



Spatial Reality Display

Operating Instructions

EN

Table of Contents

Preparation	9
Preparation 1: Setup	9
Viewing Environment	9
Preparation 2: Connection	10
1. Preparing a PC.....	10
2. Connecting the Display to a PC.....	10
3. Connecting the AC Adapter.....	11
Preparation 3: Installing the Software on a PC	11
1. Installing the SDK (Software Development Kit)	11
2. Updating the Firmware.....	11
Preparation 4: Playing Contents	12
1. Turning on the Display	12
2. Playing Contents.....	12
Further Use of the Display	12
Creating Contents	12
Information on the Support Site for Developers	12
Changing the Settings of the Display	13
Menu Items.....	13
3D/2D Switching Function.....	13
Others	14
Troubleshooting	14
Checking the Support Site for the Latest Information	14
Specifications	15
Location and Function of Parts and Controls ...	17
On accessing software to which the GPL/LGPL applies	18
Open software licenses	18
NOTICES AND LICENSES FOR SOFTWARE USED IN THIS PRODUCT	19

Before operating the display, please read this manual thoroughly and retain it for future reference.

Note

- Images and illustrations used in the Setup Guide and this manual are for reference only and may differ from the actual product.

Location of the identification label

Labels for the Display Model No. and Power Supply rating are located on the rear of the display.

For models with supplied AC adapter:
Labels for AC adapter Model No. and Serial No. are located on the bottom of AC adapter.

WARNING

TO PREVENT THE SPREAD OF FIRE,
KEEP CANDLES OR OTHER OPEN
FLAMES AWAY FROM THIS PRODUCT
AT ALL TIMES.



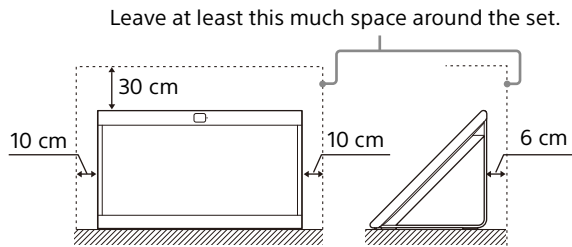
Safety Information

WARNING

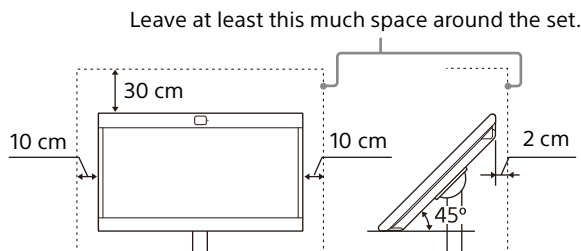
Ventilation

- Never cover the ventilation holes or insert anything into the cabinet.
- Leave space around the display as shown below.

Installed with stand



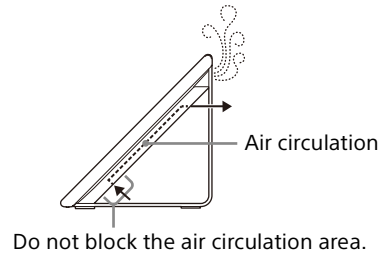
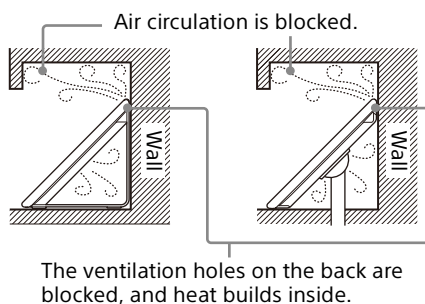
Installed on the mount arm



To ensure proper ventilation and prevent the collection of dirt or dust:

- Do not lay the display flat, install upside down, backwards, or sideways.
- Do not place the display on a shelf, rug, bed or in a closet.
- Do not cover the display with a cloth, such as curtains, or items such as newspapers, etc.
- Do not install the display as shown below.

Never install the display as follows:



Note

- Inadequate ventilation can lead to overheating of the display and may cause damage to your display or cause a fire.

AC power cord (mains lead)

Handle the AC power cord (mains lead) and socket as follows in order to avoid any risk of fire, electric shock or damage and/or injuries:

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

Never insert USB plug when the product or charging cable is wet condition

- When the USB plug is inserted in a wet condition, a short circuit occurs due to the liquid (tap water, salt water, refreshing drink etc.) attached to the main unit and charging cable or foreign matter, it may cause abnormal heat generation or malfunction.

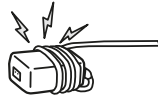
NOTE ON AC ADAPTER

Warning

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus. Do not install this equipment in a confined space, such as a bookshelf or similar unit.

- Please ensure that the AC power outlet (mains socket) is installed near the equipment and shall be easily accessible.
- Be sure to use the supplied AC adapter and AC power cord (mains lead). Otherwise it may cause a malfunction.
- Connect the AC adapter to an easily accessible AC power outlet (mains socket).
- Do not coil the AC power cord (mains lead) around the AC adapter. The core wire may be cut and/or it may cause a malfunction of the media receiver.
- Do not touch the AC adapter with wet hands.
- If you notice an abnormality in the AC adapter, disconnect it from the AC power outlet (mains socket) immediately.
- The set is not disconnected from the AC power (mains) source as long as it is connected to the AC power outlet (mains socket), even if the set itself has been turned off.
- As the AC adapter will become warm when it is used for a long time, you may feel hot when touching it by hand.



Prohibited Usage

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

Locations:

- Outdoors (in direct sunlight), at the seashore, on a ship or other vessel, inside a vehicle, unstable locations, near water, rain, moisture or smoke.

Environments:

- Places that are hot, humid, or excessively dusty; where insects may enter; where it might be exposed to mechanical vibration, near the source of naked flame, such as lighted candle, which is placed on a display. The display shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the display.

Situations:

- Use when your hands are wet, with the cabinet removed, or with attachments not recommended by the manufacturer. Disconnect the display from AC power outlet (mains socket) during lightning storms.
- Install the display so that it sticks out into an open space. Injury or damage from a person or object bumping into the display may result.
- Place the display in a humid or dusty space, or in a room with oily smoke or steam (near cooking tables or humidifiers). Fire, electric shock, or warping may result.
- Install the display in places subject to extreme temperature such as in direct sunlight, near a radiator or a heating vent. The display may overheat in such condition which can cause deformation of the enclosure and/or display malfunction.
- If the display is placed in the changing room of a public bath or hot spring, the display may be damaged by airborne sulfur, etc.
- For best picture quality, do not expose the screen to direct illumination or sunlight.
- Avoid moving the display from a cold area to a warm area. Sudden room temperature changes may cause moisture condensation. This may cause the display to show poor picture and/or poor colour. Should this occur, allow moisture to evaporate completely before powering the display on.

