

LCD Digital Colour TV

Operating Instructions

KDL-55X4500

KDL-46X4500

KDL-40X4500

BRAVIA

© 2008 Sony Corporation 4-108-535-**13**(1)

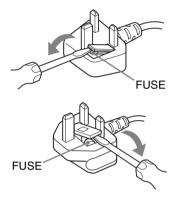
NOTICE FOR CUSTOMERS IN THE UNITED KINGDOM

A moulded plug complying with BS1363 is fitted to this equipment for your safety and convenience.

Should the fuse in the plug supplied need to be replaced with the same rating of fuse approved by ASTA or BSI to BS 1362 (i.e., marked with ♠ or ♥) must be used.

When an alternative type of plug is used it should be fitted with the same rating of fuse, otherwise the circuit should be protected by a 13 AMP FUSE at the distribution board.

If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service station.



How to replace the fuse

Open the fuse compartment with a blade screwdriver, and replace the fuse.

Please refer to the illustration that actually equipped with the product.

Introduction

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

Notes on Digital TV function

- □ Any functions related to Digital TV (□ 3) will only work in countries or areas where DVB-T (MPEG-2 and H.264/MPEG-4 AVC) digital terrestrial signals are broadcast or where you have access to a compatible DVB-C (MPEG-2 and H.264/MPEG-4 AVC) cable service. Please confirm with your local dealer if you can receive a DVB-T signal where you live or ask your cable provider if their DVB-C cable service is suitable for integrated operation with this TV.
- Your cable provider may charge a fee for their services, or require you to agree to its terms and conditions of business.
- ☐ This TV set complies with DVB-T and DVB-C specifications, but compatibility with future DVB-T digital terrestrial and DVB-C digital cable broadcasts are not guaranteed.
- ☐ Some Digital TV functions may not be available in some countries/areas and

DVB-C cable may not operate correctly with some providers.

For a list of compatible cable providers, refer to the support web site:

http://support.sony-europe.com/TV/

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: for digital channels only

Before operating the TV, please read "Safety Information" (page 9). Retain this manual for future reference.

Start-up Guide

Before Use

To check the accessories

Mains lead (Type BF)* (1)

Coaxial cable* (1)

Stand (1) and screws (4) (KDL-46X4500/40X4500 only)

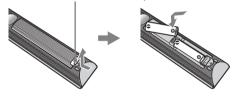
Remote RM-ED012 (1)

Size AA batteries (R6 type) (2)

* Do not remove the ferrite cores.

To insert batteries into the remote

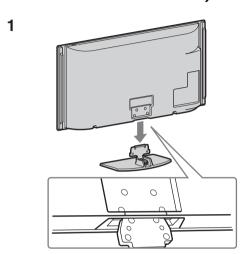
Push and lift the cover to open.



To replace the speaker grille

The speaker grille unit can be replaced with others that are sold separately. However, do not remove the unit except to replace it. For details, see the instructions supplied with speaker grille units.

1: Attaching the stand (for KDL-46X4500/40X4500)

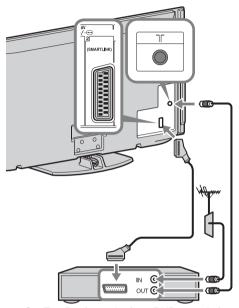


2

• If using an electric screwdriver, set the tightening torque at approximately 1.5 N·m (15 kgf·cm).

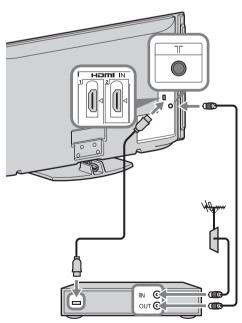
2: Connecting an aerial/Set Top Box/recorder (e.g. DVD recorder)

Connecting a Set Top Box/recorder (e.g. DVD recorder) with SCART



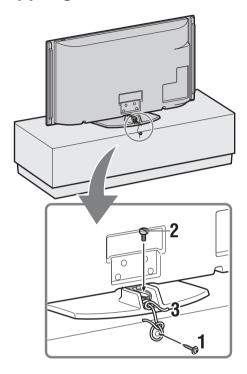
Set Top Box/recorder (e.g. DVD recorder)

Connecting a Set Top Box/recorder (e.g. DVD recorder) with HDMI



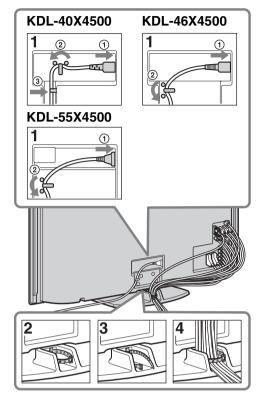
Set Top Box/recorder (e.g. DVD recorder)

3: Preventing the TV from toppling over



- 1 Install a wood screw (4 mm in diameter, not supplied) in the TV stand.
- 2 Install a machine screw (M6 \times 12–15, not supplied) into the screw hole of the TV.
- **3** Tie the wood screw and the machine screw with a strong cord.

4: Bundling the cables





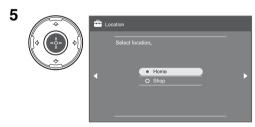
• Do not bundle the mains lead together with other cables.

5: Performing the initial set-up









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



Make sure that the aerial is connected.





When you select "Cable", we recommend that you select "Quick Scan" for quick tuning. Set "Frequency" and "Network ID" according to the information supplied from your cable provider. If no channel is found using "Quick Scan", try "Full Scan" (though it may take some time). For a list of compatible cable providers, refer to the support web site: http://support.sony-europe.com/TV/DVBC/





If you want to change the order of analogue channels, follow the steps in "Programme Sorting" on page 44. If your TV cannot receive digital broadcasts, the "Clock Set" menu appears on the screen (page 36).









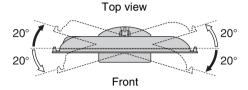




Adjusting the viewing angle of the TV

This TV can be adjusted within the angles shown below.

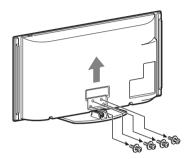
Adjust the angle left and right (swivel)



Detaching the Table-Top Stand from the TV



- Remove the screws guided by the arrow marks
- Do not remove the Table-Top Stand for any reason other than listed below.
 - To wall-mount the TV.
- To put the TV in the carton at time of purchase (KDL-46X4500/40X4500 only).



Safety Information

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 iniuries

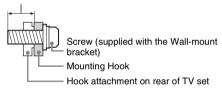
Installation

- ☐ The TV set should be installed near an easily accessible mains socket.
- ☐ Place the TV set on a stable, level surface.
- ☐ Only qualified service personnel should carry out wall installations.
- ☐ For safety reasons, it is strongly recommended that you use Sony accessories, including:
 - Wall-mount bracket SU-WL500
- ☐ 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

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.

8 mm - 12 mm

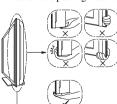


Transporting

- ☐ Before transporting the TV set, disconnect all cables.
- ☐ Two or three people are needed to transport a large TV set.
- ☐ When transporting the TV set by hand, hold it as shown on the right. Do not put stress on For KDL-46X4500/40X4500 the LCD panel.
- ☐ When lifting or moving the TV set, hold it firmly from the bottom.
- \square 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.



For KDL-55X4500

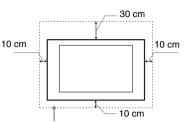


Be sure to hold the bottom of the panel, and not the transparent part, speaker, or speaker grille area. Do not compress the panel's speaker grille area.

Ventilation

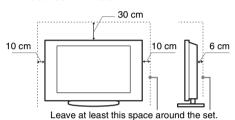
- ☐ Never cover the ventilation holes or insert anything in the
- ☐ Leave space around the TV set as shown below.
- It is strongly recommended that you use a Sony wall-mount bracket in order to provide adequate air-circulation.

Installed on the wall



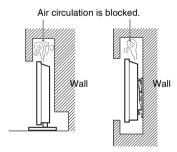
Leave at least this space around the set.

Installed with stand



☐ To ensure proper ventilation and prevent the collection of dirt

- 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.



Mains lead

Handle the mains lead and socket as follows in order to avoid any risk of fire, electrical shock or damage and/or injuries:

- Use only mains leads supplied by Sony, not other suppliers.
- Insert the plug fully into the mains socket.
- Operate the TV set on a 220-240 V AC supply only.
- When wiring cables, be sure to unplug the mains lead for your safety and take care not to catch your feet on the cables.
- Disconnect the mains lead from the mains socket before working on or moving the TV set.
- Keep the mains lead away from heat sources.
- Unplug the mains 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 mains lead on any other equipment.
☐ Do not pinch, bend, or twist the mains lead excessively. The core conductors may be exposed or broken.
☐ Do not modify the mains lead.
☐ Do not put anything heavy on the mains lead.
 Do not pull on the mains lead itself when disconnecting the mains lead.
\square Do not connect too many appliances to the same mains socket.
☐ Do not use a poor fitting mains socket.

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.

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.

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 mains socket and aerial during lightning storms.

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 mains lead. 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 mains for environmental and
safety reasons.

- ☐ As the TV set is not disconnected from the mains when the TV set is just turned off, pull the plug from the mains 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 mains lead immediately if any of the following problems occur.

Ask your dealer or Sony service centre to have it checked by qualified service personnel.

When:

- Mains lead is damaged.
- Poor fitting of mains socket.
- 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.

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 mains lead connected to the TV set from mains socket 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 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.

Batteries

- $\hfill \square$ 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.

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 on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. 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 or the shop where you purchased the product.



Disposal of waste batteries (applicable in the European Union and other European countries with separate collection systems)

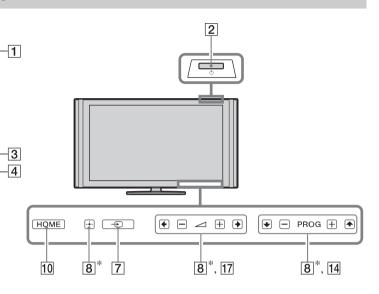
This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste. On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead. By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources. In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only. To ensure that the battery will be treated properly, hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment. For all other batteries, please view the section on how to remove the battery from the product safely. Hand the battery over to the applicable collection point for the recycling of waste batteries. For more detailed information about recycling of this product or battery, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

The manufacturer of this product is Sony Corporation, 1-7-1 Konan Minato-ku Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.

Remote and TV Controls/Indicators

Remote and TV controls





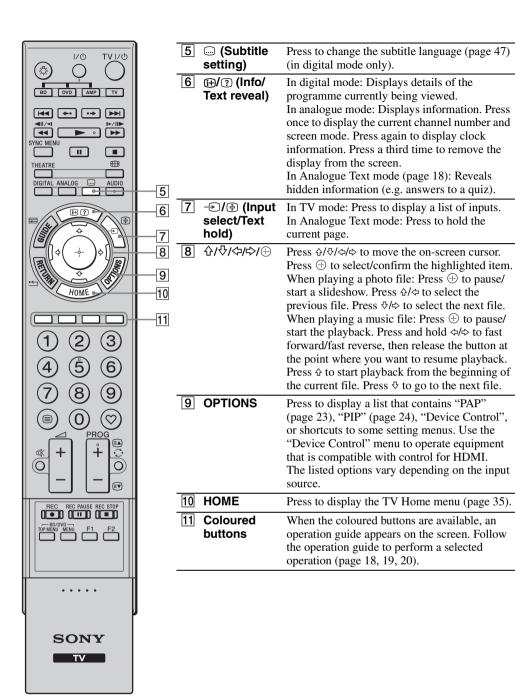
A button or touch sensors on the TV will work the same as those on the remote.

