## SONY®





3D Display

Instruction Manual

## WARNING

- To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.
- This equipment has been tested and found to comply with the limits set out in the EMC Directive using a connection cable shorter than 3 meters.
- A molded plug complying with BS1363 is fitted to this equipment for your safety and convenience. Should the fuse in the plug supplied need to be replaced, a 5AMP fuse approved by ASTA or BSI to BS1362, (i.e., marked with ⊕ or ♥ mark) must be used. If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service station.
- Some people may experience discomfort (such as eye strain, eye fatigue, or nausea) while watching 3D video images or playing stereoscopic 3D games on 3D displays. If you experience such discomfort you should immediately discontinue use of your display until the discomfort subsides. Generally we recommend that you avoid prolonged use of your PlayStation=3 system and take 15 minutes breaks during each hour of play. However, when playing stereoscopic 3D games or watching 3D video, the length and frequency of necessary breaks may vary from person to person please take breaks that are long enough to allow any feelings of discomfort to subside. If symptoms persist, consult your doctor. The vision of young children (especially those under six years old) is still under development. Consult with your child's doctor or optometrist before allowing young children to watch 3D video images or play stereoscopic 3D games. Adults should supervise young children to ensure they follow the recommendations listed above.

#### **Precautions**

Before using this product, carefully read this manual and retain it for future reference. Read also the instructions for the PlayStation<sub>0</sub>3 system.

#### Safety

- Do not use a power cord other than the supplied AC power cord. Do not modify the cord.
- Do not allow liquid or small particles to get into the product. If this happens, stop use and disconnect it from the electrical outlet immediately.
- Never disassemble or modify the product.
- Do not expose the product to dust, smoke or steam.
- $\bullet$  Do not expose the product to high temperatures, high humidity or direct sunlight.
- Do not touch the product with wet hands.
- Unplug the AC power cord from the electrical outlet before cleaning or when you do not intend to use the system for an extended period of time.
- Do not connect the AC power cord to a voltage transformer or inverter. Connecting the AC
  power cord to a voltage transformer for overseas travel or an inverter for use in an automobile
  may cause heat to build up in the system and may cause burns or a malfunction.
- Keep this product out of the reach of small children. Small children may swallow small parts
  or may wrap the cables around themselves, which may inflict injury or cause an accident or
  a malfunction.

#### Use and handling

- The LCD screen is made of glass and may crack if subjected to excessive force.
- Pixels that are not lit or are continuously lit may appear in certain locations on the LCD screen.
  The appearance of such spots is a normal occurrence associated with LCD screens and is not a
  sign of a system malfunction. LCD screens are made using highly precise technology. However,
  a very small number of dark pixels or continuously lit pixels exist on each screen. Also, a
  distorted image may remain on the screen for several seconds after the system has been
  turned off.
- Direct exposure to sunlight may damage the system's LCD screen. Be careful when using the system outdoors or near a window.
- When using the system in a cold environment, you may notice shadows on the graphics or the screen may appear darker than usual. This is not a malfunction, and the screen will return to normal when the temperature goes up.
- Do not leave still images displayed on the screen for an extended period of time, as doing so may cause a faint image to be left permanently on the screen.
- Be careful when carrying the product. If you do not have a good grip, the product may drop causing potential damage or injury.
- Do not place the product on surfaces that are unstable, tilted or subject to vibration.
- Do not place any objects on top of the product. Do not stand on the product.
- Do not throw or drop the product, or otherwise expose it to strong physical impact.
- Do not allow the product to come into contact with liquids.
- Follow the instructions below to help prevent the product exterior from deteriorating or becoming discoloured.
- Wipe with a soft, dry cloth.
- Do not place any rubber or vinyl materials on the product exterior for an extended period of time.
- Do not use solvents or other chemicals. Do not wipe with a chemically-treated cleaning cloth.

## Checking the version of the PS3™ system software

To use the 3D display, the PS3<sup>™</sup> system software must be version 3.70 or later. You can check the system software version by selecting (Settings) (System Settings) (System Information] on the XMB<sub>™</sub> (XrossMediaBar) menu of the PS3<sup>™</sup> system.

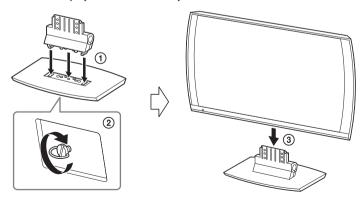
## Unpacking

- 3D display (1)
- Stand (1)
- Neck (1)

- AC power cord (1)
- HDMI cable (1) 3D glasses (2 sets) (pouch, USB cable)
- Instruction manual (1)

## **Assembly**

- 1 Insert the neck into the stand until you hear a click.
  - Check that the neck and stand face in the same direction, as shown in the illustration.
- 2 Securely anchor the neck in place by tightening the mounting screw on the bottom of the stand.
- 3 Insert the display into the neck until you hear a click.



