4-256-733-F2(1)

# **SONY**

# LCD Digital Colour TV

Operating Instructions

GΒ

# BRAVIA

KDL-22PX300

#### Introduction

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

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.

## Notes on Digital TV function

- Any functions related to Digital TV (DG) 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/ DVBC/

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Sony Corporation uses DNAS (Dynamic Network Authentication System), a proprietary authentication system, to help protect copyright and security in connecting the PlayStation<sub>TM</sub>2 console to a network. DNAS may retrieve information about a user's hardware and software for authentication, copy protection, account blocking, system, rules, or game management and other purposes. The information collected does not identify the user personally. The unauthorised transfer, exhibition, export, import or transmission of programs and devices circumventing its authentication scheme may be prohibited by law.

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## About copy protection

Attempted copying of DVDs played on this device may be prevented or restricted by copy protection technology contained on the DVD. Attempted recording or copying of DVDs for private use by the removal or circumvention of copy protection technology may be prohibited under applicable law.

#### Guarantee

Thank you for buying this Product. The term "Product" means the PlayStation<sub>TM</sub>2 computer entertainment system together with the accessories and/or peripherals with which it is packaged. This Guarantee does not cover any software whether or not packaged with the Product.

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Before operating the TV, please read "Safety Information" (page 8). Retain this manual for future reference.

## Before Use

To check the accessories Remote (1) Size AAA batteries (R3 type) (2) Analog controller (DUALSHOCK®2) (1)

#### To insert batteries into the remote

Push and lift the cover to open.



## 1: Connecting an antenna (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)

# 2: 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 (M4 × 16, not supplied) into the screw hole of the TV.
- **3** Tie the wood screw and the machine screw with a strong cord (not supplied).

# *3: Organising the AC power cord (mains lead)*



## 4: Performing the initial setup



1 Connect the TV to your AC power outlet (mains socket).

2 Press () on the TV. When you switch on the TV for the first time, the Language menu appears on the screen.



Follow the instructions on the screen.

**Digital Auto Tuning:** 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).

## Þ

• "Full Scan" may not be available depending on your region/country.

For a list of compatible cable providers, refer to the support web site: http://support.sony-europe.com/TV/ DVBC/

**Programme Sorting:** If you want to change the order of analogue channels, follow the steps in "Programme Sorting" (page 53).

## Þ

- You can also tune channels manually (page 54).
- "Language", "Time Zone" and "Daylight Savings Time (Summer Time)" of the PlayStation<sub>TM</sub>2 setting menu cannot be set in the initial set-up. They can be set in the main menu for PlayStation settings (page 43).

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

#### Ventilation

- Never cover the ventilation holes or insert anything in the cabinet.
- Leave space around the TV set as shown below.

#### 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.

Air circulation is blocked.



## 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.
- 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.

#### Warning

To prevent the spread of fire, keep candles or other open flames away from this product at all time.



## 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.
- Do not spray water or detergent directly on the TV set. It may drip to the bottom of the screen or exterior parts, and may cause a malfunction.
- 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. • This equipment has been tested and found to comply with the limits set out in the EMC Directive using a connection signal cable shorter than 3 meters.

#### **Batteries**

- 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 han 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.

## Warning about PlayStation™2

### Caution

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. The use of optical instruments with this product will increase eye hazard.

#### CLASS 1 LASER PRODUCT LUOKAN 1 LASERLAITE KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product under IEC60825-1: 2001.

#### Read carefully before operating your PlayStation™2 console

A few people may experience epileptic seizures when viewing flashing lights or patterns in our daily environment. These persons may experience seizures while watching TV or playing video games, including DVD-Videos or games played on the PlayStationTM2 console. Players who have not had any seizures may nonetheless have an undetected epileptic condition. Consult your physician before operating the PlayStation<sub>TM</sub>2 console if you have an epileptic condition or experience any of the following symptoms while watching TV programmes or playing video games: altered vision, muscle twitching, other involuntary movements, loss of awareness of your surroundings, mental confusion, and/or convulsions.

# Software title compatibility

Some PlayStation<sub>TM</sub> or PlayStation<sub>TM</sub>2 format software titles may perform differently on this console than they do on previous PlayStation<sub>TM</sub>2 or PlayStation<sub>TM</sub> consoles, or may not perform properly on this console. For more information, visit our Web site at www.eu.playstation.com/ ps2.

## Precautions about PlayStation™2

#### Safety

This product has been designed with the highest concern for safety. However, any electrical device, if used improperly, has the potential for causing fire, electrical shock or personal injury. To help ensure accident-free operation, follow these guidelines:

- Observe all warnings, precautions and instructions.
- Stop use and unplug the AC power cord from the electrical outlet immediately if the device functions in an abnormal manner or produces unusual sounds or smells.
- Never connect cables other than those specified in this manual to the network connector.
- Contact the appropriate PlayStation<sub>TM</sub> customer service helpline which can be found within every PlayStation<sub>TM</sub> and PlayStation<sub>TM</sub>2 format software manual if the device does not operate properly.

## Use and handling

- When operating the unit, play in a welllit room and keep a safe distance from the TV screen.
- Avoid prolonged use of the console. To help prevent eye strain, take a break of about 15 minutes during every hour of play.
- Stop using the console immediately if you experience any of the following symptoms. If the condition persists, consult a doctor.
  - Lightheadedness, nausea, or a sensation similar to motion sickness
     Tired, uncomfortable or aching hands or arms
  - Tired, dry or aching eyes
- Do not use the console near water.
- Do not place the console and connected accessories on the floor or in a place where they may cause persons walking by to trip or stumble.
- Do not place the console or accessories on surfaces that are unstable, tilted or subject to vibration.
- Do not expose the console or accessories to high temperatures, high humidity or direct sunlight (use in an environment where temperatures range from 5°C to 35°C/41°F to 95°F).
- Do not place the console in locations of poor ventilation such as small, enclosed areas, directly against a wall or on a thick carpet or bedding.
- Do not expose the console to dust, smoke or steam.
- Do not allow liquid or small particles to get into the console.
- Do not put any objects on the console.
- Do not touch or insert foreign objects into the connectors of the console or accessories.
- Do not allow dust or foreign matter to build up around the console vents. Remove the dust with a low-powered vacuum cleaner.

- Do not leave a disc in the console when moving or changing the position of the console.
- Do not touch a disc while it is spinning.
- · Do not close the disc cover in a way that
- could pinch your hand or fingers. Adjust the settings of the DVD player
- according to the instructions provided before playing a DVD.Keep the console and accessories,
- including cable ties and fasteners, out of the reach of small children.

#### When using software that supports the vibration function of the analog controller (DUALSHOCK®2)

Do not use the vibration function if you have any ailment or injury to the bones, joints or muscles of your hands or arms. In most cases, the vibration function can be set to "Off" in the options menu of the software.

## Network (except Local Area Networks)

- A broadband Internet connection is required to connect to a network.
- When you connect your PlayStation<sub>TM</sub>2 console to a network, the Internet service provider may charge additional usage fees. In some cases, usage charges may be more than anticipated. For details, refer to the information provided in your service contract or contact your Internet service provider.
- Parents are encouraged to monitor children in online gaming to ensure safe and responsible Internet usage.

#### Connecting with an Ethernet cable

Do not connect Ethernet cables or telephone cords of the following types to the network connector:

- Ethernet cables not appropriate for use with a 10Base-T/100Base-TX network
- Standard residential telephone lines
- Any ISDN (digital) compatible phone or data line
- · PBX phone lines
- Other "unknown" types of telephone lines

#### **Disc handling**

- Do not touch the disc surface when handling a disc; hold it by the edges.
- Do not stick paper or tape onto discs and do not write on discs.
- Fingerprints, dust, dirt or scratches on the disc can distort the picture or reduce sound quality. Always handle carefully and make sure discs are clean before use.
- Do not leave discs near a heat source, in direct sunlight or in high humidity.
- Store discs in their cases when not in use.
- Clean discs using a soft cloth, lightly wiping from the centre outwards. Do not use solvents such as benzine, commercially available cleaners not intended for CDs or anti-static spray intended for vinyl LPs.

 Do not use irregularly shaped discs (for example, heart- or star-shaped discs) or damaged, reshaped or repaired discs.

# Never disassemble the console or supplied accessories

Use the PlayStation<sup>™</sup>2 console and accessories according to the instructions in the product documentation. No authorization for the analysis or modification of the console, or the analysis and use of its circuit configurations, is provided. There are no user serviceable components inside the PlayStation<sup>™</sup>2 console. Disassembling the console will void the warranty. Additionally, there is a risk of exposure to laser radiation as well as to electrical shock hazards.

## Note on safety when playing DVDs or CDs

If you set the volume too high, it may harm your hearing or damage the speakers. Exercise care when setting the volume.

#### **Moisture condensation**

If the console or disc is brought directly from a cold location to a warm one, moisture may condense on the lens inside the console or on the disc. Should this occur, the console may not operate properly. In this case, remove the disc and turn off and unplug the console. Do not put the disc back in until the moisture evaporates (this may take several hours). If the console still does not operate properly, contact the appropriate PlayStation<sub>TM</sub> customer service helpline which cm be found within every PlayStation<sub>TM</sub> and PlayStation<sub>TM</sub>2 format software manual.

### Cleaning

- For safety reasons, before cleaning the console or connected accessories, 1) turn off the console, 2) disconnect the mains power plug for the console from the electrical outlet, and 3) disconnect the Ethernet cable from the console.
- When cleaning the console, use a soft, dry cloth. Do not use solvents or other chemicals or a chemically-treated dust cloth to clean the product.
- Do not touch the lens located inside the disc cover. To help protect the lens from dust, keep the disc cover closed except when inserting or removing discs.
- The cooling fan maintains low temperature inside the PlayStation<sub>TM</sub>2 console. If there is dust around the ventilation holes, temperature may rise inside of the PlayStation<sub>TM</sub>2 console and result in malfunction. Clean the ventilation holes on the side and rear of the PlayStation<sub>TM</sub>2 console regularly (preferably once a month).

### **Exterior protection**

To help prevent damage to the painted parts, follow the precautions below:

• Do not spill liquids such as alcohol, solvents or other chemicals on the product.

• Do not place any rubber or vinyl materials on the console exterior for an extended period of time.

## Remote and TV Controls/Indicators

Remote and TV/PlayStation™ 2 controls





Buttons on the TV will work the same as those on the remote. \* In the TV menu, these buttons will work as  $\frac{1}{\sqrt{2}}$ .

- Å.
- 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/Switch	Description			
Button/Switch	Description			
I TV I/ ○ (TV standby)	Press to turn on the TV or to enter standby mode.			
	<ul> <li>✔□</li> <li>When you turn the TV off, the TV and the built-in PlayStation<sub>TM</sub>2 enter standby mode.</li> </ul>			
2 (Power)	Press to turn on the TV or to enter standby mode.			
	<ul><li>To disconnect the TV, turn off the TV, then unplug the AC power cord (mains lead) from</li></ul>			
	<ul> <li>the AC power (mains).</li> <li>When you turn the TV off, the TV and the built-in PlayStation<sub>TM</sub>2 enter standby mode.</li> </ul>			
3 PlayStation 2 POWER ON	Press to turn on the built-in PlayStation <sub>TM</sub> 2. The TV and the PlayStation <sub>TM</sub> 2 turn on and the TV input mode is automatically switched to PlayStation <sub>TM</sub> 2 (page 35).			

	PlayStation 2 TV	Bu	tton/Switch	Description
		4	Function buttons	Switches the TV function or the built-in PlayStation <sub>TM</sub> 2 function on the remote and switches the input source between TV and PlayStation <sub>TM</sub> 2 automatically.
6 7 8 9 10			Optional equipment operating buttons	<ul> <li>If you turn the TV off, "Theatre Mode" is also turned off.</li> <li>When you change the "Scene Select" setting, "Theatre Mode" turns off automatically.</li> <li>Control for HDMI" (BRAVIA Sync or is compatible with "Control for HDMI".</li> </ul>
		6	DIGITAL/ ANALOG	Press to switch between digital and analogue mode. When viewing pictures from connected equipment, press to return to the last viewed TV mode.
		7	i-MANUAL	Press to display the on-screen instruction manual.
		8	⊟ GUIDE (EPG)	Press to display the Digital Electronic Programme Guide (EPG) (page 19).
				<ul><li>This button is unavailable for PlayStation<sub>TM</sub>2.</li></ul>
		9	•॑ RETURN	<b>TV function:</b> Press to return to the previous screen or exit from the menu. <b>PlayStation<sub>1M</sub>2 function:</b> Press to return to the previous screen on DVD menu.
		10	HOME	Press to display the TV Home Menu (page 46).

