

Before first use

Checking the package contents [1]

Location of controls

- Location of controls (Portable Ultra Short Throw Projector) [2]
- Location of controls (Wireless unit) [3]
- About the indicators [4]
- The home screen of the special application [5]

Preparing

Projector install location [6]

Preparing the power

- Charging the projector [7]
- Battery duration of the projector [8]
- Connect the Wireless unit to a wall outlet [9]

Turning the power on/off

- Turning the projector on/off [10]
- Placing the projector in standby status [11]

Installing the special application and performing the initial settings [12]

Connecting another device to the Wireless unit

- [Connecting an HDMI device or TV \[13\]](#)
- [Connecting the IR Blaster \[14\]](#)

How to use the special application

The home screen of the special application [15]

Updating the software [16]

Projecting the poster

Projecting the clock [17]

Projecting weather information [18]

Projecting a slideshow [19]

Setting the photo change interval [20]

Projecting a smartphone's photo/movie

Projecting a smartphone's photo/movie [21]

Using the mirroring function to project the smartphone's screen

Using the mirroring function to project the smartphone's screen [22]

Projecting photos/movies from a device on the home network

Projecting photos/movies from a device on the home network [23]

Projecting images from the HDMI device connected to the Wireless unit

Projecting images from the HDMI device connected to the Wireless unit [24]

Settings

Adjusting the volume/picture

- **Adjusting the volume [25]**
- **Adjusting the brightness [26]**
- **Adjusting the focus [27]**
- **Keystone correction [28]**
- **Rotating the projected image [29]**

Setting auto on/standby [30]

Adjusting the picture settings [31]

Adjusting the sound quality (xLOUD) [32]

Configuring the network settings

- [Changing the device name of the projector \[33\]](#)
- [Connecting to an access point \[34\]](#)
- [Connecting via Wi-Fi Direct \[35\]](#)
- [Checking the signal strength \[36\]](#)
- [Confirming registration when connecting a smartphone \[37\]](#)
- [Managing smartphones to be connected \[38\]](#)
- [Checking the Wi-Fi MAC address \[39\]](#)

[Setting the language for the projector \[40\]](#)

[Updating the software \[41\]](#)

[Resetting to the initial settings \[42\]](#)

[Deleting contents stored in the projector \[43\]](#)

[Checking the projector to be operated using the special application \[44\]](#)

[Pairing the projector and Wireless unit again \[45\]](#)

Precautions/specifications

[Precautions \[46\]](#)

[Cleaning \[47\]](#)

[Specifications \[48\]](#)

[Battery duration of the projector \[49\]](#)

[Trademarks \[50\]](#)

About licenses [51]

Troubleshooting/frequently asked questions

Frequently asked questions

- [The color is not correct. \[52\]](#)
- [The projected image is distorted. \[53\]](#)
- [There are shadows on the projected image. \[54\]](#)
- [The projected images flicker, or small point noises are displayed. \[55\]](#)
- [The focus cannot be adjusted \[56\]](#)
- [Images from the HDMI device are not projected, or the picture quality is poor. \[57\]](#)
- [The projection screen dims automatically, or the projection screen turns off. \[58\]](#)
- [Poor picture quality. \[59\]](#)
- [Cannot operate with the special application. \[60\]](#)

[1] Before first use

Checking the package contents

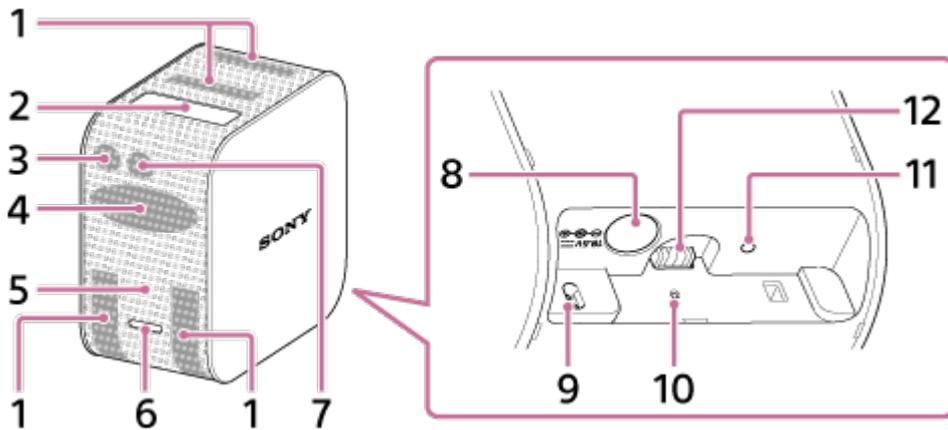
After opening the package, check that all items in the list are included in the package. If any item is missing, contact your dealer.

Numbers in () indicate the item quantities.

- Portable Ultra Short Throw Projector (LSPX-P1) (1)
- Wireless unit (LSPX-PT1) (1)
- AC adaptor VGP-AC19V77 (19.5 V / for the projector) (1)
- AC adaptor LSPX-AC5V2 (5 V / for Wireless unit) (1)
- Power cord (2)
- IR Blaster (1)
- Startup Guide (1)
- Reference Guide (1)
- Warranty (1)

Location of controls (Portable Ultra Short Throw Projector)

The location of controls of the projector is described below.



1. Ventilation holes (intake/exhaust)
2. Projection window

Projects images onto a wall, table or floor.

3. Remote control receiver

Receives signals from the HDMI device's remote control to transfer the signals to the HDMI device connected to the Wireless unit, thus allowing you to operate the HDMI device. The Wireless unit and the HDMI device should be connected via the IR Blaster (supplied).

4. Speakers
5. Power indicator

Indicates the status of the power and battery of the projector.

6. Power button

Press and hold to turn the projector on/off. Press lightly while the projector is turned on to switch between standby/power-on.

7. Illumination sensor

Measures the ambient illumination to adjust the projection screen brightness.

8. DC IN 19.5V jack

Connect the AC adaptor VGP-AC19V77 (supplied).

9. Distance sensor

Measures the distance between the projector and the projection surface.

10 RESET button

- Resets and restarts the projector.

11 Charge indicator

- Turns on during charging.

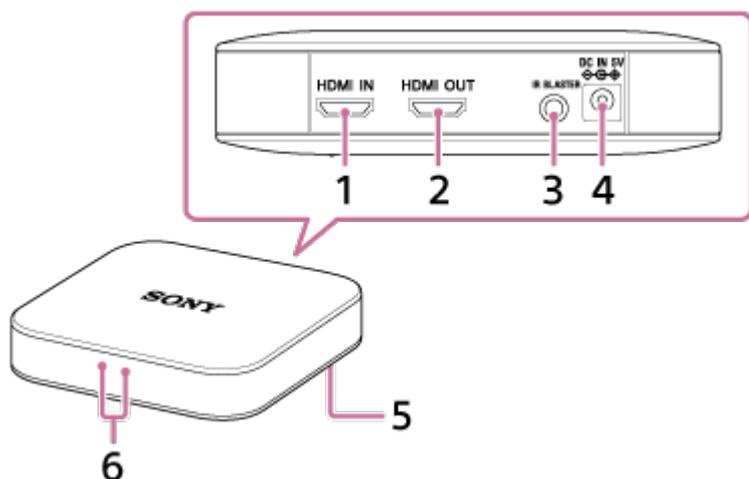
12 Power jack for the stand (sold separately)

- Supplies power to the floor stand (sold separately) when the projector is mounted on the stand.

[3] Before first use | Location of controls

Location of controls (Wireless unit)

The location of controls of the Wireless unit is described below.



1. HDMI IN connector

Connect an HDMI device with a commercially available HDMI cable. You can project images from the connected device.

2. HDMI OUT connector

Connect a TV with a commercially available HDMI cable. You can display images from the device connected to the Wireless unit onto the TV screen.

3. IR BLASTER connector

Connect the IR Blaster (supplied)

4. DC IN 5V jack

Connect the AC adaptor LSPX-AC5V2 (supplied).

5. PAIRING button

The projector and the Wireless unit have already been paired (connection setting) at the time of purchase. When the pairing is removed, such as after maintenance, use this PAIRING button to pair them again.

6. Indicator

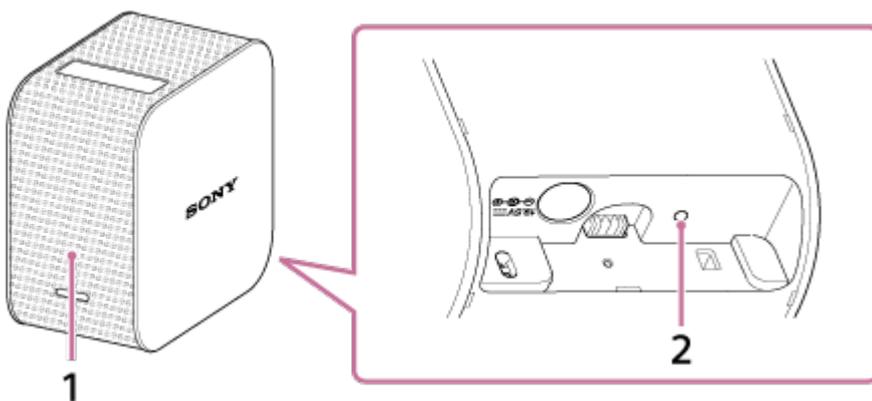
Indicates the status of the Wireless unit.

[4] Before first use | Location of controls

About the indicators

The meanings of the indicators of the projector and the Wireless unit are shown below:

Projector indicators



1. Power indicator

- Turned off: The power is off.
- Turned on in white (dim): The projector is in standby status.
- Turned on in white (bright): The power is on.
- Flashing in red
 - Flashing every four seconds: The battery is low.
 - Flashing every two seconds: The temperature inside the projector is too high or too low.

Leave the projector at room temperature for a while, then turn in on again.

- Flashing three times every three seconds: The projector is malfunctioning. Consult your dealer.

2. Charge indicator

- Turned off: Recharging is complete.
- Turned on: Charging.

Wireless unit indicator

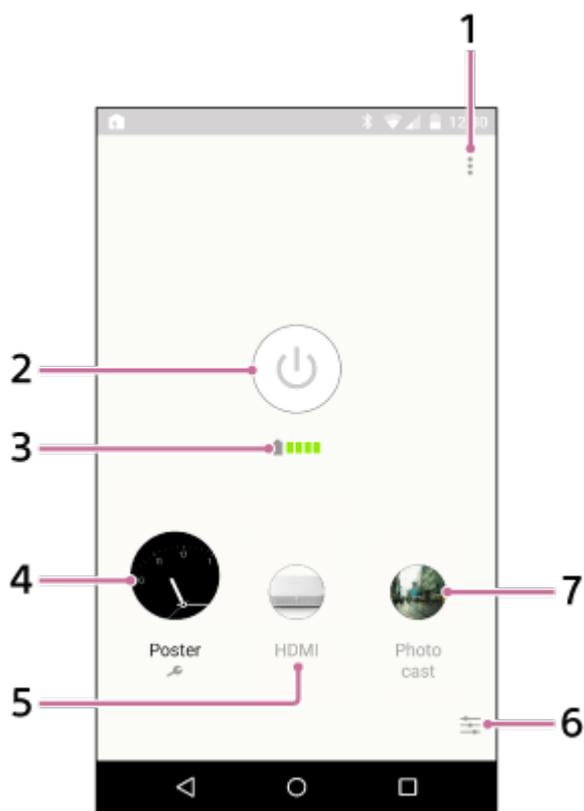


- Turned on in white: Connected with the projector.
It lights in white when connected to the wall outlet while the Wireless unit is turned off. The indicator turns off when the Wireless unit is ready to use.
- Flashing in white every second: Software update is in progress.

