SONY®

LCD TV

Operating Instructions

BRAVIA

KLV-46BX450/KLV-40BX450/KLV-40CX450/KLV-32BX35A/KLV-32BX350/KLV-32CX350/
KLV-26BX350/KLV-26CX350/KLV-22BX350/KLV-22CX350

Introduction

Thank you for choosing this Sony product.
Before operating the TV, please read this manual thoroughly and retain it for future reference.
The illustrations used in this manual are of the KLV-32BX350 unless otherwise stated.

Location of the identification label

Labels for Model No. and Power Supply rating (in accordance with applicable safety regulation) are located on the rear of the TV.

Notice for customers in India

Attach the supplied plug adaptor.
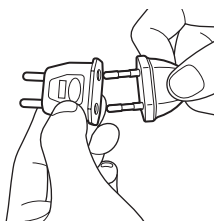
Disposal of the TV set

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

This symbol is on the remote control.

Disposal of the TV set

Disposal of Old Electrical & Electronic Equipment (Applicable in Republic of India)
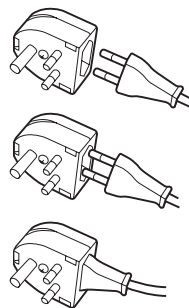
India only

This symbol indicates that this product shall not be treated as household waste and may not be dropped in garbage bins. Product owners are advised to deposit their product at the nearest collection point for the recycling of electrical and electronic equipment.Your co-operation shall facilitate proper disposal & help prevent potential negative consequences/hazards to the environment and human health, which could otherwise be caused by inappropriate waste disposal including improper handling, accidental breakage, damage and/ or improper recycling of e-waste.The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local civic office, your household waste disposal service provider or the store where you made the purchase. You may contact our company's toll free number in India for assistance.

Notice for customers in South Africa

The Euro/South Africa converter plug should be fitted as follows.

1 Insert the power supply or CEE7 plug in to the converter plug.

2 Use an appropriate screwdriver to attach the screw tightly without damaging the screw head.

3 TEST: Grip the converter plug, and pull the VDE cord set/transformer to ensure it is fully secure, if not then increase the torque setting and further tighten.
Re-test.
The converter plug is now ready for use.

Trademark information

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- "BRAVIA" and BRAVIA are trademarks of Sony Corporation.

Table of Contents

Before operating the TV, please read "Safety information" (page 6). Retain this manual for future reference.
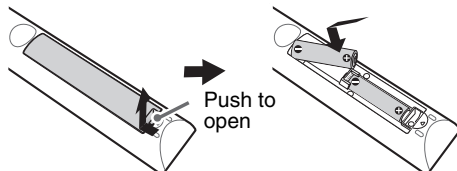
Start-up Guide

Checking the accessories

Stand (1) and screws (3)

Remote RM-GA021(1) (KLV-46/40BX450, KLV-32BX35A, KLV-32/26/22BX350 only)

**Remote RM-GA022(1) (KLV-40CX450, KLV-32/26/22CX350 only)**

Size AA batteries (R6 type) (2)

To insert batteries into the remote

Push to open

1: Attaching the stand

✍ • Refer to the supplied stand leaflet for proper attachment for some TV models.
• For best picture quality, do not expose the screen to direct illumination or sunlight.
• Place the TV with its screen facing down on a level and stable surface covered with a thick and soft cloth.
• Hold the Table-Top Stand with one hand to avoid it dropping when attaching.

Thick and soft cloth

↑×3
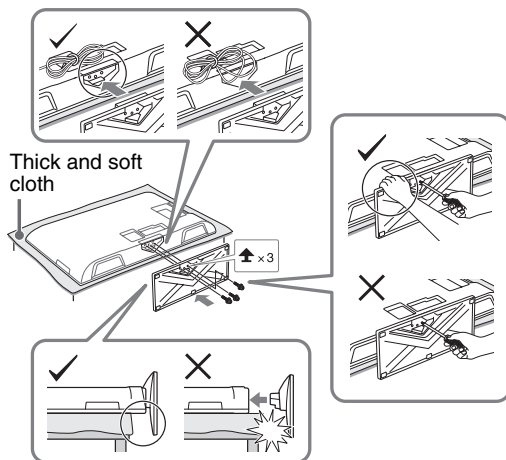
* Be careful not to hit the Table-Top Stand against the edge of the surface when attaching it.

✍ • If using an electric screwdriver, set the tightening torque at approximately 1.5 N·m (15 kgf·cm).
• Ensure the AC power cord is away from screw holes during stand installation to avoid damage to the AC power cord.

2: Connecting an antenna/cable/VCR

✍ • Connecting cables are not supplied.

Connecting an antenna/cable

Antenna cable

Connecting an antenna/cable and VCR

(MONO)
L
R
1

Antenna cable

AV cable

Antenna cable

VIDEO IN
VIDEO OUT
IN
OUT
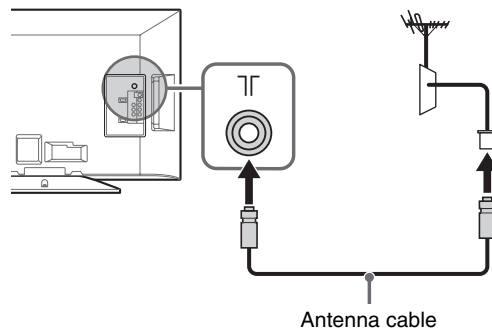
VCR
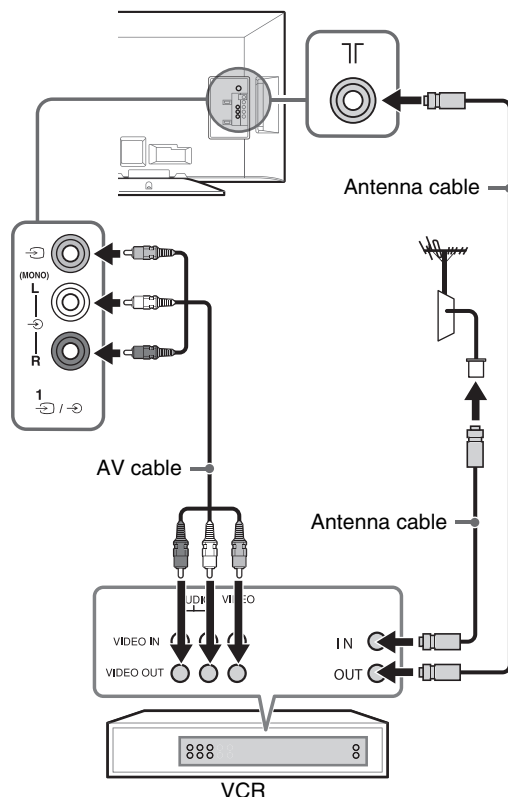
3: Preventing the TV from toppling over

An optional Sony support belt kit is used to secure the TV. Contact your nearest Sony service centre to purchase a kit. Have your TV model name ready for reference.
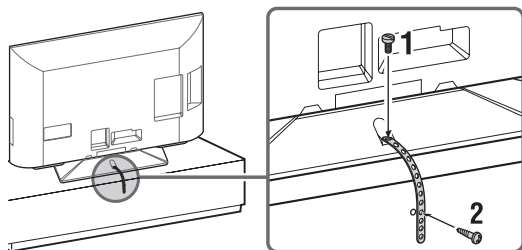
1 Install a machine screw (not supplied) into the screw hole of the TV.

2 Install a wood screw (not supplied) in the TV stand.

4: Performing the initial set-up
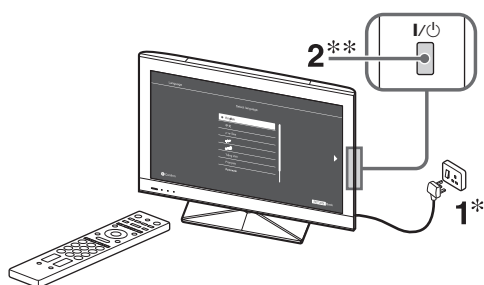
* The shapes of AC power plug and AC power outlet differ depending on the region.
When the TV is in standby mode (the ⏻ (standby) indicator on the TV front panel is red), press **I/⏻ on the remote to turn on the TV.

3

Follow the instructions on the screen.

"Location": Select "Home" for the best TV settings to use the TV in the home.

"Programme Sorting": If you want to change the order of channels, follow the steps in "Programme Sorting" (page 23). Press **HOME** to exit.

✍ • You can also tune channels manually (page 23).
   • Language options vary depending on model.

Watching TV

1 Press **I/⏻** on the TV to turn on the TV.

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

3 Press ∠ **+/–** to adjust the volume.

Detaching the stand from the TV

✍ • Do not remove the stand for any reason other than to wall-mount the TV.
   • Place the TV with its screen facing down on a level and stable surface covered with a thick and soft cloth.

Thick and soft cloth

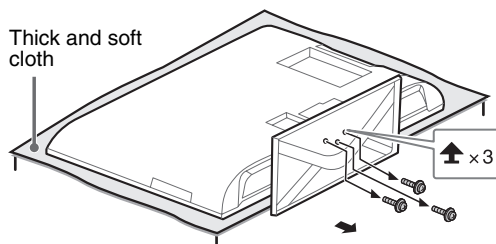✍ • Hold the Table-Top Stand with one hand to avoid it dropping when detaching.
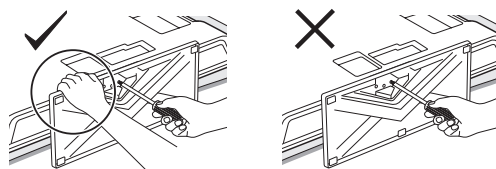
Safety information

WARNING

Batteries must not be exposed to excessive heat such as sunshine, fire or the like.

Installation/Set-up

Install and use the TV set in accordance with the instructions below in order to avoid any risk of fire, electrical shock or damage and/or injuries.

Installation

- The TV set should be installed near an easily accessible AC power outlet.
- Place the TV set on a stable, level surface to avoid it from falling down and cause personal injury or damage to the TV.
- Only qualified service personnel should carry out wall installations.
- For safety reasons, it is strongly recommended that you use Sony accessories, including:
  – KLV-46BX450/40BX450/40CX450/ 32BX350/32BX35A/32CX350: Wall-mount bracket SU-WL50B
  – KLV-26CX350/26BX350/22CX350/ 22BX350: Wall-mount bracket SU-WL100
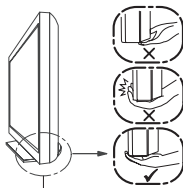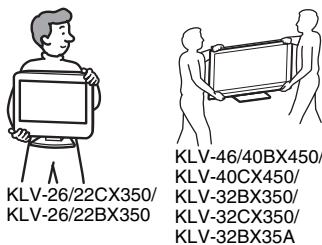- Be sure to use the screws supplied with the Wall-mount bracket when attaching the mounting hooks to the TV set. The supplied screws are designed so that they are 8 mm to 12 mm in length when measured from the attaching surface of the mounting hook.
  The diameter and length of the screws differ depending on the Wall-mount bracket model.
  Use of screws other than those supplied may result in internal damage to the TV set or cause it to fall, etc.