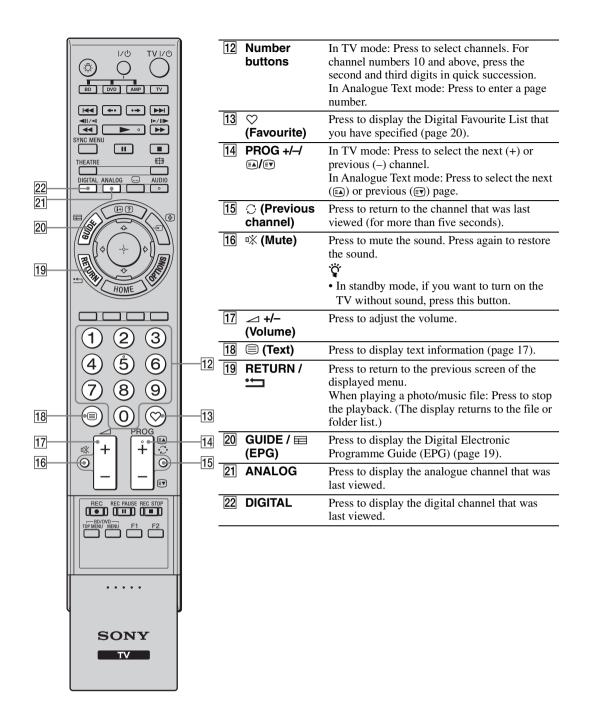
* In the TV menu, these touch sensors will work as $2/\sqrt[4]{-}$.



• The number **5**, ▶, **PROG** + and **AUDIO** buttons on the remote have a tactile dot. Use the tactile dots as a reference when operating the TV.

Button	Description	
1 TV I/() (TV standby)	Press to turn the TV on and off from standby mode.	
2 (Power)	 Press to turn the TV on or off. To disconnect the TV completely, turn off the TV, then unplug the mains lead from the mains. 	
③ ∰ (Screen mode)	Press to change the screen format (page 18).	
4 AUDIO	In analogue mode: Press to change the dual sound mode (page 39). In digital mode: Press to change the language to be used for the programme currently being viewed (page 47).	





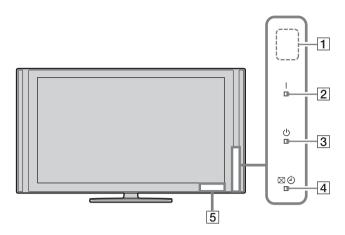


23 THEATRE You can set Theatre Mode to on or off. When Theatre Mode is set to on, the optimum audio output (if the TV is connected with an audio system using an HDMI cable) and picture quality for film-based contents are automatically set. • If you turn the TV off, Theatre Mode is also turned off. • "Control for HDMI" (BRAVIA Sync) is only available with the connected Sony equipment that has the BRAVIA Sync or BRAVIA Theatre Sync logo or is compatible with control for HDMI. 24 SYNC MENU Displays the menu of connected HDMI equipment. While viewing other input screens or TV programmes, "HDMI Device Selection" is displayed when the button is pressed. • "Control for HDMI" (BRAVIA Sync) is only available with the connected Sony equipment that has the BRAVIA Sync logo or is compatible with control for HDMI. 25 💍 (Light) Press to illuminate the buttons on the remote so that you can see them easily even if the room is dark. **Buttons for** You can operate the equipment connected to using the TV (page 22, 27, 28).

optional

equipment

Indicators

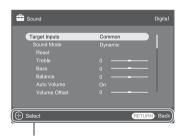


Indicator	Description
1 Light sensor Do not put anything over the sensor, doing so may affect its function. (page 44)	
2 I (Power)	Lights up in green when the TV is on.
3 (Standby)	Lights up in red when the TV is in standby mode.
4 (Picture Off / Lights up in green when you select "Picture Off" (page 44). Lights up in orange when you set the timer (page 19, 36).	
5 Remote control sensor	Receives IR signals from the remote. Do not put anything over the sensor. The sensor may not operate properly.



• Make sure that the TV is completely turned off before unplugging the mains lead. Unplugging the mains lead while the TV is turned on may cause the indicator to remain lit or may cause the TV to malfunction.

About the operation guide on the TV screen



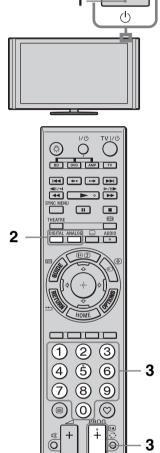
Operation Guide

Example: Press \oplus or **RETURN** (see \blacksquare on page 13 or \blacksquare on page 14).

The operation guide provides help on how to operate the TV using the remote, and is displayed at the bottom of the screen. Use the remote buttons shown on the operation guide.

Watching TV

Watching TV



1 Press (b) on the TV to turn on the TV.
When the TV is in standby mode (the (b)

- Press DIGITAL to switch to digital mode, or press ANALOG to switch to analogue mode.
 - The available channels vary depending on the mode.
- 3 Press the number buttons or PROG +/- to select a TV channel.

To select channel numbers 10 and above using the number buttons, enter the second and third digits in quick succession.

To select a digital programme using the Digital Electronic Programme Guide (EPG), see page 19.

In digital mode

An information banner appears briefly. The following icons may be indicated on the banner.

- □: Interactive service is available (Digital Text)
- ******: Scrambled/Subscription service
- Multiple audio languages available
- : Subtitles available
- Subtitles available for the hearing impaired
- ®: Recommended minimum age for current programme (ages from 4 to 18)
- Parental lock

To access Digital Text

Many broadcasters provide a Digital Text service. Digital Text offers graphically rich contents, compared to Analogue Text. Select a digital channel which provides Digital Text, then press .

When a broadcaster provides a dedicated Digital Text channel, select this channel to access Digital Text.

To navigate through Digital Text, follow the instructions on the screen.

To exit Digital Text, press **RETURN**.

To move around, press �/✧/✧/✧.

To select items, press \oplus and the number buttons.

To access shortcuts, press the coloured buttons.

To access Analogue Text

In analogue model, press
. Each time you press , the display changes cyclically as follows:

Text and TV picture \rightarrow Text \rightarrow No Text (exit the Text service)

To select a page, press the number buttons or $\mathbb{R}^{n}/\mathbb{R}^{n}$.

To hold a page, press ₤.

To reveal hidden information, press ②.

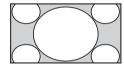


- You can also jump directly to a page by selecting the page number displayed on the screen. Press ⊕ and û/∜/¢/\$ to select the page number, then press ⊕.
- When four coloured items appear at the bottom of the Text page, you can access pages quickly and easily (Fastext). Press the corresponding coloured button to access the page.

To change the screen format manually

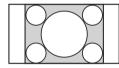
Press ## repeatedly to select the desired screen format.

Smart*



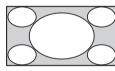
Displays conventional 4:3 broadcasts with an imitation wide screen effect. The 4:3 picture is stretched to fill the screen.

4:3



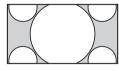
Displays conventional 4:3 broadcasts (e.g. non-wide screen TV) in the correct proportion.

Wide



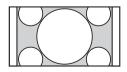
Displays wide screen (16:9) broadcasts in the correct proportion.

Zoom*



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

14:9*



Displays 14:9 broadcasts in the correct proportion. As a result, black border areas are visible on the screen.

* Parts of the top and bottom of the picture may be cut off. You can adjust the vertical position of the picture. Press ☆/☆ to move the picture up or down (e.g. to read subtitles).



• When you select "Smart", some characters and/or letters at the top and the bottom of the picture may not be visible. In such a case, adjust "Vertical Size" in the "Screen" menu (page 40).



- When "Auto Format" (page 39) is set to "On", the TV automatically selects the best mode to suit the broadcast.
- If 720p, 1080i or 1080p source pictures are displayed with black borders on the screen edges, select "Smart" or "Zoom" to adjust the pictures.

Using the Digital Electronic Programme Guide (EPG) **



Digital Electronic Programme Guide (EPG)

- 1 In digital mode, press **GUIDE**.
- **2** Perform the desired operation as shown in the following table or displayed on the screen.
- * This function may not be available in some countries/ areas.

То	Do this	
View a programme	Press �/♂/�/\$ to select a programme, then press ⊕.	
Turn off the EPG	Press GUIDE.	
Sort programme information by category – Category list	 Press the blue button. Press �/₺ to select a category, then press ⊕. The categories available include: "All Categories", "Favourites" (1 – 4), "Radio": Contains all available channels. Category name (e.g. "News"): Contains all channels corresponding to the selected category. 	
Set a programme to be displayed automatically on the screen when it starts - Reminder	 Press ♦/∜/♦/♦ to select a future programme you want to display, then press ⊕. Press ♦/∜ to select "Reminder", then press ⊕. A ⊕ symbol appears next to the programme's information. The ⋈ ⊕ indicator on the TV front panel lights up in orange. If you switch the TV to standby mode, the TV will automatically turn on when the programme starts. 	
Cancel a reminder – Cancel Timer	 Press ⊕. Press ♦/♦ to select "Timer list", then press ⊕. Press ♦/♦ to select the programme you want to cancel, then press ⊕. Press ♦/♦ to select "Cancel Timer", then press ⊕. A display appears to confirm that you want to cancel the programme. Press ♦/♦ to select "Yes", then press ⊕. 	

Using the Digital Favourite List 3*



Digital Favourite List

You can specify up to four of your favourite channel lists.

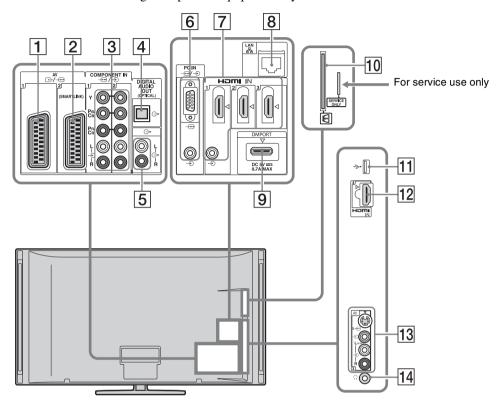
- **1** In digital mode, press \heartsuit .
- **2** Perform the desired operation as shown in the following table or displayed on the screen.
- * This function may not be available in some countries/ areas.

То	Do this	
Add or remove channels in a	1	Press the blue button.
Favourite list		Go to step 2 when you add channels for the first time or the Favourite list is empty.
	2	Press the yellow button to select the Favourite list to edit.
	3	Press $\diamondsuit/\diamondsuit/\diamondsuit/\diamondsuit$ to select the channel to add or remove, then press \oplus .
Watch a channel	1	Press the yellow button to select a Favourite list.
	2	Press $\diamondsuit/\diamondsuit$ to select a channel, then press $\textcircled{-}$.
Remove all channels from a Favourite	1	Press the blue button.
list	2	Press the yellow button to select the Favourite list to edit.
	3	Press the blue button.
	4	Press ⇔/⇔ to select "Yes", then press ⊕.

