LCD Digital Colour TV

Operating Instructions

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

KDL-20S40xx

BRAVIA

	For useful information about Sony products
	http://www.sony-europe.com/myproduct/

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, a 10 AMP 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 a 10 AMP FUSE, otherwise the circuit should be protected by a 10 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.
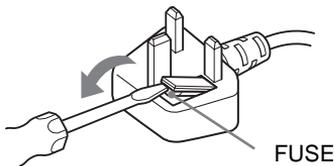
FUSE

How to replace the fuse

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

Introduction

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

Notice for Digital TV function

- Any functions related to Digital TV (DVB) will only work in countries or areas where DVB-T (MPEG2) digital terrestrial signals are broadcasted. Please confirm with your local dealer if you can receive a DVB-T signal where you live.
- Although this TV set follows DVB-T specifications, compatibility with future DVB-T digital terrestrial broadcasts cannot be guaranteed.
- Some Digital TV functions may not be available in some countries.

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.

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.

Trademark information

- **DVB** is a registered trademark of the DVB Project
- Manufactured under license from BBE Sound, Inc. Licensed by BBE Sound, Inc. under one or more of the following US patents: 5510752, 5736897. BBE and BBE symbol are registered trademarks of BBE Sound, Inc.
- Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol ▯▯ are trademarks of Dolby Laboratories.
- HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC.

ViVA DIGITAL HD3D Sound **BBE**

VIRTUAL ▯▯ DOLBY SURROUND

HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE

✍
The "xx" that appears on the model name, corresponds to two numeric digits related to colour variation.

Table of Contents

Start-up Guide 4

Watching TV

Using MENU Functions

Using Optional Equipment

Additional Information

[DVB] : for digital channels only

Start-up Guide

## 1: Checking the accessories

Remote RM-ED007 (1)

Size AA batteries (R6 type) (2)

Cable holder (1)

Support belt (1) and screws (2)
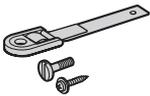

To insert batteries into the remote
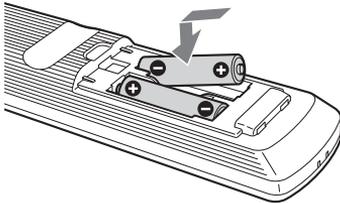
Notes

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

2: Connecting an aerial/VCR

Connecting an aerial only

Coaxial cable (not supplied)
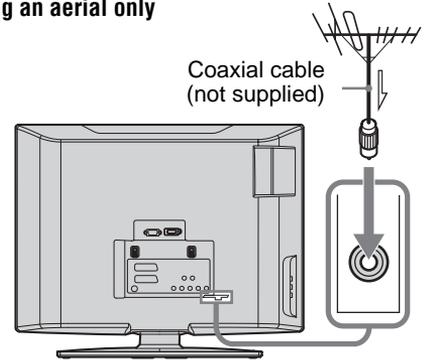
Connecting an aerial and VCR

(SmartLink)

RF lead (not supplied)

Scart lead (not supplied)

IN

OUT

VCR
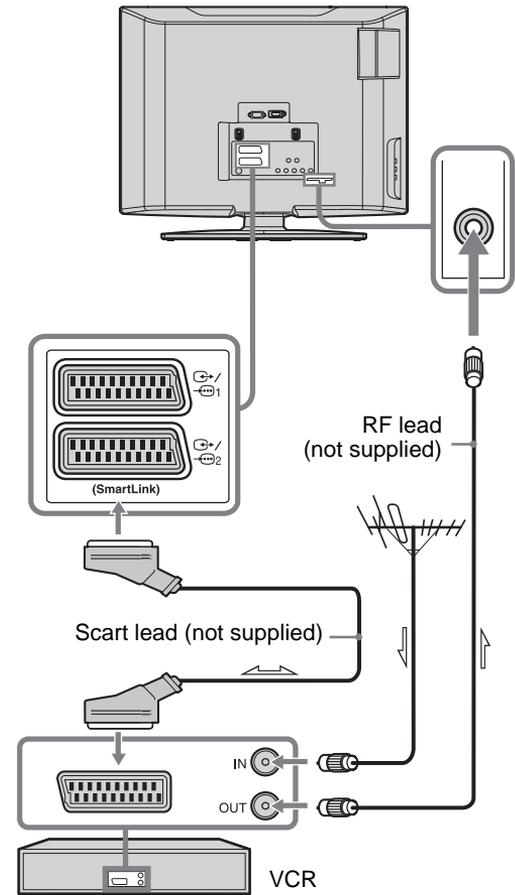
3: Bundling the cables
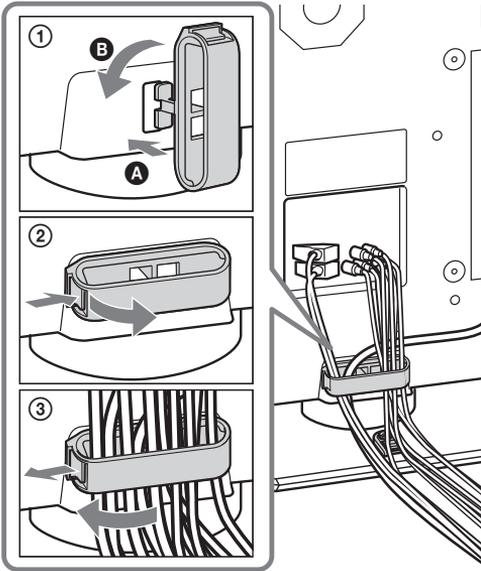
# 4: Preventing the TV from toppling over
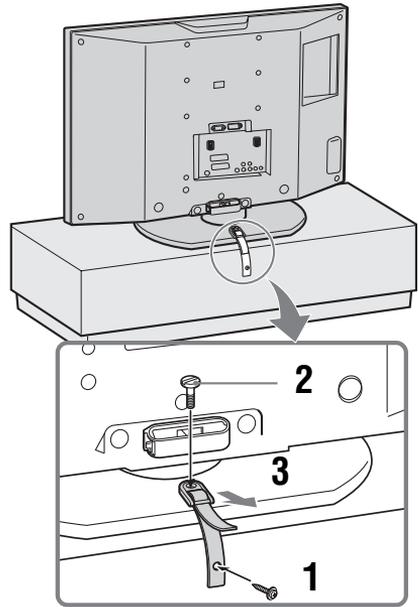
5: Selecting the language and country/region
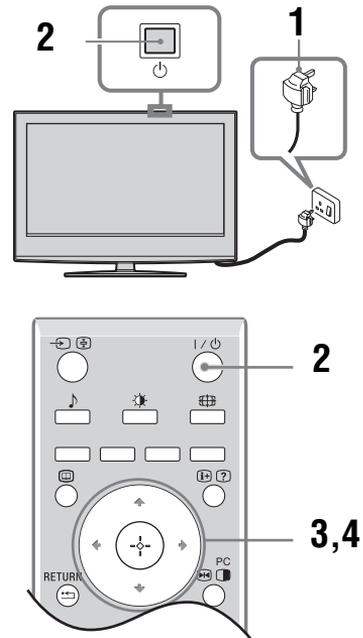
1 Connect the TV to your mains socket (220-240V AC, 50Hz).

2 Press ⏻ on the TV (top side).

When you switch on the TV for the first time, the Language menu appears on the screen.
When the TV is in standby mode (the ⏻ (standby) indicator on the TV (front) is red), press **I/**⏻ on the remote to switch on the TV.