Broken pieces:

- Do not throw anything at the display. The screen glass may break by the impact and cause serious injury.
- If the surface of the display cracks, do not touch it until you have unplugged the AC power cord (mains lead). Otherwise this may cause an electric shock.

When not in use

- If you will not be using the display for several days, the display should be disconnected from the AC power (mains) for environmental and safety reasons.
- As the display is not disconnected from the AC power (mains) when the display is just turned off, pull the plug from the AC power outlet (mains socket) to disconnect the display completely.

For children

- Do not allow children to climb on the display.
- ALWAYS keep small accessories out of the reach of children, so that they are not mistakenly swallowed.

If the following problems occur...

Turn off the display and unplug the AC power cord (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:

- AC power cord (mains lead) is damaged.
- Poor fitting of AC power outlet (mains socket).
- Display is damaged by being dropped, hit or having something thrown at it.
- Any liquid or solid object falls through openings in the cabinet.

About Display Temperature

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

Medical institutions

This product cannot be used as a medical device. It may cause a medical equipment malfunction.

Magnetic influence

- This product (including accessories such as covers) uses magnets. Do not place magnetically sensitive objects (cash cards, credit cards with magnetic coding, etc.) near this product.
- This display contains a strong magnet in the speaker unit that generates a magnetic field. Keep any items susceptible to magnetic fields away from the speaker.

- Electro-magnetic radiation emitted from optional equipment installed too close to the display may cause picture distortion and/or noisy sound.

Do not place this product close to medical devices.

This product (including accessories) has magnet(s) which may interfere with pacemakers, programmable shunt valves for hydrocephalus treatment, or other medical devices. Do not place this product close to persons who use such medical devices. Consult your doctor before using this product if you use any such medical device.

Keep out of the reach of children or the supervised individuals.

This product (including accessories) has magnet(s). Swallowing magnet(s) could cause serious harm, such as choking hazard or intestinal injuries. If magnets (or a magnet) were swallowed, consult a doctor immediately.

Precautions

- View the display in moderate light, as viewing the display in poor light or during long period of time, strains your eyes.

On Watching 3D Video Images

Some people may experience discomfort (such as eye strain, fatigue, or nausea) when using this product. Sony recommends that all viewers take regular breaks while watching 3D video images or playing stereoscopic 3D games. The length and frequency of necessary breaks will vary from person to person. You must decide what works best. If you experience any discomfort, you should stop using this product and watching the 3D video images until the discomfort ends; consult a doctor if you believe necessary. You should also review (i) the instruction manual of your display, as well as any other device or media used with your display and (ii) our website (<https://www.sony-europe.com/myproduct>) for the latest information. The vision of young children (especially those under six years old) is still under development. Consult your doctor (such as a pediatrician or eye doctor) 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.

Screen:

- Although the 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 screen. This is a structural property of the screen and is not a malfunction.
- Do not push or scratch the front filter, or place objects on top of this display. The image may be uneven or the screen may be damaged.
- If this display 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 display is in use. This is not a malfunction.
- The screen contains a small amount of liquid crystal. Follow your local ordinances and regulations for disposal.

CLEANING

When cleaning, be sure to unplug the AC power cord (mains lead) to avoid any chance of electric shock.

- Wipe the screen surface gently with the supplied cleaning cloth to remove dirt.
- Stubborn stains may be removed with the supplied cleaning cloth slightly dampened with a mild detergent solution.
- The screen may become scratched if the supplied cleaning cloth is dusty.
- Do not spray water or detergent directly on the display. It may drip to the bottom of the screen or exterior parts, and may cause a malfunction.
- If using a chemically pretreated cloth, please follow the instruction provided on the package.
- Never use strong solvents such as a thinner, alcohol or benzene for cleaning.
- Do not plug in the display into the wall outlet until the moisture from cleaning has evaporated.
- Periodic vacuuming of the ventilation openings is recommended to ensure to proper ventilation.

Optional Equipment

- Keep optional components or any equipment emitting electromagnetic radiation away from the display. 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 Standards using a connection signal cable shorter than 3 meters.

Disposal of the Display



Disposal of old electrical & electronic equipment (applicable in the European Union and other countries with separate collection systems)

Reduction in the Use of Hazardous Substances in Electrical & Electronic Equipment (Applicable in Republic of India)

This product and its components, consumables, parts or spares comply with the hazardous substances restriction of India's E-Waste (Management) Rules. The maximum allowable concentrations of the restricted substances are 0.1% by weight in homogenous materials for Lead, Mercury, Hexavalent Chromium, Polybrominated Biphenyls (PBB) and Polybrominated Diphenyl Ethers (PBDE), and 0.01% by weight in homogenous materials for Cadmium, except for the exemptions specified in Schedule II of the aforesaid Rules.

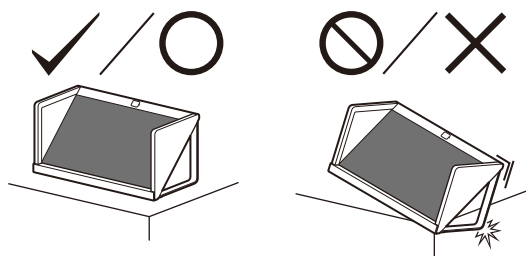
Installation/Set-up

- Install and use the display in accordance with the instructions below in order to avoid any risk of fire, electric shock or damage and/or injuries.

Installation

- The display should be installed near an easily accessible AC power outlet (mains socket).
- Place the display on a stable, level surface to prevent it from falling over and causing personal injury or property damage.
- Install the display where it cannot be pulled, pushed, or knocked over.

- Install the display so that the display's stand does not protrude out from table. If the stand protrudes out from table, it may cause display set to topple over, fall down, and cause personal injury or damage to the display.



Transporting

- Before transporting the display, disconnect all cables.
- When transporting the display by hand, hold it as shown below. Do not put stress on the LCD panel and the frame around the screen.



- When lifting or moving the display, hold it firmly from the bottom.
- When transporting the display, do not subject it to jolts or excessive vibration.
- When transporting the display for repairs or when moving, pack it using the original carton and packing material.
- Keep original bag (wrapping the display) for this purpose.

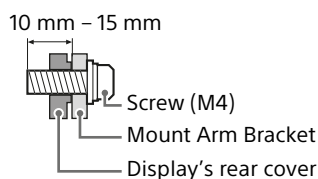
Installing the display to the Mount Arm

This display's instruction manual only provides the steps to prepare the display for Mount Arm installation before it is installed on the mount arm.