Min. ~ 26 TV: 6.5 ~ 10mm
32 TV ~ Max.: 8 ~ 12mm

Screw (supplied with the Wall-mount bracket)
Mounting Hook
Hook attachment on rear of TV set
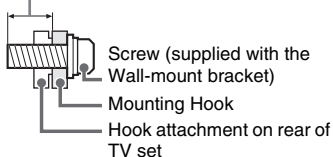
Transporting

- Before transporting the TV set, disconnect all cables.
- Two or more people are needed to transport a large TV set.
- When transporting the TV set by hand, hold it as shown below. Do not put stress on the LCD panel and the frame around the screen.

KLV-26/22CX350/
KLV-26/22BX350

KLV-46/40BX450/
KLV-40CX450/
KLV-32BX350/
KLV-32CX350/
KLV-32BX35A

Be sure to hold the bottom of the panel, not the front part.

- When lifting or moving the TV set, hold it firmly from the bottom.
- When transporting the TV set, do not subject it to jolts or excessive vibration.
- When transporting the TV set for repairs or when moving, pack it using the original carton and packing material.
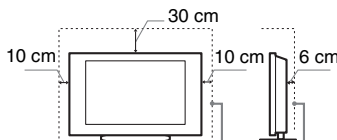
Ventilation

- Never cover the ventilation holes or insert anything in the cabinet.
- Leave space around the TV set as shown below.
- It is strongly recommended that you use a Sony wall-mount bracket in order to provide adequate air-circulation.

Installed on the wall

30 cm
10 cm
10 cm
10 cm
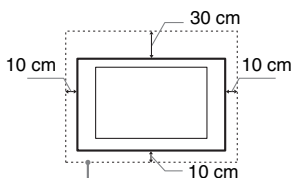
Leave at least this space around the set.

Installed with stand

30 cm
10 cm
10 cm
6 cm

Leave at least this space around the set.

- To ensure proper ventilation and prevent the collection of dirt or dust:
  – Do not lay the TV set flat, install upside down, backwards, or sideways.
  – Do not place the TV set on a shelf, rug, bed or in a closet.
  – Do not cover the TV set with a cloth, such as curtains, or items such as newspapers, etc.
  – Do not install the TV set as shown below.

Air circulation is blocked.

Wall

Wall
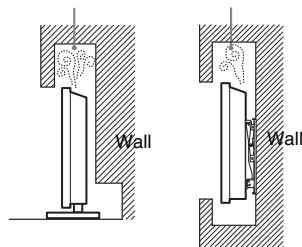
AC power cord

Handle the AC power cord and outlet as follows in order to avoid any risk of fire, electrical shock or damage and/or injuries:

– The shape of AC power plug, which is supplied with the TV set, varies depending on the regions.
– Use only Sony supplied AC power cords, not those of other brands.
– Insert the plug fully into the AC power outlet.
– Operate the TV set on a 110-240 V AC supply only.
– When wiring cables, be sure to unplug the AC power cord for your safety and take care not to catch your feet on the cables.
– Disconnect the AC power cord from the AC power outlet before working on or moving the TV set.
– Keep the AC power cord away from heat sources.
– Unplug the AC power plug and clean it regularly. If the plug is covered with dust and it picks up moisture, its insulation may deteriorate, which could result in a fire.

Notes

- Do not use the supplied AC power cord on any other equipment.
- Do not pinch, bend, or twist the AC power cord excessively. The core conductors may be exposed or broken.
- Do not modify the AC power cord.
- Do not put anything heavy on the AC power cord.
- Do not pull on the AC power cord itself when disconnecting the AC power cord.
- Do not connect too many appliances to the same AC power outlet.
- Do not use a poor fitting AC power outlet.

Prohibited Usage

Do not install/use the TV set in locations, environments or situations such as those listed below, or the TV set may malfunction and cause a fire, electrical shock, damage and/or injuries.

Location:

- Outdoors (in direct sunlight), at the seashore, on a ship or other vessel, inside a vehicle, in medical institutions, unstable locations, near water, rain, moisture or smoke.
- If the TV is placed in the changing room of a public bath or hot spring, the TV may be damaged by airborne sulfur, etc.

- Never spray water or detergent directly on the TV set. It may drip to the bottom of the screen or exterior parts and enter the TV set, and may cause damage to the TV set.

Environment:
- Places that are hot, humid, or excessively dusty; where insects may enter; where it might be exposed to mechanical vibration, near flammable objects (candles, etc). The TV set shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the TV.
- Do not place the TV in a humid or dusty space, or in a room with oily smoke or steam (near cooking tables or humidifiers). Fire, electric shock, or warping may result.
- Do not install the TV in places subject to extreme temperature such as in direct sunlight, near a radiator or a heating vent. The TV may overheat in such condition which can cause deformation of the enclosure and/or TV malfunction.

Situation:
- Do not use when your hands are wet, with the cabinet removed, or with attachments not recommended by the manufacturer. Disconnect the TV set from AC power outlet and antenna during lightning storms.
- Do not install the TV so that it sticks out into an open space. Injury or damage from a person or object bumping into the TV may result.
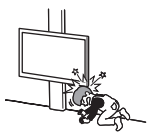
Broken pieces:
- Do not throw anything at the TV set. The screen glass may break by the impact and cause serious injury.
- If the surface of the TV set cracks, do not touch it until you have unplugged the AC power cord. Otherwise electric shock may result.

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 for environmental and safety reasons.
- As the TV set is not disconnected from the AC power when the TV set is just turned off, pull the plug from the AC power outlet to disconnect the TV set completely.
- However, some TV sets may have features that require the TV set to be left in standby to work correctly.

For children
- Do not allow children to climb on the TV set.
- Keep small accessories out of the reach of children, so that they are not mistakenly swallowed.

If the following problems occur...
Turn off the TV set and unplug the AC power cord immediately if any of the following problems occur.
Ask your dealer or Sony service centre to have it checked by qualified service personnel.

When:
– AC power cord is damaged.
– Poor fitting of AC power outlet.
– TV set is damaged by being dropped, hit or having something thrown at it.
– Any liquid or solid object falls through openings in the cabinet.

About LCD Monitor Temperature
When the LCD Monitor is used for an extended period, the panel surrounds become warm. You may feel hot when touching there by the hand.

Precautions

Viewing the TV
- View the TV in moderate light, as viewing the TV in poor light or during long period of time, strains your eyes.
- When using headphones, adjust the volume so as to avoid excessive levels, as hearing damage may result.

LCD Screen
- Although the LCD screen is made with high-precision technology and 99.99% or more of the pixels are effective, black dots may appear or bright points of light (red, blue, or green) may appear constantly on the LCD screen. This is a structural property of the LCD screen and is not a malfunction.
- Do not push or scratch the front filter, or place objects on top of this TV set. The image may be uneven or the LCD screen may be damaged.
- If this TV set is used in a cold place, a smear may occur in the picture or the picture may become dark. This does not indicate a failure. These phenomena disappear as the temperature rises.

- Ghosting may occur when still pictures are displayed continuously. It may disappear after a few moments.
- The screen and cabinet get warm when this TV set is in use. This is not a malfunction.
- The LCD screen contains a small amount of liquid crystal. Some fluorescent tubes used in this TV set also contain mercury. Follow your local ordinances and regulations for disposal.

Handling and cleaning the screen surface/cabinet of the TV set
Be sure to unplug the AC power cord connected to the TV set from AC power outlet before cleaning.
To avoid material degradation or screen coating degradation, observe the following precautions.
- To remove dust from the screen surface/ cabinet, wipe gently with a soft cloth. If dust is persistent, wipe with a soft cloth slightly moistened with a diluted mild detergent solution.
- Never spray water or detergent directly on the TV set. It may drip to the bottom of the screen or exterior parts and enter the TV set, and may cause damage to the TV set.

- Never use any type of abrasive pad, alkaline/acid cleaner, scouring powder, or volatile solvent, such as alcohol, benzene, thinner or insecticide. Using such materials or maintaining prolonged contact with rubber or vinyl materials may result in damage to the screen surface and cabinet material.
- Periodic vacuuming of the ventilation openings is recommended to ensure to proper ventilation.
- When adjusting the angle of the TV set, move it slowly so as to prevent the TV set from moving or slipping off from its table stand.

Optional Equipment
Keep optional components or any equipment emitting electromagnetic radiation away from the TV set. Otherwise picture distortion and/or noisy sound may occur.

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

Operating the TV

Overview of the remote
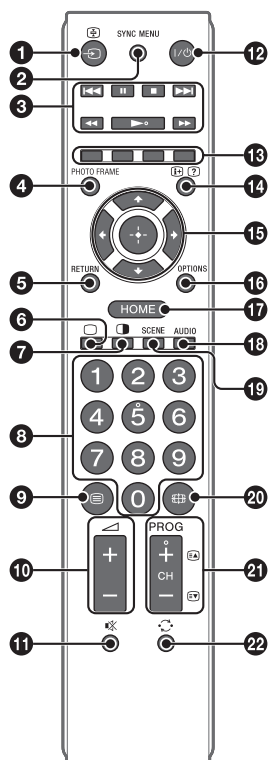
🔆 • The number **5**, ►, **PROG +** and **AUDIO** buttons have tactile dots. Use the tactile dots as references when operating the TV.

❶ ⊸/⊞ **– Input select / Text hold**
• Displays the connected equipment list and selects the input source (page 12).
• In Text mode: Holds the current page.

❷ **SYNC MENU**
Press to display the BRAVIA Sync Menu and then select connected HDMI equipment from "HDMI Device Selection".
The following options can be selected from BRAVIA Sync Menu:
"Device Control": Use the "Device Control" menu to operate equipment that is compatible with Control for HDMI. Select options from "Home (Menu)", "Options" and "Content List" to operate the equipment.
"Speakers": Selects "TV Speakers" or "Audio System" to output the TV's sound from the TV speakers or connected audio equipment.
"TV Control": Use the "TV Control" menu to operate the TV from the "Home (Menu)" or "Options" menu.
"Return to TV": Selects this option to return to TV programme.

❸ **I◄◄ /II/■/►►I/◄◄/►/►►**
You can operate the BRAVIA Sync-compatible equipment that is connected to the TV.

❹ **PHOTO FRAME (KLV-40CX450, KLV-32/26/22CX350 only)**
Press to display a photo or calendar while listening to music.

❺ **RETURN**
• Returns to the previous screen of any displayed menu.
• When playing a photo/music/video file: Press to stop the playback (the display returns to the file or thumbnail view).