Using Optional Equipment

Connecting Optional Equipment

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



Connect to	Input symbol on screen	Description
1	⊕ AV1	When you connect a decoder, the TV tuner outputs scrambled signals to the decoder, and the decoder unscrambles the signals before outputting them.
2 ⊕/-⊕AV2 (SMARTLINK)	⊕ AV2	SmartLink provides a direct link between the TV and a recorder (e.g. DVD recorder).
③ → →/→ COMPONENT IN1 or 2	⊕ Component 1 or ⊕ Component 2	The component video sockets support the following video inputs only: 480i, 480p, 576i, 576p, 720p, 1080i and 1080p.
4 DIGITAL AUDIO OUT (OPTICAL)		Use an optical audio cable.
5 0-		You can listen to TV sound on the connected Hi-Fi audio equipment.
6 -⊕/-⊕PC IN	⊕PC	It is recommended to use a PC cable with ferrites, such as the "Connector, D-sub 15" (ref. 1-793-504-11, available in Sony Service Centre), or an equivalent.

Connect to	Input symbol on screen	Description
7 HDMI IN 1, 2, or 3	⊕ HDMI 1, ⊕ HDMI 2, or ⊕ HDMI 3	Digital video and audio signals are input from the connected equipment. In addition, when you connect the equipment that is compatible with control for HDMI, communication with the
12 HDMI IN 4	∙£D HDMI 4	connected equipment is supported. Refer to page 43 to set up this communication. If the equipment has a DVI socket, connect the DVI socket to the HDMI IN 1 socket through a DVI - HDMI adaptor interface (not supplied), and connect the equipment's audio out sockets to the audio in sockets in the HDMI IN 1 sockets.
		 The HDMI sockets support the following video inputs only: 480i, 480p, 576i, 576p, 720p, 1080i, 1080p and 1080/24p. For PC video inputs, see page 52. Be sure to use only an authorised HDMI cable bearing the HDMI logo. We recommend that you use a Sony HDMI
		cable (high speed type).When connecting an audio system that is compatible with control for HDMI, be sure to also connect it to the DIGITAL AUDIO OUT (OPTICAL) socket.
8 뫔LAN		You can enjoy contents stored in DLNA-compatible devices via a network (page 31).
9 DMPORT	⊕ DMPORT	You can play audio or video (optional cable required) of a portable audio player that is connected to the TV using a DIGITAL MEDIA PORT (DMPORT) adaptor. Depending on the connected DIGITAL MEDIA PORT adaptor, you can operate the connected equipment using the TV as follows; - Using the remote of the TV: ☆/∜/⟨¬/¬>, ⊕, RETURN, ►/ ■/Ⅱ/◄//►//◄//►). - Using the OPTIONS menu function: Press OPTIONS, and select "Device Control (Menu)".
		 Do not connect or disconnect a DIGITAL MEDIA PORT adaptor while the TV is turned on. The connected equipment is not powered when the TV is turned off or in standby mode.
10 CAM (Conditional Access Module)		Provides access to pay TV services. For details, refer to the instruction manual supplied with your CAM. To use the CAM, remove the "dummy" card from the CAM slot, then turn off the TV and insert your CAM card into the slot. When you are not using the CAM, we recommend that you keep the "dummy" card in the CAM slot.
		• CAM is not supported in some countries/areas. Check with your authorised dealer.
11 ψUSB		You can enjoy photo/music files stored in a Sony digital still camera or camcorder through a USB cable or USB storage device on your TV (page 24).
13 s-⊕AV3, -⊕ AV3, and -⊕AV3	€D AV3	To avoid picture noise, do not connect the camcorder to the video jack → AV3 and the S video jack S→ AV3 at the same time. When connecting a mono equipment, connect to the → AV3 L socket.
14 () Headphones		You can listen to TV sound through headphones.

Viewing Pictures from Connected Equipment

Turn on the connected equipment, and perform one of the following operations.

For equipment connected to the scart sockets using a fully-wired 21-pin scart lead

Start playback on the connected equipment. The picture from the connected equipment appears on the screen.

For an auto-tuned VCR

In analogue mode, press **PROG** +/- or the number buttons, to select the video channel.

For a USB device

See page 24.

For a network device, see page 31.

For other connected equipment

- Press **HOME**.
- Press ⇒ to select "External Inputs".
- 3 Press �/♥ to select the desired input source, then press \oplus .

O#	Switches to the video of equipment connected to the AV3 inputs.	
000	Switches to the video of equipment connected to Component 1 or 2 inputs.	
•	Switches to the video of equipment connected to AV1 or AV2 inputs.	
	Switches to the video of equipment connected to HDMI 1, HDMI 2, HDMI 3, or HDMI 4 input.	
0	Switches to the video of equipment connected to DMPORT input.	
	Switches to the video of the PC connected to PC input.	



 Depending on the "Skip AV Inputs" setting (page 43), some input sources may not appear in the list. If you have set an input source to "Skip", that input source does not appear regardless of whether the equipment is connected. If you have set an input source to "Auto", that input source does not appear when the equipment is not connected to the TV.

Additional operations

То	Do this
Return to normal TV mode	Press DIGITAL or ANALOG .
Change the volume of the connected audio system that is compatible with control for HDMI	Press ∠ +/−.
Mute the sound of the connected audio system that is compatible with control for HDMI	Press Press again to restore the sound.

To view two pictures simultaneously - PAP (Picture and Picture)

You can view two pictures (external input and TV programme) on the screen simultaneously. Connect an optional equipment (page 21), and make sure that images from the equipment appear on the screen (page 23).



- This function is not available for a PC input or DIGITAL MEDIA PORT input.
- You cannot change the size of the pictures.
- 1 Press OPTIONS.
- Press �/♥ to select "PAP", then press ⊕. The picture from the connected equipment is displayed on the left, and the TV programme is displayed on the right.
- Press the number buttons or **PROG +/-** to select the TV channel.

To return to single picture mode Press **RETURN**.



• The highlighted picture is audible. You can switch the audible picture by pressing ⇔/⇔.

To view two pictures simultaneously – PIP (Picture in Picture)

You can view two pictures (PC input and TV programme) on the screen simultaneously.

(D

- This function is not available for a DIGITAL MEDIA PORT input.
- 1 Press OPTIONS.
- **2** Press �/∜ to select "PIP", then press ⊕.

The picture from the connected PC is displayed in full size, and the TV programme is displayed in the small screen.

You can use �/⇩ to change the position of the TV programme screen.

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

To return to single picture mode Press RETURN.



You can switch the audible picture by pressing ⇔/
 ⇒.

Playing back Photo/Music via USB

You can enjoy photo/music 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" or "Music".
- **4** Press �/� to select a USB device, then press ⊕.

The file or folder list appears. To display a thumbnail list, press the yellow button while the list is displayed.

5 Press �/♥ to select a file or folder, then press ⊕.

When you select a folder, select a file, then press \oplus . Playback starts.

Photo Playback Auto Start

The TV automatically starts photo playback when the TV is turned on and a digital still camera or other device storing photo files is connected to the USB port and then turned on (page 42).

(Photo) Available OPTIONS

Option	Description
Picture	See page 36.
Sound	See page 38.
Surround	See page 39.
Video Settings	See page 40.
Cropping	Crops a photograph.
Display map	Displays a map of the location where a photo was shot along with the photo itself.
Show Options	Allows you to set repeat/shuffle for photo playback.
Photo Set-up	Sets how playback should be performed and what effects to use during slideshows.

Option	Description
Rotate and Save	Rotates and saves unprotected files.
Speaker	See page 42.
○ Volume	See page 42.
Picture Frame Image	Allows you to select a photograph to be displayed as a picture frame.
Information	Displays information about the device, folders, and files.

Option	Description
Sound	See page 38.
Surround	See page 39.
Add to Slideshow	Registers the background music to be played during a slideshow using (Photo).
Omit from Slideshow	Cancels the registered background music.
Playback Options	Allows music options to be set for repeat, shuffle, or regular playback.
Speaker	See page 42.
○ Volume	See page 42.
Information	Displays information about the device, folders, and files.



- 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.
- Playback does not start automatically if the TV is turned on after connecting the digital still camera or other device to the USB port.

- USB playback is supported for the following photo file formats:
 - JPEG (JPEG format files with the extension ".jpg" and conforming to DCF or Exif)
 - RAW (ARW/ARW 2.0 format files with the extension ".arw". For preview only.)
- USB playback is supported for the following music file formats:
 - MP3 (files with the extension ".mp3" that have not been copyrighted)
- The file name and folder name support only English.
- 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://support.sony-europe.com/TV/compatibility/

To display a photograph — Picture Frame

You can display a photograph on the screen for a selected period of time. After that period, the TV automatically switches itself into standby mode.

1 Select a photograph.

You can select a photograph from the connected USB device or preset picture folder. For details on selecting a photograph, see page 24.

- 2 Press **OPTIONS** while the selected photograph is displayed, then press �/♡ to select "Picture Frame Image" and press ⊕.
- **3** Press **RETURN** repeatedly to return to the Home Menu.
- **4** Press ⇔/⇔ to select "Photo", then select "Picture Frame" and press ⊕.

The TV is switched to Picture Frame mode, and the selected photograph is displayed on the screen.

To set the duration of displaying a photograph

Press **OPTIONS**, then select "Duration" and press \oplus . Then, select the duration, and press \oplus .

The counter appears on the screen.

To return to the XMB™ Press RETURN.



- If the photograph is selected from a USB device, it must remain connected to the TV.
- If "Sleep Timer" is activated, the TV automatically will switch into standby mode.

To display a photograph with the location on the map

When using a digital still camera with GPS function, it is possible to display a photograph with a map of the location where the photograph was taken using a function of GPS for recording longitude and latitude. Because map information is downloaded from the Internet online map service, the network connection must be required and the TV has to be connected to the network (page 31).

- **1** Select a photograph (page 24).
- **2** Press the green/red buttons to zoom in/out on the map.

To change the display position of the map on the TV screen, press the blue button repeatedly.



- Because the Internet online map service is provided by a third party, service may be changed or terminated without prior notification to the user.
- The position indicated on the map may differ depending on the digital still camera.
- Only a large-scale map that cannot be zoomed in or out is displayed if the TV is not connected to the Internet or the Internet online map service is terminated.



- A map can be displayed in the case of photograph's Exif data includes a date information, and the associated longitude and latitude information ("Log files") has been recorded using a Sony GPS unit. Follow the procedure described below.
- 1 Connect the GPS unit to the USB port.
- 2 Press HOME.
- **3** Press ⇔/⇔ to select "Photo".
- **4** Press �/❖ to select the GPS unit, then press ⊕.
- **5** Select "Load GPS log files", then press ⊕.

- **6** Select the following items using �/�, then set them using �/�.
 - Time Zone
 - DST
- **7** Select "OK", then press ⊕.

The GPS log files are loaded.

- **8** Disconnect the GPS unit and connect the device on which the photograph is stored.
- **9** Select a photograph (page 24).
- **10** Press the green/red buttons to zoom in/out on the map.

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 (ⁿX) of a connected audio system.
- You can operate the connected Sony equipment that has the BRAVIA Sync logo by the TV remote by pressing:
 - ►/I/II/<-/>
 To operate the connected equipment directly.
 - SYNC MENU to display the menu of the connected HDMI equipment on the screen.
 After displaying the menu, you can operate the menu screen by using �/�/�/Þ, ⊕, colour buttons, and RETURN.
 - OPTIONS to display "Device Control", then select options from "Options" and "Content List" to operate the equipment.
 - 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 connect the equipment that is compatible with control for HDMI

Connect the compatible equipment and the TV with an HDMI cable. When connecting an audio system, be sure to also connect the DIGITAL AUDIO OUT (OPTICAL) jack of the TV and the audio system using an optical audio cable. For details, see page 21.