Your display can be mounted to a mount arm using a suitable Mount Arm Bracket (not supplied). If the Stand is attached to the display, the display may require detaching the Stand. Prepare the display for the Mount Arm Bracket before making cable connections.

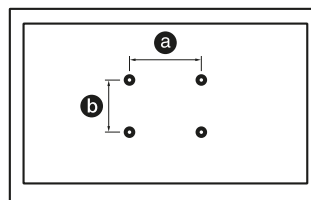
For product protection and safety reasons, Sony strongly recommends that installation of your display on the Mount Arm be performed by qualified professionals. Do not attempt to install it yourself.

- Follow the instruction guide provided with the Mount Arm Bracket for your model. Sufficient expertise is required in installing this display, especially to determine the strength of the Mount Arm for withstanding the display's weight.
- The screws for installing the Mount Arm Bracket to the display are not supplied.
- Do not hang the display from the ceiling. It may fall and cause serious injury.
- Do not hang anything on the display.
- The length of the screw for Mount Arm Bracket differs depending on the Mount Arm Bracket thickness. Please refer to below illustration.



- Refer to the following table for Mount Arm hole pattern.

Model Name	Mount Arm hole pattern
	a × b
ELF-SR2	100 mm × 100 mm



- Use the display at a tilt angle of 45 - 135 degrees against a horizontal surface such as the floor or the top of a desk. Do not use the display at any other tilt angle.
- When installed on the mount arm, use the display in a horizontal position. Do not use the display rotated to a vertical position or any position other than horizontal.
- Be sure to store the unused screws and Stand in a safe place until you are ready to attach the Stand. Keep the screws away from small children.
- When installed on the mount arm, do not use the side panel or bottom stand.

Preparation 1: Setup

For details on setting up the display, refer to the supplied "Setup Guide".

Viewing Environment

Stereoscopic content such as 3DCG can stereoscopically be viewed with the naked eye on the display. Place the display on a desk and enjoy viewing it in the following environment.

(Recommended)

Room illuminance: Approx. 100 to 1,000 lx and 100 lx and over for the surface of the face

Viewing distance: 50 cm to 70 cm

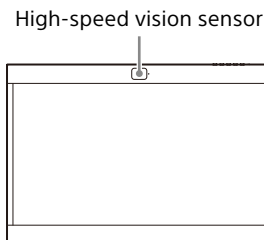
Viewing angle (horizontal): $\pm 25^\circ$

Viewing angle (vertical): $-40^\circ/+20^\circ$

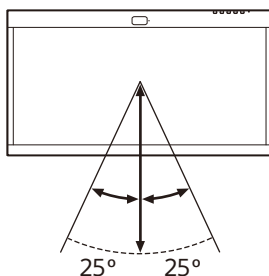
For details, visit the following site.

<https://www.sony.net/manual-srd>

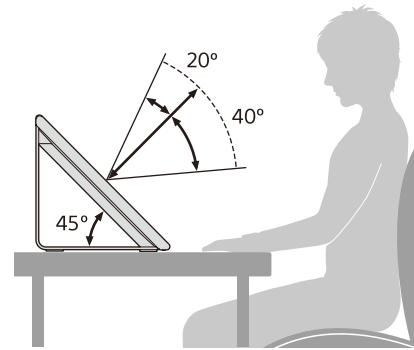
Front view



Top view



Side view



Notes

- For details on room illuminance and other information, see the following support site for developers.
<https://www.sony.net/manual-srd>
- View the display avoiding direct outside light on the display.
Stereoscopic images may not be viewable due to the light reflected on the display.
- Do not place the display in an environment where the high-speed vision sensor is facing a light source.
- The display displays an optimized image by detecting the viewer's face and recognizing the eye-gaze of the viewer with the high-speed vision sensor.
- The display has been designed for users to view images by placing it horizontally. If the display is placed vertically, you cannot view images in 3D.
- When the viewing image is unstable, adjust the viewing environment including the installation position.
The high-speed vision sensor may be having difficulty recognizing your eye-gaze.

Preparation 2: Connection

1. Preparing a PC

To use the display, connect the display to a PC. For recommended PC specifications, visit the following site.

<https://www.sony.net/manual-srd>

2. Connecting the Display to a PC

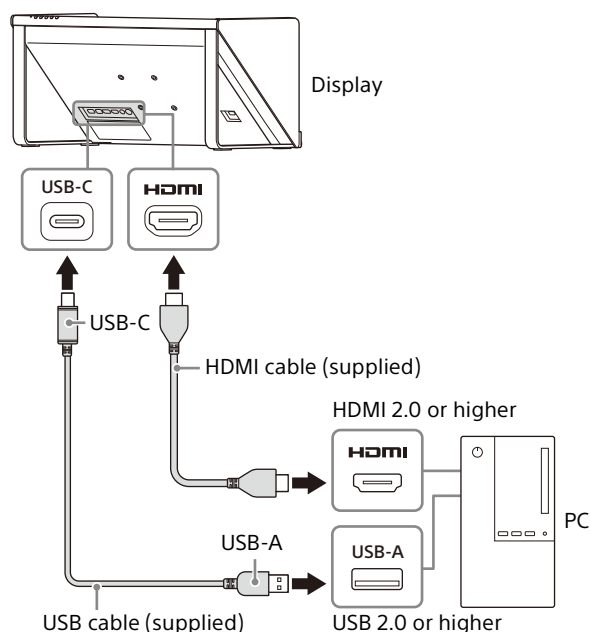
Connect the display to a PC using one of the following connection methods ①, ②, or ③.

Notes

- Connect directly to a PC without using a USB hub, etc.
- To display images in their original quality on this display, it is necessary to use a PC that meets the following standards. For details, refer to the operation manual of the PC.
 - ① When connecting with the HDMI® cable (supplied)
 - ② When connecting with a DisplayPort™ cable (sold separately)
 - ③ When connecting with a USB Type-C™ - USB Type-C cable (sold separately)

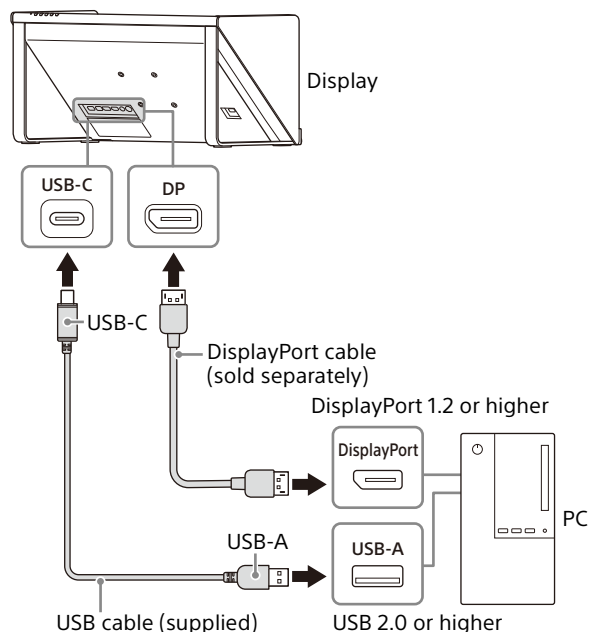
① Connecting with the HDMI Cable (Supplied)

Connect to a PC with the HDMI cable (supplied) and USB cable (supplied).