❻ ▭ **– TV mode**
Exit Text mode, or switches to a TV display when displaying external input.

❼ ▢ **– Twin Picture / PIP (page 12)**

❽ **Number buttons**
• Selects channels. For channel numbers 10 and above, enter the next digit quickly (page 23).
• In Text mode: Enters the three digit page number to select the page.

❾ ▤ **– Text**
Press repeatedly to display text information.
Text → Text over the TV picture (mix mode) → No Text (exit the Text service)

❿ **Adjust Volume ∠ +/–**

⓫ ◁✕ **– Mute / Restore Sound**

⓬ I/⏻ **– TV standby**
Press to turn the TV on or to switch to standby mode.

⓭ **Coloured buttons**
When the coloured buttons are available, an operation guide appears on the screen.

⓮ ⊞/⊡ **– Info / Text reveal**
• Displays information. Press once to display information about the programme/input you are viewing. Press again to remove the display from the screen.
• In Text mode: Reveals hidden information (e.g. answers to a quiz).

⓯ ⬆/⬇/⬅/➡/⊕ **– Item select / Enter**
• Selects or adjusts items.
• Confirms selected items.
• When playing a photo file: Press ⬅ to select the previous file. Press ➡ to select the next file.
When playing a music/video file: Press ⊕ to pause/start the playback. Press and hold ⬅/➡ to fast forward/fast reverse, then release the button at the point where you want to resume playback.

⓰ **OPTIONS**
Press to display a list that contains shortcuts to some setting menus.
The listed options vary depending on the current input and content.

⓱ **HOME**
Displays or cancels the menu.

⓲ **AUDIO – Dual Sound (page 21)**

⑲ **SCENE – Scene Select mode**
Press to display the "Scene Select" menu. When you select the desired scene option, the optimum sound and picture quality for selected scene are automatically set. The options you can select may vary. Unavailable options are greyed out.
"Auto": Delivers optimum picture and sound quality which is automatically set according to input source. There may not be any effect depending on the connected equipments.
"General": Current user settings.
"Photo": Delivers picture that reproduces the texture and colour of a printed photo.
"Music": Delivers dynamic and clear sound effects like at a concert.
"Cinema": Delivers theatre-like picture and dynamic sound.
"Game": Delivers the best picture and sound quality for fullest game playing enjoyment.
**"Graphics":** Delivers clearer detailed pictures to reduce fatigue for prolonged viewing.
"Sports": Delivers realistic picture with surround sound like in a stadium.

⑳ ⊞ **– Wide Mode**
Changes the picture size. Press repeatedly to select the desired wide mode.

㉑ **PROG/CH +/–/**⊞▲/⊞▼
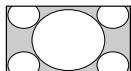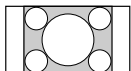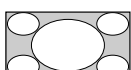• Selects the next (+) or previous (–) channel.
• In Text mode: Selects the next (⊞▲) or previous (⊞▼) page.

㉒ ↻ **– Previous channel**
Returns to the previous channel or input watched (for more than 15 seconds).

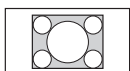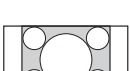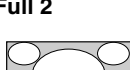## To change the Wide Mode

For TV, Video, Component or HDMI (except PC input)

Wide Zoom*	Enlarges the centre portion of the picture. The left and right edges of the picture are stretched to fill the 16:9 screen.
Normal	Displays the 4:3 picture in its original size. Side bars are shown to fill the 16:9 screen.
Full	Stretches the 4:3 picture horizontally to fill the 16:9 screen.
Zoom*	Displays cinemascopic (letter box format) broadcasts in the correct proportions.

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

✍ • You cannot select "Normal" for HD signal source pictures.

PC or HDMI PC Input (PC timing)

Normal	Displays the picture in its original pixel size. Bars are shown at the top, bottom, and both sides for small picture.
Full 1	Stretches the original picture to fill the screen vertically, keeping its original horizontal-to-vertical aspect ratio.
Full 2	Stretches the Full 1 picture horizontally to fill the 16:9 screen.

✍ • Some options may not be available depending on the PC input signal.

Overview of the TV buttons and indicators
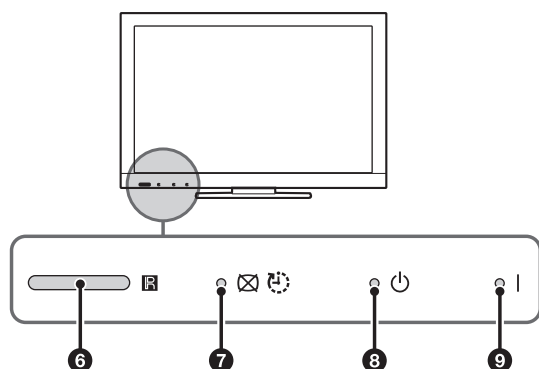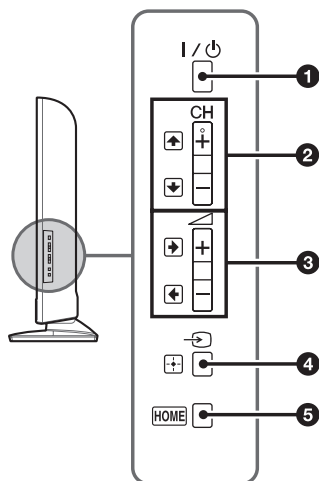
KLV-46/40BX450, KLV-32BX35A, KLV-32/26/22BX350 only.

KLV-40CX450, KLV-32/26/22CX350 only.

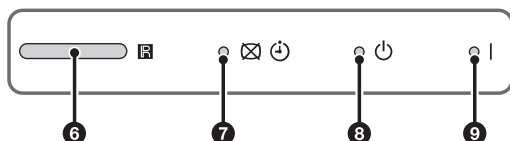❶ **I/⏻ – Power**
Press to turn the TV on or to switch to standby mode.
✍ • To disconnect the TV from the AC power completely, pull the plug from the AC power outlet.

❷ **CH +/–/[↑]/[↓]**
• Selects the next (+) or previous (–) channel.
• In TV menu: Moves through the options up ([↑]) or down ([↓]).

❸ **◢ +/–/[→]/[←]**
• Increases (+) or decreases (–) the volume.
• In TV menu: Moves through the options right ([→]) or left ([←]).

❹ **⊸/[⊞] – Input select / Enter**
• Displays the connected equipment list and selects the input source (page 12).
• In TV menu: Selects the menu or option, and confirms the setting.

❺ **HOME**
Displays or cancels the menu.

❻ **⊞ – Remote sensor**
Receives IR signals from the remote.
Do not put anything over the sensor, doing so may affect its function.

❼ **⊠/⏱ – Picture Off / Timer indicator**
• Lights up in green when you select "Picture Off" (page 27).
• Lights up in amber when you set the timer (page 25) or "Photo Frame Mode" (page 13). ("Photo Frame Mode": KLV-40CX450, KLV-32/26/22CX350 only)

❽ **⏻ – Standby indicator**
Lights up in red when the TV is in standby mode.

❾ **I – Power indicator**
• Lights up in green when the TV is turned on.
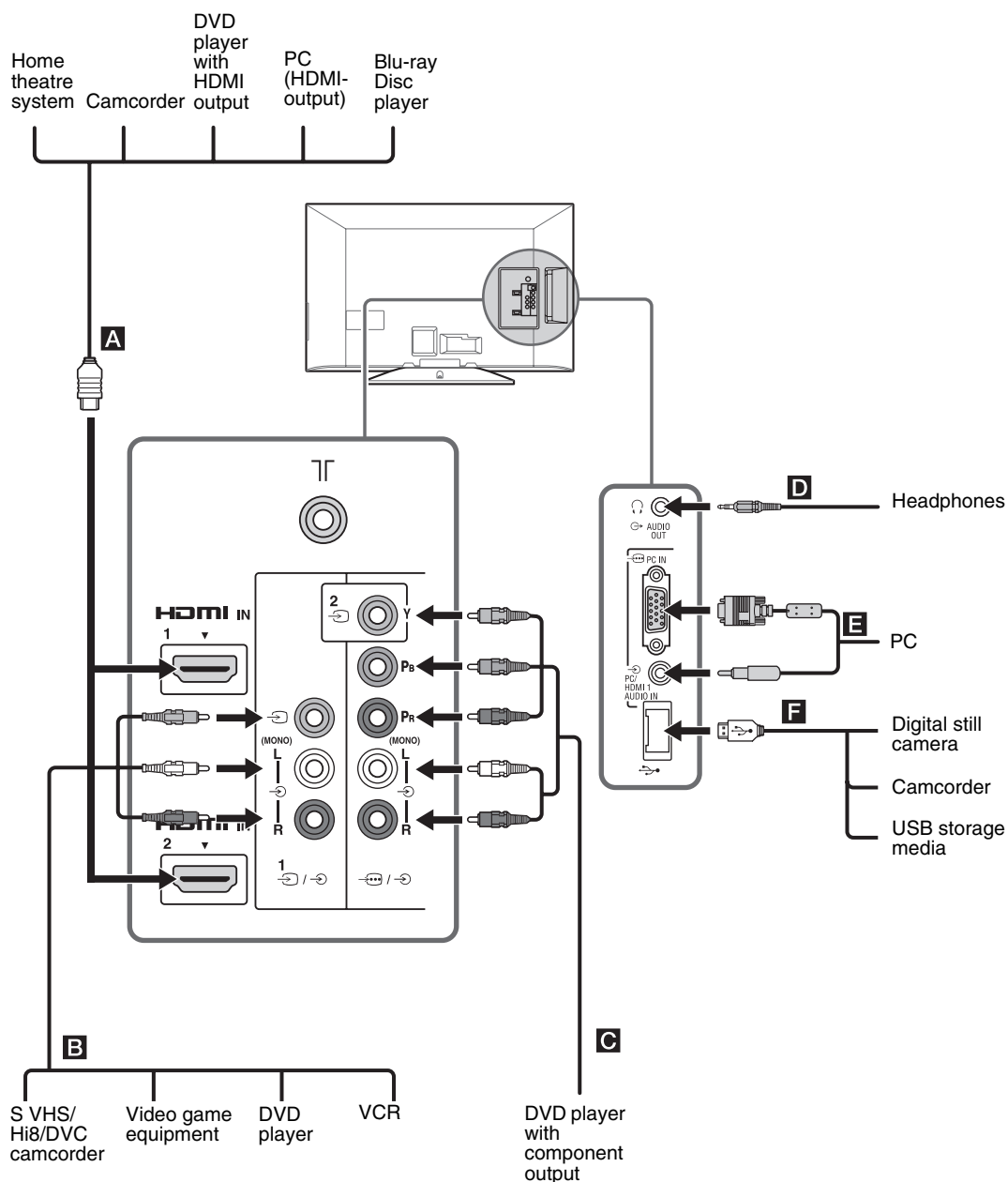• Flashes while the remote is being operated.