[5] Before first use | Location of controls

The home screen of the special application

The items displayed in the home screen of “Portable Ultra Short Throw Projector Application” are described.



1. ⋮ (Settings) button

Displays the setting menu.

2. ⏻ (standby/power-on) button

Switches between standby and power-on.

3. Projector remaining battery life

4. Poster button

Places the projector in poster mode.

Tap this button to project a poster, to use the screen mirroring function to project the smartphone's screen, or to project photos or movies from a device on the home network.

The projector is automatically placed in poster mode just after it is turned on. Tap this to place it in poster mode manually.

Tap the  button under [Poster] to change the poster type.

5. "HDMI" button

Places the projector in "HDMI" mode.

Tap this button to project images from the HDMI device connected to the Wireless unit.

6. ≡ (control panel) button

Opens the control panel. You can change the screen brightness, volume, etc.

7. Photo cast button

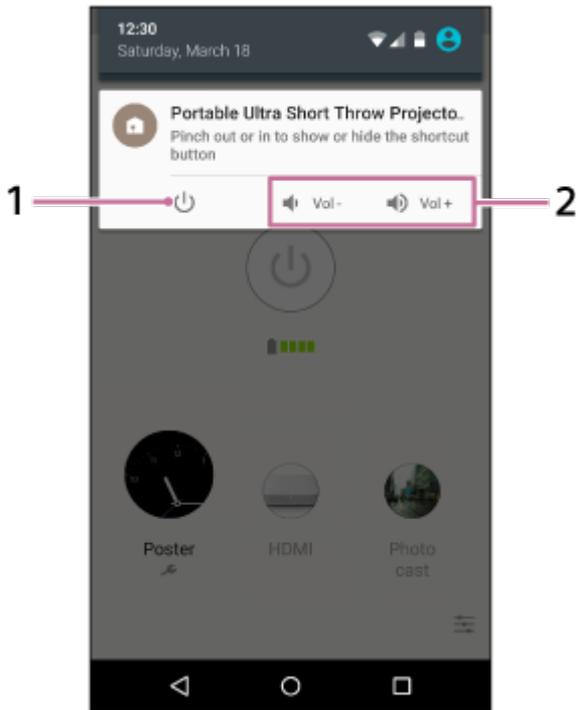
Tap this button to project a photo or movie stored in the smartphone using the special application.

About the notification screen on the smartphone

When the smartphone and projector are connected, the notification of “Portable Ultra Short Throw Projector Application” is displayed in the notification screen on the smartphone. In this notification, you can switch the projector between standby and power-on, and adjust the volume.

Flick down from the top edge of the smartphone’s screen to open the notification screen. With an iPhone, tap “Today” (a) to see the notification of this application.

Android smartphone



iPhone



Standby/power-on button

- 1.
2. Volume adjustment button

Hint

- When two or more projectors are registered to the special application, the device name currently connected is displayed on the home screen.
- The notification screen may vary depending on the smartphone.

[6] Preparing

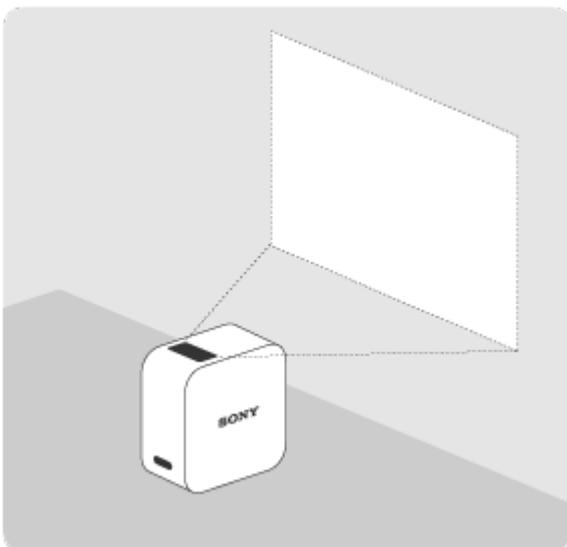
Projector install location

In addition to a wall, the projector can project photos and movies onto a table or floor. Place the projector in a location appropriate for the projection surface.

Projecting onto the wall

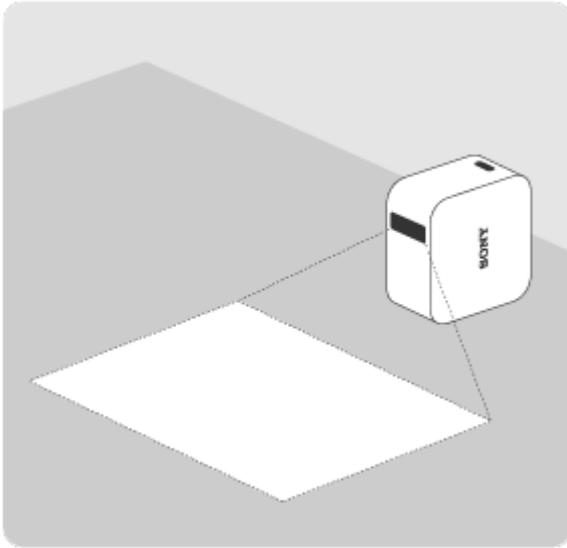
The projected image size varies according to the distance from the wall.

- 0 cm: 22 inches
- Approx. 9 cm: 40 inches
- Approx. 19 cm: 60 inches
- Approx. 28 cm: 80 inches



Projecting onto a table or floor

The projected image size is 22 inches.



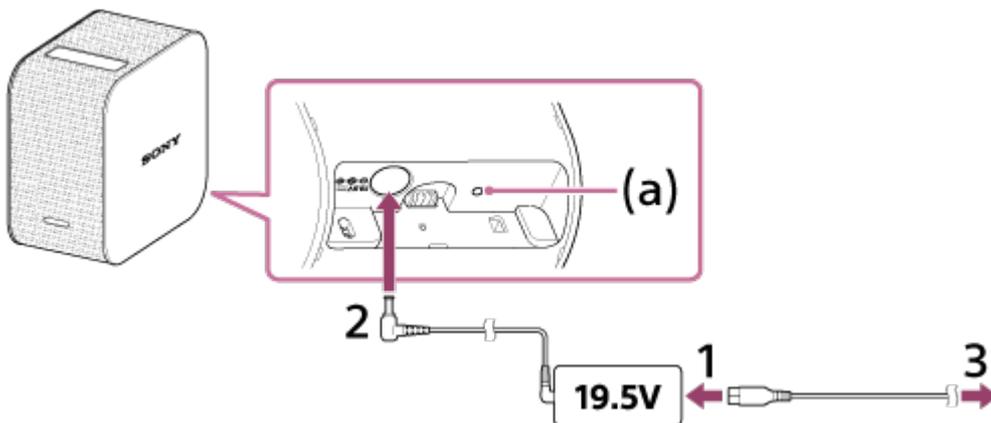
Hint

- When the projector is lifted up and moved, the projection light is dimmed to prevent it entering the eye.

[7] Preparing | Preparing the power

Charging the projector

A lithium-ion rechargeable battery is incorporated into the projector. When the remaining battery life becomes low, the power indicator flashes in red. Connect the supplied AC adaptor to charge the projector.



1 Connect the power cord (supplied) to the AC adaptor (19.5 V) for the projector (supplied).

2 Connect the AC adaptor to the DC IN 19.5V jack of the projector.

3 Firmly insert the plug of the power cord into the wall outlet.

When charging starts, the charge indicator (a) turns on in amber. When charging is complete, the charge indicator turns off.

Hint

- It takes about four hours to fully charge a flat battery.
- The charge indicator may turn on to check the remaining battery life even when the battery is fully charged.

[8] Preparing | Preparing the power

Battery duration of the projector

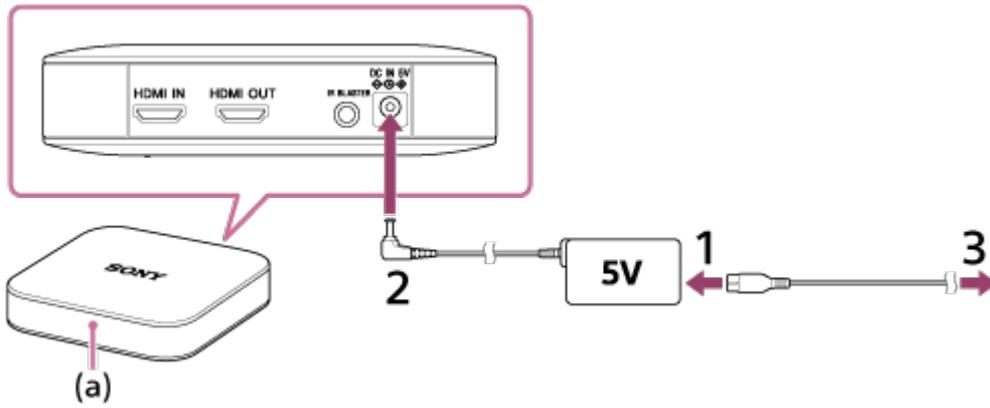
The fully-charged projector can be used for approximately 2 hours.

Hint

- This battery duration is when [Picture] is set to [Preset 1], the volume is set to approximately 80% and a movie is played.
- Battery duration may vary depending on the ambient temperature or other factors.
- Battery duration may vary depending on your smartphone.

[9] Preparing | Preparing the power

Connect the Wireless unit to a wall outlet



1 Connect the power cord (supplied) to the AC adaptor (5 V) for the Wireless unit (supplied).

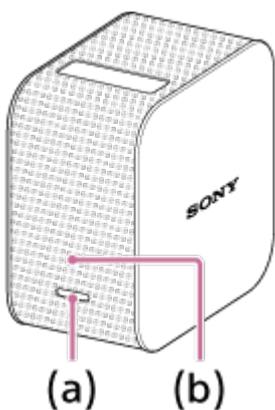
2 Connect the AC adaptor to the DC IN 5V jack of the Wireless unit.

3 Firmly insert the plug of the power cord into the wall outlet.

When the power plug is inserted into the wall outlet, the Wireless unit turns on and the white indicator (a) turns on. When the unit is ready for use, the indicator turns off.

[10] Preparing | Turning the power on/off

Turning the projector on/off



To turn on

Press and hold the power button (a). The projector is turned on, and the power indicator (b) turns on in white.

To turn off

Press and hold the power button (a). The projector is turned off, and the power indicator (b) turns off. To place the projector in standby status, lightly press the power button (a).

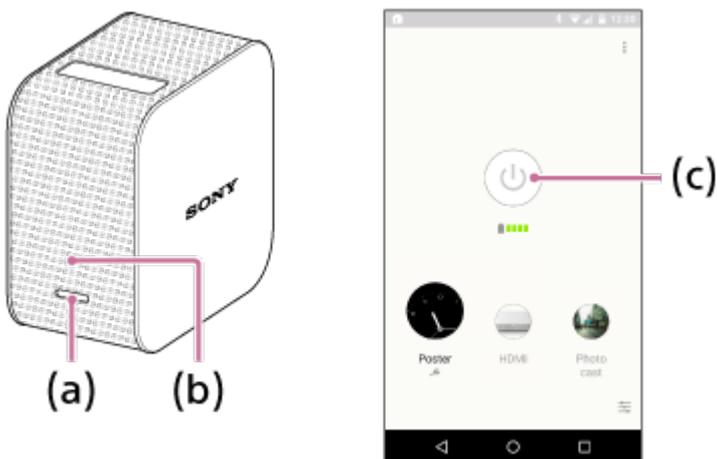
Hint

- The Wireless unit is turned on when plugged in.
- When you tap the  (standby) button on the home screen of the special application “Portable Ultra Short Throw Projector Application,” the projector is placed in standby mode. To turn the projector off, press and hold the power button of the projector.
- When the projector is turned off, it is also disconnected from the Bluetooth connection and access point (wireless router).

