to channel numbers. <ol style="list-style-type: none">Press ▲/▼ to scroll through the channel numbers. Then press [+] to select the channel number to assign a label.Press ▲/▼ to scroll through the label characters (A-Z, 0-9, etc.). Press ▶ to move to the next character. Repeat to add up to 7 characters to the label. Press [+] to set it. To assign labels to more channels, repeat steps 1-2.

Closed Captions (CC) Settings

CC Display	This option allows you to turn On or Off the Closed Captions (CC) feature.
Analog CC	Select this option for the basic analog (EIA-608) closed caption options. CC1, CC2, CC3, CC4 Displays a printed version of the dialogue 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 or the whole screen (if available).
Digital CC	Select this option for both analog (EIA-608) and digital (EIA-708) closed caption options. Select from CC1-4 and Service 1-6 (advanced digital closed caption options).
Display Options	Customize the Closed Captions (CC) displays with Text, Character Size, Character Style, Character Color, Character Opacity, Edge Type, Edge Color, Background Color and Background Opacity .



- **Closed Captions (CC)** can be turned on and off directly by pressing the **CC** button on the remote control (see page 20).

Parental Lock Settings

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.

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.

Password	Use 0-9 button on the remote control to enter a four-digit password. The first time the password is created, you must re-enter it again to confirm the password. "Password Set" message will appear on the screen upon confirmation.
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Change Password

You can change your password by entering the **Parental Lock** setting with the previously set password, highlight and select the **Change Password** then enter the new password.



- You need your password for any future access into the **Parental Lock** settings. If you lose your password, see "Lost password" on page 45.

Country	Select the country name of U.S.A. or Canada for the appropriate ratings. The rating system varies between these two countries. See "Custom Rating System Chart" on page 40.
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Rating	Off	Turns off Parental Lock . No programs are blocked from viewing based on their ratings.
	Child	Maximum ratings permitted are: U.S.: TV-Y, TV-G, G Canada: C, G, 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	Sets ratings manually. U.S.: See page 40 for details. Canada: See page 40 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 <i>(Available only in U.S.A. where advanced ratings exist)</i>	Off	Turn 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 <i>(Available only when Country is set to U.S.A.) Block programs or movies that are broadcast without a rating</i>	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.

Channel Block	This option 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 View a Blocked Channel Press ENT button when tuned to the blocked channel then enter the password.

Custom Rating System Chart

For **Country** selection of **U.S.A.**:

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 ages under 17
	NC-17 and X	No one 17 or under allowed

TV Rating <i>Block programs by their rating, content or both</i>	Age-Based Ratings	
	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.

For **Country** selection of **Canada**:

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. for details.
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HDMI Settings

HDMI inputs of this TV will recognize and communicate with other Sony equipment equipped with Control for HDMI.

HDMI Control	On/Off feature allows your TV to communicate with other equipment that supports Control for HDMI.
Device Auto Power Off	Select On to have your connected Control for HDMI equipment to power off automatically when the TV is turned off. Select Off to disable this function.
TV Auto Power On	Select On to control your TV's power on from your connected Control for HDMI equipment. Select Off to disable this function.
Device List	Displays a list of Control for HDMI equipment connected to the TV.



General Settings

Language	Select the language of your choice from English, Español and Français to be used for displaying all the on-screen settings.
Info Banner	<p>Displays the program name and the program information such as program title and program rating (if available from the broadcaster) when option is set to On. Select Off for minimal display information. Selecting Off will not completely disable the banner display. Info Banner also appears on the screen each time the channel is changed or DISPLAY button on the remote control is pressed.</p>  <ul style="list-style-type: none"> To see the rating information on the banner, Info Banner setting must be set to On.
Power Saving	<p>Reduces the power consumption by adjusting the brightness. This also enhances the black level. Select from Off, Low, High and Picture Off.</p>  <ul style="list-style-type: none"> If power is turned off while Power Saving is set to Picture Off, power consumption returns to standard when power is turned on again.
Light Sensor	<p>Enables the brightness control automatically. The Light Sensor measures the room brightness which allows the TV to automatically adjust the brightness based on the picture settings and the ambient room light conditions.</p>  <ul style="list-style-type: none"> Do not place anything in front of the sensor and IR receiver, as their function may be affected (see page 24). In low light the brightness is reduced when the Light Sensor is set to On.
Auto Brightness Control	<p>Adjusts the brightness of the image automatically when highly contrasting images are displayed on the screen for a long period of time. Select Min to dim the image. The brightest elements on the screen, such as the time indicator, will be less bright in order to prevent image burn. Ghosting (white shadows) may occur in rare cases. In this case, select Max to reduce the ghosting.</p>

Initial Setup

1·2·3

If you have missed the **Initial Setup** when you first connected the TV or if you want to scan all receivable channels, you can run the **Initial Setup**. Follow the instructions on the screen. Settings such as picture and sound adjustments will not be affected by this **Initial Setup** (see page 18).