✍ • Make sure that the TV is completely turned off before unplugging the AC power cord. Unplugging the AC power cord while the TV is turned on may cause the indicator to remain lit or may cause the TV to malfunction.
✿ • The **CH +** button has a tactile dot. Use it as a reference when operating the TV.

Using Optional Equipment

Connecting optional equipment

You can connect a wide range of optional equipment to your TV.

Home theatre system

Camcorder

DVD player with HDMI output

PC (HDMI-output)

Blu-ray Disc player

A

HDMI IN
1

2
Y
PB
PR
L
R

(MONO)
L
R

2

1

Headphones D

PC IN

PC/HDMI 1 AUDIO IN

AUDIO OUT

PC E

Digital still camera

Camcorder

USB storage media

F

B

S VHS/Hi8/DVC camcorder

Video game equipment

DVD player

VCR

C

DVD player with component output

Viewing pictures from the connected equipment

Turn on the connected equipment, then press ⤵/⤴ or ⤵/⊞ on the TV to display the connected equipment list.

A HDMI IN 1 or 2
Connect to the HDMI IN 1 or 2 jack if the equipment has an HDMI jack. See page 26 to set up this communication. If the equipment has a DVI jack, connect the DVI jack to the HDMI IN 1 jack through a DVI - HDMI adaptor interface (not supplied), and connect the equipment's audio out jack to the PC/HDMI 1 AUDIO IN jack in the PC IN jacks.

✍ • The HDMI jacks can support PC timing in HDMI PC mode. See page 22 for supported PC input signal.
  • Be sure to use only an authorized HDMI cable bearing the HDMI logo.

B ⤵1/⤵ 1
Connect to the video jack ⤵1 and the audio jacks ⤵1. If you connect mono equipment, connect to the L (MONO) jack ⤵.

C ⤵/⤵ or ⤵2
Connect to the component jacks and the audio jacks ⤵/⤵. For better picture quality, component connection is recommended if your DVD player has a component video output. When using the component video jack ⤵2 as the video jack ⤵2 select "Video 2" in the "Video 2/Component Input" menu (page 26).

D ⌒/⌖ AUDIO OUT
Connect with an audio cable or headphones. You can listen to TV sound through your stereo system or headphones. You can select "Variable" or "Fixed" in the "Audio out" menu (page 21).

E ⤵ PC IN
Connect to the ⤵ PC IN jack and the audio jack ⤵. It is recommended to use a PC cable with ferrite core.

F ⤴
You can enjoy photo/music/video files stored on a USB device (page 14).

Viewing Twin Picture and PIP (Picture in Picture)

This TV comes with Twin Picture (in Component and HDMI input mode) and PIP (in PC input mode) which allow you to view two pictures simultaneously.
Connect the optional equipment/PC (page 11), and make sure that images from the equipment/PC appear on the screen (page 12).

Twin Picture

Main Window — Sub Window

PIP

Main Window — Sub Window (Location of the sub window can be moved by pressing ⇧/⇩/⇦/⇨.)

Twin Picture Availability	
In Main Window	**In Sub Window**
Component	TV programme or Video 1
HDMI 1/2 (except PC input mode)	TV programme or Video 1/2

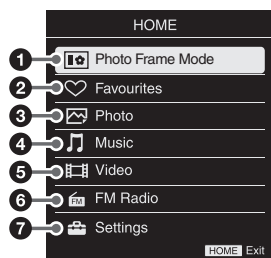| PIP Availability	
In Main Window	**In Sub Window**
PC HDMI 1/2 (PC timing)	TV programme or Video 1/2

1 Press ▯.

2 In sub window, you can select the TV channel or video input by pressing **OPTIONS** and select "Sub window".

To return to single picture mode
Press ⊕ (Twin Picture only), ▯, **RETURN** or select "Single Picture" from Options menu.

✍ • You cannot display resolutions higher than your TV's display resolution (page 31).
  • You cannot change the size of the pictures.
  • Picture smoothness may decrease when picture size reduce.
ϔ • In Twin Picture, the highlighted picture is audible. You can switch the audible picture by pressing ⇦/⇨.
  • In PIP, you can switch the audible picture by selecting "Audio Swap" from the Options menu. (only in HDMI 1 input mode)
  • You can also use these features by selecting "Twin Picture" or "PIP" from the Options menu.

Using Menu Functions

Navigating through menus

```
              HOME
❶  [📷] Photo Frame Mode
❷  [♡] Favourites
❸  [🖼] Photo
❹  [♫] Music
❺  [🎞] Video
❻  [FM] FM Radio
❼  [⚙] Settings

                        HOME  Exit
```

The **HOME** button allows you to access a variety of TV settings, USB media files and FM Radio mode and Photo Frame Mode.

1 Press **HOME** on the TV or remote.

2 Press ⬆/⬇ to select an option, then press ⊕.

3 Follow the instructions on the screen.

4 To exit the menu, press **HOME**.

Menu	Description
❶ **Photo Frame Mode**	Display Photo, Music and Clock calendar at the same time.
❷ **Favourites**	You can store up to 10 channels and/or external inputs in your Favourite list.
❸ **Photo**	You can enjoy photo files via USB devices (page 14).
❹ **Music**	You can enjoy music files via USB devices (page 14).
❺ **Video**	You can enjoy video files via USB devices (page 14).
❻ **FM Radio**	Listens to the FM Radio (page 17).
❼ **Settings**	For details about settings, see page 19 to 27.

Using Photo Frame Mode (KLV-40CX450, KLV-32/26/22CX350 only)

You can enjoy looking at photo, listening to music, seeing the clock and calendar, at the same time.

To enter Photo Frame Mode

❶ Press **HOME** or press **PHOTO FRAME** on the remote to select "Photo Frame Mode".

❷ Press **OPTIONS** on the remote in "FM Radio" or while playing back photo/music files.

❸ Press **HOME** and select "Settings", then select "Image Selection" or "Music Selection" under "Photo Frame Settings" from "Set-up".

To exit Photo Frame Mode
Press **HOME** or **RETURN**.

You can switch the frame, e.g. image and clock, full screen image or full screen clock (page 25).

Using the Favourites

Allows you to set your favourite channels and/or external input by assigning the desired channel numbers and/or external input.

To watch a channel or external input
Press ⬆/⬇ to select the channel number or external input, then press ⊕.

To turn off the Favourite list
Press **RETURN** to return to the previous screen.

### Add a current channel or external input to the Favourite list
Press ⬆/⬇ to select "Add to Favourites", then press ⊕.

✎ • Favourite channels and external inputs can also be added using the **OPTIONS** button on the remote.
  • When you run the "Auto Tuning", only the "Programme" channels in your Favourites list will be cleared.
  • When you continue to add items beyond the 10th item, the bottom item in the list will be automatically removed from the Favourite list.

13 GB

Playing back photo/music/video via USB

You can enjoy photo/music/video files stored in a Sony digital still camera or camcorder through a USB cable or USB storage device on your TV.

1 Connect a supported USB device to the TV.

2 Press **HOME**.

3 Press ⇧/⇩ to select "Photo", "Music" or "Video".

4 The thumbnail view of file or folder appears.

If more than one USB device is detected, press the red button to select "Device Selection" from the list of available options and press ⊕, then press ⇧/⇩/⇦/⇨ to select a USB device and press ⊕.

5 Press ⇧/⇩/⇦/⇨ to select a file or folder, then press ⊕.

When you select a folder, select a file, then press ⊕.

Playback starts.

ϔ • If you connect the USB device when "USB Auto Start" is set to "On" (page 25), the thumbnail view of the last played Photo/Music/Video appears automatically.

Basic operation of Photo/Music/Video

You can operate the connected USB device by the TV remote.

Item	Description
◄◄ / ►►	Fast reverses/fast forwards the file when pressed during playback.
I◄◄ / ►►I	Goes to the beginning of the previous/ next file.
►	Starts playback.
II	Pauses playback.
■	Stops playback.

ϔ • If a video file has subtitles, they can be displayed by pressing the green button during DivX playback.

To use playback options

Press the coloured buttons to display a list that contains shortcuts to some setting menus. The listed options vary depending on the current input and content.

Photo
"Slideshow Effect": Selects an effect for a slideshow.
"Slideshow Speed": Selects the slideshow duration.
"Repeat": Plays a file repeatedly.
"Shuffle": Plays a file in random order.
"Zoom": Magnifies the picture ("1×", "2×" or "4×")
"Sort By": Changes file order
"Device Selection": Selects a USB device.

Music
"Playback Target": Selects to play all files, or one selected file.
"Repeat": Plays a file repeatedly.
"Shuffle": Plays files in random order.
"Speakers": Selects a speaker (page 21).
"Sort By": Changes file order
"Device Selection": Selects a USB device.

Video

"Playback Target": Selects to play all files, or one selected file.
"Repeat": Plays a file repeatedly.
"Zoom": Magnifies the picture ("1×", "2×", "4×" or "Full")
"Speakers": Selects a speaker (page 21).
"Sort By": Changes file order
"Device Selection": Selects a USB device.

To set the picture and sound (Video)

You can adjust the picture and sound quality of USB Video.

1 Select a video.

See "Playing back photo/music/video via USB" (page 14).

2 Press **OPTIONS** during playback, then press ⇧/⇩ to select "Picture" or "Sound" and press ⊕.

3 Press ⇧/⇩/⇦/⇨ to select the item, then press ⊕.

4 Press ⇧/⇩/⇦/⇨ to adjust the setting, then press ⊕.

To play a photo as a slideshow (Photo)

You can play a slideshow with photos. "Slideshow Effect" and "Slideshow Speed" can be set.

1 Select a photo.

See "Playing back photo/music/video via USB" (page 14).

2 Press the green button in thumbnail view, or press **OPTIONS** while a photo is displayed, then press ⇧/⇩ to select "Slideshow" and press ⊕.

To stop a slideshow

Select "Stop Slideshow" from Options menu.

✍ • While the TV is accessing the data on the USB device, observe the following:
  – Do not turn off the TV or connected USB device.
  – Do not disconnect the USB cable.
  – Do not remove the USB device.
  The data on the USB device may be damaged.
 • Sony will not be held liable for any damage to, or loss of, data on the recording media due to a malfunction of any connected devices or the TV.
 • The file name and folder name may not display correctly in some cases.
 • When you connect a Sony digital still camera, set the camera's USB connection mode to Auto or Mass Storage. For more information about USB connection mode, refer to the instructions supplied with your digital camera.
 • Check the website below for updated information about compatible USB devices.
   http://www.sony-asia.com/bravia/flash.html
 • Use a USB storage device that is compliant with USB mass storage device class standards.
 • If a selected file has incorrect container information, or is incomplete, it cannot be played back.
 • BRAVIA TV supports DivX®.