[11] Preparing | Turning the power on/off

Placing the projector in standby status

When you are not going to use the projector for a while, place it in standby status to dim the projection screen.



Entering standby status

Enter standby status either from the projector or the smartphone.

-

Projector body: Press the power button (a) lightly.

- “Portable Ultra Short Throw Projector Application”: Tap the  (power-on) button (c) on the home screen.

The power indicator (b) remains lit in white when the projector is in standby status.

Resuming from standby status

Resume operation either from the projector or the smartphone.

- Projector body: Press the power button (a) lightly.
- “Portable Ultra Short Throw Projector Application”: Tap the  (power-on) button (c) on the home screen.

Hint

- You can also use the notification of “Portable Ultra Short Throw Projector Application” displayed in the notification area of the smartphone to switch between standby and power-on.
- You can use [Auto on/standby] of “Portable Ultra Short Throw Projector Application” to place the projector in standby status automatically in the following conditions.
 - When the projector is in poster mode and not operated for more than 20 minutes in a dark room
 - At the specified time
 - When your smartphone moves out of range of the projector (for example, you have moved away from the projector with the smartphone)

[12] Preparing

Installing the special application and performing the initial settings

Use the projector’s special application “Portable Ultra Short Throw Projector Application” to operate and configure the projector. Install “Portable Ultra Short Throw Projector Application” to your smartphone from Google Play store or App Store.

Compatible smartphone

- Android

Android 4.4 or later (Bluetooth 4.0 (Bluetooth Low Energy) compatible)

- iPhone

Following devices with iOS 9: iPhone 4s or later, iPod Touch 5th generation or later, iPad 3rd

generation or later, iPad mini

1 Download and install “Portable Ultra Short Throw Projector Application” from Google Play store or App Store.

<http://www.sony.net/lsp-x-p1/store/>

2 After the installation is complete, start “Portable Ultra Short Throw Projector Application.”

3 Follow the on-screen instructions to perform the initial settings of “Portable Ultra Short Throw Projector Application.”

Hint

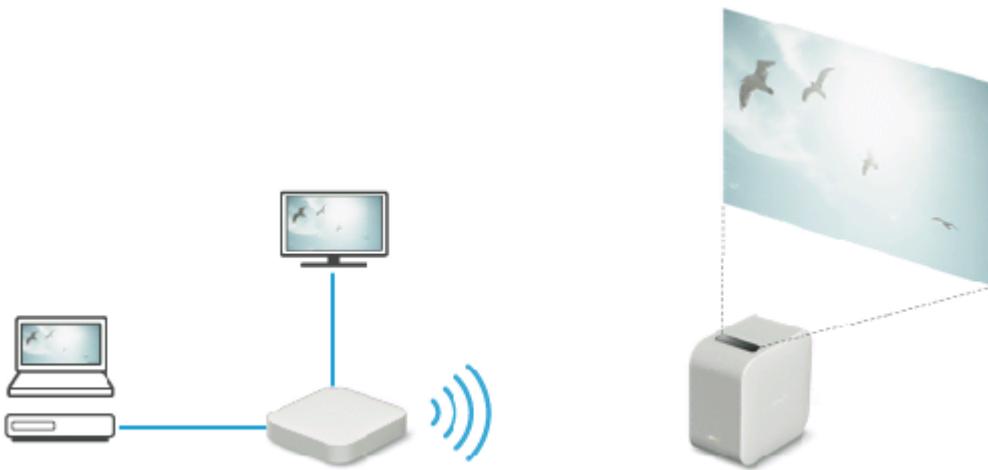
- Up to eight smartphones can be registered to the projector. When a further one is to be registered, the oldest registration is overwritten by new one.

[13] Preparing | Connecting another device to the Wireless unit

Connecting an HDMI device or TV

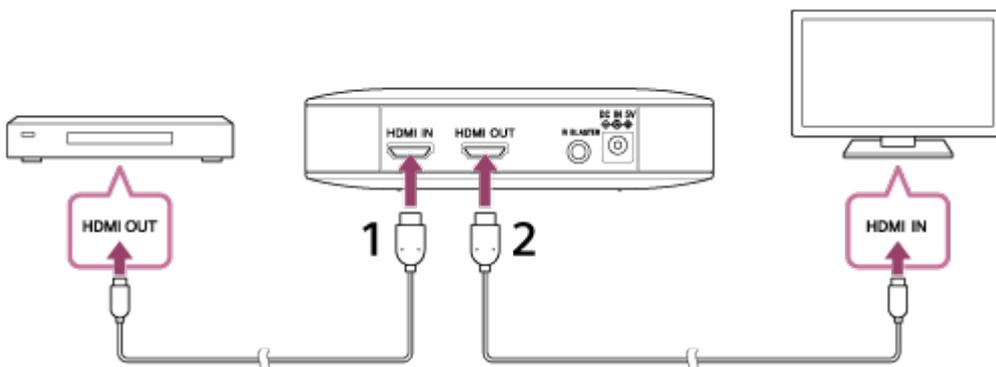
You can connect an HDMI device such as a Blu-ray Disc™ recorder to the Wireless unit to project images from the HDMI device.

To also display images from the HDMI device onto a TV screen, connect the TV to the Wireless unit. An HDMI cable (sold separately) is necessary to connect an HDMI device.



1 Connect the Wireless unit's HDMI IN connector and the HDMI device's HDMI OUT connector with an HDMI cable (sold separately).

2 To also display images from the HDMI device onto a TV screen, connect the Wireless unit's HDMI OUT connector and the TV's HDMI IN connector with an HDMI cable (sold separately).

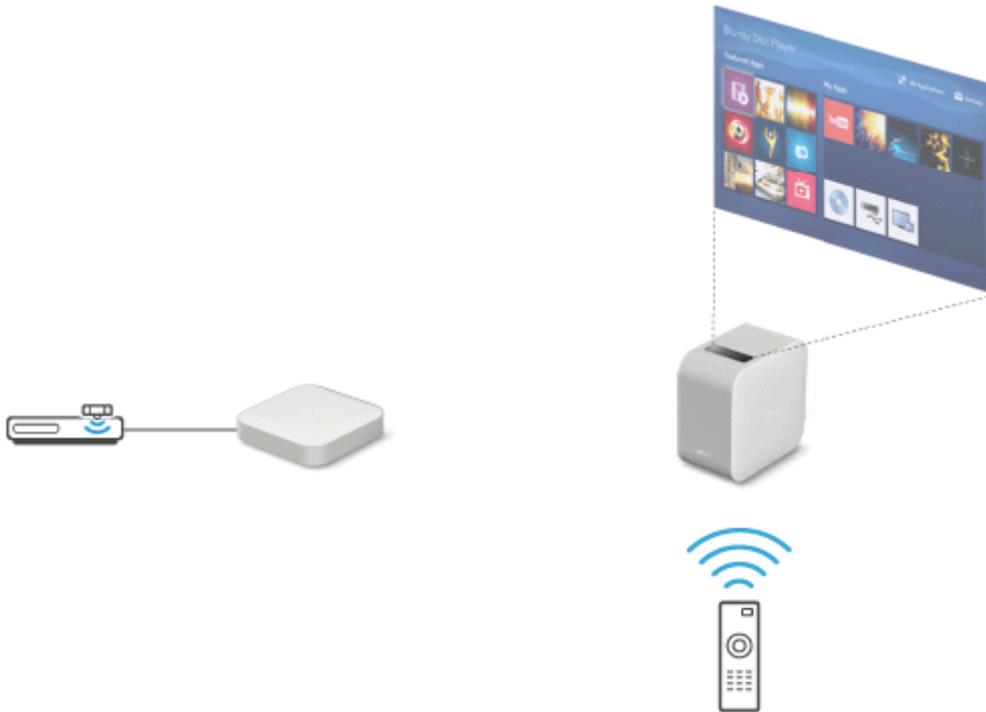


Hint

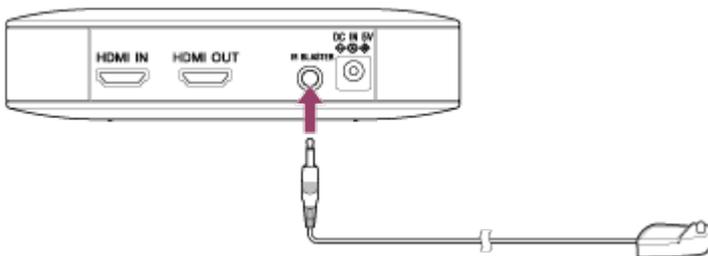
- Connecting the IR Blaster (supplied) allows you to operate the HDMI device by aiming its remote control at the projector. This is useful when the projector and HDMI device are placed at distant locations.
- When an interlaced video signal is input, the picture quality may be poor. Set the output resolution of the HDMI device to "Auto," "1080p," or "720p."

Connecting the IR Blaster

By connecting the Wireless unit and an HDMI device with the IR Blaster (supplied), you can operate the HDMI device by aiming its remote control at the projector. This is useful when the projector and HDMI device are placed at distant locations.

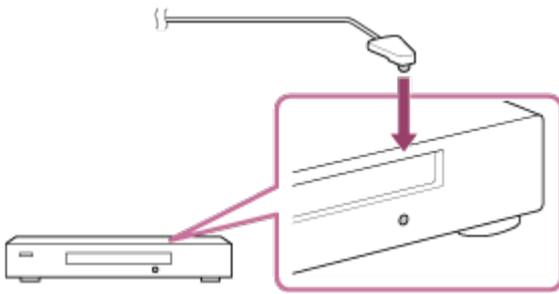


- 1 **Connect the IR Blaster to the IR BLASTER connector of the Wireless unit.**

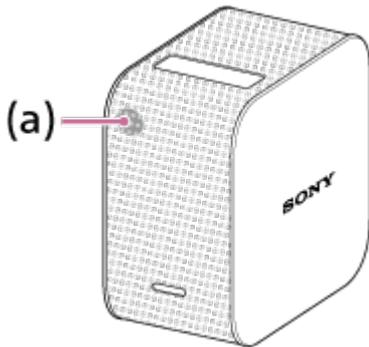


- 2 **Mount the IR BLASTER head on the HDMI device so that the head is aimed at the remote control receiver of the device.**

To locate the remote control receiver, refer to the instruction manual supplied with the HDMI device.



- 3 Aim the HDMI device's remote control at the projector's remote control receiver (a), then operate the remote control.