3 Press ⇧/⇩ to select the language displayed on the menu screens, then press ⊕.

Auto Start Up	
Language	▲
Country	English
	Nederlands
	Français
	Italiano
	Deutsch
	Ελληνικά
	Türkçe
	Español
	Português
Select: ⬆ ⬇ Confirm: ⊞	▼
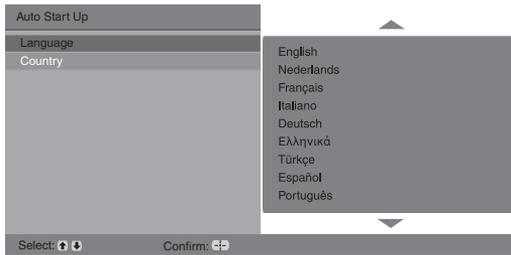
4 Press ⇧/⇩ to select the country/region in which you will operate the TV, then press ⊕.

| Auto Start Up	
Language	▲
Country	United Kingdom
	Ireland
	Nederland
	België/Belgique
	Luxembourg
	France
	Italia
	Schweiz/Suisse/Svizzera
	Deutschland
Select: ⬆ ⬇ Confirm: ⊞	▼
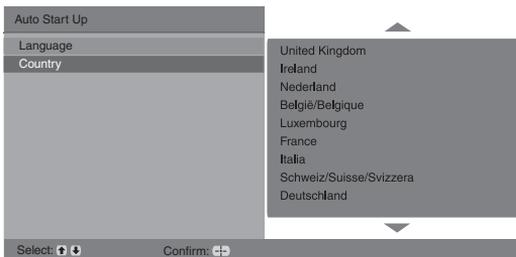
If the country/region in which you want to use the TV does not appear in the list, select "-" instead of a country/region.
The message confirming the TV start auto-tuning appears on the screen, then go to "6: Auto-tuning the TV".

6: Auto-tuning the TV

After selecting the language and country/region, a message confirming the TV start auto-tuning appears on the screen.
The TV will now search for and store all available TV channels.

1 Press ⊕.

Auto Tuning	
Do you want to start Auto Tuning?	
Back: ⬅ Start: ⊞ Cancel: MENU	
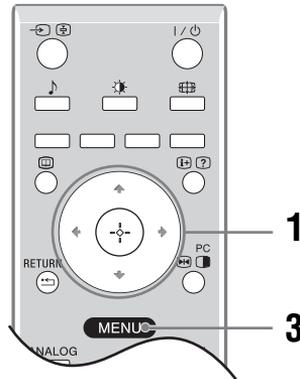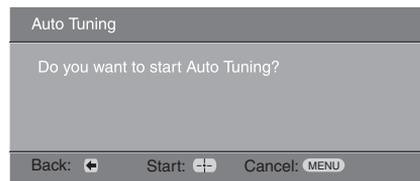
The TV starts searching for all available digital channels, followed by all available analogue channels. This may take some time, please be patient and do not press any buttons on the TV or remote.

If a message appears for you to confirm the aerial connections

No digital or analogue channels were found.
Check all the aerial connections and press ⊕ to start auto-tuning again.

2 When the Programme Sorting menu appears on the screen, follow the steps of "Programme Sorting" (page 23).

If you do not wish to change the order in which the analogue channels are stored on the TV, go to step 3.

3 Press MENU to exit.

The TV has now tuned in all the available channels.

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 injuries.

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.

Transporting
- Before transporting the TV set, disconnect all cables.
- When transporting the TV set by hand, hold it as shown on the right. Do not put stress on the LCD panel and the frame around the screen.
- When transporting the TV set, do not subject it to jolts or excessive vibration.
- When transporting the TV set for repairs or when moving, pack it using the original carton and packing material.

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

Installed on the wall
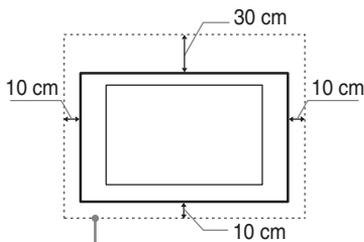
Leave at least this space around the set.

Installed with stand
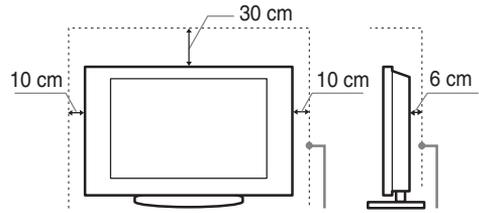
Leave at least this space around the set.

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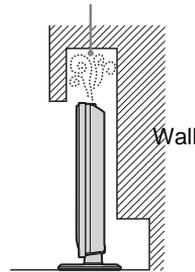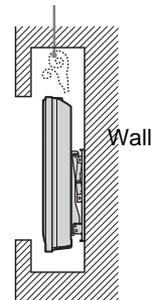
Mains lead

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 Sony mains leads, not those of other brands.
  – 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.

Continued

7 GB

- 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.
- 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 and mercury. The 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.
- 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.

Overview of the remote
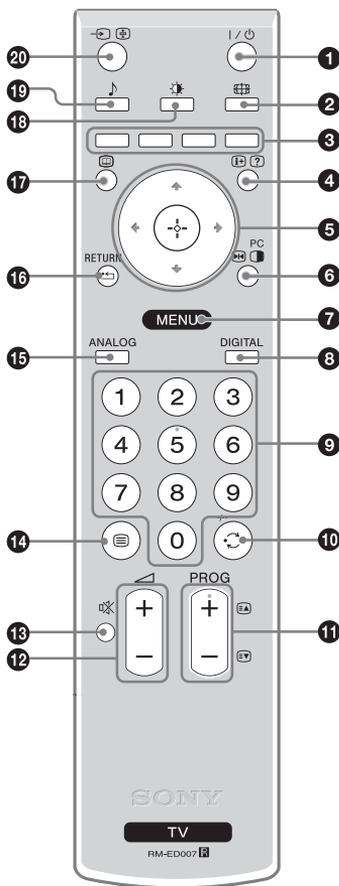
❶ **I/⏻ – TV standby**

Switches off the TV temporarily and on from standby mode.

❷ ⊞ **– Screen mode (page 12)**

❸ **Coloured buttons**
- In digital mode (page 13, 15): Selects the options at the bottom of the Favourite and EPG digital menus.
- In Text mode (page 12): Used for Fastext.

❹ ⊞/? **– Info / Text reveal**
- In digital mode: Displays brief details of the programme currently being watched.
- In analogue mode: Displays information such as current channel number and screen mode.
- In Text mode (page 12): Reveals hidden information (e.g., answers to a quiz).

❺ ⇧/⇩/⇦/⇨/⊕ **(page 17)**

❻ ▣ **Picture Freeze (page 12)/** ⏻ᴾᶜ **PIP in PC Mode (page 12)**
- In TV mode: Freezes the TV picture.
- In PC mode: Displays a small picture (PIP).

❼ **MENU (page 17)**

❽ **DIGITAL – Digital mode (page 11)**

❾ **Number buttons**
- In TV mode: Selects channels. For channel numbers 10 and above, enter the second digit within two seconds.
- In Text mode: Enters the three digit page number to select the page.

❿ ↺ **– Previous channel**

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

⓫ **PROG +/- (page 11)**
- In TV mode: Selects the next (+) or previous (-) channel.
- In Text mode: Selects the next (+) or previous (-) page.

⓬ ⊿ **+/- – Volume**

⓭ ⊗ **– Mute (page 11)**

⓮ ▤ **– Text (page 12)**

⓯ **ANALOG – Analogue mode (page 11)**

⓰ ⤺ **/ RETURN**

Returns to the previous screen of any displayed menu.