	PlayStation 2 TV		But	ton/Switch	Description
11— 12— 13—	POWERON IS (0) PES YY (16) PES YY (16) PE	17	11	Coloured buttons/DVD buttons	TV function: When the coloured buttons are available, an operation guide appears on the screen. PlayStation™2 function: DVD TOP MENU: Press to display the top menu. DVD MENU: Press to display the menu. DVD ANGLE: Press to change the viewing angle. DVD TIME: Press to display the current title or chapter number, elapsed time.
		1		Number buttons	In TV mode: Press to select channels. For channel numbers 10 and above, press the next digit quickly. PlayStationrw2 function: Press to enter a chapter number. In Text mode: Press to enter a page number.
14— 15—				⊜ (Text)	Press to display text information (page 17). ↓ • This button is unavailable for PlayStation <sub>TM</sub> 2.
			14	∠ +/– (Volume)	Press to adjust the volume.
			15	ા∜ (Mute)	Press to mute the sound. Press again to restore the sound.
			16	-∋/⊜ (Input select/Text hold)	<b>In TV mode:</b> Press to display a list of inputs. <b>In Text mode:</b> Press to hold the current page.
			17	∰ (Screen mode)	Press to change the screen format (page 18).
			18	INTERNET VIDEO	Press to access Internet content on the "XMB" (page 29).

PlayStation 2 TV	Button/Switch	Description
	19 ♡ (Favourites)	Press to display the "Favourites" menu (page 20).
SINC MENU SINC M	20 ⊕/ ⑦ (Info/ Text reveal)	Each time you press the button, the display changes as follows: In digital mode: Details of the current programme → Details of the next programme In analogue mode: Current channel number and screen mode In Text mode: Reveals hidden information (e.g. answers to a quiz) (page 17). PlayStation <sub>TM</sub> 2 function: Control panel
	21 ৫/∜/ᡧ/\$/⊕	<b>TV function:</b> Press \$\\$\\$\\$\\$\\$\\$\\$\\$ to move the on- screen cursor. Press ⊕ to select/confirm the highlighted item. <b>PlayStation™2 function:</b> Press \$\\$\\$\\$\\$\\$\\$\\$\\$ to enter/ confirm a highlighted item.
■ 0	22 OPTIONS	<ul> <li>Press to display a list of convenient functions and menu shortcuts. The menu items vary based on the current input and/or content.</li> <li>Image: This button is unavailable for PlayStation<sub>TM</sub>2.</li> </ul>
SONY	23 (Subtitle setting)	<b>TV function:</b> Press to turn subtitles on or off (when the feature is available). <b>PlayStation™2 function:</b> Press to turn subtitles on or off (when the feature is available).
	24 PROG +/-/ €à/€♥	In TV mode: Press to select the next (+) or previous (-) channel. In Text mode: Press to select the next (A) or previous (()) page.
	25 AUDIO	<b>TV function:</b> Press to change the dual sound mode (page 53). For digital mode, press to change the language to be used for the programme currently being viewed (page 55). <b>PlayStation<sub>TM</sub>2 function:</b> Press to change the multiple sound mode.

## Indicators

Indicator	Description					
1 Ambient sensor	Senses the ambient light level and adjusts the brightness and colour temperature of the picture accordingly. Do not put anything near the sensor, doing so may affect its function.					
2 Remote control sensor	Receives signals from the remote. Do not put anything near the sensor, doing so may affect its function.					
3 ⊠ ⊕ (Picture Off / Timer)	Lights up in green when you select "Picture Off" in "Power Saving" of "Eco" (page 48). Lights up in orange when you set the timer (page 48). Lights up and/or blinks in orange during a software upgrade.					
<b>④ (Standby)</b>	Lights up in red when the TV is in standby mode, PC power saving mode or during a software upgrade.					
5 I (Power)	Lights up in green when the TV is on.					

## Watching TV

## Watching TV



- Press <sup>(1)</sup> on the TV to turn on the TV.
   When the TV is in standby mode (the <sup>(1)</sup>) (standby) indicator on the TV front panel is red), press **TV I**/<sup>(1)</sup> on the remote to turn on the TV.
- **2** Press **DIGITAL/ANALOG** to switch to digital or analogue mode.

The available channels vary depending on the mode.

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

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

In digital mode, an information banner appears briefly. Each time you press  $\bigoplus$ , the banner changes cyclically as follows: Current programme information  $\rightarrow$  Next programme information  $\rightarrow$  No banner The following icons may be indicated on the banner.

- □: Interactive service is available (Digital Text)
- 🔂: Radio service
- **\*\***: Scrambled/Subscription service
- (: Multiple audio languages available
- . Subtitles available
- Subtitles available for the hearing impaired
- (D: Reminder
- Recommended minimum age for current programme (ages from 4 to 18) (For Spain only: ages from 4 to 18 and X)
- □ Parental lock

## To access Text

Press (a). Each time you press (a), 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  $\mathbb{E}/\mathbb{E}$ .

To hold a page, press 🔄.

To reveal hidden information, press ?.

Ϋ́

- You can also jump directly to a page by selecting the page number displayed on the screen. Press ⊕ and ô/\$/\$/\$/\$ 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 (Fast Text). Press the corresponding coloured button to access the page.
- Interactive service may be available if provided by a broadcaster.

## To change the Screen Format manually

Press  $\bigoplus$  repeatedly to select the desired Screen Format.

#### Smart\*



Enlarges the picture to fill a 16:9 screen, preserving the original picture as much as possible.

4:3



Displays the 4:3 picture in its original size. Side bars are shown to fill the 16:9 screen.

Wide



Stretches the 4:3 picture horizontally, to fill the 16:9 screen.

Zoom\*



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

14:9\*



Displays a 14:9 picture in its original size. Side bars are shown to fill the 16:9 screen.

 $\ast\,$  Parts of the top and bottom of the picture may be cut off.

Þ

• 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 51).

## ţ.

- When "Auto Format" (page 51) 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)



- **2** Perform the desired operation as shown in the following table or displayed on the screen.

Item	Description
1 Information Box	Shows information about the highlighted programme.
2 Video Window	Displays the last viewed programme before you entered the guide.
3 Programme Listing Grid	Select a programme to watch or to be set as a reminder.
4 Channel Information	Displays a channel title and number for a broadcaster.
5 Category	Category name (e.g. "Guide Favourites 1") contains all channels corresponding to the category.
Ŷ	

• The OPTIONS Menu allows you to select the following menu items.

- "Programme Genre List": Search programmes by genre.
- "Guide Favourites Set-up": Registers your preferred programmes for any categories.
- "Timer list": Set a programme to be displayed on the screen when it starts.

## Using the Favourites

The "Favourites" feature provides quick access to your frequently used items, such as preferred TV channels or external inputs (e.g. game console, DVD player). In addition, your favourite media files and Internet contents can be shown in the "Favourites" screen.

Þ

• Internet content (e.g. Internet Video) may not be available in some regions/countries.

## **Displaying Your Favourites**

**1** Press  $\heartsuit$ .



2 Select the desired icon listed at the bottom of the screen by using the remote, and press  $\oplus$  to expand it into a full view.

Ϋ́

• A slideshow automatically starts when a folder of photos is selected.

## **Displaying Your Recently Viewed Items**

By selecting the "Recently Viewed" stack of items in the "Favourites" screen, you can display a history of content you have recently viewed. The "Recently Viewed" list is erased whenever the TV is powered off.



Ϋ́

• "Recently Viewed" items are displayed in a stack list. Press ↔/↔ to move between the items.

## Recommendations

The "Recommendations" feature automatically analyses your interests by referencing your viewing history to find programmes and items you may like, and presents them in the "Favourites" menu. To activate this feature, select "On" in "Recommendation" of "General Set-up" (see page 48).



Ϋ́

• Recommended programmes that are currently being broadcast are displayed in a stack list of items. Press  $\oplus$  to expand the selected item into a full view.

Þ

• The "Recommendations" feature may not be available depending on your region, country and broadcasting conditions.

## Adding/Removing Favourites

You can add/remove your favourite items through the "XMB" or while you are displaying content on the screen.

- **1** Press **OPTIONS** after selecting the desired item on the "XMB".
- 2 Select "Add to Favourites" or "Remove from Favourites".

## **Connecting Optional Equipment**

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



Connecting audio-video equipment (quality order, high to low)

Connect to	Connect with	Description
4, 10 HDMI IN 1, 2, 3, or 4	HDMI cable	HDMI (High-Definition Multimedia Interface) provides an uncompressed, all-digital audio/video interface between this TV and any HDMI-equipped audio/video equipment. In addition, when you connect the equipment that is compatible with "Control for HDMI", communication with the connected equipment is supported.
		<ul> <li>Be sure to use only an authorised HDMI cable bearing the HDMI logo.</li> <li>If connecting a digital audio system that is compatible with Audio Return Channel (ARC) technology, use the HDMI IN 1. If not, an additional connection with DIGITAL AUDIO OUT (OPTICAL) is necessary.</li> </ul>

Connect to	Connect with	Description
		• If the equipment has a DVI jack (socket), connect it to the HDMI IN 4 through a DVI - HDMI adaptor interface (not supplied), and connect the equipment's audio out jacks (sockets) to the PC/HDMI 4 AUDIO IN which is located in the PC IN.
[7] →/-€ COMPONENT IN	Component video cable, audio cable	_
1 ↔/-;;AV1	SCART cable	When you connect an analogue decoder, the TV tuner outputs scrambled signals to the decoder, and the decoder unscrambles the signals before outputting them.
11 -∋ AV2, and -∋ AV2	Composite video cable	When connecting a mono equipment, connect to the $- OAV2$ L jack (socket).

## Connecting audio/portable equipment

Connect to	Connect with	Description
6 (+ (VAR/FIX)	Audio cable	You can listen to TV sound on the connected Hi-Fi audio equipment.
5 DIGITAL AUDIO OUT (OPTICAL)	Optical audio cable	You can listen to TV sound on the connected Home theatre system with digital input.
9 <b>∲USB</b>	USB cable	You can enjoy photo/music/video files stored in USB device (page 24).

## Connecting other equipment

Connect to	Connect with	Description
3 -⊕PC IN	PC cable with ferrites, audio cable	It is recommended to use a PC cable with ferrites, such as the "Connector, Mini D-sub 15" (ref. 1-793-504-11, available in Sony Service Centre), or an equivalent.
2 문 문 LAN	LAN cable	You can enjoy contents stored in DLNA-compatible devices via a network (page 27).
8  Conditional Access Module)		<ul> <li>Provides access to pay TV services. For details, refer to the instruction manual supplied with your CAM.</li> <li><sup>*</sup></li> <li><sup>*</sup> Do not insert the smart card directly into the TV CAM (Conditional Access Module) slot. It must be fitted into the Conditional Access Module provided by your authorised dealer.</li> </ul>
		<ul><li>CAM is not supported in some countries/areas. Check with your authorised dealer.</li></ul>
12 () Headphones	•	You can listen to TV sound through headphones.

## Viewing Pictures from Connected Equipment

- **1** Turn on the connected equipment.
- 2 Press and select the desired input source.

Inputs	
TV	
늘 HDMI 1	
hdmi 2	÷
🖕 HDMI 3	-9
늘 HDMI 4	
AV1	-Ð
AV2	-9
🔪 AV3	
👀 Component	
PC PC	

## To view two pictures simultaneously – PAP (Picture and Picture)

"PAP" displays two pictures at the same time from connected equipment and TV programme/composite video except SCART connector.

## Þ

• This function is not available with PC input.

- **1** Press **OPTIONS**.
- 2 Select the "PAP" from the OPTIONS Menu.
- 3 Press ⇔/⇒ to switch audio output between the two pictures. The highlighted picture is audible.

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

"PIP" displays a picture from the connected PC in the full screen, and a TV programme or composite video except SCART connector in an inset window.

## **1** Press **OPTIONS**.

- 2 Select the "PIP" from the OPTIONS Menu.
- **3** Use the OPTIONS Menu to switch audio output between the two pictures.