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" on page 43 for the TV side settings. For settings on the connected equipment, refer to the operating instructions for that equipment.

Operating Optional Equipment Using the TV Remote

Buttons for using optional equipment

For details, refer to the operating instructions supplied with the connected equipment.





• The button has a tactile dot. Use the tactile dot as a reference when operating other equipment.

Item	Description
1 I/U	Turns on or off the optional equipment you have selected
2 Function	with the function buttons.
buttons	Allows you to operate the corresponding equipment. For details, see "Programming the remote" on page 28.
3 BD/DVD operating buttons	• I◄◄/▶►I: Goes to the beginning of the previous/ next title/chapter/scene/ track. • ←•/•→: Replays the scene/ briefly fast forwards the scene. • ◀◄/▶►: Fast reverses/fast forwards the disc when pressed during playback. • ►: Plays a disc at normal speed. • II: Pauses the playback.
	• \B : Stops the playback.
4 DVD record buttons	 REC: Starts the recording. II REC PAUSE: Pauses the recording. REC STOP: Stops the recording.
5 F1/F2	 Selects a disc when using a disc changer. Selects a function when using a combination unit (e.g. a DVD/HDD).
6 BD/DVD MENU	Displays the BD/DVD disc menu.
7 BD/DVD TOP MENU	Displays the top menu of the BD/DVD disc.

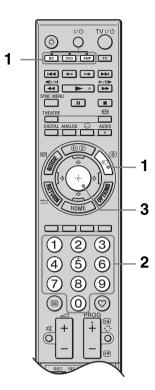
Programming the remote

This remote is preset to operate Sony TVs, and most Sony Blu-ray disc players, DVD players, DVD/HDD recorders, and audio systems (Home Theatre, etc.).

To control Blu-ray disc players, DVD players, and DVD/HDD recorders of other manufacturers (and some other Sony models), programme the remote as follows.



• Before you start, look up the three-digit code of your equipment from the "Manufacturer's codes" on page 29.



1 Press and hold the **BD**, **DVD**, or **AMP** function button you want to programme on the remote, then press €.

The selected function button (**BD**, **DVD**, or **AMP**) flashes.

2 Press the number buttons to enter the three-digit manufacturer's code number when the function button flashes.

If you do not enter the code within 10 seconds, you need to go back to step 1.

3 Press **(+)**.

The selected function button flashes twice.

If the selected function button flashes five times, repeat from step 1.

4 Turn on your equipment and check that the following main functions work.

For Blu-ray disc players, DVD players and DVD/HDD recorders, check:

▶ (playback), ■ (stop), ◄ (rewind),▶ (fast forward), channel selection.

For DVD players and DVD/HDD recorders, check:

TOP MENU/MENU and ₺/₺/\$/\$.

If your equipment is not working, or some of the functions do not work

Enter the correct code or try the next code listed for the brand. Note that the list may not include codes for all models of all brands.

To return to normal TV operation

Press the **TV** function button.

Manufacturer's codes

DVD players

Manufacturer	Code
SONY	001, 029, 030, 036 – 044, 053 – 055
AIWA	021
AKAI	032
DENON	018, 027, 020, 002
GRUNDIG	009, 028, 023, 024, 016, 003
HITACHI	025, 026, 015, 004, 035
JVC	006, 017
KENWOOD	008
LG	015, 014, 034
LOEWE	009, 028, 023, 024, 016, 003
MATSUI	013, 016
ONKYO	022, 033
PANASONIC	018, 027, 020, 002, 045 – 047
PHILIPS	009, 028, 023, 024, 016, 003, 031
PIONEER	004, 050, 051, 052
SAMSUNG	011, 014
SANYO	007
SHARP	019, 027
THOMSON	012
TOSHIBA	003, 048, 049
YAMAHA	018, 027, 020, 002

Blu-ray disc (BD) players

Manufacturer	Code
SONY	101 – 103

DVD/video cassette recorders

Manufacturer	Code
SONY	251

DVD/HDD recorders

Manufacturer	Code
SONY	201 – 203

VCRs

Manufacturer	Code
SONY	301 – 310, 362
AIWA	325, 331, 351
AKAI	326, 329, 330
DAEWOO	342, 343
GRUNDIG	358, 355, 360, 361, 320, 351, 366
HITACHI	327, 333, 334
JVC	314, 315, 322, 344, 352 – 354, 348, 349

Manufacturer	Code
LG	332, 338
LOEWE	358, 355, 360, 361, 320, 351
MATSUI	356, 357
ORION	328
PANASONIC	321, 323
PHILIPS	311 – 313, 316 – 318, 358, 359, 363, 364
SAMSUNG	339 – 341, 345
SANYO	335, 336
SHARP	324
THOMSON	319, 350, 365
TOSHIBA	337

DAV Home Theatre System

Manufacturer	Code
SONY (DAV)	401 – 404

AV receivers

Manufacturer	Code
SONY	451 – 454

Digital terrestrial receivers

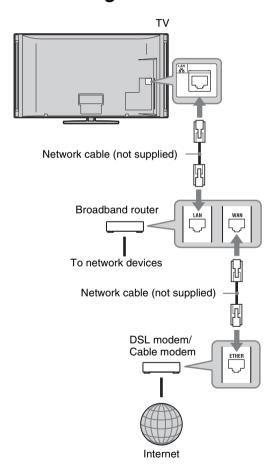
Manufacturer	Code
SONY	501 – 504

Using Home Network Features

With this TV, you can enjoy contents stored in DLNA-compatible devices on the home network.

Devices that store and provide contents, such as photo/music files, are called "server". The TV receives the photo/music files from the server via the network, and you can enjoy them on the TV even in other rooms. To enjoy the home network, a DLNA-compatible device (VAIO, Cyber-shot, etc.) is necessary as a server.

Connecting to the Network



Enjoying Photo/Music Files via the Network

You can enjoy photo/music files on the server easily by selecting an icon on the Home Menu of the TV.

- 1 Press HOME.
- **2** Press ⇔/⇔ to select "Photo" or "Music".
- 3 Press �/♥ to select a server, then press ⊕.

 The file or folder list appears.

 To display the thumbnail list, press the yellow button while the list is displayed.

 When the server cannot be found

 See "Checking the Network Connection" (page 33) and "Adjusting the Server Display Settings" (page 33).
- **4** Press �/∜ to select a file or folder, then press ⊕.

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



• A map can be displayed with a photograph in the case of longitude and latitude information has been recorded to photograph's Exif data (page 26).



- Depending on the network device, it may be necessary to register the TV with the network device.
- Picture quality may appear coarse when using (Photo) because images may be enlarged depending on the file. Also, images may not fill the entire screen depending on the image size and aspect ratio.
- Some photo files may take some time to be displayed when using (Photo).
- To play files that are received from a network device, they need to conform to one of the following file formats.
 - Still images: JPEG format
- Music: MP3 format or linear PCM format
 Depending on the network device, the file format may be converted before transfer. In such cases, the file format resulting after conversion is used for playback. For details, see the instruction manual for the network device being used.
 Even files conforming to one of the file formats given above cannot be played in some cases.
- The file name and folder name support only English.

To enjoy photographs and music on the TV screen by operating devices – Renderer

Renderer is a feature for playing photo files and music files stored in network devices (digital still cameras, mobile phones, etc.) on the TV by operating the controller device in question. To use this feature, a renderer-compatible device such as a digital still camera or mobile phone is required as the controller. Refer as well to the instruction manual supplied with the controller.

- 1 Set "Renderer Function", "Renderer Access Control" and "Renderer Set-up" in "Network Settings" if necessary (page 48).
- 2 Play the file selected using the controller on the TV.

The file is played on the TV over the connected network.

Use the controller or the TV's remote to perform operations during playback.

(Photo) Available OPTIONS

Option	Description
Picture	See page 36.
Sound	See page 38.
Surround	See page 39.
Video Settings	See page 40.
Cropping	Crops a photograph.
Display map	See page 26.
Show Options	Allows you to set repeat/shuffle for photo playback.
Photo Set-up	Sets how playback should be performed and what effects to use during slideshows.
Rotate	Rotates files.
Speaker	See page 42.
○ Volume	See page 42.
Information	Displays information about the device, folders, and files.

Option	Description
Sound	See page 38.
Surround	See page 39.
Add to Slideshow	Registers the background music to be played during a slideshow using (Photo).
Omit from Slideshow	Cancels the registered background music.
Playback Options	Allows music options to be set for repeat, shuffle, or regular playback.
Speaker	See page 42.
○ Volume	See page 42.
Information	Displays information about the device, folder, and files.

Checking the Network Connection

Enter the respective (alphanumeric) values for your router. The items that need to be set may differ, depending on the Internet service provider or the router. For details, refer to the instruction manuals that have been provided by your Internet service provider or supplied with the router.

- 1 Press HOME.
- **2** Press \$\diamset\$ to select "Settings".
- **3** Press �/录 to select "Network Settings", then press ⊕.
- **4** Select "Network", then press ⊕.
- Select "IP Address Settings", then press...
- **6** Select an item, and press ⊕.

When you select "DHCP (DNS automatic)"

Go to step 7.

When you select "DHCP (DNS manual)"

Set "Primary DNS"/"Secondary DNS" using �/∜/\$ and the number buttons.

When you select "Manual"

Set the following items using 4/4 and the number buttons.

- IP Address
- Subnet Mask
- Default Gateway
- Primary DNS/Secondary DNS

If your ISP has a specific proxy server setting

Press **OPTIONS**, then press $\diamondsuit / \diamondsuit$ to select "Proxy Set-up" and press \oplus . Then enter the settings.

- **7** Press (+).
- **8** Press ⇒ to select "Test", then press ⊕.
- 9 Press ⇔/⇔ to select "Yes", then press ⊕.The network diagnostic starts.When the message "Connection

successful." appears, press **RETURN** repeatedly to exit

repeatedly to exit.



If "Connection successful." does not appear, see "Troubleshooting" on page 54 and check the connections and settings.

Adjusting the Server Display Settings

You can select home network servers to be displayed on the Home Menu.

Up to 10 servers can be displayed on the Home Menu automatically.

1 Set the server to allow connections from the TV.

For details on settings on the server, refer to the Operating Instructions supplied with the server.

- 2 Press HOME.
- **3** Press ⇔/⇔ to select "Settings".
- **4** Press �/∜ to select "Network Settings", then press ⊕.
- **5** Select "Server Display Settings", then press \oplus .
- **6** Select the server you want to display on the Home Menu, then press ⊕.
- **7** Select "Yes", then press ⊕.

To set the server not to be displayed on the Home Menu

In step 7, press �/∜ to select "No", then press ⊕.

Available OPTIONS (on the connected server settings display)

Option	Description
Delete All	Deletes all connected servers.
Update List	Updates the server list to the latest information.
Information	Displays information about the connected server currently selected.
Delete	Deletes the connected server currently selected.

If you cannot connect to your home network

The TV can check if the server is being correctly recognised.

- 1 Press HOME.
- **2** Press ⇔/⇔ to select "Settings".
- **3** Press �/❖ to select "Network Settings", then press ⊕.
- **4** Select "Server Diagnostics", then press ⊕.
- **5** Select "Yes", then press \oplus .