⓱ ▥ **– EPG (Digital Electronic Programme Guide) (page 13)**

⓲ ☼ **– Picture mode (page 18)**

⓳ ♪ **– Sound effect (page 19)**

⓴ ⤵⎘ **– Input select / Text hold**
- In TV mode (page 16): Selects the input source from equipment connected to the TV sockets.
- In Text mode (page 12): Holds the current page.

Tip

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

Overview of the TV buttons and indicators
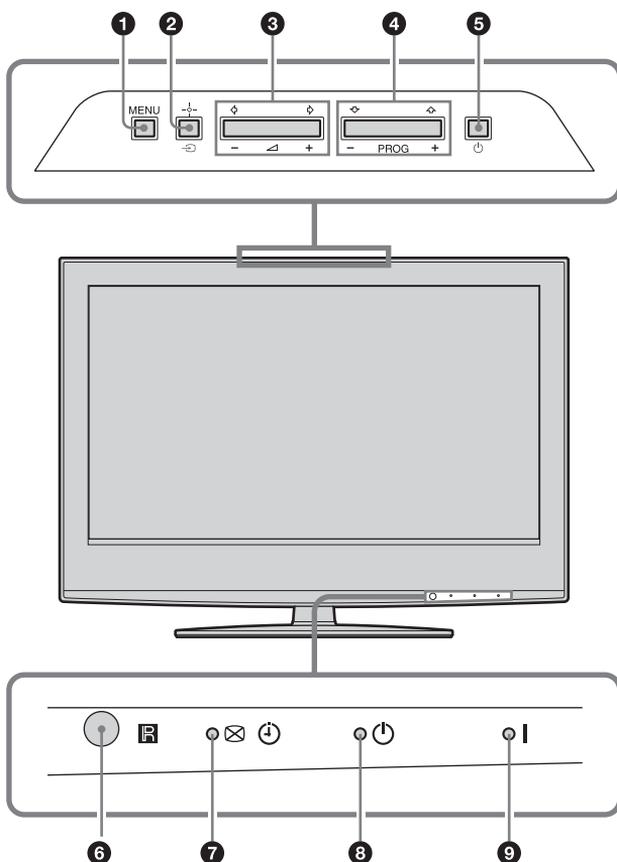
❶ **MENU (page 17)**

❷ ⬚⬛/⬚ – **Input select/OK**
- In TV mode (page 16): Selects the input source from equipment connected to the TV sockets.
- In TV menu: Selects the menu or option, and confirm the setting.

❸ ⊿ **+/-/⇦/⇨**
- Increases (+) or decreases (-) the volume.
- In TV menu: Moves through the options left (⇦) or right (⇨).

❹ **PROG +/-/⇧/⇩**
- In TV mode: Selects the next (+) or previous (-) channel.
- In TV menu: Moves through the options up (⇧) or down (⇩).

❺ ⏻ – **Power**
Switches the TV on or off.
Note:
To disconnect the TV completely, pull the plug from the mains.

❻ **Remote control sensor**

❼ ⊠ ⏲ – **Picture Off/Timer indicator**
- Lights up in green when the picture is switched off (page 21).
- Lights up in orange when the timer is set (page 22).
- Lights up in red when digital REC starts in standby mode.

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

❾ **I – Power indicator**
Lights up in green when the TV is switched on.

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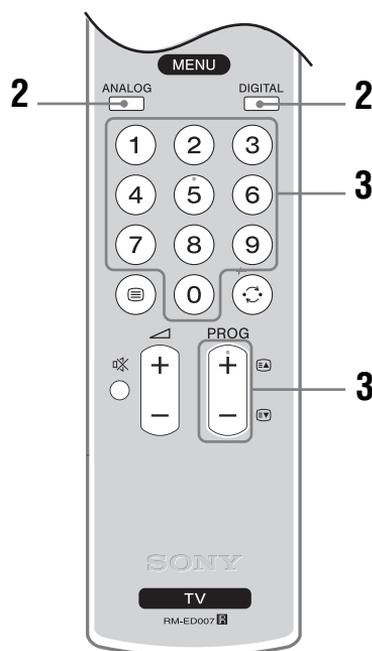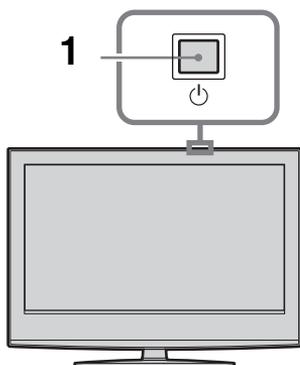
1 Press ⏻ on the TV (top side) to switch on the TV.

When the TV is in standby mode (the ⏻ (standby) indicator on the TV (front) is red), press **I**/⏻ on the remote to switch on the TV.

2 Press DIGITAL to switch to digital mode or ANALOG to switch to analogue mode.

The channels available 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 within two seconds.

To select a digital channel using the Digital Electronic Programme Guide (EPG), see page 13.

In digital mode

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

⬚ :	Interactive service is available (MHEG Digital Text)
⬚ :	Interactive service (MHEG Digital Text) is currently disabled
📻 :	Radio service
▒ :	Scrambled/Subscription service
▮◀ :	Multiple audio languages available
▦ :	Subtitles available
⬚ :	Subtitles available for the hearing impaired
⑱ :	Recommended minimum age for current programme (from 4 to 18 years)
🔒 :	Parental Lock
⬚ :	Current programme is being recorded

Additional operations

To	Do this
Turn off the TV temporarily (Standby mode)	Press **I**/⏻.
Turn on the TV from Standby mode without sound	Press ⊠. Press ⊿ +/- to set the volume level.
Switch off the TV.	Press ⏻ on the TV (top side).

Note
To disconnect the TV completely, pull the plug from the mains.

Adjust the volume	Press ⊿ + (increase)/ - (decrease).
Mute the sound	Press ⊠. Press again to restore.
Access the Programme index table (in analogue mode only)	Press ⊕ . To select an analogue channel, press ⇧/⇩, then press ⊕ . To access the Input signal index table, see page 16.

To access Text

Press ▤. Each time you press ▤, the display changes cyclically as follows:
Text → Text over the TV picture (mix mode) → No Text (exit the Text service)
To select a page, press the number buttons or PROG +/-.
To hold a page, press ↴/≑.
To reveal hidden information, press ⊞/?.

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

Picture Freeze

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

1 Press ▣ ☐ on the remote control.

2 Press ⇧/⇩/⇦/⇨ to adjust the position of the window.

3 Press ▣ ☐ to remove the window.

4 Press ▣ ☐ again to return to normal TV mode.

Tip
Not available for ◄▢ AV3, ◄▢ AV5 and ◄▢ AV6.

PIP in PC Mode (Picture in Picture)

In PC mode, displays a small picture of the last channel selected.

1 Press ▣ ☐ on the remote control.

2 Press ⇧/⇩/⇦/⇨ to adjust the position of the window.

3 Press ▣ ☐ to cancel.

Tip
The sound is output from the small picture.

To change the screen mode manually to suit the broadcast

Press ⊞ repeatedly to select Smart, 4:3, Wide, Zoom, or 14:9.

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 proportions.

Wide

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

Zoom*

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

14:9*

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

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

Tips
- Alternatively, you can set "Auto Format" to "On". The TV will automatically select the best mode to suit the broadcast (page 21).
- You can adjust the position of the picture when selecting Smart, 14:9, or Zoom. Press ⇧/⇩ to move up or down (e.g., to read subtitles).

Checking the Digital Electronic Programme Guide (EPG) DVB

Digital Electronic Programme Guide (EPG)

1 In digital mode, press ▣ to display the Digital Electronic Programme Guide (EPG).

2 Perform the desired operation, as shown in the following table.

Note
Programme information will only be displayed if the TV station is transmitting it.