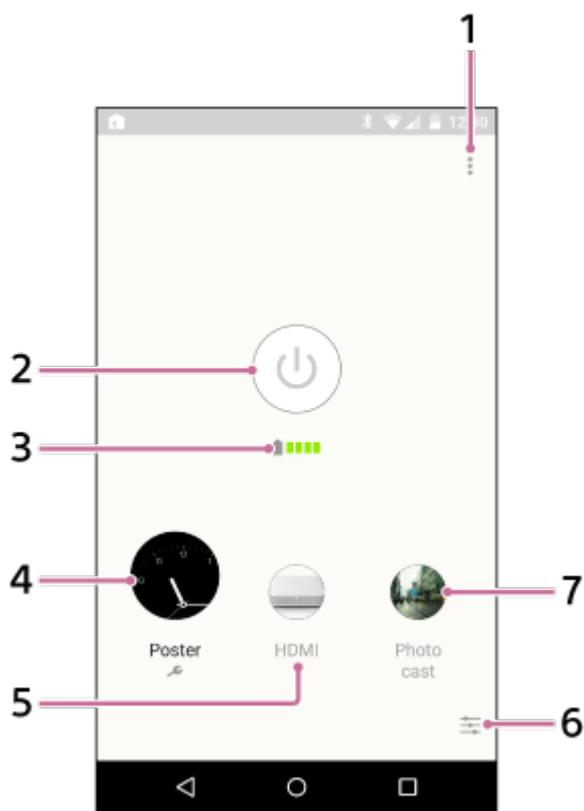


If the HDMI device does not respond, change the direction of the IR Blaster.
After checking the IR Blaster works correctly, secure it with the double-sided adhesive sheet (supplied).

[15] How to use the special application

The home screen of the special application

The items displayed in the home screen of "Portable Ultra Short Throw Projector Application" are described.



1. ⋮ (Settings) button

Displays the setting menu.

2. ⏻ (standby/power-on) button

Switches between standby and power-on.

3. Projector remaining battery life

4. Poster button

Places the projector in poster mode.

Tap this button to project a poster, to use the screen mirroring function to project the smartphone's screen, or to project photos or movies from a device on the home network.

The projector is automatically placed in poster mode just after it is turned on. Tap this to place it in poster mode manually.

Tap the  button under [Poster] to change the poster type.

5. "HDMI" button

Places the projector in "HDMI" mode.

Tap this button to project images from the HDMI device connected to the Wireless unit.

6. ≡ (control panel) button

Opens the control panel. You can change the screen brightness, volume, etc.

7. Photo cast button

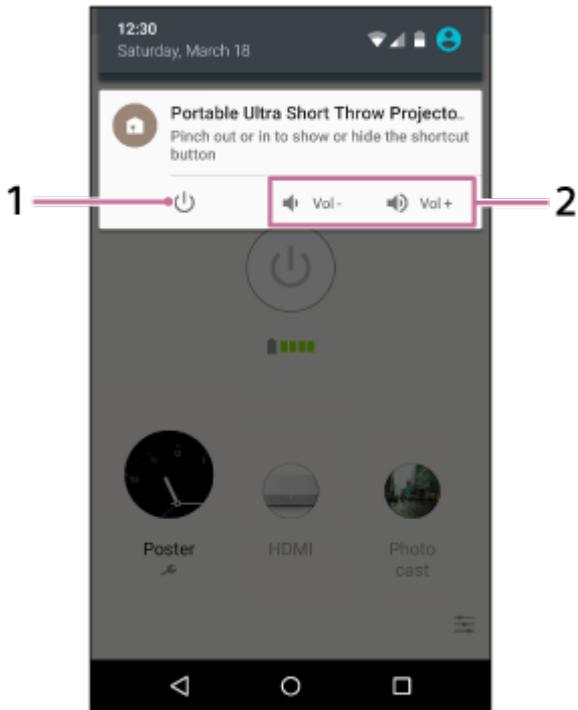
Tap this button to project a photo or movie stored in the smartphone using the special application.

About the notification screen on the smartphone

When the smartphone and projector are connected, the notification of “Portable Ultra Short Throw Projector Application” is displayed in the notification screen on the smartphone. In this notification, you can switch the projector between standby and power-on, and adjust the volume.

Flick down from the top edge of the smartphone’s screen to open the notification screen. With an iPhone, tap “Today” (a) to see the notification of this application.

Android smartphone



iPhone



Standby/power-on button

- 1.
2. Volume adjustment button

Hint

- When two or more projectors are registered to the special application, the device name currently connected is displayed on the home screen.
- The notification screen may vary depending on the smartphone.

[16] How to use the special application

Updating the software

The software of the projector and the Wireless unit can be updated via the Internet. When a new version of software is available, ● appears on the top right of the special application's home screen and ① appears at the [Update] item of the setting menu.

1 Press and hold the power button of the projector to turn it on.

2 Tap the ⋮ (Settings) button on the home screen of “Portable Ultra Short Throw Projector Application.”

3 Tap [Update] — [Update].

4 Tap [Get update], then follow the on-screen instructions to update the software.

When an update for the Wireless unit is included, it is performed after the projector's software is updated.

It is performed when playing back images from the HDMI device connected to the Wireless unit.

Hint

- Connect the projector to an access point (wireless router) to update.
- It is recommended that you connect the smartphone via Wi-Fi to perform an update because the file size may be large.
-  and  are displayed when [Update notifications] in [Update] is enabled. It is enabled by default.
- Enable [Auto-retrieve updates] in [Update] to download the software automatically. When the smartphone is connected to the Internet via Wi-Fi, a new version of software will be downloaded to it. You can reduce the time for the update. The setting is enabled by default.

[17] Projecting the poster

Projecting the clock

In poster mode, you can project the clock.

Connect the smartphone and projector to the same access point (wireless router) before using this function.

- 1** Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.
- 2** Tap the  button under [Poster].
- 3** Select the desired clock type.

Hint

- The clock automatically synchronizes with the smartphone's clock.
-

Projecting weather information

In poster mode, you can project weather information of the current location. The weather information is updated every 1 or 2 hours.

Connect the smartphone and projector to the same access point (wireless router) before using this function.

- 1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.
- 2 Tap the  button under [Poster].
- 3 Tap [Weather].
- 4 Tap [Update location information], then follow the on-screen instructions to set the location information.

Hint

- To change the location for the weather information, tap the  button to the right of [Weather], then follow the on-screen instructions.

Note

- If new weather information is not obtained, the weather information display is not updated.

Projecting a slideshow

In poster mode, you can project a slideshow. In addition to choosing one from prepared genres, you can use photos stored in the smartphone to project in a slideshow.

Connect the smartphone and projector to the same access point (wireless router) before using this function.

- 1 Start  /  (**Portable Ultra Short Throw Projector Application**) on the smartphone.
- 2 Tap the  button under [Poster].
- 3 Select a slideshow genre (such as [A day]), or [My slideshow].
- 4 When selecting [My slideshow], select photos and movies to be projected in a slideshow from the thumbnail screen, tap [Build Slideshow], then follow the on-screen instructions to complete the setting.

You can transfer photos and movies until [Free space:] of the projector is filled.

You can change the storage location of photos and movies to display on the thumbnail screen.

Tap the  button at the top of the screen to select the storage location for photos and movies to display on the thumbnail screen.

To change photos and movies of [My slideshow]

Tap the  button to the right of [My slideshow], then reselect photos and movies from the thumbnail screen. Tap [Build Slideshow] to upload them and overwrite the photos and movies previously stored in the projector.

To set the playback order of [My slideshow]

In the my slideshow screen, tap the  (Playback order) button. You can select [Newest first], [Oldest first], or [Random] as the playback order.

To set the background music for [My slideshow]

In the my slideshow screen, tap the  (Background music) button. Then, tap [Add] to select tracks to set as background music. You can select multiple tracks to be played back in the order of selection. After selecting music, tap the  button at the top left of the screen to return to the thumbnail screen, then tap [Build Slideshow].

You can add and remove music and change the music order. To change the music order, drag  at the right of the music to be moved, then drop it to the desired position.

Hint

- You can set the slideshow interval time.
- The projector can play back audio files in the following formats. Audio files in other formats may be displayed in the list, though those files cannot be played back.
 - MPEG2 AAC (AAC-LC)
 - MPEG4 AAC-LC
 - MPEG1 Layer 1/2
 - MP3 (MPEG1 Layer 3)
 - LPCM

[20] Projecting the poster

Setting the photo change interval

You can change the photo change interval for [A day] and [My slideshow].

Connect the smartphone and projector to the same access point (wireless router) before using this function.

1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap the  (Settings) button.

3 Tap [Poster settings].

4 Tap [Display time].

5 Set the display time.

[21] Projecting a smartphone's photo/movie

Projecting a smartphone's photo/movie

You can project a photo or movie stored in a smartphone using the special application. Connect the smartphone and projector to the same access point (wireless router) before using this function.

Note

- When no access point is available, place the projector in Wi-Fi Direct mode to connect the smartphone directly.

1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap [Photo cast].

3 Select the desired photo or movie.

When selecting a photo, you can tap the  (rotate) button to rotate the photo; each tap rotates it 90 degrees clockwise.

During movie playback, you can tap the  (play) button or  (pause) button to play/pause.

Tap the  button at the top of the screen to select a photo or movie stored in another location.

Hint

- Tap the  (control panel) button to adjust the volume, brightness, etc.

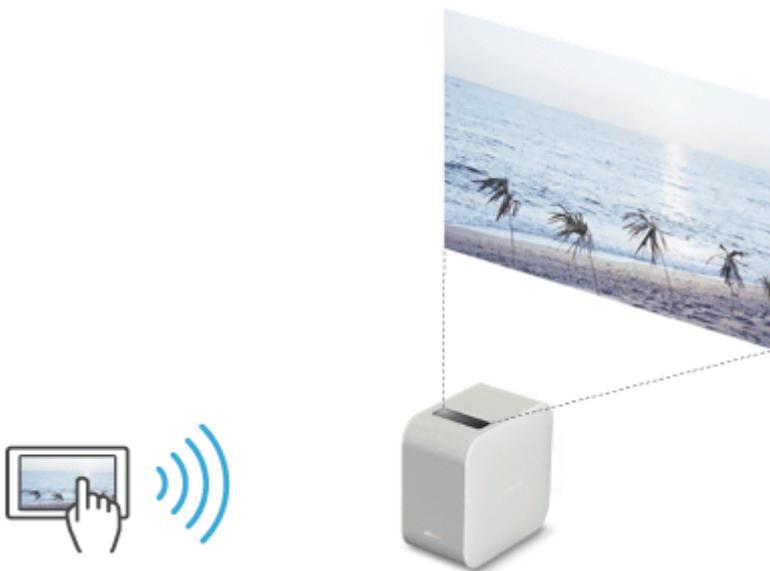
[22] Using the mirroring function to project the smartphone's screen

Using the mirroring function to project the smartphone's screen

When your smartphone supports Miracast, you can directly project the smartphone's screen. No access point (wireless router) connection is needed.

Note

- Depending on your smartphone, some Internet contents cannot be projected by the mirroring function.



1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap [Poster] to place the projector in poster mode.

3 Place the smartphone in mirroring mode, then connect it to the projector.

4 Operate the smartphone to project the screen.

[23] Projecting photos/movies from a device on the home network

Projecting photos/movies from a device on the home network

By using the home network function, you can project photos and movies stored in a device (such as a Blu-ray Disc™ recorder) on the home network.

Before using this function, connect the smartphone and projector to the access point (wireless router) to which the home network compatible device is connected.

Note

- An application which supports the control function (such as Video & TV SideView) must be installed on the smartphone to project photos and movies in a device on the home network.

1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap [Poster] to place the projector in poster mode.