## Playing back Photo/Music/ Video via USB

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

- 1 Press **HOME** and select the listed USB devices under the "Photo", "Music" or "Video" category.
- 2 Select files or folders to play from the list on the selected USB device.

## Photo Playback Auto Start

Photo playback automatically starts when you connect a USB storage device after turning on the TV, and "Slideshow" or "Thumbnail View" is selected in the "USB Auto Start" settings (page 48).

## Þ

- When connecting a Sony digital camera to the TV with a USB cable, USB connection settings on your camera need to be set to "Auto" or "Mass Storage" mode.
- Video files are located in the following folder structure (hierarchal position): /AVCHD/BDMV/STREAM/00000.MTS /PRIVATE/AVCHD/BDMV/STREAM/ 00000.MTS

#### /MP\_ROOT/100ANV01/MAHA0001.MP4

- Avoid losing your files by backing up all your media files stored on USB equipment. Sony cannot accept responsibility for lost or damaged data stored on USB equipment.
- BRAVIA TV supports DivX®.
- Check the website below for updated information about compatible USB devices. http://support.sony-europe.com/TV/compatibility/
- USB Photo Viewer supports FAT12, FAT16 and FAT32 file systems.
- USB playback of the following photo file formats is available:
  - 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") (preview only)
- USB playback is supported for the following music file format:
  - MP3 (files with the extension ".mp3" that have not been copyrighted)

- USB playback is supported for the following video file format:
  - AVCHD (files with the extension ".mts" or ".m2ts")
  - MP4 (AVC) (files with the extension ".mp4")MPEG1 (files with the extension ".mpg")
- Avoid losing your files by backing up all your media files stored on a USB device. Sony cannot accept responsibility for lost or damaged data stored on a USB device.
- This feature is not supported with the USB connector on the front of  $PlayStation_{TM}2$ .

#### 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.
- 2 Press **OPTIONS** while the selected photograph is displayed, then press ☆/☆ to select "File Options" and press ⊕.
- 3 Press ☆/∜ to select "Picture Frame Image" and press ⊕.
- Press HOME, then 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.

## Þ

- 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 photomap

By connecting a digital still camera with GPS function, you can display a photograph with a map of the location where the photograph was taken. To use this feature, the TV has to be connected to the Internet to download map information.

- **1** Select a photograph by using the "XMB".
- **2** Press  $\sqrt[n]{4}$  to zoom in/out on the map.
- **3** Press the far left coloured button repeatedly to change the display position of the map.

## Þ

- 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 online map service is terminated.
- The position indicated on the map may differ depending on the image capture device.
- The Internet online map service is provided by a third party. For this reason, service may be changed or terminated without prior notification.

## Using BRAVIA Sync with Control for HDMI

With the "Control for HDMI" function, BRAVIA Sync helps to communicate with BRAVIA Sync-compatible equipment using HDMI CEC (Consumer Electronics Control). Use the following settings and tips to help unify control of your connected equipment.

- **1** Press **HOME**.
- **2** Press  $\Leftrightarrow /\Rightarrow$  to select "Settings".
- 3 Press ☆/∜ to select "External Inputs" and press ⊕.
- 4 Press ô/<sup>⊕</sup> to select "Control for HDMI" in "HDMI Set-up", then select "On".
- Ϋ́
- "Control for HDMI" (BRAVIA Sync) is only available for the connected Sony equipment that has the BRAVIA Sync or is compatible with "Control for HDMI".
- The "Control for HDMI" settings must be set on both the TV and connected equipment. For settings on the connected equipment, refer to their instruction manuals.
- When specific Sony equipment compatible with "Control for HDMI" (BRAVIA Sync) is connected, BRAVIA sync is automatically activated on the equipment.

# Controlling BRAVIA Sync-Compatible Equipment

BRAVIA Sync-compatible equipment is listed as a new input source under "External Inputs" in the Home Menu (page 46). To control the equipment by using the remote, press **SYNC MENU** and select the desired equipment from "HDMI Device Selection".



## **BD/DVD Player**

- Automatically turns the BRAVIA Synccompatible equipment on and switches the input to that equipment when you select it from the Home Menu or Sync Menu.
- Automatically turns the TV on and switches the input to the connected equipment when the equipment starts to play.
- Automatically turns the connected equipment off when you switch the TV to standby mode.

## **AV Amplifier**

- Automatically turns the connected AV amplifier on and switches the sound output from the TV speaker to the audio system when you turn the TV on. This function is only available if you have previously used the AV amplifier to output TV sound.
- Automatically switches the sound output to the AV amplifier by turning the AV amplifier on when the TV is turned on.
- Automatically turns the connected AV amplifier off when you switch the TV to standby mode.
- Adjusts the volume (→ +/-) and mutes the sound (<sup>®</sup>X) of the connected AV amplifier through the TV's remote.
- When connecting a digital audio system that is compatible with Audio Return Channel (ARC) technology, connect to HDMI IN 1 with an HDMI cable. If connecting a system that is incompatible with "Control for HDMI" or Audio Return Channel, an additional audio connection via DIGITAL AUDIO OUT (OPTICAL) is necessary.

## Video Camera

- Automatically turns the TV on and switches the input to the connected video camera when the connected video camera is turned on.
- Automatically turns the connected video camera off when you switch the TV to standby mode.

# **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/video files, are called "Server". The TV receives the photo/music/video 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 DLNAcompatible device (VAIO, Cyber-shot, etc.) is necessary as a server.

Make either the wired connection (see the following "Connecting to the Network"), or wireless connection (see "Wireless LAN Ready" on page 28).

In addition, when you connect your TV to the Internet, you can enjoy displaying a photograph that shows its location on the map (page 25), or enjoy Internet video (page 29).

## Þ

• You will need to contract with an Internet service provider to connect to the Internet.

## Connecting to the Network



## Wireless LAN Ready

Wireless LAN Ready lets you easily access the Internet and your home network with the USB Wireless LAN Adapter UWA-BR100 (as of January 2010). By inserting the USB Wireless LAN Adapter into your TV's USB port, you can easily create a cable-free network.



#### Þ

- Before setting up the wireless LAN function of the TV, be sure to set up a wireless LAN router.
- The USB Wireless LAN Adapter is supplied or available as an optional accessory, depending on your TV model. In some regions/countries, the USB Wireless LAN Adapter may not be available.
- This feature is not supported with the USB connector on the front of PlayStation<sub>TM</sub>2.

## Connecting to Your Wireless LAN

Using the Wireless LAN Ready feature you can connect the TV to your wireless LAN. The set-up procedure differs depending on the type of wireless LAN and wireless LAN router. Before setting up a wireless LAN, check your wireless LAN environment using the following chart.

**1** Secure wireless LAN ?

#### YES: Go to 2.

**NO**: Configure the following "Network Set-up" and "Unsecured Network with Any Type of Wireless LAN Router".

2 Do you use a wireless LAN router compatible with Wi-Fi Protected Setup (WPS) ?

> **YES**: Configure the following "Network Set-up" and "Secured Network with Wi-Fi Protected Setup (WPS)".

**NO**: Configure the following "Network Set-up" and "Secured Network without Wi-Fi Protected Setup (WPS)".

## Network Set-up

The start-up screen of "Network Set-up" allows you to select a setting procedure according to your network environment. "View Network Status": Select to confirm your network status.

"Wired Set-up": Use to connect to a wired network.

"Wireless Set-up": Use to connect to a wireless network.

## Secured Network with Wi-Fi Protected Setup (WPS)

The WPS standard makes security of a wireless home network as straightforward as pressing the WPS button on the wireless LAN router. Before setting up a wireless LAN, check the position of the WPS button on the router and verify how to use it.

- **1** Select "Wireless Set-up" from the "Network Set-up" start-up screen.
- 2 Select "WPS (Push Button)" for Push Button method or "WPS (PIN)" for PIN method.
- **3** Follow the instructions appeared on the set-up screen.

### Þ

• To connect to a wireless LAN with WPS, your wireless LAN router needs to support the WPS standard.

## Secured Network without Wi-Fi Protected Setup (WPS)

For setting up a wireless LAN, SSID (wireless network name) and security key (WEP or WPA key) will be required. If you do not know them, consult the instruction manual of your router.

- 1 Select "Wireless Set-up" from the "Network Set-up" start-up screen.
- 2 Select "Scan", then select a network from the list of scanned wireless networks.
- **3** Follow the instructions that appear on the set-up screen.

## Unsecured Network with Any Type of Wireless LAN Router

For setting up a wireless LAN, SSID (wireless network name) will be required. Security key (WEP or WPA key) will not be required because you need to select no security method in this procedure.

- 1 Select "Wireless Set-up" from the "Network Set-up" start-up screen.
- 2 Select "Scan", then select a network from the list of scanned wireless networks.
- **3** Follow the instructions appeared on the set-up screen.

## Enjoying BRAVIA Internet Video

BRAVIA Internet Video serves as a gateway to Internet content, delivering a variety of ondemand entertainment straight to your TV. By making a broadband Internet connection, you can enjoy video content, including movies and cartoons.

### Þ

• Be sure to connect your TV to the broadband Internet and complete the initial set-up and "Network Set-up" (page 56).

## To Use Internet Video

You can seek forward or seek backward in the video content. (This feature is available depending on Internet content services.)

## **1** Press **INTERNET VIDEO**.

2 Press ☆/∜/☆/☆ to select the desired video icon to be displayed and press ⊕.

# To return to single picture mode Press 🗂 RETURN.

## ţ,

- The interface to Internet content depends on the Internet content providers.
- Services block video content based on the "Parental Lock" setting of the TV. Some service providers do not support this function.
- To update BRAVIA Internet Video content services, select "Settings" in the Home Menu, then select "Refresh Internet Content" in "Network" (page 57).

## Enjoying Photo/Music/ Video Files via the Network

Enjoy various content, such as photo/music/ video files, stored in DLNA Certified media server on your home network. With the home network feature, you can enjoy the Internet and/or network content on the TV even in other rooms. To enjoy your home network, DLNA Certified equipment (e.g. VAIO) is necessary as a server.

- **1** Press **HOME**.
- 2 Press ⇔/⇔ to select the listed media servers under the "Photo", "Music" or "Video" category.
- **3** Press ↔/↔ to select files or folders to play from the list on the selected media server.

## Þ

- Files from a network device need to be compatible with the following file formats.
  - Still images: JPEG format
  - Music: MP3 format or linear PCM format
  - Video: The following file formats stored on the server: AVCHD or MPEG2 format (not playable in some cases)

# To enjoy photographs, music and videos on the TV screen by operating devices

## Renderer

You can play back photo, music and video files stored in network devices (e.g. digital still cameras, mobile phones) on the TV screen by directly operating the target device. The network device should also be renderercompatible.

- **1** Press **HOME**.
- **2** Press  $\Leftrightarrow /\Rightarrow$  to select "Settings".
- Press û/◊ to select "Network", and then set "Renderer Function", "Renderer Access Control" and "Renderer Set-up" in "Renderer" if necessary (page 57).
- **4** Play back media files by using the network devices.

## Checking the Network Connection

Enter the respective alphanumeric values for your router if necessary. The items that need to be set (e.g. IP Address, Subnet Mask, DHCP) may differ depending on the Internet service provider or router. For details, refer to the instruction manuals provided by your Internet service provider, or those supplied with the router.

- **1** Press **HOME**.
- **2** Press  $\Leftrightarrow /\Rightarrow$  to select "Settings".
- 3 Press ☆/∜ to select "Network", then press⊕.
- **4** Select "Network Set-up", then press ⊕.
- **5** Select "Auto" to set the IP Address and proxy server automatically, or "Custom" to set them manually.

Follow the instructions appeared on the set-up screen.

The start-up screen allows you to select a setting procedure according to your network environment.

"View Network Status": Select to confirm your network status.

"Wired Set-up": Use to connect to a wired network.

"Wireless Set-up": Use to connect to a wireless network.

## 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 in the Home Menu automatically.

- **1** Press **HOME**.
- **2** Press  $\Leftrightarrow /\Rightarrow$  to select "Settings".
- 3 Press ☆/☆ to select "Network", then press⊕.
- **4** Select "Server Display Settings", then press ⊕.
- **5** Select the server you want to display on the Home Menu, and adjust the settings.