To	Do this
Turn off the EPG	Press ▣.
Move through the EPG	Press ⇧/⇩/⇦/⇨.
Watch a current programme	Press ⊕ while the current programme is selected.
Sort the programme information by category – Category list	**1** Press the blue button. **2** Press ⇧/⇩/⇦/⇨ to select a category. The category name is displayed on the side. The categories available include: "All Categories": Contains all available channels. "News": Contains all news channels. **3** Press ⊕. The Digital Electronic Programme Guide (EPG) now only displays the current programmes from the category selected.
Set a programme to be recorded – Timer REC	**1** Press ⇧/⇩/⇦/⇨ to select the future programme you want to record. **2** Press ⊕. **3** Press ⇧/⇩ to select "Timer REC". **4** Press ⊕ to set the TV and your VCR timers. A ▱ symbol appears by that programme's information. The ⏱ indicator on the TV (front) lights up. **Notes** • You can set VCR timer recording on the TV only for Smartlink compatible VCRs. If your VCR is not Smartlink compatible, a message will be displayed to remind you to set your VCR timer. • Once a recording has begun, you can switch the TV to standby mode, but do not switch off the TV completely or the recording may be cancelled. • If an age restriction for programmes has been selected, a message asking for pin code will appear on the screen. For more details refer to "Parental Lock" on page 27.

13 GB

To	Do this
Set a programme to be displayed automatically on the screen when it starts – Reminder	**1** Press ⇧/⇩/⇦/⇨ to select the future programme you want to display. **2** Press ⊕. **3** Press ⇧/⇩ to select "Reminder". **4** Press ⊕ to automatically display the selected programme when the programme starts. A ☽ symbol appears by that programme's information. **Note** If you switch the TV to standby mode, it will automatically turn itself on when the programme is about to start.
Set the time and date of a programme you want to record – Manual timer REC	**1** Press ⊕. **2** Press ⇧/⇩ to select "Manual timer REC", then press ⊕. **3** Press ⇧/⇩ to select the date, then press ⇨. **4** Set the start and stop time in the same way as in step 3. **5** Press ⇧/⇩ to select the programme, then press ⊕ to set the TV and your VCR timers. A ▭ symbol appears by that programme's information. The ⌚ indicator on the TV (front) lights up. **Notes** • You can set VCR timer recording on the TV only for Smartlink compatible VCRs. If your VCR is not Smartlink compatible, a message will be displayed to remind you to set your VCR timer. • Once a recording has begun, you can switch the TV to standby mode, but do not switch off the TV completely or the recording may be cancelled. • If an age restriction for programmes has been selected, a message asking for pin code will appear on the screen. For more details refer to "Parental Lock" on page 27.
Cancel a recording/reminder – Timer list	**1** Press ⊕. **2** Press ⇧/⇩ to select "Timer list". **3** Press ⇧/⇩ to select the programme you want to cancel, then press ⊕. A display appears to confirm that you want to cancel the programme. **4** Press ⇨ to select "Yes", then press ⊕ to confirm.

Tip
You can also display the Digital Electronic Programme Guide (EPG) by selecting "Digital EPG" in the "MENU".

Using the Favourite list DVB

The Favourite feature allows you to select programs from a list of up to 8 channels you specify. To display the Favourite list, see "Navigating through menus" (page 17).

Favourite list

To	Do this
Create your Favourite list for the first time	A message appears asking if you want to add channels to the Favourite list when you select "Digital Favourites" in the "MENU" for the first time. **1** Press ⊕ to select "Yes". **2** Press ⇧/⇩ to select the channel you want to add. If you know the channel number, you can use the number buttons to directly select a channel. **3** Press ⊕. Channels that are stored in the Favourite list are indicated by a ♥ symbol.
Turn off the Favourite list	Press RETURN.
Watch a channel	Press ⊕ while selecting a channel.
Add or remove channels in the Favourite list	**1** Press the blue button. Channels that are stored in the Favourite list are indicated by a ♥ symbol. **2** Press ⇧/⇩ to select the channel you want to add or remove. If you know the channel number, you can use the number buttons to directly select a channel. **3** Press ⊕. **4** Press the blue button to return to the Favourite list.
Remove all channels from the Favourite list	**1** Press the blue button. **2** Press the yellow button. A display appears to confirm that you want to delete all channels from the Favourite list. **3** Press ⇦ to select "Yes", then press ⊕ to confirm.

Viewing pictures from connected equipment

Switch on the connected equipment, then perform one of the following operation.

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 (page 4)

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

For other connected equipment

Press ⟶/⟶ repeatedly until the correct input symbol (see below) appears on the screen.

⟶AV1/⟶AV1, ⟶AV2/⟶AV2:

Audio/video or RGB input signal through the scart socket ⟶/⟶1 or 2. ⟶ appears only if an RGB source has been connected.

⟶AV3:

Component input signal through the Y, PB/CB, PR/CR sockets ⟶/⟶3, and audio input signal through the L, R sockets ⟶/⟶3.

⟶AV4/S⟶AV4:

Video input signal through the video socket ⟶4, and audio input signal through the L (MONO), R audio sockets ⟶4. ⟶S appears only if the equipment is connected to the S video socket S⟶4 instead of the video socket ⟶4, and S video input signal is input through the S video socket S⟶4.

⟶5:

RGB input signal through the PC connectors ⟶5, and audio input signal through the socket ⟶.

⟶AV6:

Digital audio/video signal is input through the HDMI IN 6 socket. Audio input signal is analogue only if the equipment has been connected using the DVI and audio out socket.

Additional operations

To	Do this
Return to the normal TV operation	Press DIGITAL or ANALOG.

To	Do this
Access the Input signal index table	Press ⊕ to access the Input signal index table. (Then, only in analogue mode, press ⇨.) To select an input source, press ⇧/⇩, then press ⊕.

Navigating through menus

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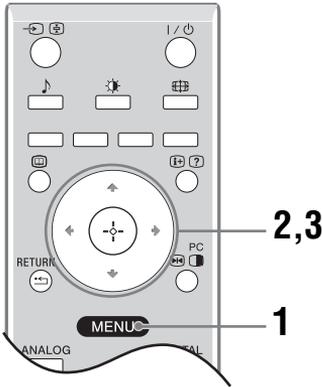
1 Press MENU to display the menu.

```
              MENU
  ♡   Digital Favourites

 [A]  Analogue

 [D]  Digital

 [≡]  Digital EPG

 [→]  External Inputs

 [🧰] Settings

 Select: ↑ ↓      Enter: ⊕      Exit: MENU
```
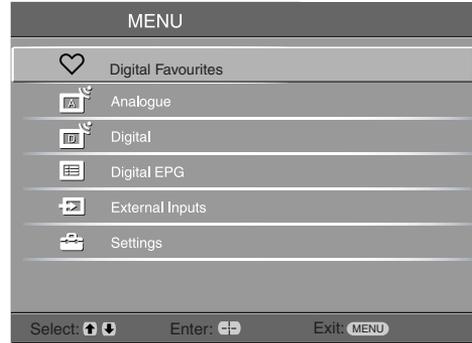
2 Press ⇧/⇩ to select an option.