3 Start the application which supports the control function.

4 Set the projector as the output destination, then display the photo or movie.

Hint

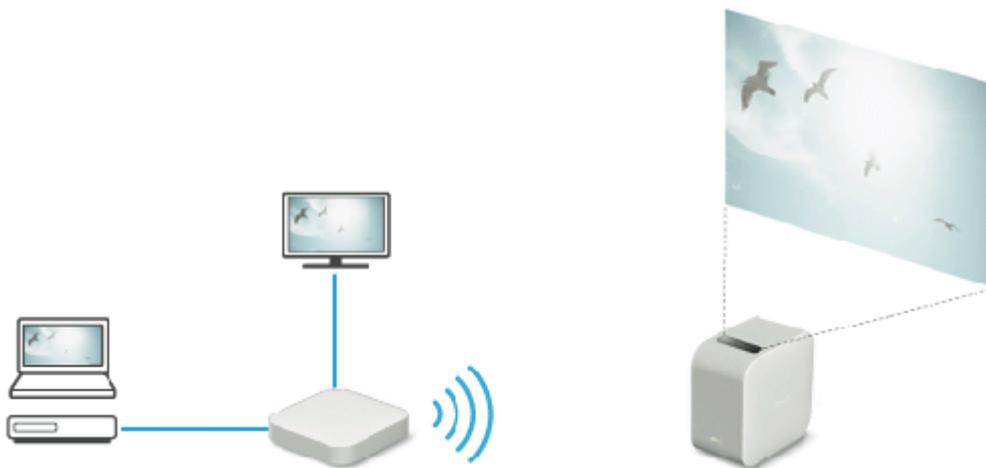
- The maximum still image size for projecting with the home network function is 32 mega pixels (8,192 × 4,096 pixels) for JPG, and 3 mega pixels (2,048 × 1,024 pixels) for PNG/GIF.

[24] Projecting images from the HDMI device connected to the Wireless unit

Projecting images from the HDMI device connected to the Wireless unit

You can project images stored in an HDMI device.

You can connect a TV to the Wireless unit to display HDMI device's images on both the projector and TV without changing the cable connection.



1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap [HDMI].

3 Operate the HDMI device to play back images to be projected.

Hint

- Connecting the IR Blaster (supplied) allows you to operate the HDMI device by aiming its remote control at the projector. This is useful when the projector and HDMI device are placed at distant locations.

[25] Settings | Adjusting the volume/picture

Adjusting the volume

You can adjust the volume of the projector.

1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap the  (control panel) button.

3 Use the slide bar of [Volume] to adjust.

Hint

- You can also use the notification of "Portable Ultra Short Throw Projector Application" displayed in the notification area of the smartphone to adjust the volume.

[26] Settings | Adjusting the volume/picture

Adjusting the brightness

You can adjust the brightness of the projected image.



1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap the  (control panel) button.

3 Use the slide bar of [Brightness] to adjust.

Automatically adjust the brightness according to ambient lighting

Tap [Auto]. While using with a battery, [Auto] is disabled.

[27] Settings | Adjusting the volume/picture

Adjusting the focus

You can adjust the focus of the projected image.

1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap the  (control panel) button.

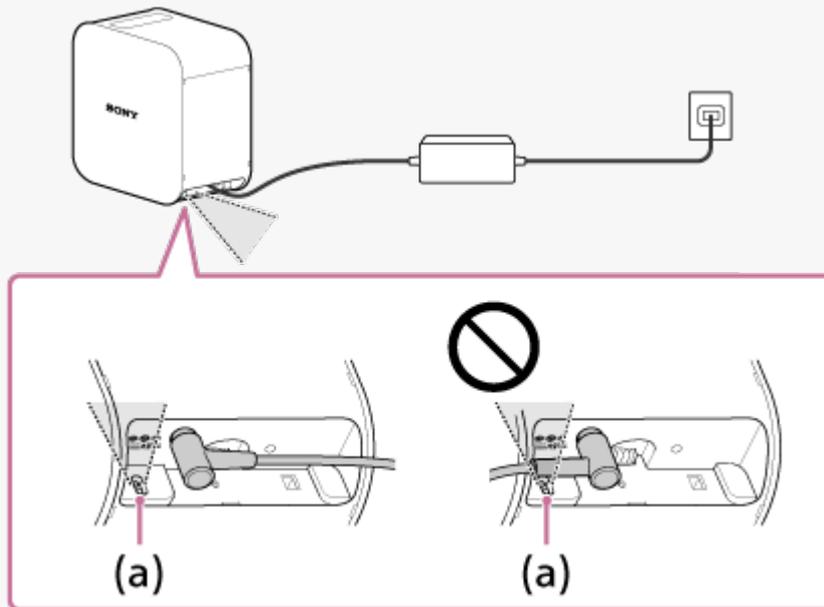
3 Use the  /  buttons or slide bar in [Focus] to adjust.

Auto focusing

Tap [Auto].

Note

- The auto focus function uses the range sensor on the rear of the projector to measure the distance to the projection surface and adjusts the focus. In the following conditions, the range sensor may not be able to measure the distance correctly and the focus may not be adjusted:
 - There is an obstruction between the projector and the projection surface
 - The projector is placed on a stand or the like.
 - The AC adaptor connected to the projector blocks the range sensor (a).



- When the projected image size is 60 inches or more, the auto focus function does not work.
- Depending on the projector's location and the material of the projection surface, the auto focus function may not work correctly.
- If the auto focus function does not work, disable [Auto], then adjust manually.

[28] Settings | Adjusting the volume/picture

Keystone correction

The correction method varies depending on the skew of the projected image.

When the lengths of the top edge and bottom edge of the projected image differ

Use the special application to perform keystone correction.



1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap the  (control panel) button.

3 Use the slide bar or  /  buttons of [Keystone correction] to adjust.

When the lengths of the left edge and right edge of the projected image differ

Change the projector's location or orientation to project perpendicularly.



[29] Settings | Adjusting the volume/picture

Rotating the projected image

You can rotate the projected image 180 degrees.

1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap the  (control panel) button.

3 Tap the  button or  button.

Tap the  button to rotate the projected image 180 degrees.

Tap the  button to return to the original orientation.

To rotate the projected image automatically

Tap [Auto].

[30] Settings

Setting auto on/standby

You can place the projector in standby mode at a specified time or when a smartphone is detected.

1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap the  (Settings) button.

3 Tap [Auto on/standby].

4 Select the item to be set.

Setting items

[Switch to standby after inactivity]

When the projector is in poster mode and not operated for more than 20 minutes in a dark room, it enters standby status and the projection screen is dimmed. Each time you tap the switch, the setting

is switched between enabled/disabled.

[On at a specified time]

At the specified time, the projector resumes from standby status and projects the image. When you tap [On at a specified time], the setting screen appears. Tap the switch to enable the setting, then specify the time. Each time you tap the switch, the setting is switched between enabled/disabled.

[Switch to standby at a specified time]

At the specified time, the projector enters standby status and dims the projection screen. When you tap [Switch to standby at a specified time], the setting screen appears. Tap the switch to enable the setting, then specify the time. Each time you tap the switch, the setting is switched between enabled/disabled.

[On when smartphone detected]

When the projector detects the smartphone, it resumes from standby status and projects the image. Each time you tap the switch, the setting is switched between enabled/disabled. When using an iPhone, set its [Portable Ultra Short Throw Projector Application] — [ALLOW LOCATION ACCESS] option to [Always] to make this function work correctly.

[Switch to standby when your smartphone moves out of range of Projector]

When the projector detects that the smartphone has moved away, it enters standby status and dims the projection screen. Each time you tap the switch, the setting is switched between enabled/disabled. When using an iPhone, set its [Portable Ultra Short Throw Projector Application] — [ALLOW LOCATION ACCESS] option to [Always] to make this function work correctly.

Hint

- When the smartphone and projector are connected, the projector's clock is automatically synchronized with the smartphone's clock.
- After placing the projector in standby status by pressing the power button, if the smartphone is taken out of range of the projector and then returned within five minutes, the [On when smartphone detected] function may not work. In such a case, turn the projector on manually.

[31] Settings

Adjusting the picture settings

You can adjust the picture settings of the projector.

1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap the  (Settings) button.

3 Tap [Picture].

4 Select the item to be adjusted.

Setting items

[Preset 1]

This option is suited to projecting onto a white wall, table or floor.

[Preset 2], [Preset 3]

This option is suited to projecting onto a yellowish wall, table or floor. Select the desired color tone.

[Custom 1], [Custom 2]

By default, [Custom 1] is adjusted to a brightness-oriented setting, and [Custom 2] is adjusted to be suited to natural images.

You can tap the  button to adjust to one of the following settings:

[Saturation], [Brightness], [Contrast], [Sharpness], and [White balance]

Tap [Reset] to reset to the default settings.

[32] Settings

Adjusting the sound quality (xLOUD)

“xLOUD” is an audio playback technology for improving the playback level. You can enjoy dynamic and powerful sound with movies, etc.

1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap  (Settings).

3 Tap [Sound].

4 Tap the [xLOUD] switch to change between enabled and disabled.

[33] Settings | Configuring the network settings

Changing the device name of the projector

You can change the projector's name displayed on the home network. "LSPXP1" is set at the time of purchase.

1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap the  (Settings) button.

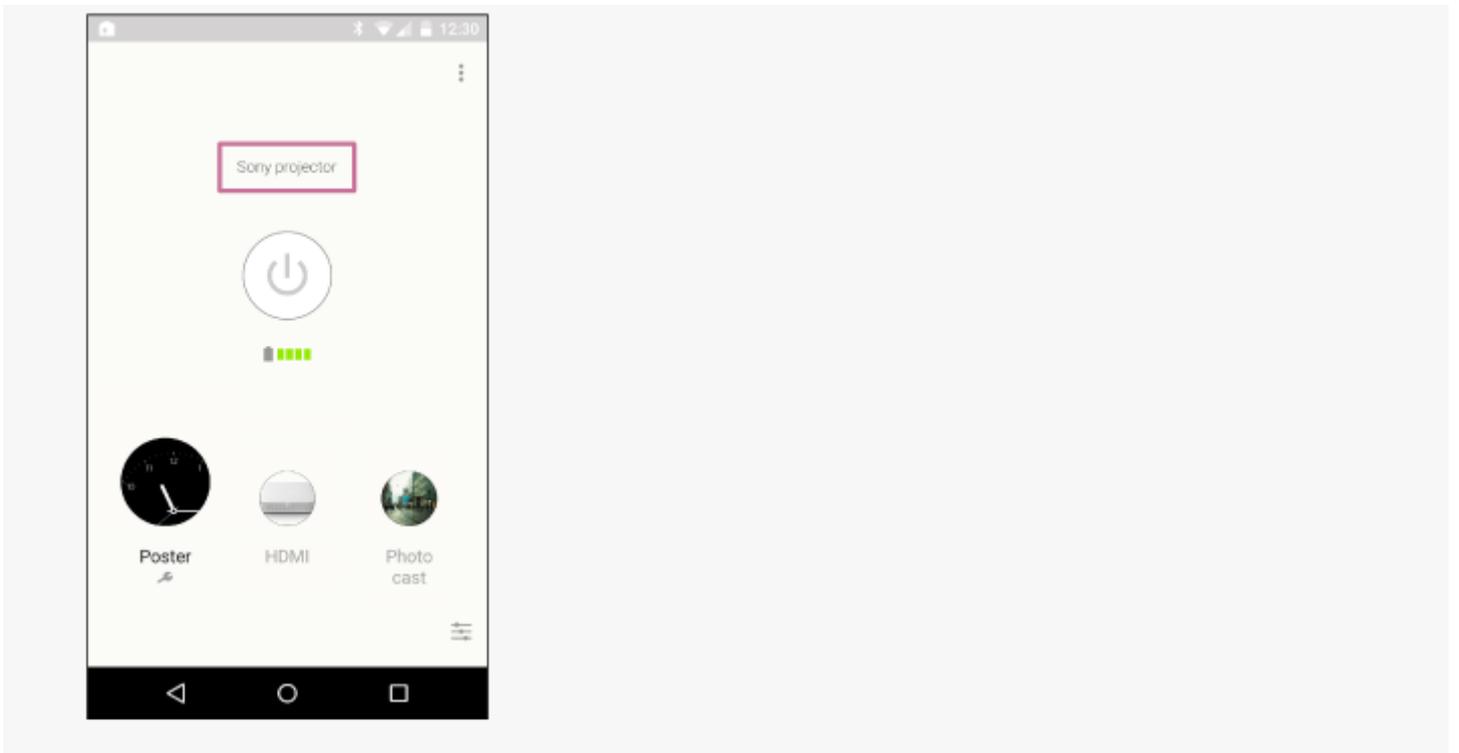
3 Tap [Network].