- **Favorites** list will be cleared each time you run the **Initial Setup**.

Other Information

Troubleshooting

If you have questions, service needs, or require 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>
 1-800-222-SONY(7669) for US Support
 1-877-899-SONY(7669) for Canadian Support

Condition	Explanation/Solution
No picture	
No picture	<ul style="list-style-type: none"> • Check the Power Saving settings (see page 41).
Cannot receive any channels	<ul style="list-style-type: none"> • Make sure the power cord is connected securely. • Turn on the power of the TV. • Check antenna/cable connections. • Make sure the Cable setting is correct for your TV signal source.
TV is locked to one channel	<ul style="list-style-type: none"> • Perform Auto Program to add receivable channels that are not present in the TV's memory (see pages 18 and 37).
Cannot receive or select channels	<ul style="list-style-type: none"> • Perform Auto Program to add receivable channels that are not present in the TV's memory (see pages 18 and 37). • To receive or select cable channels, make sure that Cable in the Channel settings is set to On (see page 37). To receive or select UHF channels over an antenna, make sure Cable is set to Off.
The TV turns off automatically	<ul style="list-style-type: none"> • Check if Sleep Timer is activated, or confirm the Duration setting of Timer (see page 32).
No picture from some video sources	<ul style="list-style-type: none"> • Check the connection between the optional video equipment and the TV. • Press INPUT on the remote control (see page 22). • Press HOME on the remote control. Select your desired input from the External Inputs list.
Poor picture	
The quality of the images is not as good as what I saw at the store	<ul style="list-style-type: none"> • Picture quality depends on the signal content.
Double images or ghosts	<ul style="list-style-type: none"> • Check antenna/cable connections. • Check the antenna location and direction. • Press HOME to select the desired Auto Brightness Control.
Only snow and noise appear on the screen	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 75 ohm coaxial cable instead.
No color/Dark picture/Color is not correct/The picture is too bright	<ul style="list-style-type: none"> • Press PICTURE to select the desired Picture Mode (see page 22). • Adjust the Picture Mode options in the Picture settings (see page 32). • If you set the Power Saving mode to Low or High, it will enhance the black level (see page 41).
Noisy picture	<ul style="list-style-type: none"> • Make sure that the antenna is connected using a 75-ohm coaxial cable. • Keep the antenna cable away from other connecting cords. • To avoid TV interference, make sure to use an undamaged antenna cable.

(Continued)

Condition	Explanation/Solution
No sound/Noisy sound	
Good picture, no sound	<ul style="list-style-type: none"> • Check the volume control. • Press MUTING or VOL + so that “Muting” disappears from the screen (see page 21). • Disconnect your headphones. • When using HDMI input with Super Audio CD or DVD-Audio, DIGITAL OUT (Optical) may not provide an audio signal. • For HDMI equipment, confirm that the audio output setting of the connected equipment is set to PCM. This TV’s HDMI inputs support PCM 32, 44.1 and 48 kHz, 16, 20 and 24bits.
Audio noise	<ul style="list-style-type: none"> • Make sure that the antenna is connected using a 75-ohm coaxial cable. • Keep the antenna cable away from other connecting cords. • To avoid TV interference, make sure to use an undamaged antenna cable.
Memory Stick	
Some photo images or music files cannot be displayed in the List View	<ul style="list-style-type: none"> • The files other than JPEG in photo or MP3 in music will not be shown on the screen. • The limit of files available is 1,000 files. Files are populated based on timestamp from the memory stick. If there are files other than JPEG in photo or MP3 in music, they will be included in the 1,000 file limitation, but they will not be shown on the screen.
Photo images or Music files in Memory Stick cannot be played	<ul style="list-style-type: none"> • The Memory Stick functionality on this TV is designed to be compatible with various Sony brand digital cameras, but not all. Sony cannot guarantee or assure compatibility with all formats or products (see page 29).
Photo images appear grainy	<ul style="list-style-type: none"> • Photo images appear magnified and grainy depending on the quality of the file.
Photo images appear small in the screen	<ul style="list-style-type: none"> • Set Display Size to Expanded. • Photo images cannot be displayed full-screen depending on the resolution or aspect ratio of the file.
Photo images take time to display	<ul style="list-style-type: none"> • Some photo images take time to display depending on the image dimensions, file size and number of files.
General	
Wide Mode changes automatically	<ul style="list-style-type: none"> • 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 settings is set to other than Off. If you want to lock in Wide Mode selected with WIDE on the remote control, set 4:3 Default to Off in the Screen settings (see page 22). • Check the Auto Wide option in the Screen settings (see page 34).
Suddenly the picture gets smaller	<ul style="list-style-type: none"> • 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.
“Black box” on screen	<ul style="list-style-type: none"> • You have selected a text option and no text is available (see page 38). To turn off this feature, set the CC Display option to Off. If you were trying to select closed captioning, select CC1 instead of Text1-4.
Black bands appear at the edges of the screen	<ul style="list-style-type: none"> • 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.
Certain programs on DVD or other digital sources display a loss of detail, especially during fast-motion or dark scenes	<ul style="list-style-type: none"> • This is due to the digital compression of the source content used by certain digital broadcasts and DVDs which 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. These signal compressions are more visible and are dependent on the clarity and resolution of the television.