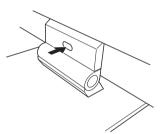
#### Hints

- Be careful not to pinch your hands or fingers when you assemble the stand and display.
- You can adjust the tilt angle of the display by up to 10° from the vertical (Figure (A)). Hold the stand down with one hand and move the upper part of the display with your other hand. Do not try to tilt the display any further than 10° from the vertical, since this may damage it.
- At least two people must perform the steps for removing the display from the neck and stand. One person must hold the neck and stand securely on a flat surface and press the button on the hinge. At the same time, another person can lift the display upwards.



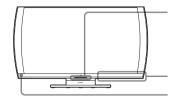
#### Rear

Press to detach display from neck and stand.



## Using the 3D display

#### **Front**



#### Status indicator

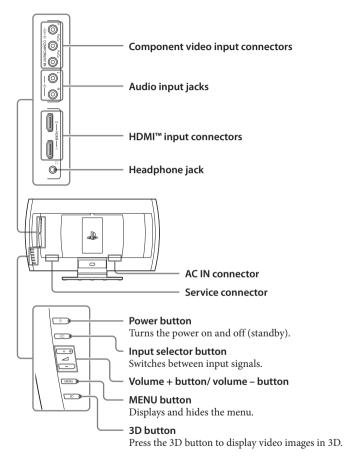
Red: power off (standby mode) Blue: starting up Green: running Orange: no input signal

#### 3D sync transmitter

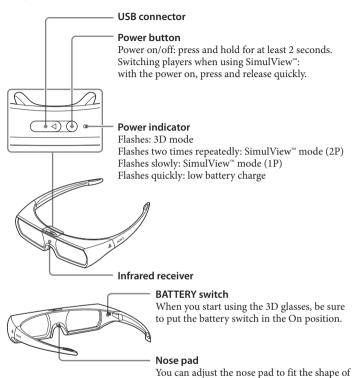
#### Infrared receiver

Infrared receiver for the remote control (sold separately).

#### Rear



#### 3D glasses



your nose.

#### Hint

Be careful not to pinch yourself in the hinges of the 3D glasses.

## Setting the video output on the PS3™ system

- 1 Go to **♣** (Settings) **→** (Display Settings).
- 2 Select [Video Output Settings].
- 3 Select [HDMI].
- 4 Select [Auto].
- **5** Verify the settings, select [Yes] and then press the  $\otimes$  button.
- **6** Set the display size to 24 inches.
- 7 Verify the settings, select [Yes] and then press the  $\otimes$  button.

#### Hint

When using this setting, connect the PS3™ system to the 3D display directly using an HDMI cable. If the display and the PS3™ system are connected via an AV amplifier or other device, this setting may not work correctly.

## Navigating the menu

Picture	Backlight	Adjusts the brightness of the backlight
	Picture Mode	[Standard]: Provides a standard natural looking picture appropriate for home use [Dynamic]: Provides a bright picture with emphasis on sharpness and contrast [Cinema]: Provides a picture optimized for watching movies [Custom]: Applies custom picture settings
	Reset Current Mode	Resets all picture settings to default values

Screen*	Wide Mode	[Normal]: Displays the picture in its original size [Full]: Displays the picture in full-screen mode [PSP™ Zoom]: Displays the picture from a connected PSP⊕ (PlayStation⊕Portable) system in full-screen mode
	Overscan	Select [ON] when visual noise or a black frame can be seen around the edges of the screen
Sound	Sound Mode	[Standard]: Provides a well-balanced, natural sound over the entire range [Dynamic]: Provides a clear sound with emphasis on high and low frequencies [Cinema]: Provides a sound with a feeling of you-are-there immediacy, just like being in a movie theatre [Custom]: Applies custom sound settings
	Reset Current Mode	Resets all sound settings to default values
	Balance	Adjusts the volume balance between the left and right speakers
3D	3D Format	Adjusts the settings to match the 3D format of the content being played when the 3D image is not displayed properly

Settings	HDMI Control	When you select [ON], the display and the connected HDMI equipment will be powered on and off simultaneously
	Signal Information	Displays the resolution and frequency of the picture
	Quick Start	When you select [ON], the display will start more quickly when it is turned on. Note that this will increase power consumption when the display is in standby mode
	Language	Sets the language displayed on the menu screens
	Restore Default Settings	Resets all settings to default values

<sup>\*</sup> The [Screen] menu can be adjusted only when component video signal is input to the 3D display.

#### Hint

You can operate the 3D display using the Blu-ray Disc™ Remote Control CECH-ZRC1E (sold separately). When operating using the BD remote control, use the TV button, the MENU button, the RETURN button, the ENTER button and the directional buttons. For details on operation, see the instruction manual for the BD remote control.