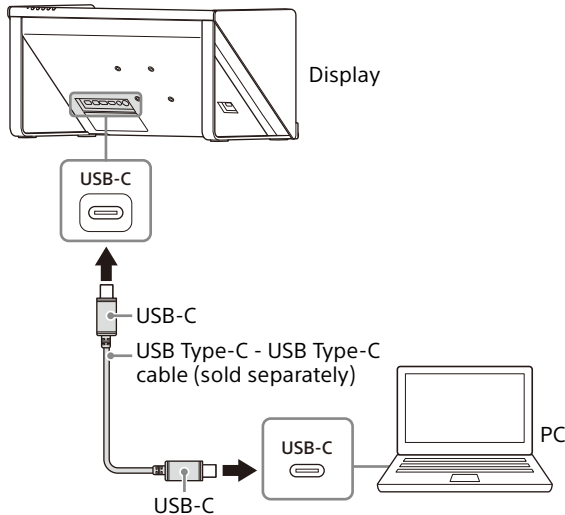
② Connecting with a DisplayPort Cable (Sold Separately)

Connect to a PC with a DisplayPort cable (sold separately) and the USB cable (supplied). In this case, use a DisplayPort cable supporting DisplayPort 1.2.



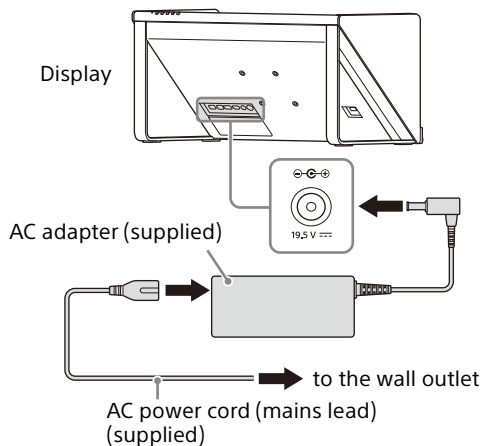
③ Connecting with a USB Type-C - USB Type-C Cable (Sold Separately)

Connect to a PC with a USB Type-C - USB Type-C cable (sold separately). In this case, use a USB Type-C - USB Type-C cable supporting DP Alt mode and USB 2.0.



3. Connecting the AC Adapter

Insert the DC connector of the supplied AC adapter straight into the 19.5 V \equiv (DC input) connector of the display to connect them.



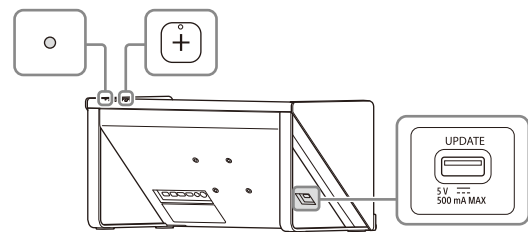
Preparation 3: Installing the Software on a PC

1. Installing the SDK (Software Development Kit)

For details on how to install, visit the following site.

<https://www.sony.net/manual-srd>

2. Updating the Firmware



- 1 Connect the USB flash drive containing the update software.

Please use a USB memory formatted with FAT32.

After several minutes, "Update?" is displayed.

- 2 Press the + button to perform the update.

To cancel the update, press the MENU button.


During the update, the screen turns black and the indicator flashes in white. The update is completed in about 15 minutes.

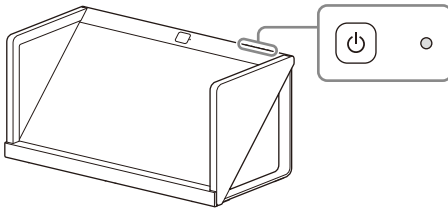
For details, visit the following site.

<https://www.sony.net/manual-srd>

Preparation 4: Playing Contents

1. Turning on the Display

- 1 Connect the AC power cord (mains lead) to the AC power outlet (mains socket).
- 2 Press the  (Power) switch to turn on the display.

**Note**

The indicator lights in white when the display is turned on.

2. Playing Contents

For details on how to play contents, visit the following site.
<https://www.sony.net/manual-srd>

Creating Contents

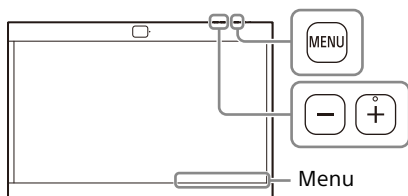
Information on the Support Site for Developers

For details on how to create contents, visit the following site.
<https://www.sony.net/manual-srd>

Changing the Settings of the Display

Picture quality adjustment and settings can be made on the menu screen of the display.

- 1 Press the MENU button to display the menu.



The item currently selected on the menu is shown at the bottom right of the screen.

Input Select ◀ HDMI ▶

- 2 Press the MENU button to select the menu item.

Each press of the MENU button changes the menu item as follows.

Input Select→Brightness→Contrast→
Language→Auto shut-off→Text to speech
→Information→MENU off→Input Select...

- 3 Press the +/- button to change the values and settings.

The adjusted values and settings are stored automatically.

When changing the value:

Press the + button to increase the value.
Press the – button to decrease the value.

When selecting the setting:

Press the +/- button to select the setting.

To clear the menu

Press the MENU button repeatedly until the "Information" appears.

Press the MENU button again to clear the screen. Also, the menu screen disappears automatically if you do not operate the menu for a while.

Menu Items

Menu	Setting
Input Select	Selects the video input source. <ul style="list-style-type: none">• HDMI• DP• USB-C
Brightness	Adjusts brightness.
Contrast	Adjusts contrast.
Language	You can select the menu or message language. <ul style="list-style-type: none">• English• Français
Auto shut-off	The display enters into standby mode automatically after a certain period of no signal input. <ul style="list-style-type: none">• On• Off <p>Note In standby mode, no image is displayed on the screen and the indicator lights in orange.</p>
Text to speech	Reads out the menu and message displayed on the screen. <ul style="list-style-type: none">• On• Off <p>Note This function is not available when "Français" is selected in "Language."</p>
Information	Displays information of the display. <ul style="list-style-type: none">• Model name• Serial No.• Software Version

3D/2D Switching Function


Press the Fn button to switch between 3D and 2D display.