# If you cannot connect to your home network

The TV detects if the server is being correctly recognised when you cannot connect it to your home network. If the diagnostic results indicate a failure, check possible causes, and network connections and settings.

- **1** Press **HOME**.
- **2** Press  $\Leftrightarrow /\Rightarrow$  to select "Settings".
- Press ☆/∜ to select "Network", then press
   ⊕.
- **4** Select "Server Diagnostics", then press  $\oplus$ .

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

## About Advanced Operations of the PlayStation 702

The PlayStation<sub>™</sub>2 User's Guide is provided for further operation of the PlayStation<sub>™</sub>2. The User's Guide (in PDF format) is accessible from a PC through the Internet and contains information on performing advanced operations, technical specifications and other information. Visit www.sony-europe.com/myproduct/, and enter your model name to search for the corresponding User's Guide.

## Part Names

### Front



Connect to	Description
1 MEMORY CARD slot 1/2	Insert a memory card (page 36).
2 Controller port 1/2	Insert the Analog Controller (DUALSHOCK $@2$ ) into a controller port of the PlayStation <sub>TM</sub> 2 (page 35).
3 v USB connector	You can connect various USB devices to the built-in PlayStation <sub>TM</sub> 2, but not all are compatible. Refer to the instructions supplied with the USB device for more information.
	<ul> <li>You cannot play photo, music, video files using the PlayStation's USB connector.</li> </ul>
4 Disc cover	Press the <b>OPEN</b> button, and the cover slides open.
5 OPEN button	Press to open the disc cover.
6 I/॑└ (on/standby)/RESET button	Press to turn on the built-in PlayStation <sub>TM</sub> 2, to enter standby mode, or to reset. RESET: Press once. Standby: Press for more than one second.
7 I/Ů (on/standby) indicator	Lights up in green when the built-in PlayStation <sub>TM</sub> 2 is on. Lights up in red when the built-in PlayStation <sub>TM</sub> 2 is in standby mode.

## Rear



Connect to	Description
1 뮮 LAN	You can enjoy online games by connecting the PlayStation <sub>TM</sub> 2 to a broadband network (page 37).
	<ul> <li>To enjoy "BRAVIA" home network features, connect to LAN of the TV using an Ethernet cable (page 42).</li> </ul>
2 DIGITAL AUDIO OUT (OPTICAL)	You can listen to the built-in PlayStation <sup>™</sup> 2 sound on a Home theatre system connected via digital input.

## Analog controller (DUALSHOCK®2)



Button/Switch	Description
1 L2 button	
2 L1 button	
3 SELECT button	
4 Directional buttons	
5 Left analog stick/ L3 button	<ul> <li>Ÿ</li> <li>The left analog stick and L3 button, function only in analogue mode (indicator: red).</li> <li>The L3 button function when the analog stick is pressed.</li> </ul>
6 ANALOG mode button	Switch between digital mode and analogue mode.
7 Mode indicator	<ul> <li>Digital mode: Lights off.</li> <li>Analogue mode: Lights up in red.</li> <li><sup>*</sup></li> <li><sup>*</sup> Depending on the software, you may not be able to switch modes even if you press the <b>ANALOG</b> mode button.</li> </ul>
8 R2 button	
9 R1 button	
10 START button	
11 ∆/O/×/□ buttons	
12 Right analog stick/ R3 button	<ul> <li>♀</li> <li>Y</li> <li>The right analog stick and R3 button, function only in analogue mode (indicator: red).</li> <li>The R3 button function when the analog stick is pressed.</li> </ul>

## Å.

• Depending on the software, the buttons for use in analogue mode may be limited. Refer to the instructions supplied with the software for details.

• The vibration function can be set to on or off in the software options menu. Depending on the software, the vibration function may be set to on automatically.

## Setting Up the PlayStation™2

You can enjoy playing games, watching movies and listening to music via the built-in PlayStation<sub>TM</sub>2.

 Connect the Analog Controller (DUALSHOCK®2) to a controller port in the front of the built-in PlayStation<sub>™</sub>2.



2 Press PlayStation 2 POWER ON on the remote to turn on the TV and the PlayStation<sub>TM</sub>2. (The TV input mode is automatically switched to PlayStation<sub>TM</sub>2.)



## Þ

- When you turn the TV off, the PlayStation<sub>TM</sub>2 is also turned off. In addition, when functions below are activated, the PlayStation<sub>TM</sub>2 will also be turned off in conjunction with the TV.
  - Idle TV Standby
  - Sleep Timer
  - PC Power Management
  - Reminder
  - On Timer
  - Picture Frame
- Do not access the memory card when a warning message (such as, "the TV will soon turn off...") appears.

## Playing Content

You can play games, DVD-Videos and audio CDs on the PlayStation $_{TM}2$ .



- 1 Press the **OPEN** button to release the disc cover lock.
- 2 Slide the disc cover to the left, then place the disc with the label side facing up.
- **3** Close the disc cover by sliding it to the right until it is locked.

## Þ

• Be sure to lock the disc cover to play a disc.

## Playing a Game

You can play PlayStation<sub>TM</sub>2 and PlayStation<sub>TM</sub> format software on the built-in PlayStation<sub>TM</sub>2.

## To start a game

Insert a disc to start playback.

## Þ

• To end a game, press PlayStation<sub>TM</sub>2  $I/\bigcirc$  (on/ standby)/RESET button on the console front after saving game data, and then remove the disc (page 32).

# Using the Analog Controller (DUALSHOCK®2)

The Analog Controller (DUALSHOCK®2) is equipped with pressure-sensitive buttons and sticks. This enables you to control game action with enhanced precision based on the force with which buttons are pressed or the angle at which the analog stick is tilted. It is also a force feedback controller with a vibration function.

## Þ

• Depending on the game, you may need to set the controller to either digital or analogue mode. Press the **ANALOG** mode button of the controller to switch to the analogue mode. To return to digital mode, press the **ANALOG** mode button again. Some games make this adjustment automatically.

## Using Memory Cards

You can save and load game data using a memory card (sold separately). You can also delete game data or copy game data from one memory card to another.

## Memory card types

There are two types of memory cards. Select the memory card type suitable for the software in use.

### Memory card for PlayStation™2; SCPH-10020 E

- Compatible software: PlayStation<sub>TM</sub>2 format software
- Amount of memory: Approximately 8 MB

## Memory card; SCPH-1020 E (This product is no longer manufactured.)

- − Compatible software: PlayStation<sub>TM</sub> format software
- Amount of memory: 15 memory blocks (approximately 120 KB)

## Þ

• MagicGate<sup>TM</sup> is a term of copyright-protection technology developed by Sony Corporation.

## To insert a memory card

Insert the memory card into a memory card slot. Some games designate a specific memory card slot to use.



## To copy or delete saved data

You can delete saved data or copy data to another memory card. Use directional buttons and the O N button of the controller to select items.
- **1** Turn on the built-in  $PlayStation_{TM}2$  with no disc inserted, and then insert a memory card.
- 2 Select "Browser", and then select the memory card you want to copy or delete data from.
- **3** Select the icon for the data item, and select "Copy" or "Delete".
- **4** Follow the instructions that appear on the set-up screen.

# **Playing Online Games**

You can play online games by connecting the built-in PlayStation<sub>TM</sub>2 to a network. Items you will need

- A network compatible PlayStation<sub>TM</sub>2 game
- Broadband Internet service
- A commercially available Ethernet cable
- A memory card (8MB) (for PlayStation<sub>TM</sub>2) (sold separately)

# Creating a Network Configuration

When playing online games, insert a commercially available Ethernet cable into the network connector, and then create a network configuration. Refer to the instructions supplied with the online game for creating a network configuration.



# Watching a DVD

You can play DVDs on the built-in PlayStation $_{TM}2$ .

#### To start a DVD

Insert a disc to start DVD playback.

# **Operating the DVD Player**

Press the **SELECT** button on the Analog Controller then select an icon.



#### **Control panel items**

lcon		Description	
°=	Menu	Displays the menu	
(Ser	Top Menu	Displays the top menu	
٥ <b>٠</b>	Return	Returns to the previously selected screen	
γ	Audio Options	Displays and changes audio options	
<b>**</b>	Angle Options	Displays and changes viewing angles	
	Subtitle Options	Displays and changes subtitle options	
4	Go To	Skips to the selected title, chapter or the specified time, and starts playback	
•	Setup	Displays and changes options for language, picture quality, Parental Control level, audio, etc.	
•	Time Display	Displays the current title or chapter number, elapsed time, etc.	
?	Help	Displays the direct button functions of the Analog Controller (DUALSHOCK®2)	
0-9	Go to Chapter	Used to enter the number of a chapter you want to play	
	Previous/Next	Returns/skips to the beginning of the current, previous or next chapter	
◀/▶	Search	Fast reverses/forwards playback	
<b>◄【/】►</b>	Slow	Changes to playback/reverse playback in slow-motion	
	Play	Starts playback	
П	Pause	Pauses playback	
	Stop	Stops playback	
A-B	A-B Repeat	Specifies a scene for playback, and starts playback of the scene that has been set	
SHUF	Shuffle Play	Begins playback of titles or chapters in a random order	
PGM	Programme Play	Begins playback of titles or chapters in a programmed sequence	
t)	Repeat Play	Selects repeated playback of all the titles on the disc, or one title or one chapter	
PLIST	Original/Play List	For DVD-RW discs (VR mode), selects Original or Play List content to play	
CLEAR	Clear	Clears selected numbers or playback modes	

• Selecting ■ (Stop) again after playback is stopped clears resume play (playback from the last stopping point).

• Some control panel options cannot be selected during resume play. To select these options, cancel resume play by selecting  $\blacksquare$  (Stop) on the control panel and then selecting  $\blacksquare$  (Stop) again after playback is stopped.

# Parental Control Settings

From the control panel, select "Setup", and then select "Parental Control" in "Custom Setup".

Follow the instructions to register or enter the password. After the password is registered or entered, proceed through the various screens to select a region and parental control level.

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- If you select "Other" in the region options, see "About Advanced Operations of the PlayStation<sub>TM</sub>2" (page 32).
- For the parental control level, note that the lower the value, the stricter the restriction.
- To clear the parental control setting, set the option to "Off".
- To change your password, select "Change Password" from the parental control options and follow the instructions to complete the operation.

# Temporary override of parental control restrictions

Start DVD playback. When prompted by the system, select "Yes", and then enter the password.

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- You cannot change the parental control setting without a password.
- When DVD playback is stopped, the parental control level will return to its default setting.
- If you forget your password, insert a DVD without the parental control feature. In the control panel, select (Stop) to stop playback, and then select
   (Stop) again to clear resume play. Select
  "Setup", and then select "Parental Control" in "Custom Setup", and then press the ⊗ button. Press the SELECT button on the Analog Controller, and then enter the number "7444".

## Compatible Software

#### DVD

- PlayStation<sub>TM</sub>2 format DVD-ROM
- DVD-ROM (DVD-Video)
- DVD+R/DVD+RW
- DVD-R/DVD-RW (Video mode / VR mode)

#### CD

- PlayStation<sub>TM</sub>2 format CD-ROM
- PlayStation<sub>TM</sub> format CD-ROM
- CD-DA (Audio CD)

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- Some discs may not be playable due to scratches, dust or recording problems.
- The audio CD playback feature of this product is designed to conform to the Compact Disc (CD) standard. Recently, some record companies have started marketing music discs encoded with copyright protection technologies. Some of these music discs do not conform to the CD standard and may not be playable on this product.
- A DualDisc is a two sided disc product that contains DVD recorded material on one side and digital audio material on the other side. However, since the audio material side does not conform to the Compact Disc (CD) standard, playback on this product is not guaranteed.
- Do not play illegally copied discs. This may cause a malfunction or damage to the PlayStation<sub>TM</sub>2.

## **Region codes**

Some discs are assigned region codes for each geographic sales region. The built-in PlayStation<sub>TM</sub>2 can play discs with the following region codes.

- DVD : , (Cxcept RU), (CXC)
- PlayStation<sub>TM</sub>2 format DVD-ROM/CD-ROM : **PAL**
- PlayStation<sub>TM</sub> format CD-ROM :

## **DVD-Videos**

The built-in PlayStation $_{TM}2$  can only play discs recorded for the PAL broadcast standard.

# DVD-R, DVD-RW, DVD+R and DVD+RW discs

• Only discs that have been finalised can be played.