The server diagnostic starts. When the server diagnostic is complete, the diagnostic result list appears.

6 Select the server you want to confirm, then press ⊕.

The diagnostic results of the selected server appear.

If the diagnostic results indicate a failure, look up the possible causes and what to do, and check connections and settings.

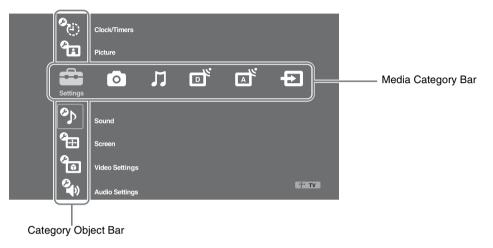
do, and check connections and settings For details, see "Troubleshooting" on page 54.

Using Menu Functions

Navigating through TV Home Menu on XMB™

The XMBTM (XrossMediaBar) is a menu of BRAVIA features and input sources displayed on the TV screen. The XMBTM is an easy way to select programming and adjust settings on your BRAVIA TV.

1 Press **HOME** to display the XMBTM.



2 Press ⇔/⇒ to select the category.

Media c	ategory icon	Description
	Settings	You can make advanced settings and adjustments. For details about settings, see page 36.
0	Photo	You can enjoy photo files via USB devices or the network (page 24, 31).
IJ	Music	You can enjoy music files via USB devices or the network (page 24, 31).
D"	Digital	You can select a digital channel, Digital Favourite list (page 20), or Digital Electronic Programme Guide (EPG) (page 19). You can also select a channel using the number buttons or PROG +/- .
A	Analogue	You can select an analogue channel. You can also select a channel using the number buttons or PROG +/- . To hide the list of analogue channels, set "Programme List Display" to "Off" (page 44).
Ð	External Inputs	You can select equipment connected to the TV. To assign a label to an external input, see "AV Preset" (page 43).

- **3** Press �/♥ to select the item, then press ⊕.
- **4** Follow the instructions on the screen.
- **5** Press **HOME** to exit.



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

TV Settings Menu



BRAVIA Tips

Introduces how to enjoy the TV.



Sleep Timer	time. When "Sleep Time lights up in orange.	When "Sleep Timer" is activated, the ③ (Timer) indicator on the TV front panel lights up in orange. When you turn off the TV and turn it on again, "Sleep Timer" is reset to "Off". A notification message appears on the screen one minute before the TV switches	
On Timer	On Timer	Sets the TV to automatically turn on from standby mode.	
	Day	Sets the desired day(s) of the week you want the timer to turn on the TV.	
	Time	Sets the time you want the timer to turn on the TV.	
	Duration	Sets how long you want the TV to stay on before switching to standby mode again.	
	Volume Set-up	Sets the volume of the TV when the timer turns it on.	
Auto Clock Update	Switches to digital mode and obtains the time.		
Clock Set	Allows you to adjust the clock manually. When the TV is receiving digital channels, you cannot adjust the clock manually, because the clock automatically receives the time code from the broadcast signal.		

Target Inputs	Allows you to select whether to use the common settings or to make custom settings for the input you are currently viewing. Set to "Common" if you want to apply the same settings to each input.		
	Common	Applies common settings to all inputs in which "Target Inputs" is set to "Common".	
	Name of current input (e.g. AV1)	Allows you to make custom settings for the input.	
Picture Mode		"Picture Mode" includes options best suited for video and tively. The options that can be selected differ depending on the	
	Vivid	Enhances picture contrast and sharpness.	
	Standard	For standard pictures. Recommended for home entertainment.	
	Cinema	For viewing film-based content. Most suitable when viewing the TV in a theatre-like environment.	

	Photo-Vivid	For viewing photographs. Enhances picture contrast and sharpness.
	Photo-Standard	For viewing photographs. Provides the optimum picture quality for viewing in the home.
	Photo-Original	For viewing photographs. Represents the picture quality used when imaging developed photographs.
	Photo-Custom	For viewing photographs. Allows you to store your preferred settings.
Reset		re" settings to the factory settings excluding "Target Inputs", "Advanced Settings".
Backlight	Adjusts the brightne	ess of the backlight.
Contrast	Increases or decreas	es picture contrast.
Brightness	Brightens or darken	s the picture.
Colour	Increases or decreas	es colour intensity.
Hue	Increases or decreas	es the green tones and red tones.
	Þ	sted only for the NTSC colour signal (e.g. U.S.A. video tapes).
Colour Temperature	Adjusts the whitene	ss of the picture.
	Cool	Gives white colours a blue tint.
	Neutral	Gives white colours a neutral tint.
	Warm 1/Warm 2	Gives white colours a red tint. "Warm 2" gives a redder tint than "Warm 1".
	Ϋ́	
	₹	arm 2" are not available when "Picture Mode" is set to "Vivid"
	(or "Photo-Vivid")	
Sharpness	Sharpens or softens	the picture.
Noise Reduction	Reduces the noise le	evel of pictures (snowy pictures).
	Auto	Automatically reduces picture noise (in analogue TV mode,
		or composite, S video or DMPORT input signals only).
	High/Medium/ Low	
		or composite, S video or DMPORT input signals only).
MPEG Noise	Off	or composite, S video or DMPORT input signals only). Modifies the effect of the noise reduction.
MPEG Noise Reduction	Off	or composite, S video or DMPORT input signals only). Modifies the effect of the noise reduction. Turns off the "Noise Reduction". se in MPEG-compressed videos. This is effective when
	Off Reduces picture noi viewing a DVD or december 1.	or composite, S video or DMPORT input signals only). Modifies the effect of the noise reduction. Turns off the "Noise Reduction". see in MPEG-compressed videos. This is effective when ligital broadcast. olution picture for high-density sources (e.g., Blu-ray disc
Reduction	Off Reduces picture noi viewing a DVD or d Produces a high-rese	or composite, S video or DMPORT input signals only). Modifies the effect of the noise reduction. Turns off the "Noise Reduction". see in MPEG-compressed videos. This is effective when ligital broadcast. olution picture for high-density sources (e.g., Blu-ray disc
Reduction	Construction of the constr	or composite, S video or DMPORT input signals only). Modifies the effect of the noise reduction. Turns off the "Noise Reduction". se in MPEG-compressed videos. This is effective when ligital broadcast. olution picture for high-density sources (e.g., Blu-ray disc satellite receiver). Recommended mode. Only available for 1080i format. "Mode 2" is especially
Reduction	Reduces picture noi viewing a DVD or d Produces a high-resplayer, DVD player, Mode 1 Mode 2	or composite, S video or DMPORT input signals only). Modifies the effect of the noise reduction. Turns off the "Noise Reduction". se in MPEG-compressed videos. This is effective when ligital broadcast. olution picture for high-density sources (e.g., Blu-ray disc satellite receiver). Recommended mode. Only available for 1080i format. "Mode 2" is especially effective when original standard-definition signals have been up-converted to 1080i format.
Reduction DRC Mode	Reduces picture noi viewing a DVD or d Produces a high-res player, DVD player, Mode 1 Mode 2	or composite, S video or DMPORT input signals only). Modifies the effect of the noise reduction. Turns off the "Noise Reduction". se in MPEG-compressed videos. This is effective when ligital broadcast. olution picture for high-density sources (e.g., Blu-ray disc satellite receiver). Recommended mode. Only available for 1080i format. "Mode 2" is especially effective when original standard-definition signals have been up-converted to 1080i format. Turns off the "DRC Mode".
Reduction	Produces a high-rese player, DVD player, Mode 1 Mode 2 Off Customises the leve from each input source, and an Press ☆/∜/⇔/⇔ to ad As you move the	or composite, S video or DMPORT input signals only). Modifies the effect of the noise reduction. Turns off the "Noise Reduction". se in MPEG-compressed videos. This is effective when ligital broadcast. olution picture for high-density sources (e.g., Blu-ray disc satellite receiver). Recommended mode. Only available for 1080i format. "Mode 2" is especially effective when original standard-definition signals have been up-converted to 1080i format.
Reduction DRC Mode	Produces a high-resplayer, DVD player, Mode 1 Mode 2 Off Customises the leve from each input source, and an Press �/♣/♦/⇒ to ad As you move the ● detailed. As you mobecomes smoother. Allows you to set "F	or composite, S video or DMPORT input signals only). Modifies the effect of the noise reduction. Turns off the "Noise Reduction". se in MPEG-compressed videos. This is effective when ligital broadcast. olution picture for high-density sources (e.g., Blu-ray disc satellite receiver). Recommended mode. Only available for 1080i format. "Mode 2" is especially effective when original standard-definition signals have been up-converted to 1080i format. Turns off the "DRC Mode". I of detail ("Reality") and smoothness ("Clarity") of pictures ree. For example, you can create a custom setting for a cable tother for a DVD player. Lijust the position of the marker (). higher along the "Reality" axis, the picture becomes more
DRC Mode DRC Palette	Produces a high-resplayer, DVD player, Mode 1 Mode 2 Off Customises the leve from each input source, and an Press �/♣/♦/⇒ to ad As you move the ● detailed. As you mobecomes smoother. Allows you to set "F	or composite, S video or DMPORT input signals only). Modifies the effect of the noise reduction. Turns off the "Noise Reduction". se in MPEG-compressed videos. This is effective when ligital broadcast. olution picture for high-density sources (e.g., Blu-ray disc satellite receiver). Recommended mode. Only available for 1080i format. "Mode 2" is especially effective when original standard-definition signals have been up-converted to 1080i format. Turns off the "DRC Mode". I of detail ("Reality") and smoothness ("Clarity") of pictures ree. For example, you can create a custom setting for a cable tother for a DVD player. Ijust the position of the marker (♠). higher along the "Reality" axis, the picture becomes more we the ♠ to the right along the "Clarity" axis, the picture

-	
Black Corrector	Enhances black areas of the picture for stronger contrast.
Adv. Contrast Enhancer	Automatically adjusts "Backlight" and "Contrast" 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.
Gamma	Adjusts the balance between bright and dark areas of the picture.
LED Dynamic Control (for KDL- 55X4500/46X4500)	
Auto Light Limiter	Reduces glare such as in scenes where the entire screen is white.
Clear White	Emphasises white colours.
Colour Space	Changes the colour reproduction gamut. "Wide" reproduces the vivid colour and "Standard" reproduces the standard colour.
Live Colour	Makes colours more vivid.
White Balance	Adjusts the temperature of each colour.
White Balance Detail Enhancer	Adjusts the temperature of each colour. Enhances the details of the picture.



Sound

Target Inputs	Allows you to select whether to use the common settings or to make custom settings for the input you are currently viewing. Set to "Common" if you want to apply the same settings to each input.		
	Common	Applies common settings to all inputs in which "Target Inputs" is set to "Common".	
	Name of current input (e.g. AV1)	Allows you to make custom settings for the input.	
Sound Mode	Dynamic	Enhances the treble and bass sounds.	
	Standard	For standard sounds. Recommended for home entertainment.	
	Clear Voice	Makes voice sound clearer.	
Reset	Resets all the "Sound" settings to the factory settings excluding "Target Inputs", "Sound Mode" and "Dual Sound".		
Treble	Adjusts higher-pitched sounds.		
Bass	Adjusts lower-pitch	Adjusts lower-pitched sounds.	
Balance	Emphasises the left or right speaker.		
Auto Volume	Keeps volume level constant across 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, when "Target Inputs" is set to the current input name (e.g. AV1).		