Display setting	Function
3D	Displays in normal 3D.
3D-2D	Displays in 2D for image shooting or to make it easier for multiple viewers to view.
2D	Displays in normal 2D.

Troubleshooting

This section may help you isolate the cause of a problem and as a result, eliminate the need to contact technical support.

- **No screen image or audio**

When the indicator flashes in orange or lights in red, unplug the AC power cord (mains lead) and wait until the indicator stops flashing. Then, plug the AC power cord (mains lead) again and turn on the display with the  (Power) switch.

If the indicator is still flashing, check how many times the indicator flashes and consult qualified Sony service personnel.

- **Image is not displayed correctly**

Check if your environment is suitable for viewing the display (page 9).

- **The screen becomes dark/no image is displayed (after a certain period passed)**

"Auto shut-off" is enabled. Check the "Auto shut-off" setting (page 13).

- **"No signal" is displayed**

No signal is input to the display.

- **"Unsupported signal" is displayed**

Some signals may not be supported on the display depending on the input signal. Check the supported signal of your PC.

Checking the Support Site for the Latest Information

The following information can be found on the support site for developers.

- Development information on content
- Troubleshooting (Q & A)
- Software update information
- Connection information with other devices
- Specification information on recommended PCs

<https://www.sony.net/manual-srd>

Specifications

Panel system	Micro optical lens LCD panel module
Panel size (diagonal)	68.5 cm
Panel aspect ratio	16:9
Number of panel pixels* ¹ (H × V)	3840 × 2160 pixels The actual effective resolution for the stereoscopic view is 4K or lower.
Effective picture size* ^{2,3} (H × V)	593.2 mm × 332.8 mm
Recommended panel installation angle	45° to 135°
Room illuminance	Approx. 100 to 1,000 lx and 100 lx and over for the surface of the face
Viewing distance	50 cm to 100 cm Recommended: 50 cm to 70 cm
Viewing angle (horizontal)	±25°
Viewing angle (vertical)	−40°/+20°
Audio output (practical maximum output)	1 W (monaural)
Video input terminal	HDMI/DP (DisplayPort)/USB-C (DP Alt mode) input 3840×2160p (60 Hz), 1920×1080p (60 Hz), 720×480p (60 Hz)* ⁴ , 640×480p (60 Hz)* ⁴
USB connectors	USB connectors: USB connector (USB 2.0) USB Type-C connector (USB 2.0) Update dedicated connector: USB connector
Audio output jack	3.5 mm stereo mini jack (fixed level)
Operating conditions	Temperature 0 °C to 40 °C Recommended temperature 20 °C to 30 °C Humidity 20% to 80% (no condensation)
Storage and transport conditions	Temperature −20 °C to +60 °C Humidity 20% to 80%

Power consumption	64 W
Standby power consumption* ^{5,6}	0.5 W
Maximum external dimensions* ² (excluding the projecting parts) (w/h/d)	622 mm × 302 mm × 301 mm 631 mm × 303 mm × 309 mm (including accessories* ⁷)
Mount arm hole pattern	100 mm × 100 mm
Mass* ²	7.3 kg 8.2 kg (including accessories* ⁷)
Power	DC IN: 19.5 V 3.3 A (supplied from the AC adapter)
Supplied accessories	Stands (2) (for left and right side) Mounting screws for stand M5×12 (6) Side panels (2) (common for left and right side) Bottom stand (1) USB cable (1) HDMI cable (1) AC adapter (1) AC power cord (mains lead) (1) Operating Instructions (this manual) (1) Setup Guide (1) Cleaning cloth (1)

- *¹ This display has a special lens (micro-optical lens) in front of the liquid crystal panel for 3D display. Therefore, when the normal 2D display (such as desktop display of a PC, application screen, etc.) is performed, the color of the image is blurred or protruded, and the image cannot be displayed correctly.
- *² Effective picture size, maximum external dimensions, and mass are approximate values.
- *³ Due to the opening of the frame that covers the panel, there will be an image chipping of about 2 mm on the top, bottom, left and right.
- *⁴ For 2D display only
- *⁵ This information is for EU and other countries whose relevant regulation is based on EU energy labelling regulation.
- *⁶ Specified standby power is reached after the display finishes necessary internal processes.
- *⁷ Accessories (the side panels and bottom stand) are included.

Notes

- Design and specifications are subject to change without notice.
- Product fiche in this manual is for COMMISSION DELEGATED REGULATION (EU) 1062/2010. Refer to its website for (EU) 2019/2013 information.

**Product registration number (COMMISSION
DELEGATED REGULATION (EU) 2019/2013)**

ELF-SR2 (1435280)

Licensing Information

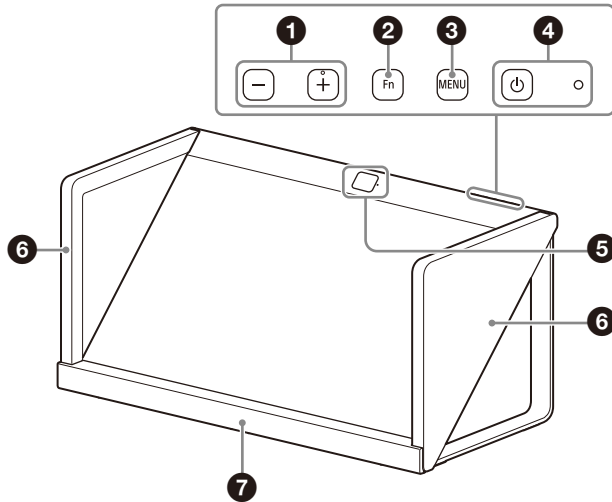
- The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI Trade dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.



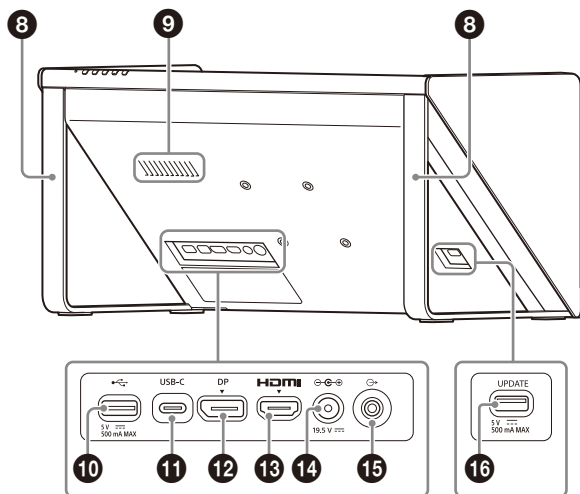
- DisplayPort™, the DisplayPort™ logo and the DisplayHDR™ logo are trademarks owned by the Video Electronics Standards Association (VESA®) in the United States and other countries.
- USB Type-C® and USB-C® are registered trademarks of USB Implementers Forum.