3 Press ⊕ to confirm a selected option.
   To exit the menu, press MENU.

Menu		Description
♡	Digital Favourites (in digital mode only)	Launches the Favourite list. For details about settings, see page 15.
📺	Programme List (in analogue mode only)	Allows you to select TV programs from a list of channel labels. • To watch the desired channel, select the channel, then press ⊕. • To assign a label to a program, see page 24.
[A]	Analogue (in digital mode only)	Returns to the last viewed analogue channel.
[D]	Digital (in digital mode only)	Returns to the last viewed digital channel.
[≡]	Digital EPG (in digital mode only)	Launches the Digital Electronic Programme Guide (EPG). For details about settings, see page 13.
[→]	External Inputs	Selects equipment connected to your TV. • To watch the desired external input, select the input source, then press ⊕. • To assign a label to an external input, see page 23.
🧰	Settings	Opens the Settings menu screen where most of advanced settings and adjustments are performed. Select a menu icon, select an option and make the desired change or adjustment using ⇧/⇩/⇦/⇨. For details about settings, see page 18 to 27.

Picture Adjustment menu

Picture Adjustment	
Picture Mode	Custom
Backlight	5
Contrast	Max
Brightness	50
Colour	50
Hue	0
Sharpness	15
Colour Tone	Warm
Reset	
Noise Reduction	Auto

Back: ←   Select: ↑ ↓   Enter: ⊕   Exit: MENU
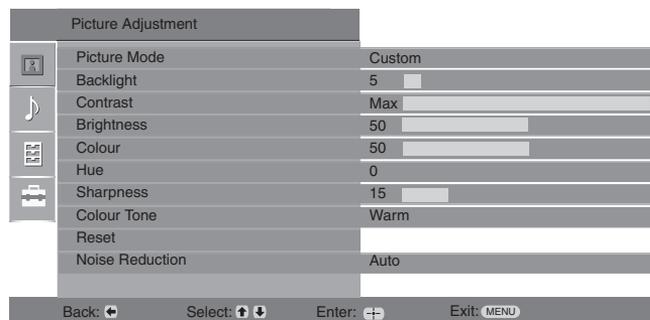
You can select the options listed below on the Picture menu. To select options in "Settings", see "Navigating through menus" (page 17).

Picture Mode	Selects the picture mode. • "Vivid": For enhanced picture contrast and sharpness. • "Standard": For standard picture. Recommended for home entertainment. • "Custom": Allows you to store your preferred settings.
Backlight	Adjusts the brightness of the backlight.
Contrast	Increases or decreases picture contrast.
Brightness	Brightens or darkens the picture.
Colour	Increases or decreases colour intensity.
Hue	Increases or decreases the green tones. **Tip** "Hue" can only be adjusted for an NTSC colour signal (e.g., U.S.A. video tapes).
Sharpness	Sharpens or softens the picture.
Colour Tone	Adjusts the whiteness of the picture. • "Cool": Gives the white colours a blue tint. • "Neutral": Gives the white colours a neutral tint. • "Warm": Gives the white colours a red tint. **Tip** "Warm" can only be selected when you set "Picture Mode" to "Custom".
Reset	Resets all picture settings except "Picture Mode" to the factory settings.
Noise Reduction	Reduces the picture noise (snowy picture) in a weak broadcast signal. • "Auto": Automatically reduces the picture noise. • "High/Mid/Low": Modifies the effect of the noise reduction.

Sound Adjustment menu

	Sound Adjustment	
⊞	Sound Effect	Standard
	Treble	50
♪	Bass	50
	Balance	0
🗐	Reset	
	Dual Sound	Mono
🛠	Auto Volume	On
	TV Speakers	On

Back: ⬅   Select: ⬆ ⬇   Enter: ⊞   Exit: MENU

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

Sound Effect	Selects the sound mode. • "Standard": Enhances clarity, detail, and sound presence by using "BBE High definition Sound System." • "Dynamic": Intensifies clarity and sound presence for better intelligibility and musical realism by using the "BBE High definition Sound System." • "BBE ViVA": BBE ViVA Sound provides musically accurate natural 3D image with Hi-Fi sound. The clarity of the sound is improved by BBE while the width depth and height of sound image are expanded by BBE's proprietary 3D sound process. BBE ViVA Sound is compatible with all TV programs including news, music, dramas, movies, sports and electronic games. • "Dolby Virtual": Uses the TV speakers to simulate the surround effect produced by a multi channel system. • "Off": Flat response. **Tips** • You can change sound effect by pressing ♪ repeatedly. • If you set "Auto Volume" to "On", "Dolby Virtual" changes to "Natural".
Treble	Adjusts higher-pitched sounds.
Bass	Adjusts lower-pitched sounds.
Balance	Emphasizes left or right speaker balance.
Reset	Resets all the sound settings to the factory settings.
Dual Sound	Selects the sound from the speaker for a stereo or bilingual broadcast. • "Stereo", "Mono": For a stereo broadcast. • "A"/"B"/"Mono": For a bilingual broadcast, select "A" for sound channel 1, "B" for sound channel 2, or "Mono" for a mono channel, if available. **Tip** If you select other equipment connected to the TV, set "Dual Sound" to "Stereo", "A" or "B".
Auto Volume	Keeps a constant volume level even when volume level gaps occur (e.g., adverts tend to be louder than programmes).

TV Speakers

Turns off the TV speakers e.g. to listen to the sound through external audio equipment connected to the TV.

- "On": the sound is output from the TV speakers.
- "One Time Off": the TV speakers are temporarily turned off allowing you to listen to the sound from external audio equipment.

- "Permanently Off": the TV speakers are permanently turned off allowing you to listen to the sound from external audio equipment.

Tips

- To turn on the TV speakers again, change to on.
- The "One Time Off" option automatically returns to "On" when the TV set is switched off.
- "Sound Adjustment" options are not available if "One Time Off" or "Permanent Off" have been selected.

Features menu

Features

⊞	Screen	▶
	Power Saving	Standard
♪	Adv. Contrast Enhancer	On
	AV2 Output	TV
▤	RGB Center	0
	PC Adjustment	▶
⚒		▶

Back: ←   Select: ↑ ↓   Enter: ⊞   Exit: MENU
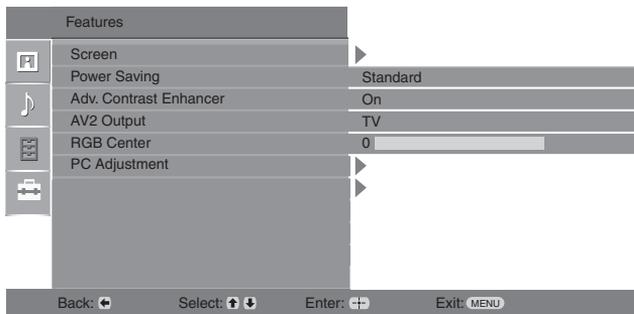
You can select the options listed below on the Features menu. To select options in "Settings", see "Navigating through menus" (page 17).

Using MENU Functions

Screen	Changes the screen format. • "Auto Format": Automatically changes the screen format according to the broadcast signal. • "Screen Format": For details about the screen format, see page 12 • "Vertical Size": Adjusts the vertical size of the picture when the screen format is set to Smart. **Tips** • Even if you have selected "On" or "Off" in "Auto Format", you can always modify the format of the screen by pressing ⊞ repeatedly. • "Auto Format" is available for PAL and SECAM signals only.
Power Saving	Selects the power saving mode to reduce the power consumption of the TV. • "Standard": Default settings. • "Reduce": Reduces the power consumption of the TV. • "Picture Off": Switches off the picture. You can listen to the sound with the picture off.
Adv. Contrast Enhancer	Automatically adjusts "Backlight" to the most suitable settings judging from the brightness of the picture. It will increase the contrast distinction of the picture.
AV2 Output	Sets a signal to be output through the socket labelled ⊙/⊡2 on the rear of the TV. If you connect a VCR to the ⊙/⊡2 socket, you can then record from the equipment connected to other sockets of the TV. • "TV": Outputs a broadcast. • "Auto": Outputs whatever is being viewed on the screen. Not available for ⊡ AV3, ⊡ AV5 and ⊡ AV6.
RGB Center	Adjusts the horizontal picture position so that the picture is in the middle of the screen. **Tip** This option is only available if an RGB source has been connected to the Scarts connectors ⊙1/⊡1 or ⊙2/⊡2 on the rear of the TV.