 Copy-protected video from a digital broadcast recorded on Content Protection for Recordable Media (CPRM) compatible DVD-RW discs or on CPRM compatible DVD-R discs cannot be played on the builtin PlayStation<sub>TM</sub>2.

# Internet Settings of the Built-in PlayStation 702

You can enjoy online games by connecting the PlayStation<sub>TM</sub>2 to a broadband network. To play all online games, you will need the following:

- A network compatible PlayStation<sub>TM</sub>2 game
- Broadband Internet service
- A commercially available Ethernet cable
- A memory card (8MB) (for PlayStation<sub>TM</sub>2) (sold separately)

#### ţ

- You cannot play online games using a dial-up or ISDN connection.
- USB connectivity from the External Network Device to the USB connector is not supported.
- There are two types of Ethernet cables: straightthrough cable and crossover cable. Ensure that you use the correct type of cable when connecting the PlayStation<sub>TM</sub>2 to your Broadband Internet connection. Refer to the instructions supplied with the network device, or your Broadband Internet Service Provider for details.
- Do not connect to the TV LAN using the Ethernet cable.

## Connecting with an Ethernet Cable

You can connect the built-in PlayStation<sub>TM</sub>2 to a network using an Ethernet cable connected to the NETWORK connector on the rear. You can connect to a 100 Base-TX or 10 Base-T network. Refer to the instructions supplied with the network device for details.

## Basic Network Setup



**Network line:** This will vary depending on the type of broadband service in your home. **Network equipment:** The type of equipment used will also vary depending on the type of service.

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- When connecting the built-in PlayStation<sub>TM</sub>2 and a PC to the network, a network device such as a router or a hub may be required. Refer to the instructions supplied with the network device for details.
- For more information on network setup, see "About Advanced Operations of the PlayStation<sub>TM</sub>2" (page 32).

## Connecting the Built-in PlayStation™2



- 1 Connect the Ethernet cable to the NETWORK connector on the rear.
- **2** Connect the Ethernet cable to the network device.

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- Do not plug the AC power cord (mains lead) for the built-in PlayStation<sup>™</sup>2 into the electrical outlet until you have made all other connections.
- Do not connect Ethernet cables or telephone cords of the following types to the network connector; too much electrical current may pass through the connector, causing a malfunction, excessive heat or fire in the connector:
  - Standard residential telephone lines
  - Ethernet cables not appropriate for use with a 10Base-T/100Base-TX network
  - Any ISDN (digital) compatible phone or data line
  - PBX phone lines
  - Other unknown types of telephone lines

## Creating Network Settings

After you have connected an Ethernet cable to the built-in PlayStation<sub>TM</sub>2, you will need to create and save network settings. To do this you need a Network Access Disc supplied by registering your PlayStation<sub>TM</sub>2. You can register your PlayStation<sub>TM</sub>2. For more information, see "About Advanced Operations of the PlayStation<sub>TM</sub>2" (page 32).

You will need the following items to create a network setting:

- A Memory Card (8MB) (for PlayStation<sub>TM</sub>2) (sold separately)
- Login and network setup information provided by your Broadband Internet Service Provider

#### Ϋ́

• Depending on the type of Internet service used, you may need to provide your Broadband Internet Service Provider with your MAC Address. You can find the MAC Address for your PlayStation<sub>TM</sub>2 listed in the Version Information screen.

## Displaying the Main Menu

From the main menu, you can access information and change various settings. You can also move to the following screens from the main menu. The main menu is displayed when you turn on the console without a disc inserted.

- Browser screen (page 43)
- System Configuration menu (page 44)
- 1 Press **PlayStation 2 POWER ON** on the TV's remote.

The main menu is displayed. Note that it may take some time for the main menu to be displayed.



• If you press **PlayStation 2 POWER ON** on the TV's remote with a disc inserted, the main menu will not be displayed. To display the main menu, press the **OPEN** button on the console front and remove the disc. Then press **PlayStation 2 POWER ON** on the TV's remote.

## Using the Browser Screen

You can do the following from the Browser screen:

- Copy or delete game data saved on a Memory Card
- Start a game
- Start playback of an audio CD
- Start playback of a DVD
- **1** Display the main menu.
- 2 Using the directional buttons, select "Browser" and then press ⊗ button.

The Browser screen is displayed.

**3** Insert a disc or Memory Card.

The icon for the inserted item is displayed on the Browser screen.



- **4** Select an icon, and then press  $\bigotimes$  button.
  - When you select the Memory Card icon, icons for data saved on the Memory Card are displayed. To copy or delete saved game data, see "To copy or delete saved data" (page 36).
  - If you select the icon for a PlayStation<sub>TM</sub>2 or PlayStation<sub>TM</sub> format software disc, the game will start.
  - When you select the icon for an audio CD, the tracks contained on the CD are displayed. See "Playing Content" (page 35).
  - If you select the icon for a DVD, playback of the DVD will begin.

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• The message "There is no data" is displayed on the Browser screen when no Memory Card or disc is inserted in the console.

### Using the System Configuration Menu

From the System Configuration menu, you can change settings for numerous options including language or time display, and audio or video output method.

- **1** Display the main menu.
- 2 Using the directional buttons, select "System Configuration" and then press ⊗ button.

The System Configuration menu is displayed.



- 3 Select an item, and then press ⊗ button.The menu option becomes active and can be selected.

For details, see the instructions for each menu item (pages 44 to 45).

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- The default setting for each menu item is underlined in the explanations below.
- Changes to each setting are saved and remain in effect even after you turn off or reset the console.

#### **Clock Adjustment**

You can set the date and time. Use the directional buttons to set "Year", "Month", "Day", "Hour", "Minute" and "Second". The setting goes into effect when you press the  $\bigotimes$  button.

#### **Optional settings**

If you press the O button at the "Clock Adjustment" screen, you can set options such as "Date Format" or "Time Format". Use the directional buttons and the O button to make each setting.

Time	Sets the system clock to either	
Format	12-hour or 24-hour clock display	
Date Format	Sets the display order of year, month and day	
Time Zone	Sets the time zone	
Daylight	Sets Standard or Daylight	
Savings	Savings (Summer Time).	
Time	Normally select "Standard".	

#### Screen Size

You can set the display mode for the TV.

4:3	
Full*	
<u>16:9</u>	

\* "Full" display mode is compatible with the System Configuration menu, Browser screen and audio CD screen.

## **Digital Out (Optical)**

You can set whether to output the signal through the DIGITAL OUT (OPTICAL) connector.

<u>On</u>	Select this option when you want to output signal through the DIGITAL OUT (OPTICAL) connector.
Off	Select this option when you do not want to output signal through the DIGITAL OUT (OPTICAL) connector.

#### **Remote Control**

You can set this option when using the DVD Remote Control (for PlayStation<sub>TM</sub>2) (sold separately).

Gameplay Function On	Select this option when operating PlayStation <sub>TM</sub> 2 or PlayStation <sub>TM</sub> format software with the DVD Remote Control.	
Gameplay Function Off	Select this option when not operating PlayStation <sub>TM</sub> 2 or PlayStation <sub>TM</sub> format software with the DVD Remote Control.	

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- The following limitations apply when the DVD Remote Control is set to "Gameplay Function On":
  - Depending on the software, some remote control buttons may not work properly.
  - The buttons of the DVD Remote Control will not work when two or more buttons are pressed at the same time.
  - Some software titles may stop operating properly when a controller is removed from controller port 1. If this happens, set to "Gameplay Function Off".

#### Language

You can use this option to select the language displayed on the main menu, Browser screen, System Configuration menu, and Version Information screen.

English	Displays messages in English		
French	Displays messages in French		
Spanish	Displays messages in Spanish		
German	Displays messages in German		
Italian	Displays messages in Italian		
Dutch	Displays messages in Dutch		
Portuguese	Displays messages in Portuguese		

# Navigating through TV Home Menu (XMB™)

The TV Home Menu/XMB<sup>TM</sup> (XrossMediaBar) provides quick access to programme listings, input sources, the settings menu of your TV and more.

**1** Press **HOME** to display the XMB<sup>TM</sup>.



- **2** Press  $\Leftrightarrow / \Rightarrow$  to select a category.

Media category icon		Description	
	Settings	Contains all of the necessary configurations to customise your TV settings. (page 47).	
0	Photo	You can enjoy photo content via USB devices or the network, including Internet content services. (page 24, 30).	
Л	Music	You can enjoy music content via USB devices or the network, including Internet content services. (page 24, 30).	
Ħ	Video	You can enjoy video content via USB devices or the network, including Internet content services. (page 24, 30).	
D.	Digital	You can select digital channel, and the Digital Electronic Programme Guide (EPG) (page 19).	
A	Analogue	You can select analogue channel.	
Ð	External Inputs	You can select equipment connected to the TV.	
	Network	You can enjoy "Internet Video" (page 29).	

- **3** Press  $\Phi/\Phi$  to select an item, then press  $\oplus$ .
- **4** Follow the instructions on the screen.
- **5** Press **HOME** to exit.

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- The options you can adjust vary depending on the situation.
- Unavailable options are greyed out or not displayed.
- "Photo", "Music" and "Video" are not supported with the USB connector on the front of PlayStation<sub>TM</sub>2.

# TV Settings Menu

?

## Product Support

i-Manual	Displays the on-screen instruction manual.
i-ivialiual	
	<ul> <li>Some functions can be started directly from the i-Manual. Press          <ul> <li>to start the function when "Use this function" is displayed at the bottom of the screen.</li> </ul> </li> </ul>
System Update	Updates the TV software automatically through your existing antenna (aerial)/ cable/Internet (when available). To always keep the software updated to the newest version, it is recommended to have this option set to "On".
	<ul><li>The software updates when the TV is in standby mode.</li><li>If performing an update, your TV may take up to several minutes to turn on.</li></ul>
System Information	Displays the manufacturer, brand name, model number, serial number, software version, and signal condition. The signal condition is for the currently viewed channel. As the signal condition changes, the level indicator on the screen rises or falls.
	<ul><li>Image: Provide the signal condition is unavailable for analogue channels and external inputs.</li></ul>

# System Settings

Scene Select	Optimises picture and sound quality by selecting the following options.			
	<ul> <li>When you set "Theatre Mode" to "On", "Scene Select" is automatically set to "Cinema".</li> </ul>			
	Cinema	Optimises picture scenes and sound just like those in a theatre.		
	Sports	Presents realistic pictures and sound just like those in a stadium.		
	Photo	Reproduces the texture and colour of a printed photo.		
		• "Photo" is available only when the input signal is 1080i/p.		
	Music	Lets you experience dynamic and clear sound just like at a concert.		
	Game	Broadens your game-playing experience with superb picture and sound quality.		
	Graphics	Eases prolonged monitor viewing with clearer detailed pictures.		
	General	Optimised to view general content.		
	Auto	Automatically optimises picture and sound quality according to the input source.		

Eco	Changes the setting	s related to power consumption.	
200	Power Saving	Reduces power consumption by adjusting the TV backlight.	
		When you select "Picture Off", only sound remains.	
	Idle TV Standby	Turns the TV off after it has been idle for the preset length of time.	
	PC Power Management	Turns the TV to standby mode when there is no signal from the PC input source for 30 seconds.	
Clock/Timers	Clock Set	Set the current time. When the TV has received the clock from the broadcast signal, the clock cannot be manually set.	
	Time Zone	Select the time zone you are in.	
	Auto DST	Switches between summer and winter time according to the calendar.	
	On Timer	Turns on the TV from standby mode at a time you set, and tuned to a channel or input of your preference.	
	Sleep Timer	Turns the TV to standby mode after a preset length of time.	
		Ϋ́	
		• When you turn off the TV and turn it on again, "Sleep Timer" is reset to "Off".	
General Set-up	USB Auto Start	Select "Slideshow" or "Thumbnail View" to start photo playback automatically.	
		• Be sure to turn on the TV before connecting a USB device	
		to the TV.	
		• This option is not supported with the USB connector on the front of PlayStation <sub>TM</sub> 2.	
	Home Menu Cursor Movement	Select the cursor speed for navigating through menu options from "Fast Scroll", "Slow Scroll" or "No Auto Repeat".	
	Recommendation	Searches for and shows programmes you may like under "Recommendations" in "Favourites".	
	Quick Start	Turns the TV on faster than usual by pressing the power button on the remote. Up to three time periods can be set. When you set "Smart Mode" to "On", the TV turns on at the time of day when you watch TV the most.	
		• If "Quick Start" is set, power consumption may rise.	
	Factory Settings	Resets all settings to factory settings. After completing this process, the initial set-up screen is displayed.	
Language	Sets the language di	splayed on the menu screens.	
Radio Display		Displays the screen wallpaper for a radio broadcast. You can select a pattern or "Photo Slideshow" for a wallpaper.	
Parental Lock         Sets an age restriction to viewing, or blocks spec		on to viewing, or blocks specific channels. To view any rated cify or any blocked channel, enter the correct PIN code.	
	PIN Code	Enter your PIN code to activate "Parental Lock". You can also change the PIN code.	
		• PIN code 9999 is always accepted.	
DivX(R) VOD		DD Registration Code" to register your TV for playback of ct "DivX(R) VOD Deregistration Code" to delete the	
	• A new registration	code will be displayed in "DivX(R) VOD Registration Code" stration via "DivX(R) VOD Deregistration Code".	