Location and Function of Parts and Controls

Front



Rear



1 +/- button

Press to adjust the volume.

When the on-screen menu is displayed, press to change the setting value of the menu item (page 13).

2 Fn (function) button

Press to call the assigned functions (page 13).

3 MENU button

Press to turn on/off the on-screen menu.

When the on-screen menu is displayed, press to select a menu item.

4 (power) switch and indicator

Press to turn on the power and start up the display.

The indicator lights up in white while the display is in operation.

Press again to turn off the power, and the indicator goes off.

5 High-speed vision sensor and camera function operation lamp

Detects the viewer's face and recognizes the eye-gaze of the viewer.

The lamp lights up in white while the camera function is in operation.

6 Side panels (left/right)

7 Bottom stand

8 Stands (left/right)

9 Speaker (monaural)

Outputs audio.

10 (USB-A) connector (USB 2.0)

Connect a keyboard or mouse to operate the PC.

11 USB-C connector

Use the supplied USB cable to connect to the USB connector of the PC.

12 DP (DisplayPort) connector

Connect a PC with DisplayPort output.

13 HDMI (HDMI) input connector

Inputs the HDMI signal.

Connect to the HDMI output connector on your PC using the supplied HDMI cable.

14 19.5 V (DC input) connector

Connect the DC connector of the supplied AC adapter.

15 (line audio output) jack (3-pole stereo mini jack)

Outputs line audio (fixed level) in stereo.

16 UPDATE connector

Use when updating the firmware of the display.

For details on how to update, see "2. Updating the Firmware" (page 11).

On accessing software to which the GPL/LGPL applies

This product uses software to which the GPL/LGPL applies. This informs you that you have a right to have access to, modify, and redistribute source code for these software programs under the conditions of the GPL/LGPL.

The source code is provided on the internet. Use the following URL and follow the download instructions.

<https://www.sony.net/Products/Linux/common/search.html>

We would prefer that you do not contact us about the contents of the source code.

Open software licenses

On the basis of license contracts between Sony and the software copyright holders, this product uses open software.

To meet the requirements of the software copyright holders, Sony is obligated to inform you of the content of these licenses.

For the content of these licenses, see "License" in the following site.

<https://www.sony.net/manual-srd>

NOTICES AND LICENSES FOR SOFTWARE USED IN THIS PRODUCT

END USER LICENSE AGREEMENT

IMPORTANT:

BEFORE USING THE SOFTWARE, PLEASE READ THIS END USER LICENSE AGREEMENT ("EULA") CAREFULLY. BY USING THE SOFTWARE YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS EULA. IF YOU DO NOT AGREE TO THE TERMS OF THIS EULA, YOU MAY NOT USE THE SOFTWARE.

This EULA is a legal agreement between (i) you and any entity you represent (collectively "you") and (ii) Sony Corporation ("SONY"). This EULA governs your rights and obligations regarding the software of SONY and/or its third party licensors (including SONY's affiliates) and their respective affiliates (collectively, the "THIRD-PARTY SUPPLIERS") made available to you by SONY, as embedded in this product ("DEVICE"), together with any updates/upgrades, any printed, on-line or other electronic documentation for such software and any data files, each provided by SONY or the THIRD-PARTY SUPPLIERS, or created by operation of such software (collectively, the "SOFTWARE").

Notwithstanding the foregoing, any software in the SOFTWARE having a separate end user license agreement (including, but not limited to, GNU General Public License and Lesser/Library General Public License) ("EXCLUDED SOFTWARE", which includes, but not limited to, the software listed in the following page of this EULA) shall be covered by such applicable separate end user license agreement in lieu of the terms of this EULA to the extent required by such separate end user license agreement.

SOFTWARE LICENSE

The SOFTWARE is licensed, not sold. The SOFTWARE is protected by copyright and other intellectual property laws and international treaties.

COPYRIGHT

All right and title in and to the SOFTWARE (including, but not limited to, any images, photographs, animation, video, audio, music, text and "applets" and other content incorporated into the SOFTWARE) is owned by SONY or one or more of the THIRD-PARTY SUPPLIERS.

GRANT OF LICENSE

SONY grants you a limited, non-exclusive, personal, non-transferable license to use the SOFTWARE solely in connection with your DEVICE solely in accordance with this EULA and the usage instructions as may be made available to you by SONY or the THIRD-PARTY SUPPLIERS. SONY and the THIRD-PARTY SUPPLIERS expressly reserve all rights, title and interest (including, but not limited to, all intellectual property rights) in and to the SOFTWARE that this EULA does not specifically grant to you.

REQUIREMENTS AND LIMITATIONS

You may not copy, publish, adapt, redistribute, attempt to derive source code, modify, reverse engineer, decompile, or disassemble any of the SOFTWARE, whether in whole or in part, or create any derivative works from or of the SOFTWARE unless such derivative works are intentionally facilitated by the SOFTWARE. You may not modify or tamper with any digital rights management functionality of the SOFTWARE. You may not bypass, modify, defeat or circumvent any of the functions or protections of the SOFTWARE or any mechanisms operatively linked to the SOFTWARE. You may not separate any individual component of the SOFTWARE for use on more than one DEVICE unless expressly authorized to do so by SONY. You may not remove, alter, cover or deface any trademarks or notices on the SOFTWARE. You may not share, distribute, rent, lease, sublicense, assign, transfer or sell the SOFTWARE. You may not use the SOFTWARE in connection with violation of laws, regulations, court decisions or other legally binding dispositions by a public authority or

public policy, or infringement of the rights or legally protected interests (including, but not limited to, intellectual and other property rights, rights to trade secrets, honors, privacy and publicity) of SONY, each of the THIRD-PARTY SUPPLIERS or any third parties. The software, network services or other products other than the SOFTWARE upon which the SOFTWARE'S performance depends might be modified, interrupted or discontinued at the discretion of the suppliers (software suppliers, service suppliers, or SONY). SONY and such suppliers do not warrant that the SOFTWARE, network services, contents or other products will continue to be available, or will operate without interruption or modification. You shall not, nor shall you instruct or permit, procure, enable or request any third party (including your users, third party personnel or other personnel, staff or contractors) to, take any action designed or intended to: (i) use the SOFTWARE (or any part thereof) in any manner or for any purpose that is inconsistent with this EULA; (ii) introduce to the SOFTWARE any "back door," "drop dead device," "time bomb," "Trojan horse," "virus," or "worm" (as such terms are commonly understood in the software industry) or any other equivalent code, files, scripts, agents, programs, software routine or instructions designed or intended to disrupt, disable, harm or otherwise impede in any manner the operation of the SOFTWARE or any device or system owned or controlled by you or any third party, or which otherwise may damage or destroy any data or file ("Malicious Code"); (iii) interfere with the proper working of the SOFTWARE; (iv) circumvent, disable, or interfere with security-related features of the SOFTWARE or features that prevent or restrict use, access to, or copying the SOFTWARE, or that enforce limitations on use of the SOFTWARE; or (v) impose (or which may impose, in your sole discretion) an unreasonable or disproportionately large load on the SOFTWARE.