4 Tap [Device].

5 Enter the new name.

Hint

- After changing the device name, it is displayed on the home screen of the special application.



[34] Settings | Configuring the network settings

Connecting to an access point

A connection between the projector and access point (wireless router) is needed in the following situations. Connect the smartphone and projector to the same access point (wireless router).

- When projecting photos or movies in the smartphone.
- When operating the poster.
(When changing the poster type, transferring photos and movies for [My slideshow], updating the weather information for poster mode, or using [Poster settings])
- When updating the software of the unit.
- When setting the language for the projector.

1 Connect the smartphone to the access point.

2 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

3 Tap the  (Settings) button.

4 Tap [Network].

5 Tap [Wi-Fi].

6 Tap [Connect] to connect to the access point.

If the access point requires password input, tap [Password] to enter the password.

If the access point supports the WPS (Wi-Fi Protected Setup™) function, tap [Connect using Wi-Fi Protected Setup™], select the connection method, then follow the on-screen instructions.

To connect to an access point you have connected in the past

On the Wi-Fi screen, tap the  button, then tap [Network history] to view access points you have connected in the past. Tap the desired access point.

To delete an access point

On the Wi-Fi screen, tap the  button, then tap [Delete current network settings] to delete the access point currently connected to.

To delete an access point displayed in [Network history], touch and hold the access point to be deleted.

Hint

- The terms “access point” and “encryption key (password)” vary depending on the manufacturer (“encryption key,” “KEY,” “WEP key,” “security key,” “pass phrase,” “network key,” etc.). If you are uncertain, consult the manufacturer of the access point.
- The AOSS button of the access point may support WPS. For whether or not it supports WPS, refer to the instruction manual of the access point.

Connecting via Wi-Fi Direct

You can directly connect this unit and a smartphone (Wi-Fi Direct) without using an access point (wireless router).

Note

- When [Wi-Fi Direct] is enabled, screen mirroring of the smartphone's screen is not available. Also, [Wi-Fi Direct] is disabled when establishing a connection with an HDMI device.
- When [Wi-Fi Direct] is enabled, the smartphone establishes a peer-to-peer connection with the projector, therefore it is unable to establish a Wi-Fi connection with an access point (wireless router). After use, disable [Wi-Fi Direct].

1 Start  /  (**Portable Ultra Short Throw Projector Application**) on the smartphone.

2 Tap the  (**Settings**) button.

3 Tap [**Network**].

4 Tap [**Wi-Fi Direct**].

5 Tap the switch of [**Wi-Fi Direct**] to enable it.

[Wi-Fi Direct: On] appears on the home screen or photo cast screen of the special application. If your smartphone is an Android smartphone, it connects to this unit automatically. If you are using an iPhone, or your Android smartphone does not connect automatically, use the Wi-Fi setting screen of the smartphone to connect to this unit.

To disable [Wi-Fi Direct]

Tap the switch of [Wi-Fi Direct].

Checking the signal strength

You can check the signal strength of the wireless LAN connection between the projector and Wireless unit/access point (wireless router), and the signal strength of the Bluetooth connection between the projector and smartphone.

1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap the  (Settings) button.

3 Tap [Network].

4 Tap [Signal strength].

Hint

- Tap the  (refresh) button to refresh the signal strength indication.

Note

- The signal strength between the projector and Wireless unit is displayed only when the projector is in “HDMI” mode.
- The signal strength between the projector and access point (wireless router) is not displayed when the following functions are used:
 - When the projector is in “HDMI” mode
 - When the mirroring function is used to project the smartphone screen
 - When connecting via Wi-Fi Direct

Confirming registration when connecting a smartphone

When an unregistered smartphone accesses the projector, you can have a confirmation screen displayed to restrict the automatic registration.

- 1** Start  /  (**Portable Ultra Short Throw Projector Application**) on the smartphone.
- 2** Tap the  (**Settings**) button.
- 3** Tap **[Network]**.
- 4** Tap the **[Restrict adding smartphones]** switch to switch between enabled and disabled.

When enabled, PIN code input is required to connect an unregistered smartphone. The PIN code is displayed on the projection screen.

Managing smartphones to be connected

You can allow/deny access from each smartphone registered to the projector. You can also delete a registration.



- 1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.
- 2 Tap the  (Settings) button.
- 3 Tap [Network].
- 4 Tap [Smartphones added].
- 5 Tap the device to be changed.
- 6 Select [Allow] or [Deny].

To delete the registration, tap [Delete smartphone].

Note

- Even when the registration has been deleted, the deleted device will be registered to the access device list if the device accesses the projector.
To deny the automatic registration, enable [Restrict adding smartphones].
- You can set [Deny] to up to seven devices.

1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap  (Settings).

3 Tap [Network].

4 Check [Wi-Fi MAC address].

[40] Settings

Setting the language for the projector

The projector's messages are displayed in the same language as "Portable Ultra Short Throw Projector Application" at the time of purchase.

Before setting, connect the smartphone and projector to the same access point (wireless router).

1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap the  (Settings) button.

3 Tap [Projector language settings].

4 Select a desired language.

[41] Settings

Updating the software

The software of the projector and the Wireless unit can be updated via the Internet. When a new version of software is available, ● appears on the top right of the special application's home screen and ① appears at the [Update] item of the setting menu.

- 1 Press and hold the power button of the projector to turn it on.**
- 2 Tap the ⋮ (Settings) button on the home screen of “Portable Ultra Short Throw Projector Application.”**
- 3 Tap [Update] — [Update].**
- 4 Tap [Get update], then follow the on-screen instructions to update the software.**

When an update for the Wireless unit is included, it is performed after the projector's software is updated.

It is performed when playing back images from the HDMI device connected to the Wireless unit.

Hint

- Connect the projector to an access point (wireless router) to update.
- It is recommended that you connect the smartphone via Wi-Fi to perform an update because the file size may be large.
- ● and ① are displayed when [Update notifications] in [Update] is enabled. It is enabled by default.
- Enable [Auto-retrieve updates] in [Update] to download the software automatically. When the smartphone

is connected to the Internet via Wi-Fi, a new version of software will be downloaded to it. You can reduce the time for the update. The setting is enabled by default.

[42] Settings

Resetting to the initial settings

You can reset the special application to the initial settings. A reset does not affect slideshows and background music transferred to the projector.

- 1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.
- 2 Tap the  (Settings) button.
- 3 Tap [Reinitialize].
- 4 Tap [Reinitialize settings], then follow the on-screen instructions to perform the initialization.

[43] Settings

Deleting contents stored in the projector

You can delete images and background music transferred to the projector.

- 1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap the  (Settings) button.

3 Tap [Reinitialize].

4 Tap [Reinitialize content], then follow the on-screen instructions to perform the initialization.

[44] Settings

Checking the projector to be operated using the special application

When you have two or more projectors, you can register additional projectors and select the device to be operated.

1 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.

2 Tap the  (Settings) button.

3 Tap [Add or Change Projector].

Projectors registered to the special application are displayed.  is displayed on the device currently designated to be operated.

Registering an additional projector

Tap the **+** (add) button, then follow the on-screen instructions to register.

Changing the projector to be operated

Tap the desired projector.

[45] Settings

Pairing the projector and Wireless unit again

The projector and Wireless unit have already been paired at the time of purchase. When the pairing is removed such as after maintenance, pair them again.

- 1 Disconnect the AC adaptor from the Wireless unit.**
- 2 After approximately 10 seconds, connect the AC adaptor to the Wireless unit again.**
- 3 Start  /  (Portable Ultra Short Throw Projector Application) on the smartphone.**
- 4 Tap the  (Settings) button.**
- 5 Tap [Reinitialize].**
- 6 Tap [Pairing Wireless unit].**
- 7 Locate the PAIRING button of the Wireless unit, then tap [Start].**

8 Follow the on-screen instructions to pair again.

About the indicator display during pairing

During pairing, the indicator on the front panel of the Wireless unit flashes as follows:

- Flashing in white twice every 1.5 seconds: Attempting to pair with the projector.
- Flashing in red: Failed to pair.

Hint

- Press the PAIRING button with a thin object such as a paper clip.

[46] Precautions/specifications

Precautions

For your safety

- Do not let water or foreign objects get into the unit. It may cause a fire or electric shock. If water or foreign objects have gotten into the unit, turn it off immediately, and disconnect the power cord and connection cables.
- Do not disassemble or modify the unit. It may cause a malfunction, fire or electric shock.
- If there is a possibility of lightning strike, do not use the unit. A lightning strike may cause an electric shock. If lightning is likely, unplug the unit to prevent a fire, electric shock and malfunction.

On safety

- Wireless functions are incorporated into this unit. Radio waves may affect the operation of other devices. Do not use this device in the following locations.

On an airplane.

Near automatically-controlled equipment, such as automatic doors or fire alarms.

If other equipment experiences problems such as interference while the unit is being used,

immediately stop using the unit.

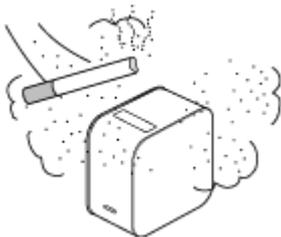
- Do not continue viewing the projected screen for a long time. Continuously viewing the projected screen for a long time may cause eye strain. If you feel any discomfort or pain, immediately stop using the unit and have a rest. If the discomfort or pain persists after taking a rest, consult a doctor.
- Do not project onto a glossy surface. The light may be reflected into your eyes and may adversely affect them.
- Keep the unit away from children. If a cable becomes wrapped around the neck or similar misuse, it may cause an accident or injury.

On handling

- If the unit is not to be used for a long time, unplug it.
- Do not drop, hit, compress, or put a heavy object on the unit.
- The operating temperature range of the unit is 5 °C to 35 °C (41 °F to 95 °F). If the unit is used in an extremely cold or hot place outside the operating temperature range, it may cause a malfunction.
- The wireless function of the unit is designed for use in the U.S.A. only. Each country/region has its own regulations for radio wave use, therefore if you use the wireless function of the unit abroad, you may be penalized.
- Do not place the unit where there is excessive oily smoke, steam, moisture or dust. It may cause a fire or electric shock.
- Do not install the unit in a dangerously unsuitable location. The unit may fall causing an injury.
- Do not subject the unit to a strong impact. If you apply a strong force to the unit, such as putting a heavy object on it, drop it, or step on it, it may cause injuries or a malfunction. Although the projection window is made of tempered glass, if it is strongly pushed or struck, it may break causing injuries.
- Take care not to drop the unit when moving it. If the unit falls, it may break or cause injuries.