PC Adjustment

Customizes the TV screen as a PC monitor.

Tip

This option is only available if you are in PC Mode.
- "Phase": Adjust the screen when a part of a displayed text or image is not clear.
- "Pitch": Enlarges or shrinks the screen size horizontally.
- "H Center": Moves the screen to the left or to the right.
- "V Lines": Corrects the picture lines while viewing an RGB input signal from the PC ⤳ connector.
- "Power saving": Turns to standby mode if no PC signal is received.
- "Reset": Resets to the factory settings.

Timer

Sets the timer to turn on/off the TV.

• Sleep Timer

Sets a period of time after which the TV automatically switches itself into standby mode.
When the Sleep Timer is activated, the ⏱ (Timer) indicator on the TV (front) lights up in orange.

Tips
- If you switch off the TV and switch it on again, "Sleep Timer" is reset to "Off".
- "TV will soon turn off by sleep timer." appears on the screen one minute before the TV switches to standby mode.

• Clock Set

Allows you to adjust the clock manually. When the TV is receiving digital channels, the clock cannot be adjusted manually since it is set to the time code of the broadcasted signal.

• Timer

Sets the timer to turn on/off the TV.
"Timer Mode": Selects the desired period.
"On Time": Sets the time to turn on the TV.
"Off Time": Sets the time to turn off the TV.

Set-up menu

Set Up

	Auto Start Up	▶
	Language	English
	Country	-
	Auto Tuning	▶
	Programme Sorting	▶
	AV Preset	▶
	Sound Offset	▶
	Manual Programme Preset	▶
	Digital Set Up	▶

Back: ◀   Select: ↑ ↓   Enter: ⊕   Exit: MENU
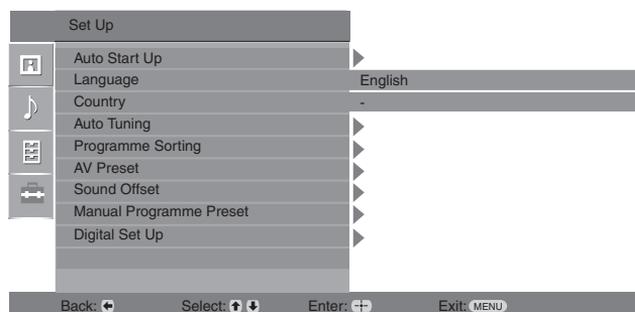
You can select the options listed below on the Set-up menu. To select options in "Settings", see "Navigating through menus" (page 17).

Auto Start-up	Starts the "first time operation menu" to select the language and country/region, and tune in all available digital and analogue channels. Usually, you do not need to do this operation because the language and country/region will have been selected and channels already tuned when the TV was first installed (page 5, 6). However, this option allows you to repeat the process (e.g., to retune the TV after moving house, or to search for new channels that have been launched by broadcasters).
Language	Selects the language in which the menus are displayed.
Country	Selects the country/region where you operate the TV. **Tip** The country/region in which you want to use the TV does not appear in the list, select "-" instead of a country/region.
Auto Tuning	Tunes in all the available analogue channels. Usually you do not need to do this operation because the channels are already tuned when the TV was first installed (page 5, 6). However, this option allows you to repeat the process (e.g., to retune the TV after moving house, or to search for new channels that have been launched by broadcasters).
Programme Sorting	Changes the order in which the analogue channels are stored on the TV. **1** Press ⇧/⇩ to select the channel you want to move to a new position, then press ⇨. **2** Press ⇧/⇩ to select the new position for your channel, then press ⊕.
AV Preset	Assigns a name to any equipment connected to the side and rear sockets. The name will be displayed briefly on the screen when the equipment is selected. You can skip an input source that is not connected to any equipment. **1** Press ⇧/⇩ to select the desired input source, then press ⊕. **2** Press ⇧/⇩ to select the desired option below, then press ⊕. • AV1 (or AV2/ AV3/ AV4/ PC/ HDMI), VIDEO, DVD, CABLE, GAME, CAM, SAT: Uses one of the preset labels to assign a name to connected equipment. • "Edit": Creates your own label. • "Skip": Skips an input source that is not connected to any equipment when you press ⇧/⇩ to select the input source.
Sound Offset	Sets an independent volume level to each equipment connected to the TV.

Continued

Manual Programme Preset

Before selecting "Label"/"AFT"/"Audio Filter"/"Skip"/"Decoder", press ⇧/⇩ to select the programme number you want to modify. Then, press ⊕.

System/Channel

Presets programme channels manually.

1   Press ⇧/⇩ to select "System", then press ⊕.
2   Press ⇧/⇩ to select one of the following TV broadcast systems, then press ⇦.
    B/G: For western European countries/regions
    D/K: For eastern European countries/regions
    L: For France
    I: For the United Kingdom

Note

Depending on the country/region selected for "Country" (page 5), this option may not be available.

3   Press ⇧/⇩ to select "Channel", then press ⊕.
4   Press ⇧/⇩ to select "S" (for cable channels) or "C" (for terrestrial channels), then press ⇨.
5   Tune the channels as follows:

    If you do not know the channel number (frequency)

    Press ⇧/⇩ to search for the next available channel. When a channel has been found, the search will stop. 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 or your VCR channel number.

6   Press ⊕ to jump to "Confirm", then press ⊕.
7   Press ⇩ to select "OK", then press ⊕.

Repeat the procedure above to preset other channels manually.

Label

Assigns a name of your choice, up to five letters or numbers, to the selected channel. This name will be displayed briefly on the screen when the channel is selected.

AFT

Allows you to fine-tune the selected programme number manually if you feel that a slight tuning adjustment will improve the picture quality.
You can adjust the fine tuning over a range of -15 to +15. When "On" is selected, the fine tuning is performed automatically.

Audio Filter

Improves the sound for individual channels in the case of distortion in mono broadcasts. Sometimes a non-standard broadcast signal can cause sound distortion or intermittent sound muting when watching mono programmes.
If you do not experience any sound distortion, we recommend that you leave this option set to the factory setting "Off".

Notes
• You cannot receive stereo or dual sound when "Low" or "High" is selected.
• "Audio Filter" is not available when "System" is set to "L".

Skip

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

Decoder

Views and records the scrambled channel selected when using a decoder connected directly to scart connector ⊙→/→⊡1, or to scart connector ⊙→/→⊡2 via a VCR.

Note

Depending on the country/region selected for "Country" (page 5), this option may not be available.

Confirm

Saves changes made to the "Manual Programme Preset" settings.

Using MENU Functions

Digital Set-up menu $\mathbb{DVB}$

Set Up

🔲	Auto Start Up	▶
	Language	English
♪	Country	-
	Auto Tuning	▶
🖹	Programme Sorting	▶
	AV Preset	▶
📠	Sound Offset	▶
	Manual Programme Preset	▶
	Digital Set Up	▶

Back: ←   Select: ↑ ↓   Enter: ⊕   Exit: MENU
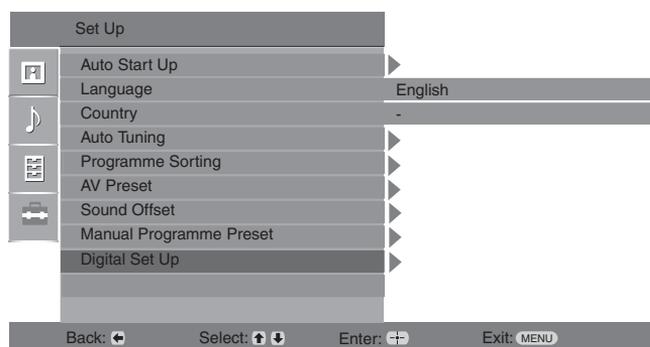
You can change/set the digital settings using the Digital Set-up menu. To select options in "Settings", see "Navigating through menus" (page 17).