## **Using SimulView**<sup>™</sup> mode

SimulView $^{\bowtie}$  allows two players to view different screen images while playing the same game. To use this feature, the game must support SimulView $^{\bowtie}$  and both players need 3D glasses.

#### Hints

- In some viewing environments and for some video content, the images may not be completely separate and it may appear that two different images are overlapping.
- SimulView<sup>™</sup> Mode displays two different images on screen. Please put on 3D glasses before playing or watching in SimulView<sup>™</sup> Mode.

### Charging the 3D glasses

1 Open the USB connector cover. Connect a Type A - micro-B USB cable.

# 2 Connect the other end of the USB cable to a PS3™ system or other supported device.

The power indicator lights up during charging and turns off when charging is complete.

#### Hints

- If you start charging the 3D glasses while they are turned on, the power will turn off.
- The 3D glasses cannot be charged when the battery switch is in the Off position.

#### **Troubleshooting**

#### The power to the display shuts off suddenly or has shut off unexpectedly.

→ The power goes off automatically when there is no incoming signal.

#### There are bright spots or dark spots on the screen.

→ Black (dark) pixels and continuously lit pixels may appear in certain locations on the LCD screen. The appearance of such spots is a normal occurrence associated with LCD screens and is not a sign of a system malfunction.

## 3D or SimulView™ images are not displayed, or the image does not look like a 3D or SimulView™ image.

- → Check that the 3D glasses are turned on.
- → Check that the 3D glasses are charged.
- → The 3D glasses operate by receiving a constant infrared signal from the 3D sync transmitter. The glasses may not operate properly in the following cases.
  - The 3D glasses do not face the 3D sync transmitter.
  - There are objects blocking the path between the 3D glasses and the 3D sync transmitter.
  - There are other infrared communication devices, lighting fixtures, space heaters, or similar equipment nearby.
- → Use the 3D glasses so that they are level with the display. If you are lying down or if your head is tilted, it may be difficult to experience the 3D effect and the colour of the image may change.
- → If the display and the PS3<sup>™</sup> system are connected via an AV amplifier or other device, 3D or SimulView<sup>™</sup> images may not be displayed correctly. Connect the PS3<sup>™</sup> system to the display directly using an HDMI cable, and then adjust the video output settings on the PS3<sup>™</sup> system.

#### The 3D glasses are not receiving any power.

→ Check that the battery switch is in the On position.

#### **Specifications**

3D display

Inputs and Outputs HDMI input connectors  $\times 2$ 

Component video input connectors (Y/CB (PB)/CR (PR)) × 1 each Audio input connectors × 2: 2 ch, pin jack USB connector × 1: Type A, for service use only Headphone output connector × 1: stereo mini jack

Speakers Stereo 2 ch (full range, 3 W × 2, 28 mm × 28 mm, elliptical)

Subwoofer (5 W, 50 mm) Load impedance: 8 Ω

Panel resolution  $1920 \times 1080$ 

 Effective screen size
 23.5 inches

 Power requirement
 AC 100 V - 240 V (50/60 Hz)

 Power consumption
 60 W. 0.6 A - 0.26 A (in use).

60 W, 0.6 A – 0.26 A (in use), 0.2 W or less (in standby mode),

7 W or less (when the Quick Start feature is [ON])

Operating temperature 5°C – 35°C

**Dimensions (w × h × d)** Approx.  $650 \times 391 \times 207$  mm (including stand)

Weight Approx. 5.7 kg (including stand)

3D glasses

Built-in, rechargeable lithium-ion battery

Battery voltage DC 3.7 V
Battery capacity 70 mAh
Power consumption 5 V 100 mA

Dimensions (w x h x d) Approx.  $174 \times 41 \times 177$  mm (in use),

approx.  $174 \times 41 \times 60 \text{ mm (folded)}$ 

Weight Approx. 47 g

Design and specifications are subject to change without notice.

#### **GUARANTEE**

This product is covered for 12 months from date of purchase by the manufacturer's warranty set out in the PS3™ system manual.

Please refer to the PS3™ system manual for full details.

The manufacturer of this product is Sony Computer Entertainment Inc., 1-7-1 Konan, Minato-ku, Tokyo 108-0075 Japan.

The Authorised Representative for EMC and product safety in Europe is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany.

Distributed in Europe by Sony Computer Entertainment Europe Ltd, 10 Great Marlborough Street, London, W1F 7LP, United Kingdom.

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This symbol may be used on batteries in combination with additional chemical symbols. The chemical symbols for mercury (Hg) or lead (Pb) will appear if the battery contains more than 0.0005% mercury or more than 0.004% lead.

This product contains a battery which is permanently built-in for safety, performance or data integrity reasons. The battery should not need to be replaced during the lifetime of the product and should only be removed by skilled service personnel. To ensure the correct waste treatment of the battery, please dispose of this product as electrical waste.

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