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.

# Display

#### Picture

Target Inputs	Select "Current" to make custom picture settings to the current input. Select "Common" to apply common picture settings to all input.				
Picture Mode	-	Sets a picture mode. The options that can be selected differ depending on the scene select settings.			
	Vivid	Enhances picture contrast and sharpness.			
	Standard	For standard pictures. Recommended for basic home use.			
	Custom	Stores your preferred settings.			
	Cinema	For film-based content. Suitable in a theatre-like environment.			
	Sports	Optimises picture quality for viewing sports.			
	Game-Standard	For standard picture suitable for games.			
	Game-Original	Adjusts the game picture according to your preference.			
	Graphics	Optimises picture quality for viewing graphics.			
	Photo-Vivid	Enhances contrast, sharpness, and colou of photographs.			
	Photo-Standard	<b>ard</b> For standard viewing of photographs.			
	Photo-Original	Enhances the visual warmth of photographs.			
	Photo-Custom	Adjusts the detailed settings for viewing photographs and stores your preferred settings.			
Reset		Resets all the "Picture" settings to the factory settings excluding "Target Inputs", "Picture Mode" and "Advanced 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 and red tones.				
	المستعن • "Hue" is available depending on colour system.				
Colour	Adjusts the whiten				
Temperature	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".			

Sharpness	Sharpens or soften	s the picture.	
Noise Reduction	Reduces the noise level of pictures (snowy pictures).		
	<ul> <li>"Noise Reduction" is available when "Intelligent Picture" is set to "Off".</li> <li>Reduces picture noise in MPEG-compressed videos.</li> </ul>		
MPEG Noise Reduction			
	•	picture movement when playing DVD or on film, reducing picture blur and	
	Auto	Provides the original film-based content as is.	
	Off		
	• If the image contains irregular signals or too much noise, "Film Mode" is automatically turned off even if "Auto" is selected.		
Settings		'Picture'' settings in more detail. These ilable when "Picture Mode" is set to -Vivid").	
	Reset	Resets all the advanced settings to the factory settings.	
	Black Corrector	Enhances black areas of the picture for stronger contrast.	
	Adv. Contrast Enhancer	Adjusts "Backlight" and "Contrast" by judging the brightness of the screen. This setting is effective for dark images and scenes.	
	Gamma	Adjusts the balance between bright and dark areas of the picture.	
	Auto Light Limiter	Reduces glare such as in scenes where the entire screen is white.	
	Clear White	Emphasises white colours.	
	Live Colour	Makes colours more vivid.	
	White Balance	Adjusts the temperature of each colour.	

Screen (for input other than a PC)	Target Inputs		" to make custom picture settings to the Select "Common" to apply common picture nput.	
	Screen Format	-	e the Screen Format manually" (page 18).	
	Auto Format	signal. If you w	changes "Screen Format" to match the input vant to use the setting that you specified in t", select "Off".	
	4:3 Default	Sets the default screen 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".	
	Auto Display Area	Automatically display area.	adjusts the picture to the most appropriate	
	Display Area	Adjusts the picture display area.		
		+1	Displays pictures in their original size.	
		Normal	Displays pictures in their recommended size.	
		-1	Enlarges the picture so that the edges are outside the visible display area.	
	Screen Position	Adjusts the vertical position and horizontal position of the picture.		
	Vertical Size	Adjusts the vertical size of the picture.		
(for PC input)	Auto Adjustment	<ul> <li>picture in PC n</li> <li><sup>°</sup> Auto Adjust</li> <li>signals. In successful and signals.</li> </ul>	adjusts the display position, and phase of the node. ment" may not work well with certain input ch cases, manually adjust "Phase", "Pitch", Shift", and "Vertical Shift".	
	Reset		creen settings to factory settings.	
	Phase		ase when the screen flickers.	
	Pitch	с I	ch when the picture has unwanted vertical	
	Horizontal Shift	Adjusts the hor	rizontal position of the picture.	
	Vertical Shift	Adjusts the ver	tical position of the picture.	
	Screen Format	Sets "Screen Fo	ormat" for displaying pictures from your PC.	
		Normal	Displays the picture in its original size.	
		Full 1	Enlarges the picture to fill the display area, while maintaining its original proportion.	
		Full 2	Enlarges the picture to fill the display area.	
Video Input Settings	Colour System	Select the color the input source	ur system according to the input signal from e.	

Sound			
Sound	Target Inputs		' to make custom picture settings to the elect "Common" to apply common picture put.
	Sound Mode	suited for video	de. "Sound Mode" includes options best and photographs, respectively. The options cted differ depending on the scene select
		Dynamic	Enhances the treble and bass sound to make sound clear.
		Standard	Provides natural sound.
		Clear Voice	Makes voice clearer by lowering background sound.
	Reset		Sound" settings to the factory settings et Inputs", and "Sound Mode".
	Treble	Adjusts higher-p	pitched sounds.
	Bass	Adjusts lower-p	itched sounds.
	Balance	Emphasises sour	nd from the left or right speaker.
	Surround	on the genre of video game.	elect the suitable surround effects depending TV programme (movie, sport, music, etc.) or t can be selected differ depending on the settings.
		S-FORCE Fro	<b>nt</b> Virtually reproduces realistic sound.
		Sports	Delivers surround effects that make you feel like you are watching a live sports event.
		Music	Delivers surround effects that make you feel like you are in a music hall.
		Cinema	Delivers surround effects just like the high-grade audio systems found in movie theatres.
		Game	For virtual game world experience.
		Off	Turns off "Surround".
			ng "Surround", be sure to set options in ' according to your target programme type to d effects.
	Sound Enhance	er Reproduces clea sounds.	ar sound by complementing high-frequency
	Auto Volume		evel constant across all programmes and verts tend to be louder than programmes).
	Volume Offset	Adjusts the volu	me level of the current input relative to other arget Inputs" is set to "Current".

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.	
	(L)		
	• For other equipment connected to the TV, set "Dual Sound" to "Stereo", "A", or "B".		
Speakers	TV Speakers	Turns on and outputs the TV's sound from the TV speakers.	
	Audio System	Turns off the TV speakers and outputs the TV's sound from external audio equipment connected to the audio output jacks (sockets) on the TV.	
	(L)		
		nnel audio, select external audio system and connect optical out mpatible with Dolby Digital.	
	• "Audio System" 1	nust be selected to listen to 5.1 multi-channel audio.	
Headphone Settings	Headphone Speaker Link	Switches the TV's internal speakers on/off when you connect headphones to the TV.	
Audio Out	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.	
	Variable	When using an external audio system, volume output from audio out can be controlled using the TV's remote.	
Key Tone	Select "On" to play sounds as you navigate with the remote.		
	• When you select	"Off", the TV start-up sound is also turned off.	
Optical Out	•	om the <b>DIGITAL AUDIO OUT (OPTICAL)</b> . Select "Auto" for ble with Dolby Digital, or "PCM" for equipment not olby Digital.	

# Analogue Set-up

Programme List Display	Select "Off" to hide the list of analogue channels from the XMB (XrossMediaBar).
1 Digit Direct	Select "On" for changing analogue channels with one preset number button $(0-9)$ on the remote.
	<ul><li>You cannot select channel numbers 10 and above by entering two digits on the remote.</li></ul>
Auto Tuning	Automatically tunes in all available analogue channels, and stores their settings in the TV. You can run "Auto Tuning" after moving to a new residence, changing service providers, or to search for newly launched channels.
Programme Sorting	Changes the order of analogue channels stored in the TV.

Programme Labels	Assigns	a channel name of your choice.		
	1 Pre	ss $\partial/\partial$ to select the channel you want to name, then press $\oplus$ .		
		Press ↔/↔ to select the desired letter or number ("_" for a blank space), then press ↔.		
	lf y	ou enter a wrong character		
		ss $\Leftrightarrow /\Rightarrow$ to select the wrong character. Then, press $\diamond / \Rightarrow$ to select the correct racter.		
	3 Rep	beat step 2 until you finish entering the name.		
	4 Pre	ss $\oplus$ to exit the labeling procedure.		
Intelligent Picture	On with Indicator Automatically reduces the picture noise. The signal level bar is displayed when the channel is changed or the display is changed from an input screen to a TV programme.			
	On	Automatically reduces the picture noise.		
	Off	Turns off the "Intelligent Picture" feature.		
Manual Programme	To prese	t a channel, press <b>PROG +/–</b> to select the channel number.		
Preset	(D)			
	• You ca	nnot select a channel number that is set to "Skip" (page 54).		
	Progra	mme Select a channel number to tune manually.		
	System	Select a TV broadcast system.		
	Channe	Select "S" for cable channels or "C" for terrestrial channels.		
	AFT	Allows you to fine-tune the selected channel manually if you feel that a slight tuning adjustment may improve picture quality.		
		When "On" is selected, fine tuning adjustments are made automatically.		
	Audio I	<b>Filter</b> Improves the sound of individual channels when distortion occurs in mono broadcasts.		
		• You cannot receive stereo or dual sound when "Low" or "High" is selected.		
	Skip	Skips unused analogue channels when you press <b>PROG +/–</b> to select channels. To select channels you have programmed to skip, use the corresponding number buttons.		
	Signal	Level Displays the signal level for current programme.		
and the second se				

# Digital Set-up

Subtitle Set-up Primary Preferred Language Secondary Preferred Language	Subtitle Setting	Displays visual aids for the hearing impaired with subtitles (if available) by setting to "For Hard Of Hearing".
	Preferred	Select the most preferred subtitle language.
	Preferred	Select the secondary preferred subtitle language.
Audio Set-up	Audio Type	Switches to broadcast for the hearing impaired when you select "For Hard Of Hearing".

	Primary Preferred Language	Select the most preferred language. Some digital channels may broadcast several audio languages for a programme.
	Secondary Preferred Language	Select the secondary preferred language.
	Audio Description	Provides audio description (narration) of visual information, when such information is available.
	Mixing Level	Adjusts the TV main audio and "Audio Description" output levels.
	Dynamic Range	Compensates for differences in the audio level between different channels (only for Dolby Digital audio).
		<ul><li>The effect may not function or may vary depending on the</li></ul>
		programme regardless of the "Dynamic Range" setting.
	MPEG Audio Level	Adjusts the MPEG audio sound level.
Digital Auto Tuning	Automatically tunes in all available digital channels and stores their settings in the TV. You can run "Digital Auto Tuning" after moving to a new residence, changing service providers, or to search for newly launched channels.	
Auto Tuning Range	Select the tuning ran	nge to search for available channels.
	Normal	Searches within your region/country.
	Full	Searches regardless of region/country.
Digital Programme Sorting	Removes unwanted channels, or changes the order of digital channels stored in the TV.	
Digital Manual Tuning	Tunes digital channels manually when "Digital Auto Tuning" is set to "Antenna".	
Digital Auto Service Update	Detects and stores new digital services as they become available.	
Service Replacement	Automatically changes the channel when a broadcaster changes transmission of the viewing programme to a different channel.	
CA Module Set-up	Provides access to a pay TV service after you obtain a Conditional Access Module (CAM) and a view card. See the location of the 🗂 (PCMCIA) jack (socket) (page 22).	



External Inputs

**AV Preset** 

Assigns an icon or name to external equipment. Select "Auto" to display icons or names only when the equipment is connected, or "Always" to display regardless of connection status.