Digital Tuning

Displays the "Digital Tuning" menu.

Digital Auto Tuning

Tunes in all the available digital channels.

Usually you do not need to do this operation because the channels are already tuned when the TV was first installed (page 5). However, this option allows you to repeat the process (e.g., to retune the TV after moving house, or to search for new channels that have been launched by broadcasters).

Programme List Edit

Removes any unwanted digital channels stored on the TV, and changes the order of the digital channels stored on the TV.

1 Press ⇧/⇩ to select the channel you want to remove or move to a new position.

If you know the programme number (frequency)

Press the number buttons to enter the three-digit programme number of the broadcast you want.

2 Remove or change the order of the digital channels as follows:

To remove the digital channel

Press ⊕. A message that confirms whether the selected digital channel is to be deleted appears. Press ⇦ to select "Yes", then press ⊕.

To change the order of the digital channels

Press ⇨, then press ⇧/⇩ to select the new position for the channel and press ⇦. Repeat the procedure in steps 1 and 2 to move other channels if required.

3 Press RETURN.

Digital Manual Tuning

Tunes the digital channels manually.

1 Press the number button to select the channel number you want to manually tune, then press ⇧/⇩ to tune the channel.

2 When the available channels are found, press ⇧/⇩ to select the channel you want to store, then press ⊕.

3 Press ⇧/⇩ to select the programme number where you want to store the new channel, then press ⊕.

Repeat the procedure above to tune other channels manually.

Digital Set-up

Displays the "Digital Set-up" menu.

Subtitle Setting

Displays digital subtitles on the screen.
When "For Hard Of Hearing" is selected, some visual aids may also be displayed with the subtitles (if TV channels broadcast such information).

Subtitle Language

Selects which language subtitles are displayed in.

Audio Language

Selects the language used for a programme. Some digital channels may broadcast several audio languages for a programme.

Audio Type

Increases the sound level when "For Hard Of Hearing" is selected.

Parental Lock

Sets an age restriction for programmes. Any programme that exceeds the age restriction can only be watched after a PIN Code is entered correctly.

1 Press the number buttons to enter your existing PIN code.

If you have not previously set a PIN, a PIN code entry screen appears. Follow the instruction of "PIN Code" below.

2 Press ⇧/⇩ to select the age restriction or "None" (for unrestricted watching), then press ⊕.

3 Press RETURN.

PIN Code

Sets a PIN code for the first time, or allows you to change your PIN code.

1 Enter a PIN as follows:

If you have previously set a PIN
Press the number buttons to enter your existing PIN.

If you have not set a PIN
Press the number buttons to enter the factory setting PIN of 9999.

2 Press the number buttons to enter the new PIN code.

A message appears to inform you that the new PIN has been accepted.

3 Press RETURN.

Tip
PIN code 9999 is always accepted.

Technical Set-up

Displays the Technical Set-up menu.
"Auto Service Update": Enables the TV to detect and store new digital services as they become available.
"Software Download": Enables the TV to automatically receive software updates, free through your existing aerial (when issued). Sony recommends that this option is set to "On" at all times. If you do not want your software to be updated, set this option to "Off".
"System Information": Displays the current software version and the signal level.
"Time Zone": Allows you to select the correct time zone for your country.

CA Module Set-up

Allows you to access a Pay Per View service once you obtain a Conditional Access Module (CAM) and a view card. See page 28 for the location of the 🔲 (PCMCIA) socket.

Connecting optional equipment

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

Connecting to the TV (side)

To connect	Do this
Conditional Access Module (CAM) **A**	To use Pay Per View services. For details, refer to the instruction manual supplied with your CAM. To use the CAM, remove the rubber cover from the CAM slot. Switch off the TV when inserting your CAM into the CAM slot. When you do not use the CAM, we recommend that you replace the cover on the CAM slot.
S VHS/Hi8/DVC camcorder **B**	Connect to the S video socket S-⊶4 or the video socket →⊖4, and the audio sockets →⊖4. To avoid picture noise, do not connect the camcorder to the video socket →⊖4 and the S video socket S-⊶4 at the same time. If you connect mono equipment, connect to the L socket →⊖4, and set "Dual Sound" to "A" (page 19).
Headphones **C**	Connect to the ⌒ socket to listen to sound from the TV on headphones.

S VHS/Hi8/DVC camcorder

Headphones

Connecting to the TV (rear)
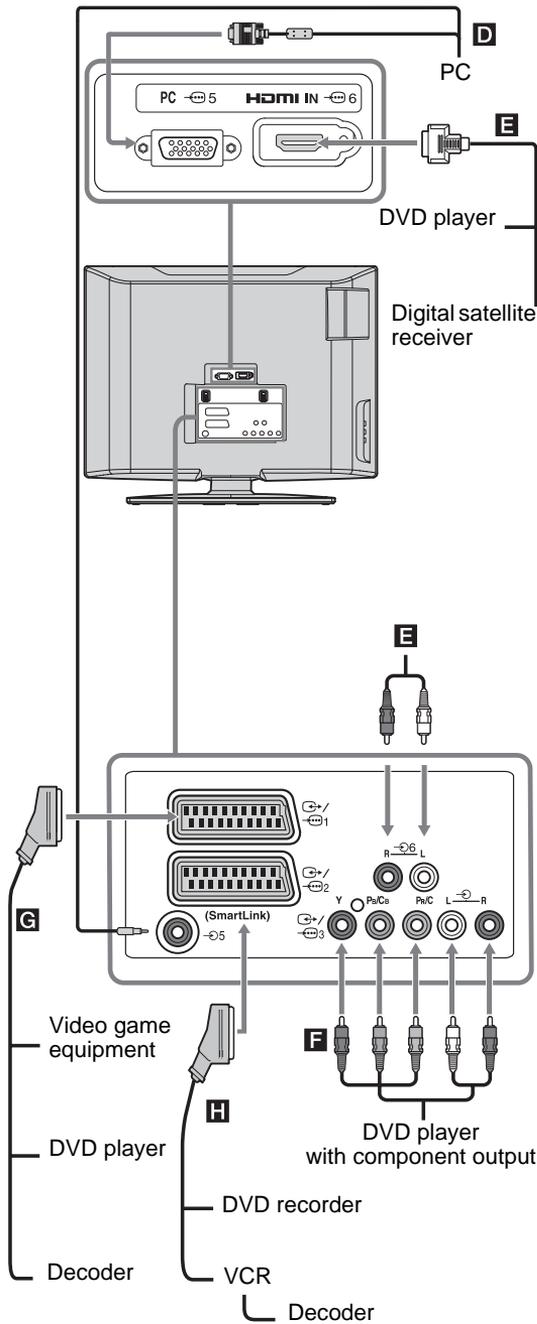
To connect	Do this
PC **D**	Connect to the PC →⋯5/→5 sockets. It is recommended to use a PC cable with ferrites.
Digital satellite receiver or DVD player **E**	Connect to the HDMI IN 6 socket if the equipment has a HDMI socket. The digital video and audio signals are input from the equipment. If the equipment has a DVI socket, connect the DVI socket to the HDMI IN 6 socket through a DVI - HDMI adaptor interface (not supplied), and connect the equipment's audio out sockets to the audio in HDMI IN 6 sockets. **Notes** • The HDMI sockets only support the following Video inputs: 480i, 480p, 576i, 576p, 720p and 1080i. To connect a PC, please use the PC input socket. • Use HDMI certified cable with HDMI logo.
DVD player with component output **F**	Connect to the component sockets and the audio sockets →⋯/→3.
Video game equipment, DVD player or decoder **G**	Connect to the scart socket →→/→⋯1. When you connect the decoder, the scrambled signal from the TV tuner is output to the decoder, then the unscrambled signal is output from the decoder.
DVD recorder or VCR that supports SmartLink **H**	Connect to the scart socket →→/→⋯2. SmartLink is a direct link between the TV and a VCR/DVD recorder.