Surround	Live Sports	Delivers surround effects that make you feel like you are watching a live sports contest.
	Music Hall	Delivers surround effects that make you feel like you are surrounded by sound as in a music hall.
	Cinema	Delivers surround effects just like the high-grade audio systems found in movie theatres.
	Custom	A "Voice Zoom" adjustment can be stored according to taste.
	Off	Converts and reproduces 5.1ch and other digital broadcast surround audio to normal stereo audio (2ch). The original audio of other broadcasts is reproduced.
Voice Zoom	announcer is indis Conversely, if you	level of human voices. For example, if the voice of a news stinct, you can turn up this setting to make the voice louder. are watching a sports programme, you can turn down this ne voice of the commentator.
Sound Booster	Produces a fuller sounds.	sound for more impact, by emphasizing the treble and bass
Dual Sound	Sets the sound from the speaker for a stereo or bilingual broadcast.	
	Stereo/Mono	For stereo broadcasts.
	A/B/Mono	For bilingual broadcasts, select "A" for sound channel 1, "B" for sound channel 2, or "Mono" for mono channel, if available.
	• For other equipm "B".	nent connected to the TV, set "Dual Sound" to "Stereo", "A", or



Screen (for inputs other than a PC)

Target Inputs	Allows you to select whether to use the common settings or to make custom settings for the input you are currently viewing. Set to "Common" if you want to apply the same settings to each input.	
	Common	Applies common settings to all inputs in which "Target Inputs" is set to "Common".
	Name of current input (e.g. AV1)	Allows you to make custom settings for the input.
Screen Format	See "To change the screen format manually" on page 18.	
Auto Format	Automatically changes the screen format to match the broadcast signal. If you want to use the setting that you specified in "Screen Format", select "Off".	
4:3 Default	Sets the default scre	een format for 4:3 broadcasts.
	Smart	Displays conventional 4:3 broadcasts with an imitation wide screen effect.
	4:3	Displays conventional 4:3 broadcasts in the correct proportion.
	Off	Uses the setting that you specified in "Screen Format".

Display Area	Adjusts the picture display area.		
	Auto	Automatically switches to the most appropriate display area.	
	Full Pixel	Displays pictures in their original size when parts of the picture are cut off.	
	+1	Displays pictures in their original size.	
	Normal	Displays pictures in their recommended size.	
	-1/-2	Enlarges the picture so that the edges are outside the visible display area.	
Horizontal Shift	Adjusts the horizontal position of the picture.		
Vertical Shift	Adjusts the vertical position of the picture when "Screen Format" is set to "Smart", "Zoom" or "14:9".		
Vertical Size	Adjusts the vertical size of the picture when "Screen Format" is set to "Smart".		



Screen (for PC input)

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".		
Reset	Resets all PC s	creen settings to factory settings.	
Phase	Adjusts the pha	Adjusts the phase when the screen flickers.	
Pitch	Adjusts the pitch when the picture has unwanted vertical stripes.		
Horizontal Shift	Adjusts the hor	rizontal position of the picture.	
Vertical Shift	Adjusts the vertical position of the picture.		
Screen Format	Sets a screen for	ormat for displaying pictures from your PC.	
	Normal	Displays the picture in its original size.	
	Full 1	Enlarges the picture to fill the vertical display area, while maintaining its original proportion.	
	Full 2	Enlarges the picture to fill the display area.	



Video Settings

Motionflow	Provides smoother 1	Provides smoother picture movement and reduces picture blur.		
	High (for KDL- 40X4500)/ Smooth (for KDL- 55X4500/46X4500)			
	Standard	Provides smooth picture movement. Use this setting for standard use.		
	Clear (for KDL-55X4500/46X4500)	Provides smooth and sharp picture movement. Suitable when) viewing video containing fast motion.		

	Off	Use this setting when the "High", "Smooth", "Standard" or "Clear" settings result in noise.	
	 Depending on the video, you may not see the effect visually, even if you have changed the setting. 		
Film Mode	Provides improved picture movement when playing DVD or VCR images taken on film, reducing picture blur and graininess.		
	Auto 1	Provides smoother picture movement than the original film-based content. Use this setting for standard use.	
	Auto 2	Provides the original film-based content as is.	
	Off	Turns off the "Film Mode".	
	• If the image conta	ins irregular signals or too much noise, "Film Mode" is ed off even if "Auto 1" or "Auto 2" is selected.	
Game/Text Mode		m screen for viewing images with fine lines and characters that game equipment and PCs. Set to "On" for the sharp display of ers.	
Video/Photo	Sets the image qualidata).	ity setting most suited to the input source (video or photograph	
	Video-A	Sets suitable image quality, depending on the input source, video data or photograph data when directly connecting Sony HDMI output-capable equipment that supports "Video-A" mode.	
	Video	Produces suitable image quality for moving pictures.	
	Photo	Produces suitable image quality for still images.	
	• If the connected ed	quipment does not support Video-A mode, the setting is o "Video", even if you select "Video-A".	
x.v.Colour		ctures more faithfully to the original source by matching the TV to that of the source.	
	• If the input signal even if you select	is HDMI (RGB), the setting is automatically set to "Normal", "x.v.Colour".	
Photo Colour Space	Selects an option (sRGB, sYCC, Adobe RGB) to set the picture quality best suited to the colour space of the photograph. If equipment converts the output colour space of a photograph from sYCC or Adobe RGB to x.v.Colour or xvYCC, select "sYCC". Results in picture quality best suited to the original colour space. If an RGB signal is being input through HDMI input, automatically set to "sRGB" even if you have selected "sYCC".		
Colour Matrix	source does not mat	factory setting. If the colour tone of the picture from the input ch the colour standard and looks unnatural, select either 09", which normalises colour tone.	
RGB Dynamic Range	input colour signals	lour by changing the luminance tone reproduction of HDMI (RGB). Set to "Auto" for standard use. Change the setting only tone of the display is unnatural.	
Colour System		em ("Auto", "PAL", "SECAM", "NTSC3.58", or "NTSC4.43") ut signal from the input source.	



Audio Settings

Speaker	TV Speaker	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 sockets 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.
○ Speaker Link	Switches the TV's TV.	internal speakers on/off when you connect headphones to the
	On	Sound is output only from the headphones.
	Off	Sound is output from the TV and the headphones.
○ Volume	Adjusts the volume	e of the headphones when "C Speaker Link" is set to "Off".
○ Dual Sound	Sets the sound from the headphones for a bilingual broadcast.	
Woofer Level	TV is located. Dec	evel to taste since the bass level varies depending on where the crease the level if you feel too much bass is being output, and f you feel not enough bass is being output.
		is only necessary when the TV is first installed or when its changed. Adjustment is not required for regular listening.

Set-up	
USB Auto Start	Automatically starts photo playback when the TV is turned on and a digital still camera or other device storing photo files is connected to the USB port and then turned on.
	 Playback does not start automatically if the TV is turned on after connecting the digital still camera or other device to the USB port.
Quick Start	The TV turns on faster than usual by turning on the power using the remote. However, power consumption in standby mode is approximately 20 watts higher than usual. Up to 3 out of 5 time zones can be set.

AV Preset Assigns an icon or name to equipment connected to the side and rear sockets. The icon and name appear briefly on the screen when you select the equipment. Press �/♥ to select the desired input source, then press ⊕. **Skip AV Inputs** For each input, sets whether or not to display on the Home Menu or in a list of inputs that will appear when you press €. Auto Displays the icon and name only when the equipment is connected (except for AV1 or AV2 inputs). **Always Display** Always displays the icon and name regardless of whether or not the equipment is connected. Skip Does not display the icon and name even if the equipment is connected. Press ⇒ to assign an icon and name. Label AV Inputs Uses preset labels to assign a name to connected equipment. Allows you to create your own label when you select "Edit". Allows you to edit the name in the edit screen and choose the appropriate icon. **Auto S Video** Sets the input signal from S video socket S—AV3 when you have equipment connected to the S-AV3 and AV3 sockets. **AV2 Output** Sets a signal to be output to the $\bigcirc -$ AV2 socket. If you connect a VCR or other recording equipment to the 🕒 /- AV2 socket, you can record the output signal from other equipment connected to the TV. TV Outputs TV broadcasts. AV1 Outputs signals from equipment connected to the 🚭/ → AV1 socket. AV3 Outputs signals from equipment connected to the S-1 → AV3 socket. **DMPORT** Outputs signals from equipment connected to the DMPORT socket. Auto Outputs whatever is being viewed on the screen (except signals from the → COMPONENT IN1 or 2, HDMI IN1, 2, 3, or 4, and PC IN $\rightarrow \bigcirc$ / \rightarrow sockets). **HDMI Set-up** Allows the TV to communicate with equipment that is compatible with the control for HDMI function, and connected to the HDMI sockets 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. Auto TV On When this is set to "On", the TV turns on when you turn on

HDMI.

Tuner Box

Control

the connected equipment that is compatible with control for

If set to "Advanced", you can select a channel tuned by

connected equipment using the TV's remote.

	HDMI Device List Displays a list of connected equipment that is compatible with control for HDMI.
	 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.
Auto Start-up	You can run the initial set-up that appeared when you first connected the TV, and select the language and country/area, or tune in all available channels again. Even if you have made the settings when you first connected the TV, you may need to change the settings after moving house, or to search for newly launched channels.
Power Saving	Reduces power consumption of the TV by adjusting the backlight. When you select "Picture Off", the picture is switched off, and the 🄀 (Picture Off) indicator on the TV front panel lights up in green. The sound remains unchanged.
Light Sensor	On Automatically optimises the picture settings according to the ambient light in the room.
	Off Turns off the "Light Sensor".
	• Do not put anything over the sensor, doing so may affect its function. See page 16 to check the position of the sensor.
Logo Illumination	Lights up and turns off the Sony logo on the front of the TV.
Panel Key Illumination	Constantly lights up the touch sensors on the front of the TV.
PC Power Management	Switches the TV to standby mode when the TV receives no signal from the PC input source for 30 seconds.
Language	Sets the language displayed on the menu screens.
Product Information	Displays product information of the TV.
All Reset	Resets all settings to factory settings and displays the initial set-up screen.
	 Do not turn off the TV or press any buttons during "All Reset" (takes about 30 seconds). Settings for the Digital Favourites lists, country/area, language, and auto tuned channels will also be reset to factory settings.

Ø A	Analogue	Set-up
-----	----------	--------

Programme List Display	Select "Off" to hide the list of analogue channels from the XMB TM (XrossMediaBar).				
1 Digit Direct	When "1 Digit Direct" is set to "On", you can select an analogue 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 by entering two digits on the remote.				
Auto Tuning	Tunes in all the available analogue channels. You can retune the TV after moving house, or to search for newly launched channels.				
Programme Sorting	Changes the order of analogue channels stored in 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 the channel, then press ⊕.					

Programme Labels

Assigns a channel name of your choice, up to five letters or numbers. The name appears briefly on the screen when you select the channel. (Names for channels are usually taken automatically from Analogue Text (if available).)

- 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 enter a wrong character

Press ♦/\$ to select the wrong character. Then, press ♦/\$ to select the correct

- 3 Repeat step 2 until you complete the name.
- Press

 to exit the labeling procedure.