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 $\bullet$  For a SCART connection and PlayStation\_{\mbox{\tiny TM}}2 mode, skip cannot be set.

• For a PC connection, icon and label cannot be set.

HDMI	Set-up
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Communicates with equipment compatible with the "Control for HDMI" function.

• "Control for HDMI" settings must be made on the connected equipment.

	e sectings must se	inade on the connected equipment.	
Control for HDMI	Links the operations of the TV and the connected equipment. For specific Sony equipment compatible with "Control for HDMI", this setting is applied automatically to the connected equipment when "On" is set.		
Auto Devices Off	Turns off the conne	ected equipment when you turn off the TV.	
Auto TV On	Turns on the TV when you turn on or perform playback, etc., on the connected equipment.		
HDMI Device List	t Displays a list of connected equipment that is compatible with Control for HDMI.		
Device Control Keys	Select button functions of the TV's remote to operate the connected equipment.		
	Normal	For basic operations, such as navigation buttons (up, down, left or right, etc).	
	Tuning Keys	For basic operations and operation of channel-related buttons, such as PROG +/ – or 0 - 9, etc.Useful when you control a tuner or set-top box, etc; via the remote.	
	Menu Keys	For basic operations and operation of the HOME/OPTIONS buttons. Useful when you select menus of a BD player, etc; via the remote.	
	Tuning and Menu Keys	For basic operations and operation of channel-related buttons and HOME/ OPTIONS buttons.	

#### (D)

• 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.



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• For PlayStation<sub>TM</sub>2, other settings are necessary.

Network Set-up	Select "Custom" aft	Select "Custom" after selecting "Wired Set-up".	
	IP Address Setting	Select "Manual" to set the IP address manually, or "Auto" to set it automatically.	
	IP Address/ Subnet Mask/ Default Gateway/ Primary DNS/ Secondary DNS	Configure each option when "Manual" is selected in "IP Address Setting".	
	MAC Address	Displays the MAC address, which is a fixed, globally unique identifier of the network device.	
	Proxy Server	Configure the proxy server name and port number if you use a proxy server.	
	Network (SSID)	Select SSID (network name) of the target router.	
	Security	Select an appropriate security key.	

Refresh Internet Content	For reconnection to the Internet to receive available Internet content services.	
Server Display Settings	Displays the connected server list. You can select the server to display in the Home Menu.	
Server Diagnostics	Diagnoses whether the TV can connect to each server on the home network.	
Renderer	Renderer Function	Enables the TV to playback photo/music/video files located on other control devices, such as a digital still camera or mobile phone, using those control devices via the network.
	Renderer Access Control	Select "On" to allow access from a specified control device.
	Renderer Set-up	"Automatic Access Permission" permits access to the TV automatically when a control device accesses the TV for the first time. When "Smart Select" is set to "On", the TV can respond to infrared signals sent from control devices. You can set the name of the TV shown on the control device in "Renderer Name".

# Specifications

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 system	Analogue: PAL, PAL60 (only video input), SECAM, NTSC3.58 (only video input), NTSC4.43 (only video input) video input) Digital: MPEG-2 MP@ML/HL, H.264/MPEG-4 AVC MP/HP@L4	
Channel coverage	Analogue: VHF: E2–E12/UHF: E21–E69/CATV: S1–S20/HYPER: S21–S41 D/K: R1–R12, R21–R69/L: F2–F10, B–Q, F21–F69/I: UHF B21–B69 Digital: VHF/UHF	
Sound output	5 W + 5 W	
Input/Output jacks		
Antenna (aerial) cable	75 ohm external terminal for VHF/UHF	
→AV1	21-pin scart connector (CENELEC standard) including audio/video input, RGB input and TV audio/video output.	
- COMPONENT IN	Supported formats: 1080p, 1080i, 720p, 576p, 576i, 480p, 480i	
-OCOMPONENT IN	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, Dolby Digital Analogue audio input (minijack) (HDMI IN 4 only) PC Input (page 60)	
-> AV2	Video input (phono jack)	
-DAV2	Audio input (phono jacks)	
⊖+ DIGITAL AUDIO OUT (OPTICAL)	Digital optical jack (Two channel linear PCM, Dolby Digital)	
G+ (VAR/FIX)	Audio output (phono jacks)	
→ PC IN	PC Input (Mini D-sub 15-pin) (page 60) - PC audio input (minijack)	
Ý	USB port	
0	Headphones jack	
<i>□</i> 1	CAM (Conditional Access Module) slot	
뭅LAN	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.) * For LAN connections, use a Category 7 10BASE-T/100BASE-TX cable (not supplied).	

Model name KDL-		22PX300		
Power and o	Power and others			
Power requirements		220 V – 240 V AC, 50 Hz		
Screen size (measured diagonally)		Approx. 54.8 cm/22 inches		
Display resolu	ition	1,366 dots (horizontal) × 768 lines (vertical)		
Power consumption	in "Home"/ "Standard" mode	39.0 W		
	in "Shop"/ "Vivid" mode	90.0 W		
Standby power consumption* <sup>1</sup>		0.9 W (13 W when "Quick Start" is set to "On")		
Average annual energy consumption* <sup>2</sup>		57 kWh		
Laser		Type: Semiconductor, continuous DVD Wavelength: 645 - 660 nm Power: Max 6 mW CD Wavelength: 770 - 800 nm Power: Max 7 mW		
Dimensions (	Dimensions (Approx.) $(w \times h \times d)$			
with Table-Top Stand		57.5 × 42.9 × 25.3 cm		
Mass (Approx.)				
with Table-Top Stand		9.8 kg		
Supplied accessories		See "To check the accessories" (page 5).		
Operating temperature		5 °C to 35 °C		

\*<sup>1</sup> Specified standby power is reached after the TV finishes necessary internal processes.
\*<sup>2</sup> 4 hours a days and 365 days a year

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• To save power consumption

- when you reduce backlight setting (the brightness of the screen), the power consumption reduce.
- the "Eco" settings (e.g. "Power Saving", "Idle TV Standby") help you to reduce the power consumption and thus save money by reducing electricity bills.

Design and specifications are subject to change without notice.

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

\* 1080p timing when applied to the HDMI input will be treated as a video timing and not a PC timing. This will affect the "Video Input Settings" and "Screen" settings. To view PC contents, set "Screen Format" to "Wide".

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• This TV's PC input does not support Sync on Green or Composite Sync.

• This TV's PC input does not support interlaced signals.

## **Optional accessories**

When purchasing optional accessories, be sure to purchase those that are compatible with this model of the PlayStation<sub>TM</sub>2 console.

#### About the DVD remote control (for PlayStation<sub>m2</sub>)

When purchasing a new DVD remote control, choose model number SCPH-10420 E which does not include the IR receiver unit (for PlayStation<sub>TM</sub>2).

#### Accessories not compatible with this model

The following accessories for the PlayStation<sub>TM</sub> console and the PlayStation<sub>TM</sub>2 console are not compatible with this model of the PlayStation<sub>TM</sub>2 console.

Product name
Network Adaptor (Ethernet) (for PlayStation <sub>TM</sub> 2)
Multitap
Vertical stand (for PlayStation <sub>TM</sub> 2)
Horizontal stand (for PlayStation <sub>TM</sub> 2)
Products that use the <b>i</b> <sup>w</sup> S400 i.LINK connector
Component AV Cable
Component AV Cable (for PlayStation <sup>™</sup> 2)
Euro-AV Cable
RFU Adaptor

## Troubleshooting

Check whether the  $\bigcirc$  (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 three second break. For example, the indicator may flash three times, go off for three seconds, then flash again three times.
- 2 Press () on the TV to turn it off, disconnect the AC power cord (mains lead), and inform your dealer or Sony service centre of how the indicator flashes (number of flashes).

#### When the (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.

ndition	Explanation/Solution
cture	
No information from connected equipment.	<ul> <li>Press - to display the list of inputs, then select the desired input.</li> <li>Check the connection between the equipment and the TV.</li> </ul>
Ghosting or double images appear.	<ul><li>Check the antenna (aerial)/cable connection.</li><li>Check the antenna (aerial) location and direction.</li></ul>
Only noise appears on the screen.	<ul> <li>Check if the antenna (aerial) is broken or bent.</li> <li>Check if the antenna (aerial) has reached the end of its serviceable life (three to five years for normal use, one to two years at the seaside location).</li> </ul>
There is picture or sound noise when viewing a TV programme.	• Adjust "AFT" (Automatic Fine Tuning) to obtain better picture reception (page 54).
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 pictures are distorted.	• Change the current setting of "Film Mode" to other settings (page 50).
No picture colour.	• Select "Reset" in "Picture" (page 49).
No picture colour from equipment connected to the 	<ul> <li>Check the connection of the — COMPONENT IN jacks (sockets) and check if connectors are fully plugged in.</li> </ul>
No picture from the connected equipment.	<ul> <li>Turn the connected equipment on.</li> <li>Check the cable connection.</li> <li>Press  to display the list of inputs, then select the desired input.</li> <li>Correctly insert the memory card or other storage device, such as digita still camera.</li> <li>Make sure that the memory card (in equipment such as a digital still camera) has been properly formatted.</li> <li>Operation is not guaranteed for all USB devices. Also, operations differ depending on the features of the USB device or the video files being played.</li> </ul>
You cannot select connected equipment in the Home Menu.	<ul> <li>Check the cable connection.</li> <li>Set the servers to be displayed in the Home Menu (page 31).</li> </ul>

Condition	Explanation/Solution
The size of the video image from the built-in PlayStation <sup>™</sup> 2 does not match the TV screen.	<ul> <li>Check the screen format settings on the TV.</li> <li>Adjust the image size of the DVD to match the TV screen. Start a DVD, stop playback, and then select "Setup", and select "TV Type" in "Screen Setup" in the control panel of the PlayStation<sub>TM</sub>2.</li> <li>With some DVDs, image size cannot be changed.</li> </ul>
Sound	
There is no sound.	<ul> <li>Press → +/- or <sup>®</sup>X (Muting).</li> <li>Check if the "Speakers" is set to "TV Speakers" (page 53).</li> <li>When using HDMI input with Super Audio CD or DVD-Audio, DIGITAL AUDIO OUT (OPTICAL) may not output audio signals.</li> <li>When you select an analogue (RF) channel and pictures are displayed correctly, refer to "System" in "Manual Programme Preset" (page 54) and change the TV broadcast system.</li> </ul>
There is no sound. (For the built-in PlayStation <sup>™</sup> 2.)	<ul> <li>Press → +/- or <sup>®</sup>X (Muting).</li> <li>If the PlayStation<sub>TM</sub>2 is connected to an audio device, check the settings on the connected device. For details, refer to the instruction manual supplied with the device.</li> <li>When playing PlayStation<sub>TM</sub>2 format software titles that do not support audio output from the DIGITAL OUT (OPTICAL) connector, no sound will be produced even if you connect using an optical digital cable for audio.</li> </ul>
quality from the digital audio	<ul> <li>If the PlayStation<sub>TM</sub>2 is connected to a digital audio device, check if the "Digital Out (Optical)" in the System Configuration menu is set to "On".</li> <li>When playing DTS audio, set "DTS" to "On" in the control panel of the PlayStation<sub>TM</sub>2 (select "Setup", and then select "Audio Digital Out" in "Audio Setup"). If the connected device does not have a built-in DTS decoder, DTS audio cannot be played.</li> </ul>
The surround effect is not produced when playing a DVD with a Dolby Digital audio track. (For the built-in PlayStation <sub>TM</sub> 2.)	<ul> <li>Check that the PlayStation<sub>TM</sub>2 is connected to an audio device with a built-in Dolby Digital decoder using an optical digital cable.</li> <li>To play Dolby Digital audio, set "Dolby Digital" to "On" in the control panel of the PlayStation<sub>TM</sub>2 (select "Setup", and then select "Audio Digital Out" in "Audio Setup").</li> </ul>
The audio output from a DVD is low.	• Select "Off" in "Digital Out (Optical)" (page 45), and change the output volume from the DVD to "+1" or "+2". For details, see the User's Guide on the Internet (page 32).
Channels	
You cannot select the desired channel.	• Switch between digital and analogue mode, and select the desired channel.
Some channels are blank.	<ul> <li>The channel is for scrambled/subscription service only. Subscribe to a pay TV service.</li> <li>The channel is used only for data (no picture or sound).</li> <li>Contact the broadcaster for transmission details.</li> </ul>
You cannot view digital channels.	<ul><li> Ask a local installer if digital transmissions are provided in your area.</li><li> Upgrade to a higher gain antenna (aerial).</li></ul>
Network Connection	
Connection fails.	<ul> <li>Check Connections</li> <li>By verifying that you are using a straight cable for the LAN cable.</li> <li>By examining if the cable is connected firmly.</li> <li>By examining the connection between the TV and router.</li> <li>Check Settings</li> <li>By changing the IP Address for the DNS server (page 30).</li> <li>By contacting your Internet service provider.</li> <li>By specifying the IP Address of the router if you do not know the DNS of your Internet service provider.</li> </ul>