Additional Information

Specifications

Display Unit
Power Requirements:
220–240 V AC, 50 Hz
Screen Size:
20 inches
Display Resolution:
1,366 dots (horizontal) × 768 lines (vertical)
Power Consumption:
65 W or less
Standby Power Consumption*:
1 W or less
* Specified standby power is reached after the TV finishes necessary internal processes.
Dimensions (w × h × d):
Approx. 500 × 406 × 209 mm (with stand)
Approx. 500 × 370 × 100 mm (without stand)
Mass:
Approx. 8 kg (with stand)
Approx. 7 kg (without stand)

Panel System
LCD (Liquid Crystal Display) Panel

TV System
Depending on your country/region selection:
Analogue: B/G/H, D/K, L, I
Digital: DVB-T

Colour/Video System
Analogue: PAL, SECAM
NTSC 3.58, 4.43 (only Video In)
Digital: MPEG-2 MP@ML

Aerial
75 ohm external terminal for VHF/UHF

Channel Coverage
Analogue: 48.25 - 855.25 MHz
Digital: VHF Band III (177.5 - 226.5 MHz)
UHF E21 - E69 (474 - 858 MHz)

Terminals
⊷/⊷1
21-pin Scart connector (CENELEC standard) including audio/video input, RGB input, and TV audio/video output.
⊷/⊷2 (SmartLink)
21-pin Scart connector (CENELEC standard) including audio/video input, RGB input, selectable audio/video output, and SmartLink interface.
⊷3
Supported formats: 1080i, 720p, 576p, 576i, 480p, 480i
Y: 1 Vp-p, 75 ohms, 0.3V negative sync
P_B/C_B: 0.7 Vp-p, 75 ohms
P_R/C_R: 0.7 Vp-p, 75 ohms
⊷3
Audio input (phono jacks)
500 mVrms
Impedance: 47 kilo ohms
S-⊷4 S video input (4-pin mini DIN)
⊷4 Video input (phono jack)
⊷4 Audio input (phono jacks)

PC ⊷5 PC Input (15 Dsub) (see page 29)
G: 0.7 Vp-p, 75 ohms, non Sync on Green
B: 0.7 Vp-p, 75 ohms, non Sync on Green
R: 0.7 Vp-p, 75 ohms, non Sync on Green
HD: 1-5 Vp-p
VD: 1-5 Vp-p
⊷ 5 PC audio input (minijack)

HDMI IN 6
Video: 1080i, 720p, 576p, 576i, 480p, 480i
Audio: Two channel linear PCM
32, 44.1 and 48 kHz, 16, 20 and 24 bits, or analogue audio input (phono jacks)
⌒ Headphones jack
CAM (Conditional Access Module) slot

Sound Output
5 W + 5 W (RMS)

Supplied Accessories
Refer to "1: Checking the accessories" on page 4.

Design and specifications are subject to change without notice.

PC Input Signal Reference Chart

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

- This TV's PC input does not support Sync on Green or Composite Sync.
- This TV's PC input does not support interlaced signals.
- This TV's PC input supports signals in the above chart with a 60 Hz vertical frequency. For other signals, you will see the message "NO SYNC".

Troubleshooting

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

When it is flashing
The self-diagnosis function is activated.
1   Measure how long the ⏻ (standby) indicator flashes and stops flashing.
    For example, the indicator flashes for two seconds, stops flashing for one second, and flashes for two seconds.
2   Press ⏻ on the TV (top side) to switch it off, disconnect the mains lead, and inform your dealer or Sony service centre of how the indicator flashes (duration and interval).

When it is not flashing
1   Check the items in the tables below.
2   If the problem still persists, have your TV serviced by qualified service personnel.

Picture

Problem	Cause/Remedy
No picture (screen is dark) and no sound	• Check the aerial connection. • Connect the TV to the mains, and press ⏻ on the TV (top side). • If the ⏻ (standby) indicator lights up in red, press Ɩ/⏻.
No picture or no menu information from equipment connected to the scarts or HDMI IN socket	• Check that the optional equipment is on and press ⊸/⊞ repeatedly until the correct input symbol is displayed on the screen. • Check the connection between the optional equipment and the TV. • When connecting any equipment to the HDMI IN 6 socket or when changing the resolution, some dots can appear blinking on the screen for a few seconds. HDMI signal decoding is in progress and it does not indicate a malfunction.
Double images or ghosting	• Check aerial/cable connections. • 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 in normal use, one to two years at the seaside).
Distorted picture (dotted lines or stripes)	• Keep the TV away from electrical noise sources such as cars, motorcycles, hair-dryers or optical equipment. • When installing optional equipment, leave some space between the optional equipment and the TV. • Check the aerial connection. • Keep the aerial cable away from other connecting cables.
Picture noise when viewing a TV channel	• Select "Manual Programme Preset" in the "Set-Up" menu and adjust "AFT" (Automatic Fine Tuning) to obtain better picture reception (page 24).
Some tiny black points and/or bright points on the screen	• The picture of a display unit is composed of pixels. Tiny black points and/or bright points (pixels) on the screen do not indicate a malfunction.
No colour on programmes	• Select "Reset" in the "Picture Adjustment" menu to return to the factory settings (page 18).
No colour or irregular colour when viewing a signal from the Y, P_B/C_B, P_R/C_R jacks of ⊸3	• Check the connection of the Y, P_B/C_B, P_R/C_R jacks of ⊸3. • Make sure that the Y, P_B/C_B, P_R/C_R jacks of ⊸3 are firmly seated in their respective sockets.

Sound

Problem	Cause/Remedy
No sound, but good picture	• Press ⊿ +/– or ◁✕ (Mute). • Check that "TV Speakers" is set to "On" in the "Sound Adjustment" menu (page 20).
Noisy sound	• See the "Picture noise" causes/remedies on page 31.

Channels

Problem	Cause/Remedy
The desired channel cannot be selected	• Switch between digital and analogue mode and select the desired digital/ analogue channel.
Some channels are blank	• Scrambled/Subscription only channel. Subscribe to the Pay Per View service. • Channel is used only for data (no picture or sound). • Contact the broadcaster for transmission details.
Digital channel is not displayed	• Check that the aerial is plugged directly into the TV (not through other equipment). • Contact a local installer to find out if digital transmissions are provided in your area. • Upgrade to a higher gain aerial.

General

Problem	Cause/Remedy
The TV turns off automatically (the TV enters standby mode)	• Check if the "Sleep Timer" is activated, or confirm the setting of "Off Time" (page 22). • 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 Time" is activated (page 22).
Some input sources cannot be selected	• Select "AV Preset" in the "Set-up" menu and cancel "Skip" of the input source (page 23).
The remote does not function	• Replace the batteries.

http://www.sony.net/

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