Using Menu Functions

USB Video format

Extension	Container	Video Codec	Audio Codec
.avi .divx	AVI	DivX 3.11/4.x/5.1	PCM / MPEG1 Layer1, 2 / MP3 / Dolby Digital (2ch) / WMA v8
		XviD	
		MPEG1	
		MPEG2 MP	
		H.264 BP/MP/HP	
		MPEG-4 SP/ASP	
.wmv .asf	ASF	WMV v9	MP3 / WMA v8
		Divx 3.11	
		XviD	
		MPEG-4 SP/ASP	
		VC-1	
.mp4 .mov .3gp	MP4	H.264 BP/MP/HP	MPEG1 Layer1, 2 / MP3
		MPEG-4 SP/ASP	
		H.263	
.mkv	MKV	H.264 BP/MP/HP	PCM / MPEG1 Layer1, 2 / MP3 / Dolby Digital (2ch) / WMA v8
		MPEG-4 SP/ASP	
		WMV v9	
		DivX 3.11/4.x/5.1	
		VC-1	
.mpg .mpeg .mpe	PS	MPEG1	MPEG1 Layer1, 2 / MP3 / Dolby Digital (2ch)
		MPEG2 MP	
.mts, .m2ts	TS	MPEG2 MP	MPEG1 Layer1, 2 / MP3
		VC-1	
		H.264 BP/MP/HP	

✍ • DivX Certified® to play DivX® video up to HD 1080p, including premium content.
  • Covered by one or more of the following U.S. patents: 7,295,673; 7,460,668; 7,515,710; 7,519,274

USB Music format

Extension	Audio Codec
.mp3	MP3
.wma	WMA v8

USB Photo format

Extension	Image Codec
.jpg, .jpeg	JPEG

DCF2.0 or EXIF2.21 supported.

✍ • Playback of the above file formats is not guaranteed.
  • The USB device supports FAT16 , FAT32 and NTFS.

Listening to the FM Radio

You are able to listen to the FM radio stations using your TV by connecting an antenna (page 4). FM Radio tuning range is from 87.5-108.0 MHz.

When you use the FM Radio function for the first time, press **HOME** and select "FM Radio", then perform "Auto Tuning" in the "FM Radio Set-up" menu (page 24).

To	Do this
Access to FM Radio mode	Press **HOME** and select "FM Radio".
Exit from FM Radio mode	Press **RETURN** to return to previous view input.

Listen to preset stations	**1** Access to FM Radio mode.
	2 Press **HOME** and select "Settings". Preset the desired FM radio stations and its labels in "FM Radio Set-up" from "Channel Set-up" menu (page 23).
	  ✍ • You can also access to "FM Radio Presets" by selecting "FM Radio Presets" from the Options menu in FM Radio mode.
	3 Exit from "Channel Set-up" menu by pressing **HOME**. The selected preset FM radio station number and label will appear on the screen. To select the desired preset FM radio station, press **PROG +/−**.
	  ✍ • You can also use the 0-9 buttons on the remote to directly select the desired preset FM radio station.

Listen to non-preset stations	**1** Access to FM Radio mode.
	2 Press ⇧/⇩ to manually search for the desired FM radio station. It will search and stop when found the next available station.
	  ✍ • You can also tune FM frequency for the desired FM radio station by pressing ⇦/⇨. The available radio frequency is only for temporary listening pleasure and cannot be stored in the memory.
	  • If the message "Please set-up FM Radio." appears, display the "Channel Set-up" menu and select "FM Radio Set-up" to preset the desired FM radio stations (page 24).

Show Slideshow while listening to FM Radio (KLV-46/40BX450, KLV-32BX35A, KLV-32/26/22BX350 only)	**1** Use coloured button to access "Slideshow" from the "Photo" menu to view your personal pictures. **2** Press **RETURN** to exit. **3** Access to FM Radio mode. **4** Press **OPTIONS** to select "Slideshow", then press ⊕. **5** Press ⊞/⑦ to end "Slideshow".
Show photo or picture while listening to FM Radio	**1** Press **OPTIONS** to select "Picture Frame Image"* or "Photo Frame Mode"**, then press ⊕. **2** In "Picture Frame Image"* press ⊞/⑦ or **RETURN** to exit. In "Photo Frame Mode"** press **RETURN** to exit. * "Picture Frame Image": KLV-46/40BX450, KLV-32BX35A, KLV-32/26/22BX350 only. ** "Photo Frame Mode": KLV-40CX450, KLV-32/26/22CX350 only.
Reduce power consumption while in FM Radio mode	**1** Press **OPTIONS** to select "Power Saving". Select the desired options and press ⊕. ✍ • You can also access to "Power Saving" by selecting "Eco" from the setting menu (page 27). **2** Exit from "Picture Off" by pressing any key on the remote except ⊿ +/−, ⊠ or **AUDIO**.

✍ • If the station has a noisy sound, you may be able to improve the sound quality by pressing ⇦/⇨.
  • When a FM stereo programme has static noise, press **AUDIO** until "Mono" appears. There will be no stereo effect, but the noise will be reduced.

Using BRAVIA Sync with Control for HDMI

The Control for HDMI function enables the TV to communicate with the connected equipment that is compatible with the function, using HDMI CEC (Consumer Electronics Control). For example, by connecting Sony equipment that is compatible with Control for HDMI (with HDMI cables), you can control them together.
Be sure to connect the equipment correctly, and make the necessary settings.

Control for HDMI

• Automatically turns the connected equipment off when you switch the TV to standby mode using the remote.
• Automatically turns the TV on and switches the input to the connected equipment when the equipment starts to play.
• If you turn on a connected audio system while the TV is on, the sound output switches from the TV speaker to the audio system.
• Adjusts the volume (⊿ +/–) and mutes the sound (⊠) of a connected audio system.
• You can operate the connected Sony equipment that has the BRAVIA Sync logo by the TV remote. Possible operations with BRAVIA Sync buttons, see page 8.
  – Refer to the instruction manual of the equipment for available control.
• If "Control for HDMI" of the TV is set to "On", "Control for HDMI" of the connected equipment is also automatically switched to "On".

To make the Control for HDMI settings

The Control for HDMI settings must be set on both the TV side and connected equipment side. See "HDMI Set-up" (page 26) for the TV side settings. For settings on the connected equipment, refer to its operating instructions.

Settings adjustment

✍ • The options you can adjust vary depending on the situation. Unavailable options are greyed out or not displayed.

🖼 Picture

Picture Mode	Sets a picture mode. The options that can be selected differ depending on the "Scene Select" settings. **"Vivid":** Enhances picture contrast and sharpness. **"Standard":** For standard pictures. Recommended for home entertainment. **"Custom":** Allows you to store your preferred settings. **"Cinema":** For film-based content. Suitable in a theatre-like environment. **"Photo":** For standard viewing of photographs. **"Sports":** Optimizes picture quality for viewing sports. **"Game":** Select for standard picture suitable for games. **"Graphics":** Optimizes picture quality for viewing graphics.
Reset	Resets all the "Picture" settings except "Picture Mode" and "Intelligent Picture Plus Set-up" to the factory settings.
Backlight	Adjusts the brightness of the backlight.
Picture	Increases or decreases picture contrast.
Brightness	Brightens or darkens the picture.
Colour	Increases or decreases colour intensity.
Hue	Increases or decreases the green tones and red tones. ✍ • When viewing TV programme or video input, "Hue" is only available for NTSC colour system.
Sharpness	Sharpens or softens the picture.
Colour Temperature	Adjusts the whiteness of the picture. **"Cool":** Gives the white colours a blue tint. **"Neutral":** Gives the white colours a neutral tint. **"Warm":** Gives the white colours a red tint. ✍ • "Warm" is not available when "Picture Mode" is set to "Vivid".
Noise Reduction	Reduces the picture noise (snowy picture) in a weak broadcast signal.
MPEG Noise Reduction	Reduces the picture noise in MPEG-compressed video.
Cinema Drive	Provides improved picture movement when playing BD (Blu-ray Disc), DVD or VCR images taken on film, reducing picture blur and graininess. Select "Auto" to represent original film-based content as is. ✍ • If the image contains irregular signals or too much noise, "Cinema Drive" is automatically turned off even if "Auto" is selected.
Advanced Settings	Allows you to set "Picture" settings in more detail. These settings are not available when "Picture Mode" is set to "Vivid". **"Reset":** Resets all the advanced settings to the factory settings. **"Adv. Contrast Enhancer":** Automatically adjusts "Backlight" and "Picture" to the most suitable settings judging from the brightness of the screen. This setting is especially effective for dark images scenes, and will increase the contrast distinction of the darker picture scenes. **"Black Corrector":** Enhances black areas of the picture for stronger contrast. **"Gamma":** Adjusts the balance between bright and dark areas of the picture. **"Clear White":** Emphasises white colours. **"Live Colour":** Makes colours more vivid.

Continued

Intelligent Picture Plus Set-up	**"Intelligent Picture Plus"** Allows you to improve the picture when viewing TV programme or video input. The options that can be selected differ depending on the "Scene Select" settings. **"Signal Level Indicator"** Turns on/off the "Signal Level Indicator" feature. When "On" is selected, the signal level bar will be displayed when you select a channel or video input. **"Picture Optimisation"** Allows you to enhance the picture to your preferred settings. **"Crisp":** For a sharper image with more visible noise. **"Smooth":** For a softer image with less visible noise.

🔊 Sound

Sound Mode	Sets a sound mode. The options that can be selected differ depending on the "Scene Select" settings. **"Dynamic":** Enhances treble and bass. Recommended for home entertainment. **"Standard":** For standard sound. **"Clear Voice":** Makes voice sound clearer.
Reset	Resets all the "Sound" settings except "Sound Mode", "Dual Sound", "Speakers", "Audio Out" and "HDMI/DVI Audio Source" to the factory settings.
7 Band Equalizer	Adjusts sound frequency settings. Press ◁/▷ to select the desired sound frequency, then press ⭡/⭣ to adjust the setting and press ⊕. The adjusted settings will be received when you select "Sound Mode" options. Selecting "Reset" will set the "7 Band Equalizer" to original settings. ✍ • Adjusting higher frequency will affect higher pitched sound and adjusting lower frequency will affect lower pitched sound.
Balance	Emphasises left or right speaker balance.
Intelligent Volume	Minimizes the difference in volume level between all programmes and adverts (e.g. adverts tend to be louder than programmes).
Volume Offset	Adjusts the volume level of the current input relative to other inputs.
Surround	Allows you to select the suitable surround effects depending on the genre of TV programme (movie, sport, music, etc.) or video game. The options that can be selected differ depending on the "Scene Select" settings. **"On":** Delivers surround effects that help you enjoy the virtual two-ch surround audio with just the two internal TV speakers. **"Simulated Stereo":** Adds a surround-like effect to mono programmes. **"Off":** Turn off "Simulated Stereo" surround effects. **"Cinema":** Delivers surround effects just like the high-grade audio systems found in movie theatres. **"Off":** Turn off "Cinema" surround effects. **"Music":** Delivers surround effects that make you feel like you are surrounded by sound as in a music hall. **"Off":** Turn off "Music" surround effects. **"Sports":** Delivers surround effects that make you feel like you are watching a live sports contest. **"Off":** Turn off "Sports" surround effects. **"Game":** Delivers surround effects that enhance game sound. **"Off":** Converts and reproduces multi-ch audio to 2ch audio. In the case of other audio formats, the original audio is reproduced.
Bass Booster	Produces a fuller sound for more impact, by emphasising the bass sounds.