EXCLUDED SOFTWARE AND OPEN SOURCE COMPONENTS

Notwithstanding the foregoing limited license grant, you acknowledge that the SOFTWARE may include EXCLUDED SOFTWARE. Certain EXCLUDED SOFTWARE may be covered by open source software licenses ("Open Source Components"), which means any software licenses approved as open source licenses by the Open Source Initiative or any substantially similar licenses, including but not limited to any license that, as a condition of distribution of the software licensed under such license, requires that the distributor make the software available in source code format. If and to the extent disclosure is required, please visit oss.sony.net/Products/Linux or other SONY-designated web site for a list of applicable OPEN SOURCE COMPONENTS included in the SOFTWARE from time to time, and the applicable terms and conditions governing its use. Such terms and conditions may be changed by the applicable third party at any time without liability to you. To the extent required by the licenses covering EXCLUDED SOFTWARE, the terms of such licenses will apply in lieu of the terms of this EULA. To the extent the terms of the licenses applicable to EXCLUDED SOFTWARE prohibit any of the restrictions in this EULA with respect to such EXCLUDED SOFTWARE, such restrictions will not apply to such EXCLUDED SOFTWARE. To the extent the terms of the licenses applicable to Open Source Components require SONY to make an offer to provide source code in connection with the SOFTWARE, such offer is hereby made.

USE OF SOFTWARE WITH COPYRIGHTED MATERIALS

The SOFTWARE may be capable of being used by you to view, store, process and/or use content created by you and/or third parties. Such content may be protected by copyright, other intellectual property laws, and/or agreements. You agree to use the SOFTWARE only in compliance with all such laws and agreements that apply to such content. You acknowledge and agree that SONY may take appropriate measures to protect content stored, processed or used by the SOFTWARE. Such measures include, but are not limited to, refusal to accept your request to enable backup and restoration of content through certain SOFTWARE features, and termination of this EULA in the event of your illegitimate use of the SOFTWARE.

CONTENT SERVICE

PLEASE ALSO NOTE THAT THE SOFTWARE MAY BE DESIGNED TO BE USED WITH CONTENT AVAILABLE THROUGH ONE OR MORE CONTENT SERVICES ("CONTENT SERVICE"). USE OF THE SERVICE AND THAT CONTENT IS SUBJECT TO THE TERMS OF SERVICE OF THAT CONTENT SERVICE. IF YOU DECLINE TO ACCEPT THOSE TERMS, YOUR USE OF THE SOFTWARE WILL BE LIMITED. You acknowledge and agree that certain content and services available through the SOFTWARE may be

provided by third parties over which SONY has no control. WHERE CONTENT SERVICE IS NOT UNDER SONY'S CONTROL, SONY SHALL NOT BE LIABLE IN RESPECT OF ANY DAMAGES (OR OTHER LIABILITY) RELATED TO SUCH CONTENT SERVICE. USE OF THE CONTENT SERVICE REQUIRES AN INTERNET CONNECTION. THE CONTENT SERVICE MAY BE MODIFIED OR DISCONTINUED AT ANY TIME.

EXPORT AND OTHER REGULATIONS

You agree to comply with all applicable export and re-export restrictions and regulations of the area or country in which you reside or use the SOFTWARE, and not to transfer, or authorize the transfer, of the SOFTWARE to a prohibited country or otherwise in violation of any such restrictions or regulations.

HIGH RISK ACTIVITIES

The SOFTWARE is not fault-tolerant and is not designed, manufactured or intended for use or resale as on-line control equipment in hazardous environments requiring fail-safe performance, such as in the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, direct life support machines, or weapons systems, in which the failure of the SOFTWARE could lead to death, personal injury, or severe physical or environmental damage ("HIGH RISK ACTIVITIES"). SONY, each of the THIRD-PARTY SUPPLIERS, and each of their respective affiliates specifically disclaim any express or implied warranty, duty or condition of fitness for HIGH RISK ACTIVITIES.

EXCLUSION OF WARRANTY ON SOFTWARE

You acknowledge and agree that use of the SOFTWARE is at your sole risk and that you are responsible for use of the SOFTWARE. The SOFTWARE is provided "AS IS," without warranty, duty or condition of any kind.

SONY AND EACH OF THE THIRD-PARTY SUPPLIERS (for purposes of this Section, SONY and each of the THIRD-PARTY SUPPLIERS shall be collectively referred to as "SONY") EXPRESSLY DISCLAIM ALL WARRANTIES, DUTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY, QUALITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY, TITLE AND NONINFRINGEMENT. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, SONY DOES NOT WARRANT OR MAKE ANY CONDITIONS OR REPRESENTATIONS (A) THAT THE FUNCTIONS CONTAINED IN ANY OF THE SOFTWARE WILL MEET YOUR REQUIREMENTS OR THAT THEY WILL BE UPDATED, (B) THAT THE OPERATION OF ANY OF THE SOFTWARE WILL BE CORRECT OR ERROR-FREE OR THAT ANY DEFECTS WILL BE CORRECTED, (C) THAT THE SOFTWARE WILL NOT DAMAGE ANY OTHER SOFTWARE, HARDWARE OR DATA, (D) THAT ANY SOFTWARE, NETWORK SERVICES (INCLUDING THE INTERNET) OR PRODUCTS (OTHER THAN THE SOFTWARE) UPON WHICH THE SOFTWARE'S PERFORMANCE DEPENDS WILL CONTINUE TO BE AVAILABLE, UNINTERRUPTED, TIMELY, SECURE OR UNMODIFIED, (E) THAT THE SOFTWARE OR ANY EQUIPMENT, SYSTEM OR NETWORK ON WHICH THE SOFTWARE IS USED (INCLUDING THE DEVICE) WILL BE FREE OF VULNERABILITY TO INTRUSION OR ATTACK AND (F) REGARDING THE USE OR THE RESULTS OF THE USE OF THE SOFTWARE IN TERMS OF ITS CORRECTNESS, ACCURACY, RELIABILITY, OR OTHERWISE.

NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY SONY OR AN AUTHORIZED REPRESENTATIVE OF SONY SHALL CREATE A WARRANTY, DUTY OR CONDITION OR IN ANY WAY INCREASE THE SCOPE OF THIS WARRANTY. SHOULD THE SOFTWARE PROVE DEFECTIVE YOU ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THESE EXCLUSIONS MAY NOT APPLY TO YOU TO THE EXTENT THEY ARE CONTRARY TO APPLICABLE LAW OF YOUR JURISDICTION.

LIMITATION OF LIABILITY

SONY AND EACH OF THE THIRD-PARTY SUPPLIERS (for purposes of this Section, SONY and each of the THIRD-PARTY SUPPLIERS shall be collectively referred to as "SONY") SHALL NOT BE LIABLE FOR ANY INCIDENTAL, INDIRECT, SPECIAL, EXEMPLARY OR CONSEQUENTIAL LOSS OR DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT LIABILITY OR UNDER ANY OTHER LEGAL THEORY RELATED TO THE SOFTWARE, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES ARISING OUT OF LOSS OF PROFITS, LOSS OF REVENUE, LOSS OF DATA, LOSS OF USE OF THE SOFTWARE OR ANY ASSOCIATED HARDWARE, DOWN TIME AND USER'S TIME, EVEN IF ANY OF THEM HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSSES OR DAMAGES. IN ANY CASE, EACH AND ALL OF THEIR AGGREGATE LIABILITY UNDER ANY

PROVISION OF THIS EULA SHALL BE LIMITED TO THE GREATER OF (i) THE AMOUNT ACTUALLY PAID FOR THE SOFTWARE, SONY'S PRODUCT WHICH THE SOFTWARE IS EMBEDDED IN OR BUNDLED WITH AND/OR SONY'S SERVICE TO WHICH THE SOFTWARE IS DEDICATED OR (ii) THE FIXED AMOUNT AGREED IN WRITING BETWEEN SONY AND YOU. SOME JURISDICTIONS DO NOT ALLOW SUCH EXCLUSIONS OR LIMITATIONS OF LIABILITY, SO THE ABOVE EXCLUSIONS OR LIMITATIONS MAY NOT APPLY TO YOU TO THE EXTENT THEY ARE CONTRARY TO APPLICABLE LAW OF YOUR JURISDICTION.

INDEMNITY

Except as prohibited by applicable law, you agree to indemnify and hold harmless SONY and the THIRD-PARTY SUPPLIERS and their respective affiliates, officers and employees, from any loss, claim or demand, including reasonable attorneys' fees, made by any third party due to or arising out of your use of the SOFTWARE and/or the DEVICE (including, without limitation, any software vulnerability caused by such use), your violation of this EULA or your failure to fulfill your responsibility under this EULA.

UPDATE

From time to time, SONY or the THIRD-PARTY SUPPLIERS may update or otherwise modify the SOFTWARE, including, but not limited to, for purposes of enhancement of security functions, error correction and improvement of functions. Such updates or modifications may delete or change the nature of features or other aspects of the SOFTWARE, including, but not limited to, functions you may rely upon. You acknowledge and agree that such activities may occur at SONY's sole discretion and that SONY may condition continued use of the SOFTWARE upon your complete installation or acceptance of such update or modifications. Any updates/modifications shall be deemed to be, and shall constitute part of, the SOFTWARE for purposes of this EULA. By acceptance of this EULA, you consent to such update/modification.

FORCE MAJEURE

SONY shall not be liable for any delay or failure to perform resulting from causes outside its reasonable control, including, but not limited to, fire, floods, storms, earthquakes, epidemics, acts of God, war, terrorism, riots, insurrection, embargos, acts of civil, military or governmental authorities, nuclear or other accidents, explosions, strikes or shortages of transportation facilities, fuel, energy, labor or materials.

ENTIRE AGREEMENT, WAIVER, SEVERABILITY

This EULA (and SONY's applicable privacy policy separately presented to you, if any), as amended and modified from time to time, constitute the entire agreement(s) between you and SONY with respect to the SOFTWARE. The failure of SONY to exercise or enforce any right or provision of this EULA shall not constitute a waiver of such right or provision. If any part of this EULA is held invalid, illegal, or unenforceable, that provision shall be enforced to the maximum extent permissible so as to maintain the intent of this EULA, and the other parts will remain in full force and effect.

GOVERNING LAW AND JURISDICTION

The United Nations Convention on Contracts for the International Sale of Goods shall not apply to this EULA. This EULA shall be governed by the laws of Japan, without regards to conflict of laws provisions. Any dispute arising out of this EULA shall be subject to the exclusive venue of the Tokyo District Court in Japan, and the parties hereby consent to the venue and jurisdiction of such courts. The foregoing does not apply to you to the extent applicable law of your jurisdiction restricts or prohibits such agreements.

EQUITABLE REMEDIES

Notwithstanding anything contained in this EULA to the contrary, you acknowledge and agree that any violation of or non-compliance with this EULA by you will cause irreparable harm to SONY, for which monetary damages would be inadequate, and you consent to SONY obtaining any injunctive or equitable relief that SONY deems necessary or appropriate in such circumstances. SONY may also take any legal and technical remedies to prevent violation of and/or to enforce this EULA, including, but not limited to, immediate termination of your use of the SOFTWARE, if SONY believes in its sole discretion that you are violating or intend to violate this EULA. These remedies are in addition to any other remedies SONY may have at law, in equity or under contract.

TERMINATION

Without prejudice to any of its other rights, SONY may suspend your access or use of the SOFTWARE and/or

terminate this EULA if you fail to comply with any of its terms. In case of such termination, you must cease all use, and destroy any copies, of the SOFTWARE.

AMENDMENT

SONY RESERVES THE RIGHT TO AMEND ANY OF THE TERMS OF THIS EULA AT ITS SOLE DISCRETION BY POSTING NOTICE ON A SONY DESIGNATED WEB SITE, BY EMAIL NOTIFICATION TO AN EMAIL ADDRESS PROVIDED BY YOU, BY PROVIDING NOTICE AS PART OF THE PROCESS IN WHICH YOU OBTAIN UPGRADES/UPDATES OR BY ANY OTHER LEGALLY RECOGNIZABLE FORM OF NOTICE. If you do not agree to the amendment, you should promptly contact SONY for instructions. Your continued use of the SOFTWARE after the effective date of any such notice shall be deemed your agreement to be bound by such amendment.

THIRD-PARTY BENEFICIARIES

Each THIRD-PARTY SUPPLIER is an express intended third-party beneficiary of, and shall have the right to enforce, each provision of this EULA with respect to the software of such party.

Should you have any questions concerning this EULA, you may contact SONY by writing to SONY at the applicable contact address for each area or country.