Manual Programme Preset

To preset a channel, press **PROG +/–** to select the programme number, before selecting "Label", "AFT", "Audio Filter", "Skip", "Decoder", or "LNA". You cannot select a programme number that is set to "Skip" (page 46).

Programme/ System/Channel

Allows you to preset programme channels manually.

- 1 Press �/♥ to select "Programme", then press ⊕.
- Press �/♥ to select the programme number you want to manually tune (if tuning a VCR, select channel 00), then press **RETURN**.
- Press �/♥ to select "System", then press ⊕.
- Press �/♥ to select one of the following TV broadcast systems, then press **RETURN**.

B/G: For western European countries/areas

I: For the United Kingdom

D/K: For eastern European countries/areas L: For France

- Press �/♥ to select "Channel", then press ⊕.
- Press �/♥ to select "S" (for cable channels) or "C" (for terrestrial channels), then press ⇒.



- "S" is not available when "United Kingdom" is selected for "Country" (page 6).
- Tune the channels as follows:

If you do not know the channel number

Press �/♥ to search for the next available channel. The search stops when a channel is found. To continue searching, press �/♥.

If you know the channel number (frequency)

Press the number buttons to enter the channel number of the broadcast you want to tune, or the channel number of your VCR.

Press \(\oplus \) to jump to "Confirm", then press \(\oplus \). Your changes have been saved.

> Repeat the above procedure to preset other channels manually.

Label

Assigns a name of your choice, up to five letters or numbers, to the selected channel. This name appears briefly on the screen when you select the channel.

To input characters, follow steps 2 to 4 in "Programme Labels" (page 45).

AFT	Allows you to fine-tune the selected channel manually if you feel that a slight tuning adjustment may improve picture quality. You can adjust the fine tuning over a range of –15 to +15. When "On" is selected, fine tuning adjustments are made automatically.
Audio Filter	Improves the sound of individual channels when distortion occurs in mono broadcasts. Sometimes a non-standard broadcast signal can cause sound distortion or intermittent sound muting in mono programmes. If you do not experience any sound distortion, we recommend that you leave this option to "Off" (factory setting). • You cannot receive stereo or dual sound when "Low" or
	"High" is selected.
Skip	Skips unused analogue channels when you press PROG +/- to select channels. To select channels you have programmed to skip, use the corresponding number buttons.
Decoder	Allows you to view and record the scrambled channel when using a decoder connected directly to scart connector →/—AV1, or →/—AV2 via a VCR.
	• This option is not available when "United Kingdom" is
LNA	selected for "Country" (page 6). Improves the picture quality of the channel (noisy picture) when the broadcast signal is very weak. If you cannot see any improvement in the picture quality ever if you set to "On", set this option to "Off" (factory setting).
Confirm	Saves changes you have made to the "Manual Programme Preset" settings.



Digital Auto Tuning	Tunes in the available digital channels. You can retune the TV after moving house, or to search for newly launched channels.				
Programme Sorting	Allows you to remove or change the order of digital channels stored in the TV. 1 Press �/� to select the channel you want to remove or move to a new position.				
	You can also select a channel by pressing the number buttons to enter its three-digit channel number.				
	2 Remove or change the order of the digital channels as follows:				
	To remove a digital channel				
	Press \oplus . After a confirmation message appears, press \Leftrightarrow to select "Yes", then press \oplus .				
	To change the order of the digital channels				
	Press ⋄, then press ⋄/♦ to select the new position for the channel and press ⋄.				
	3 Press RETURN.				

	es the digital channels manually. This feature is available when "Digital Auto ing" is set to "Antenna".
1	Press the number buttons to enter the channel number you want to tune, or press $\diamondsuit/\diamondsuit$.
2	When the available channels are found, press \lozenge/\lozenge to select the channel you want to store, then press \oplus .
3	Press Φ/Φ to select the channel number where you want to store the new channel, then press \oplus .
Rep	eat the above procedure to tune other channels.
	en set to "For Hard Of Hearing", visual aids for the hearing impaired are blayed with the subtitles (when such visual aids are available).
Allo	ows you to select the language of the subtitles.
	tches to broadcast for the hearing impaired when you select "For Hard Of uring".
	s the language to be used for a programme. Some digital channels may adcast several audio languages for a programme.
	vides audio description (narration) of visual information, when such ormation is available.
Adj	usts the TV main audio and Audio Description output levels.
	npensates for differences in the audio level between different channels.
P	
	ne effect may not function or may vary depending on the programme regardless the "Dynamic Range" setting.
jack Dig	s the audio signal that is output from the DIGITAL AUDIO OUT (OPTICAL) of the TV. Set to "Auto", when connecting equipment compatible with Dolby ital. Set to "PCM", when connecting equipment not compatible with Dolby ital
Disp the	plays the screen wallpaper when you listen to a radio broadcast. You can select screen wallpaper colour, display a random colour or view a slideshow (page 24, . To cancel the screen wallpaper display temporarily, press any button.
	s an age restriction to viewing. To view any programme rated for ages above the
	you specify, enter the correct PIN code. Press the number buttons to enter your PIN code.
	If you have not already set a PIN code, a PIN code entry screen appears. Follow the instructions in "PIN Code" below.
2	Press \lozenge/\lozenge to select an age restriction or "None" (for unrestricted watching), then press \oplus .
3	Press RETURN.
То	set a PIN for the first time
1	Press the number buttons to enter a PIN code.
	Press the number buttons to enter the PIN code entered in step 1.
3	Press RETURN .
То	change your PIN
1	Press the number buttons to enter your PIN code.
2	Press the number buttons to enter a new PIN code.
3	Press the number buttons to enter the new PIN code entered in step 2.
4	Press RETURN .
<u>,</u> Ĉ.	
• PI	N code 9999 is always accepted.
	to Service Enables the TV to detect and store new digital services as they become available.
	Tun 1 2 3 Rep Who disp Allo Swin Head Sets brown info Adj Company of the Sets jacks Dig Dig Dig Disp the Sets age 1 2 3 To 1 2 3 To 2 3 To 4 Provided The Sets age 1

	System Update	Enables the TV to automatically receive free software updates through your existing aerial/cable (when issued). We recommend that you leave the setting to "On" at all times. Displays the current software version and the signal level. Allows you to manually select the time zone you are in, if it is not the same as the default time zone setting for your country/ area.			
	System Information				
	Time Zone				
	Auto DST	Sets whether time and wint	or not to automatically switch between summer ter time.		
		Off Displays the time according to the time difference set in "Time Zone".			
		On Automatically switches between sur time and winter time according to the calendar.			
CA Module Set-up		to a pay TV service after you obtain a Conditional Access Module we card. See page 21 for the location of the (PCMCIA) socket.			

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AD.

Network Settings

Network	IP Address Settings	Manual	Allows you to set the network settings according to your network environment.		
		DHCP (DNS manual)	Automatically acquires the network settings except for DNS server settings. You can manually set the DNS settings.		
		DHCP (DNS automatic)	Automatically acquires the network settings through the Dynamic Host Configuration Protocol server function of the router or Internet service provider.		
	Test	Diagnoses whether	er the network is correctly connected.		
	IP Address/ Subnet Mask/ Default Gateway/ Primary DNS/ Secondary DNS	in "IP Address Settings". Hateway/ When "DHCP (DNS manual)" is selected, be sure to enter "Primary DNS" and "Secondary DNS" server addresses manually. Hress Displays the MAC address, which is a fixed, globally unique identifier of the network device. The connected server list and allows you to select the server you want to			
	MAC Address				
Server Display Settings	Displays the connec display on the Home				
Server Diagnostics	Diagnoses whether t	the TV can connect	to each server on the home network.		
Renderer Function		Enables playback of photos or music on the TV through other control devices on the network, such as a digital still camera or mobile phone.			
Renderer Access Control	•	rify the accessible controller to the TV. When this setting is set to back photos or music on the TV using the controller.			
Renderer Set-up	Automatic Access Permission	Allows you to select whether to permit access to the TV automatically when a network device accesses the TV for th first time.			
	Renderer Name	r Name Allows you to set the name of the TV to be shown on controller.			

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:

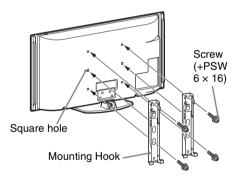
Provide full attention to safety during the installation, periodic maintenance and examination of this product.

Your TV can be installed using the Wall-Mount Bracket SU-WL500 (sold separately).

- Refer to the Instructions supplied with the Wall-Mount Bracket to properly carry out the installation.
- Refer to "Detaching the Table-Top Stand from the TV" (page 8).
- Refer to "TV installation dimensions table" (page 50).
- Refer to "Screw and Hook locations diagram/table" (page 50).

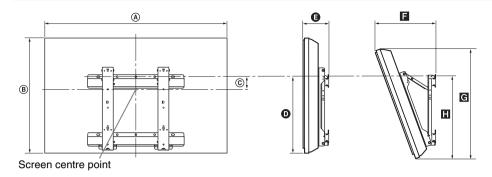


• Place the TV on the Table-Top Stand, when securing the Mounting Hook.



Sufficient expertise is required for installing this product, especially to determine the strength of the wall for withstanding the TV's weight. Be sure to entrust the attachment of this product 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.

TV installation dimensions table



Unit: mm

	Disp	olay	Screen	Length for each mounting angle				
Model Name	dimensions		centre dimension	Angle	e (0°)	A	\ngle (20°)	
	A	B	©	0	3		G	
KDL-55X4500	1,486	803	25	429	207	454	766	484
KDL-46X4500	1,259	685	84	429	204	411	656	483
KDL-40X4500	1,128	603	122	427	185	365	579	475

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

WARNING

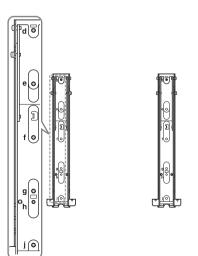
The wall that the TV will be installed on should be capable of supporting a weight of at least four times that of the TV. Refer to "Specifications" (page 51) for its weight.

Screw and Hook locations diagram/table

Model Name	Screw location	Hook location	
KDL-55X4500	d a	а	
KDL-46X4500/40X4500	d, g	b	

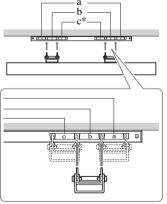
Screw location

When installing the Mounting Hook on the TV.



Hook location

When installing the TV onto the Base Bracket.



* Hook location "c" cannot be used for the models.