Dual Sound	Sets the sound from the speaker for a stereo or bilingual broadcast.
	"Stereo"/"Mono": For stereo broadcasts.
	"Main"/"Sub"/"Mono": For bilingual broadcasts, select "Main" for sound channel 1, "Sub" for sound channel 2, or "Mono" for mono channel, if available.
	✍ • If the signal is very weak, the sound becomes monaural automatically.
	    • If the stereo sound is noisy when receiving a NICAM programme, select "Mono". The sound becomes monaural, but the noise is reduced.
	    • The "Dual Sound" setting is memorized for each programme position.
	    • You cannot listen to stereo broadcast sound when "Mono" is selected.
	ʬ̌ • If you select other equipment connected to the TV, set "Dual Sound" to "Stereo", "Main" or "Sub". However, when the external equipment connected to the HDMI jack (except HDMI 1) is selected, this is fixed to "Stereo".
	    • If you access to FM Radio mode, set "Dual Sound" to "Stereo" or "Mono".

Speakers	**"TV Speakers":** Turns on and outputs the TV's sound from the TV speakers. **"Audio System":** Turns off the TV speakers and outputs the TV's sound from external audio equipment connected to the audio output jacks on the TV. You can also turn on the connected equipment that is compatible with Control for HDMI, after making the appropriate settings of Control for HDMI.
Audio Out	**"Variable":** When using an external audio system, volume output from audio out can be controlled using the TV's remote. **"Fixed":** The audio output of the TV is fixed. Use your audio receiver's volume control to adjust the volume (and other audio settings) through your audio system.
HDMI/DVI Audio Source **(only in HDMI 1 input mode)**	Switches the audio signal for HDMI input when a DVI device is connected. Select from "Auto", "HDMI Audio" and "PC Audio".

⊞ Screen

Wide Mode	For details about wide mode, see page 9.
Auto Wide	Automatically changes the wide mode according to the input signal from an external equipment. To keep your setting, select "Off". ʬ̌ • Even if "Auto Wide" is set to "On" or "Off", you can always modify the format of the screen by pressing ⊞ repeatedly.
4:3 Default	Selects the default screen mode for use with 4:3 broadcasts. **"Wide Zoom":** Enlarges the 4:3 picture to fill the 16:9 screen, keeping the original image as much as possible. **"Normal":** Displays conventional 4:3 broadcasts in the correct proportions. **"Off":** Keeps the current "Wide Mode" setting when the channel or input is changed.
Auto Display Area	**"On":** Automatically adjusts the display area based upon the content. **"Off":** Turns off the "Auto Display Area". Choose one from the "Display Area" options. ✍ • "Auto Display Area" is only available when watching programmes from HDMI input.
Display Area	Adjusts the picture display area. **"Full Pixel":** Displays the picture for 1080/50i, 1080/60i, 1080/50p and 1080/60p sources (HDMI or component input only) or 1080/24p sources (HDMI input only) in the original size. (KLV-40CX450, KLV-40/46BX450 only) **"+1":** Displays pictures in their original size. This option may not be available depending on input signal. **"Normal":** Displays pictures in their recommended size. **"-1":** Enlarges the picture so that the edges are outside the visible display area.
Horizontal Shift	Adjusts the horizontal position of the picture when "Wide Mode" is set to "Wide Zoom" or "Zoom".
Vertical Shift	Adjusts the vertical position of the picture when "Wide Mode" is set to "Wide Zoom" or "Zoom".

PC Settings

"Wide Mode"

Selects a screen mode for displaying input from your PC, see page 9.

"Reset"

Resets all the "PC Settings" except "Wide Mode" to the factory settings.

"Auto Adjustment"

Automatically adjusts the display position, phase and pitch of the picture when the TV receives an input signal from the connected PC.

🔆 • "Auto Adjustment" may not work well with certain input signals. In such cases, manually adjust "Phase", "Pitch", "Horizontal Shift" and "Vertical Shift".

"Phase"

Adjusts the phase when the screen flickers.

"Pitch"

Adjusts the pitch when the picture has unwanted vertical stripes.

"Horizontal Shift"

Adjusts the horizontal position of the picture.

"Vertical Shift"

Adjusts the vertical position of the picture.

PC input signal reference chart for ⌐ PC and HDMI IN 1, 2

For KLV-40BX450/KLV-40CX450/KLV-46BX450

Signals	Horizontal (Pixel)	Vertical (Line)	Horizontal frequency (kHz)	Vertical frequency (Hz)	Standard
VGA	640	480	31.5	60	VGA
SVGA	800	600	37.9	60	VESA Guidelines
XGA	1024	768	48.4	60	VESA Guidelines
WXGA	1280	768	47.4	60	VESA
WXGA	1280	768	47.8	60	VESA
WXGA	1360	768	47.7	60	VESA
SXGA	1280	1024	64	60	VESA
HDTV	1920	1080	67.5	60	EIA

For KLV-22BX350/KLV-22CX350/26BX350/26CX350/32BX350/32CX350/32BX35A

Signals	Horizontal (Pixel)	Vertical (Line)	Horizontal frequency (kHz)	Vertical frequency (Hz)	Standard
VGA	640	480	31.5	60	VGA
SVGA	800	600	37.9	60	VESA Guidelines
XGA	1024	768	48.4	60	VESA Guidelines
WXGA	1280	768	47.4	60	VESA
WXGA	1280	768	47.8	60	VESA
WXGA	1360	768	47.7	60	VESA

✍ • This TV's PC input does not support Sync on Green or Composite Sync.
• This TV's PC input does not support interlaced signals.
• This TV's PC input supports signals in the above chart with a 60 Hz vertical frequency.

📡 Channel Set-up

1 Digit Direct	When "1 Digit Direct" is set to "On", you can select a channel using one preset number button (0 - 9) on the remote. ✍ • When "1 Digit Direct" is set to "On", you cannot select channel numbers 10 and above entering next digit using the remote.
Auto Tuning	Tunes in all the available channels. This option allows you to retune the TV after moving house, or to search for new channels that have been launched by broadcasters.
Programme Sorting	Changes the order in which the channels are stored on the TV. **1** Press ⇧/⇩ to select the channel you want to move to a new position, then press ⊕. **2** Press ⇧/⇩ to select the new position for your channel, then press ⊕.

Programme Labels	Assigns a channel name of your choice up to seven letters or numbers.
	1 Press ⇧/⇩ to select the channel you want to name, then press ⊕.
	2 Press ⇧/⇩ to select the desired letter or number ("_" for a blank space), then press ⇨.
	   If you input a wrong character
	   Press ⇦/⇨ to select the wrong character. Then, press ⇧/⇩ to select the correct character.
	   To delete all the characters
	   Select "Reset", then press ⊕.
	3 Repeat the procedure in step 2 until the name is completed, then press ⊕.

Manual Programme Preset	Before selecting "Label"/"AFT"/"Audio Filter"/"Skip"/"Colour System", press **PROG +/–** to select the programme number with the channel. You cannot select a programme number that is set to "Skip" (page 24).
	
	"Programme"/"TV System"/"Frequency"
	Presets programme channels manually.
	1 Select "Programme", then press ⊕.
	2 Press ⇧/⇩ to select the programme number you want to manually tune (if tuning a VCR, select channel 0), then press **RETURN**.
	3 Press ⇧/⇩ to select "TV System", then press ⊕.
	4 Press ⇧/⇩ to select your TV broadcast systems, then press ⊕.
	5 Press ⇧/⇩ to go to the frequency range indication ("VHF Low", "VHF High" or "UHF"), then press ⊕.
	6 Tune the channels as follows:
	   Press ⇦/⇨ to search for the next available channel. When a channel has been found, the search will stop. To continue searching, press ⇦/⇨.
	Repeat the procedure above to preset other channels manually.
	
	"Label"
	Assigns a name of your choice, up to seven letters or numbers, to the selected channel. To input characters:
	1 Press ⇧/⇩ to select the desired letter or number ("_" for a blank space), then press ⇨.
	   If you input a wrong character
	   Press ⇦/⇨ to select the wrong character. Then, press ⇧/⇩ to select the correct character.
	2 Repeat the procedure in step 1 until the name is completed, then press ⊕.
	
	"AFT"
	Allows you to fine-tune the selected channel manually. When "On" is selected, the fine tuning is performed automatically.

Using Menu Functions

"Audio Filter"

Improves the sound of individual channels when distortion occurs in mono broadcasts in TV system "B/G", "I" and "D/K".

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

"Skip"

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

"Colour System"

Selects the colour system ("Auto", "PAL", "SECAM", "NTSC3.58", "NTSC4.43" or "PAL60") according to the channel.

"Signal Level"

Displays the signal level for programme currently being watched.

| red (weak) | amber (average) | green (good) |
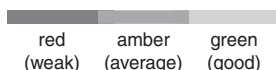
FM Radio Set-up

Preset up to 30 FM radio stations that can be received in your area.

"Auto Tuning"

Allows you to automatically tune and store all the available channels.

1 Select "Auto Tuning", then press ⊕.

2 Select "OK" to automatically tune in all the available channels.

"FM Radio Presets"

Manually tune and store each available channel one at a time.

1 Press ⇧/⇩ to select the desired FM radio station position, then press ⊕.

2 Press ⇧/⇩ to search the FM radio stations. Searching stops automatically when a station is tuned in. If the station has a noisy sound, you may be able to improve the sound quality by pressing ⇦/⇨. Press ⊕ to store the FM radio station.
You may edit the FM radio station label. Press ⇧/⇩ to select alphanumeric characters for the label, then press ⊕. Repeat steps 1 to 2 to preset other FM radio stations.

✍ • To enable this feature, access to FM Radio mode by using HOME (Menu) (page 13), then preset your desired FM radio stations according to the steps mentioned above.