ndition	Explanation/Solution
No server is found, no list is retrieved, and playback fails.	• Once server settings are changed, turn the TV off and on by pressing ( on the TV.
	• Run "Server Diagnostics" (page 31).
	When using a PC as the server
	<ul> <li>Check if the PC is turned on. Do not turn off the PC while accessing it</li> <li>If the PC has security software installed, allow connections from atternal daviage. For dataile, rafer to the manual supplied with your</li> </ul>
	external devices. For details, refer to the manual supplied with your security software.
	<ul> <li>Stop the server application and restart it if the server is experiencing instability. If the server remains instable, restart the PC.</li> <li>Reduce the number of applications running on the PC; the server may be applied on the PC.</li> </ul>
	<ul><li>Reduce the number of applications running on the FC, the server may be overloaded.</li><li>Reduce the amount of content; the server may be overloaded.</li></ul>
Changes on the server are not made correctly.	• Sometimes changes are not applied to the TV display even though content has been added and/or deleted on the server. Go back up one level and try opening the folder or server again.
NT 1 / 1 / 1	
No photo, music, or video files	č –
are displayed.	<ul> <li>Check that the connected device supports DLNA.</li> <li>Operations are not guaranteed for all servers. Also, operations differences of the servers.</li> </ul>
	• 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 by examining that the LAN cable or AC
	power cord (mains lead) of the server has been connected
	properly.
	Check Settings
	• By examining that the connected device is registered under "Server Display Settings" (page 31).
	• By checking if that the server is correctly configured.
	• By examining that the selected device is connected to the network and
	can be accessed.
	• If "IP Address Settings" in "Network Set-up" (page 56) is set to "Auto
	<ul><li>it may take some time to recognise devices if there is no DHCP serve</li><li>When playing content from your PC, adjust its firewall settings.</li></ul>
	• Check connections by examining that the LAN cable or AC power con (moins load) of the device has been connected properly.
a renderer-compatible device.	<ul> <li>(mains lead) of the device has been connected properly.</li> <li>Check connections or settings of the wireless LAN (page 28).</li> <li>Check Settings</li> </ul>
	• By confirming that the "Renderer Function" is activated (page 57).
	<ul> <li>By confirming that the connected device is registered under "Rendere Access Control" (page 57).</li> </ul>
Wireless LAN connection	• Check the installation location for the TV and wireless LAN router.
fails or radio reception conditions are bad.	<ul> <li>Signal condition may be affected for the following reasons.</li> <li>Other wireless devices, microwaves, fluorescent lights, etc., are place nearby.</li> </ul>
	<ul> <li>There are floors or walls between the wireless LAN router and TV.</li> <li>When using a USB Wireless LAN Adapter, move it to avoid signal</li> </ul>
	interference by using an extension cable with base unit (optional
	accessory).
A connection to the network	• Check that the network settings are correct (page 42). Refer to the
of the built-in PlayStation <sub>TM</sub> 2 cannot be established.	information from your broadband Internet service provider and the instructions supplied with the software in use, and adjust the settings accordingly.
	• Check that the Ethernet cable is properly connected (page 42).
	<ul> <li>Check that you are using the correct type of Ethernet cable (cross or straight cable). For details, refer to the instruction manual supplied wi</li> </ul>
	the network device.
	• Check that the network device is properly connected. Also check that t
	settings of the network device in use are correct. For details, refer to the
	instruction manual supplied with the network device.

#### Explanation/Solution

Only a few icons appear under • This is normal when internet connection is not available. the "Network" in the Home Menu.

nalog Controller (DUALSHO	OCK®2)
The controller does not function correctly.	<ul> <li>If a software title is compatible only with the Analog Controller (DUALSHOCK®2), it will not work properly with the Analog Controller (DUALSHOCK®). Use a controller that is appropriate for the software title. For details, refer to the instruction manual supplied with the software.</li> <li>Some software specifies a specific controller port that must be used. Check that the controller is connected to the correct port. For details, refer to the instruction manual supplied with the software.</li> <li>There may be a problem with the controller in use. Try using another controller that is compatible with the built-in PlayStation<sub>TM</sub>2.</li> </ul>
The left and right analog sticks of the controller do not operate properly.	• When these symptoms occur, rotate the left and right analog sticks of the Analog Controller (DUALSHOCK®2) in a large circle to adjust the sticks to an optimal range of operation. Be sure to rotate in a circle; do not twist the sticks.
peration (PlayStation <sub>TM</sub> 2)	
Check the following items first;	<ul> <li>Check that the PlayStation<sub>TM</sub>2 is turned on. Press PlayStation 2 POWER ON on the remote to turn on the PlayStation<sub>TM</sub>2 (the I/C) indicator on the front of the PlayStation<sub>TM</sub>2 will turn green).</li> <li>Check that the AC power cord (mains lead) of the TV is fully inserted into the electrical outlet (page 6).</li> <li>Check that the cables are correctly and securely connected.</li> </ul>
A disc cannot be played.	<ul> <li>Check that the disc is of a type that can be played on the PlayStation<sub>TM</sub>2 (page 40).</li> <li>Check that the disc is clean and in good condition. If the disc is dirty, wipe it gently with a soft cloth.</li> <li>Some PlayStation<sub>TM</sub> format software may not perform properly. For more information, refer to the URL in the Operating Instructions (paper manual).</li> <li>If the disc has a label, place the disc in the PlayStation<sub>TM</sub>2 with the label side facing up (page 35).</li> <li>If a DVD-R or DVD-RW disc is not finalised, it cannot be played.</li> <li>Copy-protected video from a digital broadcast recorded on Content Protection for Recordable Media (CPRM) compatible DVD-RW discs or on CPRM compatible DVD-R discs cannot be played.</li> <li>Check that the region code of the DVD is correct for the PlayStation<sub>TM</sub>2 in use (page 40). Also check that the broadcast standard is correct.</li> <li>The parental control feature may be set on the disc. Follow the on-screen instructions and temporarily raise the parental control restriction level.</li> </ul>
The PlayStation <sup>™</sup> 2 does not recognise the memory card. Data cannot be saved or copied to the memory card.	<ul> <li>Check that the memory card is compatible with the software in use (page 36). To save or load PlayStation<sub>TM</sub>2 format software, use a memory card (8MB) (for PlayStation<sub>TM</sub>2) (SCPH-10020 E). To save or load PlayStation<sub>TM</sub> format software, use a memory card (SCPH-1020 E).</li> <li>You cannot copy saved data from PlayStation<sub>TM</sub>2 format software to a memory card (SCPH-1020 E).</li> <li>Check that the memory card is securely inserted into the memory card slot on the front of the PlayStation<sub>TM</sub>2 (page 36).</li> <li>There may be a problem with the memory card in use. If you have another memory card that is compatible with the PlayStation<sub>TM</sub>2, try switching memory cards.</li> </ul>

ndition	Explanation/Solution
Data saved on a memory card is corrupted.	<ul> <li>While saving, loading, copying or deleting data, do not attempt any of the following. Doing so may cause the data to become corrupted.</li> <li>-Do not remove the memory card or the controller.</li> <li>-Do not open the disc cover.</li> <li>-Do not reset the PlayStation<sub>TM</sub>2.</li> <li>-Do not turn off the PlayStation<sub>TM</sub>2.</li> </ul>
The PlayStation <sup>™</sup> 2 does not function properly.	• Static electricity and other similar occurrences may affect the PlayStation <sub>TM</sub> 2 operation. Turn off the PlayStation <sub>TM</sub> 2 and the TV, and unplug the TV from the electrical outlet. Then plug in and turn it on.
The $I/\bigcirc$ indicator flashes in red and the PlayStation <sub>TM</sub> 2 does not work.	• Do not use the PlayStation <sub>TM</sub> 2 until the flashing stops (page 32). Placin the TV in an extremely hot location or blocking vents of the PlayStation <sub>TM</sub> 2 raises the internal temperature of it, thereby interruptin proper operation.
You forgot your password.	<ul> <li>You can clear the password using the following procedure: <ol> <li>Insert a DVD without the parental control feature.</li> <li>In the control panel of the PlayStation<sub>TM</sub>2, select ■ (Stop) to stop playback, and then select ■ (Stop) again to clear resume play.</li> <li>Select "Setup", and then select "Parental Control" in "Custom Setup and then press the ⊗ button on the controller.</li> <li>Press the SELECT button on the controller, and then enter the number "7444" on the screen that is displayed. The registered password is cleared, and the screen for registering a new password displayed. Enter a new password.</li> </ol> </li> </ul>
The DVD does not function. Some DVD settings cannot be changed.	<ul> <li>The playback status or settings of some DVDs are preset intentionally the manufacturer. Because the PlayStation<sub>TM</sub>2 plays DVDs according to the settings on the disc, some functions may not be available even if you follow the procedures in this manual.</li> <li>Some settings cannot be changed during playback or resume play. In the control panel of the PlayStation<sub>TM</sub>2, select ■ (Stop) to stop playback, and then select ■ (Stop) again to clear resume play.</li> </ul>
eneral	
Poor picture on BRAVIA Internet Video.	• The quality of the video displayed on your TV depends on the quality the video provided by the video content provider as well as your connected bandwidth.
Small picture on BRAVIA Internet Video.	• Press �/⊕ to zoom in and out.
Certain Internet video programmes display a loss of detail, especially during fast- motion or dark scenes.	• Video quality and picture size vary and are dependent upon broadband speed and delivery by content providers.
Good picture quality but no sound on the Internet video content.	<ul> <li>Quality depends on content provided by the video content provider as well as your connected bandwidth.</li> <li>Due to the nature of Internet video, not all videos will contain sound.</li> </ul>
You do not see many videos in the Internet Video Guide.	• Press <b>OPTIONS</b> and select categories to view more content.
Distorted picture and/or sound.	<ul> <li>Keep the TV away from electrical noise sources such as cars, hair-drye or optional equipment.</li> <li>When installing optional equipment, leave some space between the equipment and the TV.</li> <li>Check the antenna (aerial)/cable connection.</li> <li>Keep the antenna (aerial)/cable TV cable away from other connecting cables.</li> </ul>
The TV turns off automatically.	<ul> <li>Check if the "Sleep Timer" is activated, or confirm the "Duration" setting of "On Timer" (page 48).</li> <li>Check if the "Idle TV Standby" in "Eco" is activated (page 48).</li> </ul>

ndition	Explanation/Solution
The TV turns on automatically.	• Check if the "On Timer" is activated (page 48).
Some input sources cannot be selected.	• Select "AV Preset" and confirm the "Always" setting for the input sources (page 55).
The remote does not function.	<ul> <li>Replace the batteries.</li> <li>Your TV may be in SYNC mode.</li> <li>Press SYNC MENU, select "TV Control" and then select "Home (Menu)" or "Options" to control the TV.</li> <li>Check the function buttons on the remote (page 13). If PS2 is selected in TV mode or TV is selected in PS2 mode, the remote will not function</li> </ul>
HDMI equipment does not appear on "HDMI Device Selection".	• Check that your equipment is compatible with Control for HDMI the value of "Control for HDMI" is "On".
You cannot select "Off" in "Control for HDMI".	• You cannot select "Off" for any audio system compatible with "Control for HDMI". If you want to change the audio output to the TV speaker, select "TV Speakers" in the "Speakers" menu (page 53).
The "Parental Lock" password of the TV setting menu has been forgotten.	• Enter 9999 for the PIN code. (PIN code 9999 is always accepted.)
Not all channels are tuned for cable.	• Check the support website for cable provide information. http://support.sony-europe.com/TV/DVBC/
The TV surrounds become warm.	• When the TV is used for an extended period, the TV surrounds become warm. You may feel hot when touching there by the hand.

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