Condition	Explanation/Solution
The screen suddenly turns black	<ul style="list-style-type: none"> When the screen turns black with “XEL-1” displayed on and off, the screen saver is activated. Press ▲/▼/◀/▶, [+] or VOL+/- buttons to return to the previously viewed screen. If no operation is performed (such as switching the channels or adjusting the volume control) for more than 5 minutes when the HDMI input is selected and no HDMI signal is input, the HDMI input sign on the screen disappears and the screen turns black. Press ▲/▼/◀/▶ or [+] to display the sign again.
The TV Home Menu or Settings menu suddenly disappears	<ul style="list-style-type: none"> When no operation is performed (such as switching the channels or adjusting the volume control) for more than 2 to 3 minutes while displaying the TV Home Menu or Settings menus, the screen returns to the previously viewed screen.
Ghosting appears occasionally	<ul style="list-style-type: none"> In order to protect the screen, the brightness of the screen is automatically adjusted. When Auto Brightness Control is set to Min, prolonged display of bright images may cause ghosting. In this case, select Max to reduce the ghosting.
The screen fades to dark gradually	<ul style="list-style-type: none"> When no operation is performed (such as switching the channels or adjusting the volume control) for more than 5 minutes while displaying still or motionless images, the screen fades to dark gradually. Press HOME or OPTIONS to return to the normal screen.
The entire screen moves occasionally	<ul style="list-style-type: none"> In order to protect the screen by preventing image retention, the display position of an image is moved slightly after a predetermined time has elapsed.
Remote control does not operate	<ul style="list-style-type: none"> Check the polarity of the batteries or replace the batteries. Point the remote control at the remote control sensor located at the front 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	<ul style="list-style-type: none"> 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 (see page 37).
Lost password	<ul style="list-style-type: none"> Select the Password settings on the Parental Lock settings, then enter the following master password: 4357. The master password clears your previous password and allows you to enter a new password (see page 38).
The TV becomes warm	<ul style="list-style-type: none"> The TV may become warm depending on the way the TV is installed and/or used. This is not a malfunction.
How to reset the TV to factory settings	<ul style="list-style-type: none"> Turn on the TV. While holding down ▲ on the remote control, press POWER on the TV. (The TV will turn itself off, then back on again.) Release ▲. WARNING: The Reset will clear all of your customized settings including the Parental Lock setting.

Specifications

Model	XEL-1
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	OLED (Organic Light-Emitting Diode) Panel
Speaker output	1 W + 1 W
Input/Output jacks	
Antenna	75-ohm external terminal for VHF/UHF
HDMI IN 1/2	HDMI: Video: 480i, 480p, 720p, 1080i, 1080p / Audio: Two channel linear PCM 32, 44.1 and 48 kHz, 16, 20 and 24bits
Headphones/DIGITAL AUDIO OUT (OPTICAL)	Stereo mini jack / Impedance: ≥ 16 ohms Optical Digital Audio Output (PCM/Dolby Digital)
Power and others	
Power requirement	XEL-1: 16 V DC with AC power adapter AC power adapter AC-ED001: Rating: Input AC 100 V-120 V 1.3 A-1.0 A 50/60 Hz Output DC 16 V 3.75 A
Power consumption	
in use	34 W
in standby	0.7 W
Screen size (inches measured diagonally)	11
Display resolution (horizontal \times vertical)	960 dots \times 540 lines
Dimensions (mm) (inches)	287 \times 253 \times 140 11 $\frac{3}{8}$ \times 10 \times 5 $\frac{5}{8}$
Mass	4 lb. 3oz. 1.9 kg
Supplied accessories	Remote control RM-YD022 (1) / CR2032 (lithium) battery (1) / AC power cord (1) / AC power adapter AC-ED001 (1) / Operating Instructions (1) / Warranty Card (1) / Online Registration Card (U.S.A. and Canada only) (1) / Cleaning Cloth (1)
Optional accessories	Headphones plug adapter / Connecting cables / POC-20AP (Mini-plug adapter for Digital audio equipment)



- Optional accessories availability depends on its stock.
- Design and specifications are subject to change without notice.

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For Your Convenience

Please contact Sony directly if you:

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

Contact Sony Customer Support at:

<http://www.sony.com/tvsupport>

or to speak with a support representative:

United States

1-800-222-SONY (7669)

Canada

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

<http://www.sony.net/>