⎐ Parental Lock

PIN Code	Allows you to set up TV to block channel or external input. Use 0-9 on the remote to enter a four-digit PIN code.
Change PIN Code	Selects to change your PIN code.
Programme Block	Blocks an individual channel from being watched. To view a blocked channel, select "Unblocked".
External Input Lock	Locks an external input from being watched. To view a blocked external input, select "Unblocked".

✍ • Entering the correct PIN code for blocked channel or external input will temporarily deactivates the "Parental Lock" feature. To reactivate the "Parental Lock" settings, turn off and on the TV.

ϔ • If you lost your PIN code, see page 30.

⊞ Set-up

|	
Photo Frame Settings (KLV-40CX450, KLV-32/26/22CX350 only)	**"Display Mode"** Allows you to select the display mode. Select from "Image and Clock", "Full Screen Image" and "Full Screen Clock". **"Clock Display"** Allows you to select the clock display. Select from "Calendar", "Analogue Clock", "Digital Clock", "Calendar and Clock" and "Clock". "Calendar", "Calendar and Clock" and "Clock" can be displayed only when "Display Mode" is "Full Screen Clock". "Calendar", "Analogue Clock" and "Digital Clock" can be displayed only when "Display Mode" is "Image and Clock". **"Audio Application"** **"FM Radio":** You can enjoy listening to the FM radio with this function. **"Music":** You can enjoy music with this function. **"Off":** Turns off the music. **"Image Selection"** Select image. **"Music Selection"** Select music. **"Slideshow Setting"** **"Slideshow":** You can play a slideshow of photos. **"Single View":** Displays one photo only. **"Music Playback Setting"** **"All Tracks":** Listen to all music tracks. **"Single Track":** Set to listen to a single music track. **"Duration"** Selects the time period ("1 h", "2 h", "4 h" or "24 h") after which the TV automatically switches to standby mode. **"First day of the week"** Set "Sunday" or "Monday" as the first day of the week on the calendar.
USB Auto Start	Automatically enters the thumbnail view of the last played Photo/Music/Video when the TV is turned on and a USB device is connected to the USB port then turned on.
Sleep Timer (KLV-46/40BX450, KLV-32BX35A, KLV-32/26/22BX350 only)	Set the time in minutes ("Off", "15min", "30min", "45min", "60min", "90min", or "120min") that you would like the TV to remain on before shutting off automatically.
Clock/Timers (KLV-40CX450, KLV-32/26/22CX350 only)	**"Sleep Timer"** Set the time in minutes ("Off", "15min", "30min", "45min", "60min", "90min", or "120min") that you would like the TV to remain on before shutting off automatically. **"On Timer"** Turns on the TV from standby mode at a time you set, and tuned to a channel or input of your preference. Before setting this function, make sure you set the correct current time. **"Clock Set"** Set the current time and date. This feature also can be set from initial set-up.
Auto Start-up	Starts the initial set-up procedure (page 5). This option allows you to retune the TV after moving house, or to search for new channels that have been launched by broadcasters.

Continued

Language	Selects the language in which the menus are displayed.
Start-up Logo	Select "On" to display logo when the TV is turned on. Select "Off" to disable it.
AV Set-up	**"Video Labels"** Assigns a name to any equipment connected to the side and rear jacks. **1** Press ⭡/⭣ to select the desired input source, then press ⊕. **2** Press ⭡/⭣ to select the preset labels option, then press ⊕ to assign a name to connected equipment. ✍ • If you select "**Edit**", you can edit video labels. Follow steps 2 to 3 of "Programme Labels" (page 23). • When the input source is set to "Skip" in the "Video Labels" under the "AV Set-up" menu, that input is greyed out in the list. **"Colour System"** Selects the colour system ("Auto", "PAL", "SECAM", "NTSC3.58", "NTSC4.43" or "PAL60") according to the composite video signal from the input source. **"Video 2/Component Input"** Select "Auto" to have the TV detects and switch between the component video jack ⊸ or the video jack ⊸2 when component video jack ⊸ or video jack ⊸2 is connected. ✍ • You cannot use the component video jack ⊸ and the video jack ⊸2 at the same time. **"Headphone/Audio out"** Sets the sound output to headphones or external audio system connected to the TV. Disconnect headphones from the TV when you select "Audio Out".
HDMI Set-up	Allows the TV to communicate with equipment that is compatible with the Control for HDMI function, and connected to the HDMI jacks of the TV. Note that communication settings must also be made on the connected equipment. **"Control for HDMI"** Sets whether or not to link the operations of the TV and the connected equipment that is compatible with Control for HDMI. When set to "On", the following functions are available. If the specific Sony equipment that is compatible with Control for HDMI is connected, this setting is applied to the connected equipment automatically when the "Control for HDMI" is set to "On" using the TV. **"Auto Devices Off"** When this is set to "On", the connected equipment that is compatible with Control for HDMI turns off when you turn off the TV by remote. **"Auto TV On"** When this is set to "On", the TV turns on when you turn on the connected equipment that is compatible with Control for HDMI. **"HDMI Device List"** Displays a list of connected equipment that is compatible with Control for HDMI. Selects "Enable" to update the "HDMI Device List". **"Device Control Keys"** Select button functions of the TV's remote control to operate the connected equipment. **"None":** For basic operations, such as navigation buttons (up, down, left or right, etc). **"Normal":** For basic operations, such as navigation buttons (up, down, left or right, etc). **"Tuning Keys":** For basic operations and operation of channel-related buttons, such as **PROG +/–** or **(0-9)**, etc. Useful when you control a tuner or set-top box, etc; via the remote control. **"Menu Keys":** For basic operations and operation of the **HOME/OPTIONS** buttons. Useful when you select menus of a BD player, etc; via the remote control. **"Tuning and Menu Keys":** For basic operations and operation of channel-related buttons and **HOME/OPTIONS** button. ✍ • You cannot use "Control for HDMI" if the TV operations are linked to the operations of an audio system that is compatible with Control for HDMI. • Some equipment with "Control for HDMI" does not support the "Device Control" feature.

DivX® VOD	Select "DivX® VOD Registration Code" to register your TV for playback of DivX contents. Select "DivX® VOD Deregistration Code" to delete the registration. ✍ • A new registration code will be displayed in "DivX® VOD Registration Code" after deleting registration via "DivX® VOD Deregistration Code".
Product Information	Displays your TV's product information.
Factory Settings	Resets all settings to factory settings. After completing this process, the initial set-up screen is displayed. ✍ • Be sure not to turn the TV off during this period (it takes about 30 seconds) or press any buttons.

🌿 Eco

Reset	Resets the current Eco settings to the default values.
Power Saving	Reduces power consumption of the TV by adjusting the backlight. When you select "Picture Off", the picture is switched off, and the ⊠ (Picture Off) indicator on the TV front panel lights up in green. The sound remains unchanged.
Idle TV Standby	Turns the TV off after it has been kept idle for the preset length of time.
PC Power Management	Switches the TV to standby mode when the TV receives no signal from the PC input source for 30 seconds.

Using Menu Functions

27 GB

Additional Information

Installing the accessories (Wall-Mount Bracket)

To Customers:
For product protection and safety reasons, Sony strongly recommends that installing of your TV be performed by Sony dealers or licensed contractors. Do not attempt to install it yourself.

To Sony Dealers and Contractors:
Provide full attention to safety during the installation, periodic maintenance and examination of this product.

Your TV can be installed using the Wall-Mount Bracket SU-WL50B or SU-WL100 (sold separately).
- Refer to the Instructions supplied with the Wall-Mount Bracket to properly carry out the installation.
- Refer to "Detaching the stand from the TV" (page 5).

✍ • Place the TV on the stand, when securing the Mounting Hook.

Sufficient expertise is required for installing these products, especially to determine the strength of the wall for withstanding the TV's weight. Be sure to entrust the attachment of these products to the wall to Sony dealers or licensed contractors and pay adequate attention to safety during the installation. Sony is not liable for any damage or injury caused by mishandling or improper installation.
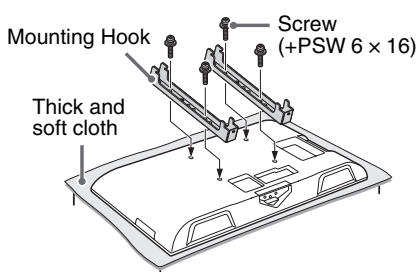
Note when installing
When using the SU-WL50B or SU-WL100 Wall-Mount Bracket, the space between the wall and the TV will be 6 cm. Use this space to route cables to the TV. See page 6 for installed with stand.
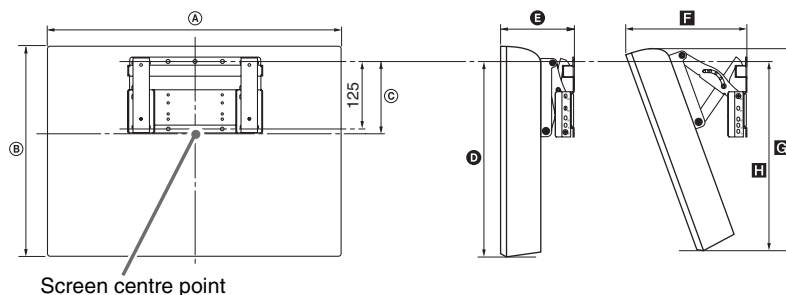
SU-WL100:
(KLV-26/22CX350/KLV-26/22BX350)

Mounting Hook

Screw (+PSW 4 × 12)

Thick and soft cloth
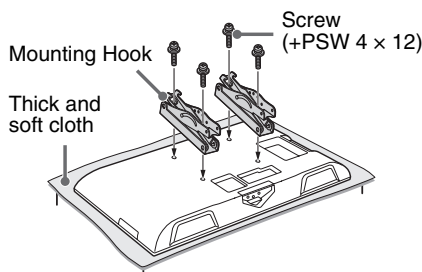
SU-WL50B:
(KLV-46/40BX450/KLV-40CX450/KLV-32BX35A/ KLV-32BX350/KLV-32CX350)

Mounting Hook

Screw (+PSW 6 × 16)

Thick and soft cloth

TV installation dimensions table

SU-WL100:

125

Screen centre point

Unit: mm

Model name	Display dimensions		Screen centre dimension	Length for each mounting angle				
				Angle (0°)		Angle (20°)		
	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Ⓕ	Ⓖ	Ⓗ
KLV-26BX350/ KLV-26CX350	661	424	117	336	144	241	402	338
KLV-22BX350/ KLV-22CX350	545	360	107	299	122	211	341	297

SU-WL50B:
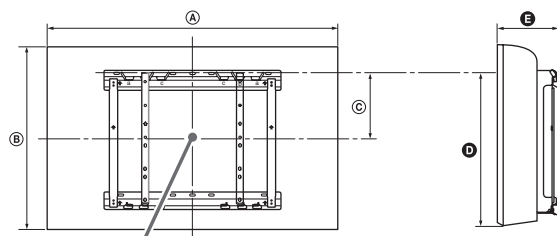
Screen centre point

Unit: mm

Model name	Display dimensions			Screen centre dimension	Length for mounting angle	
	Ⓐ	Ⓑ		Ⓒ	Ⓓ	Ⓔ
KLV-46BX450	1112	675		137	479	151
KLV-40BX450/ KLV-40CX450	980	601		175	479	151
KLV-32BX350/ KLV-32CX350/ KLV-32BX35A	790	497		200	454	149

Figures in the above table may differ slightly depending on the installation.
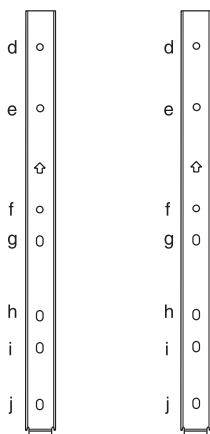
WARNING

The wall that the TV will be installed on should be capable of supporting a weight of at least four times that of the TV. Refer to "Specifications" for its weight.