On placement

- Do not place the unit in any places where there is excessive dust or cigarette smoke. Dust and cigarette tar adheres to components inside the unit (such as the projection window) causing a malfunction.



- Do not place the unit in any places where the temperature is extremely hot or cold, or the humidity is extremely high. Especially when there is strong sunshine or during the summer, the inside of a car can get quite hot, and a unit left in the car may deform or malfunction.
- Do not place the unit on an unstable surface. The unit may fall or topple over resulting in injuries.
- Do not place the unit where there is water. It may cause a fire or electric shock.
-

Do not place/store the unit in a place exposed to direct sunlight or close to a heater. Heat may build up in the unit causing a fire.

On AC adaptor and cables

- Do not damage the power cord. It may cause a fire or electric shock.
- Be sure to use the supplied AC adaptor with the unit. If a different AC adaptor is used with the unit, it may cause a fire, electric shock or malfunction.
- Do not touch the power plug with wet hands. It may cause an electric shock.
- Before making connections with the AC adaptor and connection cables, turn off the unit and connected equipment, and unplug the power plugs from the wall outlet.
- Do not wrap the power cord or connection cable around the AC adaptor. It may cause the cord or cable to break.
- Before moving the unit, disconnect the power cord and connection cables. The cables may be damaged resulting in a fire or electric shock, or connected equipment may fall or topple over causing injuries.
- Insert the connector straight. If it is inserted at an angle, pins may make a short circuit causing a fire.

On fan noise

- A fan is incorporated inside the projector to prevent overheating, and this makes a slight noise while turned on. This noise is not a malfunction. However, if there are any abnormal noises, consult qualified Sony personnel.

On light source maintenance

- This unit uses a laser, therefore special caution and facilities are necessary for the inspection and maintenance of light source components. Be sure to consult qualified Sony personnel.

On projector

- Although this unit is manufactured using very high precision technology, there may be some permanent black or white pixels on the projected screen. Also, there may be striped unevenness in color or brightness. This is a result of the projector structure and is not a malfunction. The color balance of each projector unit varies; therefore, when multiple LCD projectors are used, the color reproduction among projectors may vary, even if they are of the same model.
- Depending on viewed content, primary colors such as red, blue, or green are visible when you move your eyes or under certain conditions; this is not a malfunction. It is caused by a “color breakup” phenomenon which is specific to the field-sequential color system adopted into the unit for displaying images. This phenomenon can be subdued by diminishing the contrast between the image and the backdrop, such as decreasing the brightness of the unit or increasing the brightness of the room.

On condensation

- If the projector is moved suddenly from a cold to a warm place, or just after a room heater is turned on in a winter morning, condensation may occur on the surface or inside of the projector. If

condensation occurs, leave the projector turned off until the condensation dissipates. If the projector is used while there is condensation, it may cause a malfunction.

On ventilation holes

- Do not block the ventilation holes (intake/exhaust). If the ventilation holes are blocked, heat will build up inside the unit, causing a fire or malfunction. To maintain good ventilation, observe the following:

Place the unit away from walls and objects.



Do not use a cover that blocks the ventilation holes.



Do not place the unit on a soft cloth, paper documents, thick carpet or small pieces of paper. They may be drawn in and block the intake holes.



- Do not bring your hand or object close to the exhaust holes. It may cause burns or deformation.

On projection window

- Do not look into the projection window. The light may damage your eyes.
- Do not obstruct the projection window. The light will heat the obstruction, which may cause deterioration, deformation, burns or fire.

Cautions about heat generation of the unit

- While using or charging the unit, the unit or AC adaptor may become hot; this is not a malfunction. If the unit temperature becomes excessively hot, it may automatically turn off for safety. In such a case, use it in a cooler place after the unit has cooled down.
- If the unit or AC adaptor becomes unusually hot, it may malfunction. Immediately turn the unit off and unplug the AC adaptor from the wall outlet, then consult qualified Sony personnel.
- Do not continue touching the unit in operation or the AC adaptor for a long time. Prolonged

contact with the skin may result in burns. Even touching through clothing, prolonged contact may result in burns.

- Do not use the unit or AC adaptor covered by cloth or bedding. Heat will build up causing deformation, malfunction or a fire.

On charging

- Charge the unit in the ambient temperature of 5 °C to 35 °C (41 °F to 95 °F). The unit may not charge sufficiently outside this temperature range.
- While charging or using the unit, the temperature of the unit may rise; this is not a malfunction.
- If you do not use the unit for a long time, charge it every six months to prevent battery degradation.
- When the unit has been left unused for a long time, the charging time may be longer.
- When the battery usage time drops to half of its original time, it may have reached the end of its life span. Consult qualified Sony personnel about the rechargeable battery replacement.

On AC power interruption

When the unit is turned off using the power button, the power supply to the unit is not completely stopped.

To completely stop the power supply to the unit, unplug it from the wall outlet. Place the AC adaptor close to the wall outlet so that you can quickly unplug it when becoming aware of a problem.

Notes on wireless LAN

Sony is not liable for any loss or damage caused by loss or theft of the unit resulting in unauthorized accesses to or abuse of the equipment which is incorporated into the unit.

Notes on wireless LAN security

- Always make sure that you are using a wireless LAN that is secured against hacking, access from malicious third parties, and other vulnerabilities. Proper security setting for a wireless LAN is very important.
- Sony is not liable for any loss or damage caused by security problems resulted from failing to take security countermeasures, or unavoidable circumstances due to specifications of the wireless LAN.

If you have questions or problems, read Reference Guide, Startup Guide, and Help Guide thoroughly again. If the answer is not found, consult qualified Sony personnel.

Cleaning

- Be sure to unplug the unit from the wall outlet before cleaning.
- To clean the surface of the projection window:
Gently wipe it with a soft cloth such as an eyeglass cleaning cloth. If there are stubborn stains, wipe them up with a cloth moistened with water. Never use alcohol, benzene, thinner, acidic cleaning agents, alkaline cleaning agents, abrasive cleaning agents, chemical dust cloths, and so on.
- To clean the exterior:
Gently wipe it with a soft cloth. If there are stubborn stains, wipe up the stains with a soft cloth which has been soaked in diluted neutral detergent and thoroughly wrung out, then wipe the exterior again with a dry cloth. Do not use alcohol, benzene, thinner, and so on.
- If the unit is rubbed hard with a dirty cloth, the unit may be scratched.
- If volatile liquid such as insecticide splashes on the unit, or an item made of rubber or vinyl stays in physical contact with the unit for a long time, the unit may be affected or the surface color may fade.
- Do not touch the projection window with bare hands.

[48] Precautions/specifications

Specifications

Portable Ultra Short Throw Projector (LSPX-P1)

■ Projector

Projection system

SXRD three primary colors LCD shutter projection system

Display device

0.37 inch SXRD × 1

1366 × 768 pixels

Focus adjustment

Motor-driven (auto focus^{*1})

Projected image size

22 inches to 80 inches

Light source

Laser diode

Light output

100 lm

■ Battery

Built-in lithium-ion battery

Available operating time

Approx. 2 hours^{*2}

Charging time

Approx. 4 hours

■ **Audio**

Speakers

Approx. 25 mm diameter × 2 (monaural) bass reflex system

Amplifier

2 W × 2 W monaural (4 ohms)

xLOUD compatible

■ **Wireless communication**

Wireless LAN

IEEE 802.11a/b/g/n (2.4 GHz band, 5 GHz band), MIMO compatible

Bluetooth

Bluetooth 4.0 (Bluetooth Low Energy)

■ **General**

Miracast compatible

Built-in storage

4 GB^{*3}

Sensors

Acceleration (attitude) sensor, illumination sensor, range sensor, IR remote control receiver (IR Blaster compatible)

Compatible codecs/formats

Picture: JPEG, GIF, PNG, BMP

Movie^{*4}: MPEG-2, H.264, MPEG-4, H.263

Smartphone application

Portable Ultra Short Throw Projector Application

Compatible operating systems/devices

Android 4.4 or later (Bluetooth 4.0 (Bluetooth Low Energy) compatible)

Following devices with iOS 9: iPhone 4s or later, iPod Touch 5th generation or later, iPad 3rd generation or later, iPad mini

Operating environment conditions

Temperature: 5 °C to 35 °C (41 °F to 95 °F)

Humidity: 20% to 80%

(No condensation, humidity at 35 °C (41 °F) should be 65% or less)

Power

DC 19.5 V (AC adaptor VGP-AC19V77)

Power consumption

Turned on: Approx. 18 W, approx. 32 W (charging)

Standby: Approx. 6 W, approx. 20 W (charging)

Dimensions (width × height × depth)

Approx. 80 mm × 131 mm × 131 mm (3 1/4 inches × 5 1/4 inches × 5 1/4 inches)

Mass

Approx. 930 g (2 lb 1 oz)

- *1 Depending on the material of the projection surface and the projector's location, the auto focus function may not work correctly. In such cases, adjust the focus manually.
- *2 This operation time is when [Picture] is set to [Preset 1], the volume is set to approximately 80% and a movie is played.
- *3 Shared as the system area and user area.
- *4 The maximum playable movie size is 1080p.

Wireless unit (LSPX-PT1)

■ Input/output

HDMI IN connector

HDMI OUT (pass-through) connector

IR BLASTER connector (Mini jack)

■ Wireless communication

Wireless LAN

IEEE 802.11a/n (5 GHz band), MIMO compatible

■ Compatible input signal formats

480p, 720p, 1080p

■ General

Operating environment conditions

Temperature: 5 °C to 35 °C (41 °F to 95 °F)

Humidity: 20% to 80%

(No condensation, humidity at 35 °C (41 °F) should be 65% or less)

Power

DC 5 V (AC adaptor LSPX-AC5V2)

Power consumption

Operating: Approx. 10 W max.

Dimensions (width × height × depth)

Approx. 135 mm × 35 mm × 135 mm (5 3/8 inches × 1 7/16 inches × 5 3/8 inches)

Mass

Approx. 200 g (7 oz)

Optional accessories

Floor stand LSPX-PS1

Design and specifications are subject to change without notice.

[49] Precautions/specifications

Battery duration of the projector

The fully-charged projector can be used for approximately 2 hours.

Hint

- This battery duration is when [Picture] is set to [Preset 1], the volume is set to approximately 80% and a movie is played.
- Battery duration may vary depending on the ambient temperature or other factors.
- Battery duration may vary depending on your smartphone.

[50] Precautions/specifications

Trademarks

- “xLOUD” is a trademark of Sony Corporation.
- Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.
- The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.
- The BLUETOOTH SMART word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Sony Corporation is under license.
- Wi-Fi, Wi-Fi Direct, Miracast, and Wi-Fi Protected Setup are trademarks or registered trademarks of Wi-Fi Alliance.
- Google, Google logo, Android, Google Play, and YouTube are trademarks or registered trademarks of Google Inc.
- Apple, Apple logo, iPhone, iPod touch, iPad, and iPad mini are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc.

All other names of systems, products, and services are trademarks or registered trademarks of their respective owners. In this manual, the TM or ® marks are not specified. All rights which are not explicitly written in this document belong to their respective owners.

HDMI





(Only as for projector)



[51] Precautions/specifications

About licenses

1. MPEG-2 Video

ANY USE OF THIS PRODUCT IN ANY MANNER OTHER THAN PERSONAL USE THAT COMPLIES WITH THE MPEG-2 STANDARD FOR ENCODING VIDEO INFORMATION FOR PACKAGED MEDIA IS EXPRESSLY PROHIBITED WITHOUT A LICENSE UNDER APPLICABLE PATENTS IN THE MPEG-2 PATENT PORTFOLIO, WHICH LICENSE IS AVAILABLE FROM MPEG LA, L.L.C., 6312 S. Fiddlers Green Circle, Suite 400E, Greenwood Village, CO 80111 U.S.A.