Specifications

Model name		KDL-40X4500	KDL-46X4500	KDL-55X4500		
System				•		
Panel system		LCD (Liquid Crystal Display) Panel			
TV system		Analogue: Depending on your country/area selection: B/G/H, D/K, L, I Digital: DVB-T/DVB-C				
Colour/video sys	stem	input)	y video input), SECAM, NTSO HL, H.264/MPEG-4 AVC MP			
Channel coverag	е	Analogue: VHF: E2–E12/UF	HF: E21–E69/CATV: S1–S20/ F2–F10, B–Q, F21–F69/I: UH	HYPER: S21–S41		
Sound output		10 W + 10 W, 12 W + 12 W	(Woofer)			
Input/Output ja	acks					
Aerial/cable		75 ohm external terminal for	VHF/UHF			
→ / → •••AV1		21-pin scart connector (CEN and TV audio/video output.	ELEC standard) including aud	lio/video input, RGB input,		
→/AV2 (S	SMARTLINK)	21-pin scart connector (CEN selectable audio/video output	ELEC standard) including aud t, and SmartLink interface.	lio/video input, RGB input,		
- ⊕COMPONE	NT IN1, 2		080i, 720p, 576p, 576i, 480p, gative sync/Рв/Св: 0.7 Vp-p, 7			
→ COMPONEN	NT IN1, 2	Audio input (phono jacks)				
HDMI IN1, 2, 3,	4	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 Analogue audio input (minijack) (HDMI IN1 only) PC Input (see page 52)				
s-⊷AV3		S video input (4-pin mini DI	N)			
→AV3		Video input (phono jack)				
-ĐAV3		Audio input (phono jacks)				
C+ DIGITAL A	UDIO OUT (OPTICAL)	Digital optical jack				
C+		Audio output (phono jacks)				
→ PC IN		PC Input (D-sub 15-pin) (see page 52) 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 audio input (minijack)				
DMPORT		DIGITAL MEDIA PORT				
ψ		USB port				
0		Headphones jack				
Ť		CAM (Conditional Access Module) slot				
뭄LAN		10BASE-T/100BASE-TX connector (Depending on the operating environment of the network, connection speed may differ. 10BASE-T/100BASE-TX communication rate and communication quality are not guaranteed for this TV.)				
Power and oth	ners					
Power requireme	ents	220 V – 240 V AC, 50 Hz				
Screen size (mea	sured diagonally)	40 inches (Approx. 101.6 cm)	46 inches (Approx. 116.8 cm)	55 inches (Approx. 138.8 cm)		
Display resolution	on	$1,920 \text{ dots (horizontal)} \times 1,03$	80 lines (vertical)			
Power consumption	in "Home"/"Standard" mode	210 W	270 W	370 W		
	in "Shop"/"Vivid" mode	230 W	350 W	480 W		
Standby power c	l .	0.2 W (19 W when "Quick Start" is set to "On")	0.5 W (20 W when "Quick Start" is set to "On")	0.6 W (22 W when "Quick Start" is set to "On")		
Dimensions	with Table-Top Stand	112.8 × 65.5 × 27.9 cm	125.9 × 73.7 × 31.5 cm	148.6 × 85.5 × 35.6 cm		
$\begin{aligned} &(\text{Approx.}) \\ &(\text{w} \times \text{h} \times \text{d}) \end{aligned}$	without Table-Top Stand	112.8 × 60.3 × 12.5 cm	125.9 × 68.5 × 14.4 cm	148.6 × 80.3 × 14.7 cm		

Model name		KDL-40X4500	KDL-46X4500	KDL-55X4500	
Mass (Approx.)	with Table-Top Stand	27.0 kg	38.0 kg	54.0 kg	
	without Table-Top Stand	23.5 kg	33.0 kg	47.5 kg	
Supplied accessor	Supplied accessories See "To check the accessories" on page 4.				
Optional	Wall-Mount Bracket	SU-WL500			
accessories	Colour Variation Unit	CRU-40SG11	CRU-46SG11	CRU-55SG11	

^{*} Specified standby power is reached after the TV finishes necessary internal processes.

Design and specifications are subject to change without notice.

PC input signal reference chart for -PC and HDMI IN 1, 2, 3, 4

Resolution						
Signals	Horizontal (Pixel)	×	Vertical (Line)	Horizontal frequency (kHz)	Vertical frequency (Hz)	Standard
VGA	640	×	480	31.5	60	VGA
	640	×	480	37.5	75	VESA
	720	×	400	31.5	70	VGA-T
SVGA	800	×	600	37.9	60	VESA Guidelines
	800	×	600	46.9	75	VESA
XGA	1024	×	768	48.4	60	VESA Guidelines
	1024	×	768	56.5	70	VESA
	1024	×	768	60.0	75	VESA
WXGA	1280	×	768	47.4	60	VESA
	1280	×	768	47.8	60	VESA
	1280	×	768	60.3	75	
	1360	×	768	47.7	60	VESA
SXGA	1280	×	1024	64.0	60	VESA
HDTV	1920	×	1080	67.5	60	CEA-861*

^{* 1080}p timing when applied to the HDMI input will be treated as a video timing and not a PC timing. This affects the "Video Settings" menu and "Screen" menu settings.

To view PC contents, set "Game/Text Mode" to "On", "Screen Format" to "Wide", and "Display Area" to "Full Pixel".



- This TV's PC input does not support Sync on Green or Composite Sync.
- This TV's PC input does not support interlaced signals.
- For the best picture quality, it is recommended to use the signals in the above chart with a 60 Hz vertical frequency (boldfaced).

Troubleshooting

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

When the () (standby) indicator is flashing

The self-diagnosis function is activated.

- 1 Count how many times the () (standby) indicator flashes between each two second break.

 For example, the indicator may flash three times, go off for two seconds, then flash again three times.
- **2** Press on the TV to turn it off, disconnect the mains lead, and inform your dealer or Sony service centre of how the indicator flashes (number of flashes).

When the \circlearrowleft (standby) indicator is not flashing

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

ondition	Explanation/Solution
cture	
There is no picture (screen is dark) and no sound.	 Check the aerial/cable connection. Connect the TV to the mains, and press (b) on the TV. If the (b) (standby) indicator lights up in red, press TV 1/(b).
No picture or menu information from equipment connected to the scart connector appears on the screen.	 Press to display the list of inputs, then select the desired input. Check the connection between the optional equipment and the TV.
Ghosting occurs, or double images appear.	 Check the aerial/cable connection. Check the aerial location and direction.
Only snow and noise appear on the screen.	 Check if the aerial is broken or bent. Check if the aerial has reached the end of its serviceable life (three to five years for normal use, one to two years when used at the seaside).
The picture is distorted (dotted lines or stripes appear).	 Keep the TV away from electrical noise sources such as cars, motorcycles, hair-dryers, or optical equipment. When installing optional equipment, leave some space between the optional equipment and the TV. Check the aerial/cable connection. Keep the aerial/cable TV cable away from other connecting cables.
There is picture or sound noise when viewing a TV channel.	• Adjust "AFT" (Automatic Fine Tuning) to obtain better picture reception (page 46).
Tiny black points and/or bright points appear on the screen.	• The screen is composed of pixels. Tiny black points and/or bright points (pixels) on the screen do not indicate a malfunction.
The picture contours are distorted.	• Select "Standard" or "Off" in "Motionflow" (page 40). If the symptom still persists, change the current setting of "Film Mode" to other settings (page 41).
The picture is not displayed in colour.	• Select "Reset" (page 37).
The picture from equipment connected to the —COMPONENT IN1 or 2 sockets is not displayed in colour, or is displayed in irregular colours.	• Check the connection of the —COMPONENT IN1 or 2 sockets and check if the sockets are firmly seated in their respective sockets.

Condition	Explanation/Solution
No picture from the connected equipment appears on the screen.	 Turn the connected equipment on. Check the cable connection. Press ⊕ to display the list of inputs, then select the desired input. Correctly insert the memory card or other storage device in the digital still camera. Use a digital still camera memory card or other storage device that has been formatted according to the instruction manual supplied with the digital still camera. Operations are not guaranteed for all USB devices. Also, operations differ depending on the features of the USB device and the video being played.
You cannot select the connected equipment on the Home Menu or you cannot switch the input.	 Check the cable connection. Set the server to be displayed on the Home Menu (page 33).
Sound	
The picture is good, but there is no sound.	 Press ∠ +/- or ¼ (Mute). Check if the "Speaker" is set to "TV Speaker" (page 42). When using HDMI input with Super Audio CD or DVD-Audio, DIGITAL AUDIO OUT (OPTICAL) may not output audio signals.
The sound from the external audio equipment such as an AV amplifier connected to the TV may be out of sync with the video.	• Adjust the timing of audio being output using the functions of the external audio equipment. If you sense that audio is still out of sync with the video, set "DRC Mode" to "Off" (page 37).
There is a significant difference in the output volume level between DIGITAL MEDIA PORT input and TV or other equipment input.	Adjust "Volume Offset" setting in the "Sound" menu (page 38).
Channels	
You cannot select your desired channel.	• Switch between digital and analogue mode, and select the desired digital/analogue channel.
Some channels are blank.	 The channel is for scrambled/subscription service only. Subscribe to a pay TV service. The channel is used only for data (no picture or sound). Contact the broadcaster for transmission details.
You cannot view digital channels.	 Contact a local installer to find out if digital transmissions are provided in your area. Upgrade to a higher gain aerial.
Home Network	
Connection diagnostic results indicate a failure.	 Check Connections Use a straight cable for the LAN cable. Check if the cable is connected firmly. Check the connection between the TV and the broadband router. Check Settings Change the IP address for the DNS server (see "Checking the Network Connection" on page 33) while referring to the following. Contact your Internet service provider. Specify the IP address of the router if you do not know the DNS of your Internet service provider.

ndition	Explanation/Solution		
The server cannot be found, a list cannot be retrieved, and playback fails.			
Changes on the server are not being applied or displayed content differs from content on the server.	• Sometimes changes are not applied to displays on the TV even though content has been added and/or deleted on the server. If this happens, go back up one level and try opening the folder or server again.		
Photo and/or music files do not appear or icons are not displayed.	 Preliminary Check Check that the connected device supports DLNA. Operations are not guaranteed for all servers. Also, operations differ depending on the features of the server and the content in question. Turn the connected device on. Check Connections Check that the LAN cable and/or mains lead of the server has not become disconnected. Check Settings Check that the connected device is registered under "Server Display Settings" (page 33). Check that the server is correctly configured. Check that the selected device is connected to the network and can be accessed. If the "IP Address Settings" in "Network" under "Network Settings" set to "DHCP (DNS automatic)" or "DHCP (DNS manual)", it may tal some time to recognise devices if there is no DHCP server. Execute "Server Diagnostics" (page 34). 		
The TV cannot be found from renderer-compatible device (the controller).	 Check Connections Check that the LAN cable and/or mains lead of the server has not become disconnected. Check Settings Check if the "Renderer Function" is activated (page 48). Check that the connected device is registered under "Renderer Access Control" (page 48). 		
eneral			
The TV turns off automatically (the TV enters standby mode).	 Check if the "Sleep Timer" is activated, or confirm the "Duration" setting of "On Timer" (page 36). If no signal is received and no operation is performed in the TV mode for 10 minutes, the TV automatically switches to standby mode. 		
The TV turns on automatically.	• Check if the "On Timer" is activated (page 36).		
Some input sources cannot be	• Select "AV Preset" and cancel the "Skip" setting for the input source		
selected. The remote does not function.	(page 43).		

ondition	Explanation/Solution		
HDMI equipment does not appear on "HDMI Device List".	Check that your equipment is compatible with control for HDMI.		
You 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. If you want to change the audio output to the TV speaker, select "TV Speaker" in the "Speaker" menu (page 42).		
Not all channels are tuned for cable.	Check the support website for cable provide information. http://support.sony-europe.com/TV/DVBC/		
The speaker grille has come off.	To attach the speaker grille, first turn off the TV, then unplug the main lead. Then follow the procedure below. Orient the speaker grille so that the location of the marks on the speaker grille and TV match, insert the protrusions on the speaker grille into the holes on the TV, and support gently. Check that the speaker grille and TV are in contact without any gaps, and then secure it by pressing dow on the speaker grille from the top and sliding it into place. To prevent the TV set from being damaged, do not touch the speakers their surroundings.		

Do not touch the speakers.

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.





4-108-535-**13**(1)