Screw and hook locations diagram/table

Screw location -
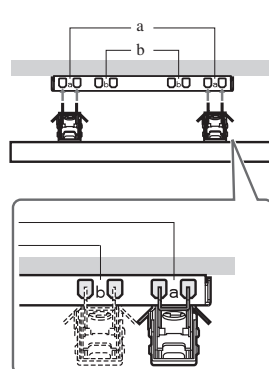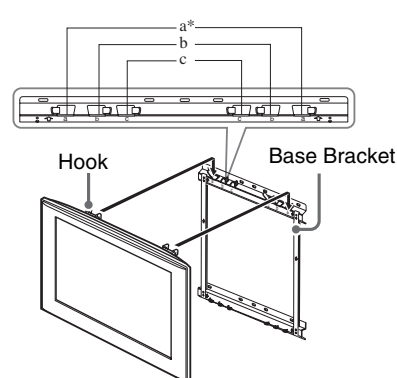When installing the Mounting Hook on the TV.

Hook location -
When installing the TV onto the Base Bracket.

SU-WL50B

SU-WL100

SU-WL50B

Hook

Base Bracket

* Hook location "a" cannot be used for the models in the table below.

Model name	Screw location	Hook location
	SU-WL50B	SU-WL50B
KLV-46BX450/KLV-40BX450/KLV-40CX450	d, i	b
KLV-32BX350/KLV-32CX350/KLV-32BX35A	e, h	c
		SU-WL100
KLV-26CX350/KLV-26BX350		a
KLV-22CX350/KLV-22BX350		b

Troubleshooting

When the ⏻ (standby) indicator is flashing, count how many times it flashes (interval time is three seconds).

Press **I/⏻** on the TV to turn it off, disconnect the AC power cord, and inform your dealer or Sony service centre of how the indicator flashes (number of flashes).

When it is not flashing

Check the items listed below. If the problem still persists, have your TV serviced by qualified service personnel.

Picture

No picture and no sound
- Check the antenna/cable connection.
- Connect the TV to the AC power outlet, and press **I/⏻** on the TV. If the ⏻ (standby) indicator lights up in red, press **I/⏻**.

No picture from connected equipment.
- Press ⬗ repeatedly to select the desired input.
- Check the connection between the optional equipment and the TV.

Double images or ghosting
- Check the antenna/cable connection, location or direction.

Only snow and noise appear on the screen
- Check if the antenna is broken or bent.
- Check if the antenna has reached the end of its serviceable life (three to five years in normal use, one to two years at the seaside).

Distorted picture (dotted lines or stripes)
- Keep the TV away from electrical noise sources such as cars, motorcycles, hair-dryers or optional equipment.
- When installing optional equipment, leave some space between the optional equipment and the TV.
- Check the antenna/cable connection.
- Keep the antenna/cable away from other connecting cables.

Picture or sound noise when viewing a TV channel
- Adjust "AFT" (Automatic Fine Tuning) to obtain better picture reception (page 23).

Tiny black points and/or bright points appear on the screen
- The screen is composed of pixels. This is not a malfunction.

Picture contours are distorted
- Change the current setting of "Cinema Drive" to other settings (page 19).

No colour on programmes
- Select "Reset" (page 19).

No picture from the connected equipment
- Turn the connected equipment on.
- Check the cable connection.
- Press ⬗ repeatedly to select the desired input.
- Correctly insert the USB device.
- Make sure that the USB device has been properly formatted.
- Operations are not guaranteed for all USB devices. Also, operations differ depending on the features of the USB device and the video being played.

Sound

No sound, but good picture
- Press ⊿ +/– or ◻️✕ (Mute).
- Check if the "Speakers" is set to "TV Speakers" (page 21).

No sound or noisy sound
- Check if the TV system setting is appropriate (page 23).

Channels

Some channels are blank
- The channel is for scrambled/subscription service only. Subscribe to a pay TV service.
- Channel is used only for data (no picture or sound).
- Contact the broadcaster for transmission details.

General

The TV turns off automatically (the TV enters standby mode)
- Check if the "Sleep Timer" is activated (page 25).
- Check if the "Idle TV Standby" is activated (page 27).

The TV surrounds become warm.
- When the TV is used for an extended period, the TV surrounds become warm. You may feel hot when touching there by the hand.

Some input sources cannot be selected
- Select "Video Labels" and cancel "Skip" of the input source (page 26).

The remote does not function
- Replace the batteries.

HDMI equipment does not appear on "HDMI Device List"
- Check that your equipment is compatible with Control for HDMI.

Cannot select "Off" in "Control for HDMI"
- If you have connected any audio system that is compatible with Control for HDMI, you cannot select "Off" in this menu. To change the audio output to the TV speaker, select "TV Speakers" in the "Speakers" menu (page 21).

The "Parental Lock" password has been forgotten
- Enter 9999 for the PIN code (PIN code 9999 is always accepted.) (page 24).

Specifications

System	
Panel system	LCD (Liquid Crystal Display) Panel
TV system	B/G, I, D/K, M
Colour/video system	PAL, PAL60, SECAM, NTSC4.43, NTSC3.58
Channel coverage	Analogue: UHF/VHF/Cable, depending on your country/area selection
Sound output	KLV-46BX450/40CX450/40BX450/32CX350/32BX350/32BX35A: 8 W + 8 W KLV-26CX350/26BX350/22CX350/22BX350: 5 W + 5 W

| Input/Output jacks	
Antenna	75 ohm external terminal for VHF/UHF
⊷ COMPONENT IN/ ⊷ 2	⊷ COMPONENT IN Supported formats: 1080p, 1080i, 720p, 576p, 576i, 480p, 480i Y: 1 Vp-p, 75 ohms, 0.3V negative sync/P$_B$/C$_B$: 0.7 Vp-p, 75 ohms/P$_R$/C$_R$: 0.7 Vp-p, 75 ohms ⊷ 2 Video input (phono jack)
⊷ COMPONENT IN	Audio input (phono jack)
⊷ 1	Video input (phono jack)
⊷ 1	Audio input (phono jack)
HDMI IN 1, 2	Video: 1080/24p, 1080p, 1080i, 720p, 576p, 576i, 480p, 480i Audio: Two channel linear PCM: 32, 44.1 and 48 kHz, 16, 20 and 24 bits, Dolby Digital ⊷ Analogue audio input (minijack) (HDMI IN 1 only) PC Input (see page 22)
⊷	Audio output (minijack)
PC IN ⊷	PC Input (D-sub 15-pin) (see page 22) G: 0.7 Vp-p, 75 ohms, non Sync on Green/B: 0.7 Vp-p, 75 ohms/ R: 0.7 Vp-p, 75 ohms/HD: 1-5 Vp-p/VD: 1-5 Vp-p
PC IN ⊷	PC audio input (minijack)
⊷	USB port
⌓	Headphones jack
Operating temperature	0 ℃ – 40 ℃
Operating humidity	10 % – 80 % RH (non-condensing)

Additional Information

31 GB

Model name	KLV-40BX450	KLV-40CX450	KLV-46BX450
Power and others			
Power requirements	110-240 V AC, 50/60 Hz		
Screen size (measured diagonally) — inches	40		46
Screen size (measured diagonally) — cm (Approx.)	101.6		116.8
Display resolution	1,920 pixels (horizontal) × 1,080 lines (vertical)		
Power consumption	Indicated on the rear of the TV.		
Dimensions (Approx.) (w × h × d) — with stand (mm)	980 × 639 × 220		1,112 × 713 × 278
Dimensions (Approx.) (w × h × d) — without stand (mm)	980 × 601 × 94		1,112 × 675 × 97
Mass (Approx.) — with stand (kg)	14.0		18.4
Mass (Approx.) — without stand (kg)	13.2		17.3
Optional accessories — Wall-Mount Bracket	SU-WL50B		

Model name	KLV-32CX350	KLV-32BX350	KLV-32BX35A
Power and others			
Power requirements	110-240 V AC, 50/60 Hz		
Screen size (measured diagonally) — inches	32		
Screen size (measured diagonally) — cm (Approx.)	80.0		
Display resolution	1,366 pixels (horizontal) × 768 lines (vertical)		
Power consumption	Indicated on the rear of the TV.		
Dimensions (Approx.) (w × h × d) — with stand (mm)	790 × 534 × 193		
Dimensions (Approx.) (w × h × d) — without stand (mm)	790 × 497 × 91		
Mass (Approx.) — with stand (kg)	9.4		
Mass (Approx.) — without stand (kg)	8.9		
Optional accessories — Wall-Mount Bracket	SU-WL50B		

Model name	KLV-26CX350	KLV-26BX350	KLV-22CX350	KLV-22BX350
Power and others				
Power requirements	110-240 V AC, 50/60 Hz			
Screen size (measured diagonally) — inches	26		22	
Screen size (measured diagonally) — cm (Approx.)	66.1		54.8	
Display resolution	1,366 pixels (horizontal) × 768 lines (vertical)			
Power consumption	Indicated on the rear of the TV.			
Dimensions (Approx.) (w × h × d) — with stand (mm)	661 × 461 × 193		545 × 399 × 175	
Dimensions (Approx.) (w × h × d) — without stand (mm)	661 × 424 × 83		545 × 360 × 61	
Mass (Approx.) — with stand (kg)	7.7		5.4	
Mass (Approx.) — without stand (kg)	7.2		5.1	
Optional accessories — Wall-Mount Bracket	SU-WL100			

Design and specifications are subject to change without notice.

Customer support
http://www.sony-asia.com/support

Instructions on "Installing the Wall-Mount Bracket" are not supplied in the form of a separate leaflet with this TV. These installation instructions are included within this TV's instructions manual.

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http://www.sony.net/