2. MPEG-4 Visual

THIS PRODUCT IS LICENSED UNDER THE MPEG-4 VISUAL PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER FOR.

(i) ENCODING VIDEO IN COMPLIANCE WITH THE MPEG-4 VISUAL STANDARD (“MPEG-4 VIDEO”) AND/OR (ii) DECODING MPEG-4 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NONCOMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE MPEG-4 VIDEO.

NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION INCLUDING THAT RELATING TO PROMOTIONAL, INTERNAL AND COMMERCIAL USES AND LICENSING MAY BE OBTAINED FROM MPEG LA, L.L.C. [HTTP://WWW.MPEGLA.COM](http://www.mpegla.com)

3. MPEG-4 AVC

THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO

(i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD (“AVC VIDEO”) AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A

PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO.

NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE [HTTP://WWW.MPEGLA.COM](http://www.mpegla.com)

THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE. SUCH LICENSE EXTENDS TO THIS PRODUCT ONLY AND ONLY TO THE EXTENT OF OTHER NOTICES WHICH MAY BE INCLUDED HEREIN. THE LICENSE DOES NOT EXTEND TO ANY OTHER PRODUCT REGARDLESS OF WHETHER SUCH PRODUCT IS INCLUDED WITH THIS LICENSED PRODUCT IN A SINGLE ARTICLE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE [HTTP://WWW.MPEGLA.COM](http://www.mpegla.com)

4. VC-1

THIS PRODUCT IS LICENSED UNDER THE VC-1 PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER FOR

(i) ENCODING VIDEO IN COMPLIANCE WITH THE VC-1 STANDARD (“VC-1 VIDEO”) AND/OR
(ii) DECODING VC-1 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NONCOMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE VC-1 VIDEO.

NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION INCLUDING THAT RELATING TO PEOMOTIONAL, INTERNAL AND COMMERCIAL USES AND LICENSING MAY BE OBTAINED FROM MPEG LA, L.L.C..[HTTP://WWW.MPEGLA.COM](http://www.mpegla.com)

THIS PRODUCT IS LICENSED UNDER THE VC-1 PATENT PORTFOLIO LICENSE.SUCH LICENSE ENTENDS TO THE PRODUCT ONLY TO THE EXTENT OF OTHER NOTICES WHICH MAY BE INCLUDED HEREIN. THE LICENSE DOES NOT EXTEND TO ANY OTHER PRODUCT REGARDLESS OF WHETHER SUCH PRODUCT IS INCLUDED WITH THIS LICENSED PRODUCT IN A SINGLE ARTICLE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, LLC. SEE [HTTP://WWW.MPEGLA.COM](http://www.mpegla.com)

[52] Troubleshooting/frequently asked questions | Frequently asked questions

The color is not correct.

- Depending on the color of the projection surface, the images may not projected correctly. Select the  (Settings) button — [Picture] of “Portable Ultra Short Throw Projector Application” to adjust the picture quality.
- When the projector is used in a cold environment, the color may be pale or incorrect just after the

projector is turned on. After a while, the color will become correct.

[53] Troubleshooting/frequently asked questions | Frequently asked questions

The projected image is distorted.

- When the lengths of top edge and bottom edge of the projected image differ, tap the  (control panel) button on “Portable Ultra Short Throw Projector Application,” then adjust with [Keystone correction].



- When the lengths of left edge and right edge of the projected image differ, change the projector's location or orientation to project perpendicularly.



[54] Troubleshooting/frequently asked questions | Frequently asked questions

There are shadows on the projected image.

- When the projection surface is bumpy, shadows may be cast. It is recommended that you project onto a smooth and flat surface.

[55] Troubleshooting/frequently asked questions | Frequently asked questions

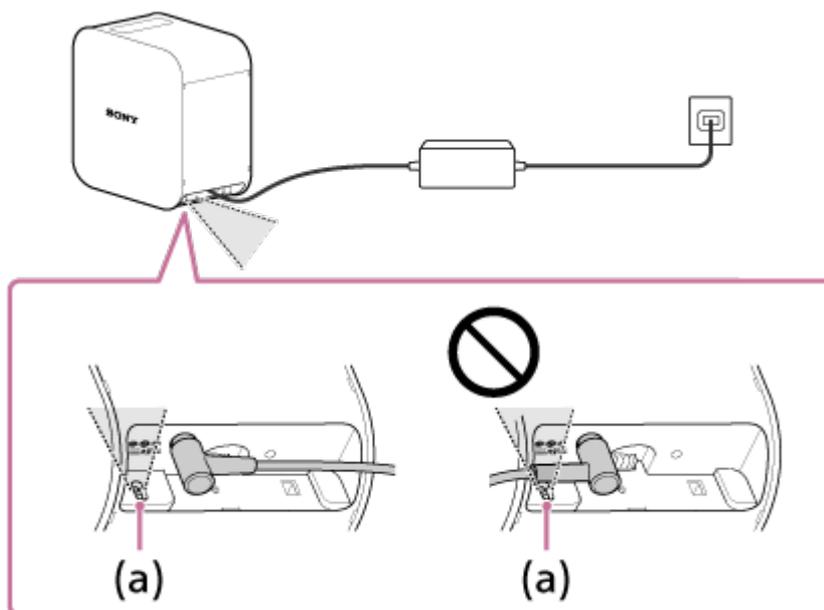
The projected images flicker, or small point noises are displayed.

- This unit uses direct laser, therefore a speckled pattern (intense grains on projected images) may appear; this is not a malfunction. This phenomenon can be relieved to some extent by making the room brighter and projecting on a non-glossy, matte surface.

[56] Troubleshooting/frequently asked questions | Frequently asked questions

The focus cannot be adjusted

- If the range sensor on the rear of the projector cannot measure the distance to the projection surface, the auto focus function may not work correctly. In this case:
 - Remove obstructions between the projector and the projection surface
 - Remove the projector from the stand or the like
 - Keep the AC adaptor from blocking the range sensor (a).



- When the projected image size is 60 inches or more, the auto focus function does not work.
- Depending on the projector's location and the material of the projection surface, the auto focus function may not work correctly.
- If the auto focus function does not work correctly, tap the  (control panel) button on "Portable Ultra Short Throw Projector Application," then disable [Auto]. Adjust the focus manually.

[57] Troubleshooting/frequently asked questions | Frequently asked questions

Images from the HDMI device are not projected, or the

picture quality is poor.

- Depending on the signal strength and the location of the projector and Wireless unit, images from the HDMI devices may not be projected properly. Change the location and orientation of the projector and Wireless unit.
- Make sure that there are no obstructions blocking the radio wave between the projector and Wireless unit, and make sure that the projector and Wireless unit are not placed too far away from each other.
- When an interlaced video signal is input, the picture quality may be poor.
If a message “Input video from HDMI is interlaced. This may cause the video to display incorrectly. Check the output settings of the device connected to the Wireless unit for a non-interlaced option.” appears, set the output resolution of the HDMI output device to “Auto,” “1080p,” or “720p.”

[58] [Troubleshooting/frequently asked questions](#) | [Frequently asked questions](#)

The projection screen dims automatically, or the projection screen turns off.

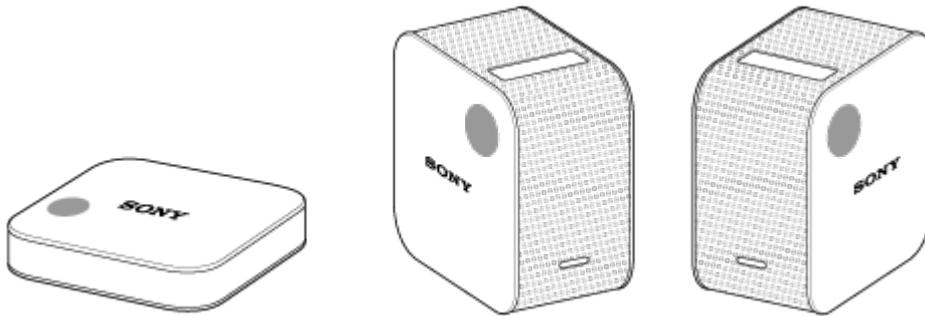
- When the projector is used in a hot environment, or the ventilation holes (intake/exhaust) are blocked, the brightness is automatically reduced to cool down the inside of the projector. If the temperature in the projector is not cooled down even when the brightness is reduced, the projection automatically stops.

[59] [Troubleshooting/frequently asked questions](#) | [Frequently asked questions](#)

Poor picture quality.

- The projector uses wireless LAN and Bluetooth communication, therefore the communication range may become short depending on the environment such as an obstruction between the projector and Wireless unit (or your smartphone), signal strength, and wall material. In such a case, change the projector’s location, or bring your device and the projector nearer to each other.
- If the projector is used near another device which uses wireless LAN or Bluetooth communication, interference may occur causing low communication speed or connection failure. In such a case, move the projector away from the other radio device. If the problem persists, turn off the other radio device.

The antenna is incorporated around ● in the illustration.

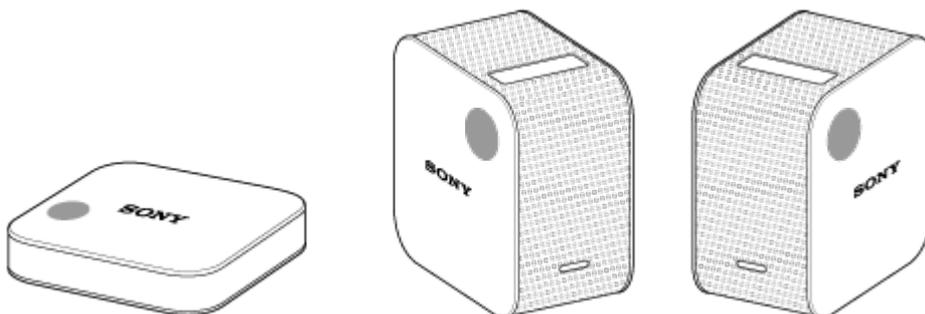


[60] Troubleshooting/frequently asked questions | Frequently asked questions

Cannot operate with the special application.

- The projector uses wireless LAN and Bluetooth communication, therefore the communication range may become short depending on the environment such as an obstruction between the projector and Wireless unit (or your smartphone), signal strength, and wall material. In such a case, change the projector's location, or bring your device and the projector nearer to each other.
- If the projector is used near another device which uses wireless LAN or Bluetooth communication, interferences may occur causing low communication speed or connection failures. In such a case, move the projector away from the other radio device. If the problem persists, turn off the other radio device.

The antenna is incorporated around ● in the illustration.



Features of this unit

This unit is a “Portable Ultra Short Throw Projector” utilizing a laser light source and an ultra-short

focus lens.

Install the special application “Portable Ultra Short Throw Projector Application” to a smartphone to operate this unit. It allows you to project and enjoy images of an HDMI device connected to the supplied Wireless unit.

Just place the unit near a wall to project images of 22 to 80 inches at point-blank range. In addition to walls, this unit can project 22-inch images on a table or floor. A lithium-ion rechargeable battery and speakers are incorporated into this unit, allowing you to enjoy images anywhere without concern for cabling.

Note

- Screen images and illustrations in this help guide may vary from the actual product.
- Design and specifications are subject to change without notice.