

Projector Optional License

User's Guide

LSM-120P1
LSM-BRIN1
LSM-HDR1
LSM-NVG1
LSM-AC1

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

Installation

This document describes the procedure for installing optional licenses.

The following shows the corresponding licenses.

Product name	Corresponding license
LSM-120P1	License corresponding to 4K/120p and 4K/3D (For VPL-GTZ280)
LSM-BRIN1	License corresponding to 5,000 lumen (For VPL-GTZ280)
LSM-HDR1	License corresponding to High Dynamic Range (For VPL-GTZ280)
LSM-NVG1	License corresponding to the infrared light setting (For VPL-GTZ280)
LSM-AC1	License for DSMA-PM1 (For VPL-GTZ280/VPL-GTZ270/ VPL-VW5000)

Save the file with the install key written acquired from eCSite to a USB memory, and then use the menu to install. Use the USB memory with the FAT32 format of 1GB or more.

For details on using menus, refer to the projector Operating Instructions.

Checking the Current Version of Software

For installing optional licenses, the software versions of projectors must be updated as follows.

Product name	Corresponding projector	Software version
LSM-120P1 LSM-BRIN1 LSM-HDR1 LSM-NVG1	VPL-GTZ280	V3.203 or later
LSM-AC1	VPL-GTZ280	V3.404 or later
	VPL-GTZ270	V4.404 or later
	VPL-VW5000	V4.404 or later

Check the software version that is displayed on “Software Version” in the Information **i** menu.

If the software version is lower, perform the version upgrade in advance.

Saving the File with the Install Key Written to a USB memory

- 1 Prepare the computer to save data to the USB memory.
- 2 Save the acquired text file directly to the root directory of the USB memory.

Performing the Installation

Note

Do not do any of the following while performing the installation. Doing so could interrupt the installing process, and cause malfunctions.

- Eject or insert a USB memory
- Turn the power off

- 1 Insert the USB memory that contains the install key into the USB terminal of the projector.
- 2 Select “Activate Licenses” in “License Management” of the Installation **↻** menu.
The message “To complete activating, power off and disconnect/connect power cord.” appears.

If the install key is not found:

The message “No valid license is found.” appears. The following are the possible causes.

- The file with the install key written has not been saved to the root directory of the USB memory.
- The install key for a different model has been saved.
- The saved file name is not proper.

Save the file with the correct install key written to a USB memory, and restart the installation from step 1.

- 3 Select “OK”, then turn the power off and disconnect the power cord.
- 4 Connect the power cord again and turn the power on.

Note

It may take about 15 minutes until the screen appears, as the update operation starts after turning the power on.

- 5 Check that LSM-BRIN1, LSM-HDR1, LSM-120P1, LSM-NVG1 and/or LSM-AC1 are displayed in “License Management” of the Installation **↻** menu.

If the applicable licenses are not displayed:

Re-check the installation procedure, and restart the installation from step 1.

Notes


- Always verify that the unit is operating properly before use. SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION OR REIMBURSEMENT ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS DUE TO FAILURE OF THIS UNIT, EITHER DURING THE WARRANTY PERIOD OR AFTER EXPIRATION OF THE WARRANTY, OR FOR ANY OTHER REASON WHATSOEVER.
- SONY WILL NOT BE LIABLE FOR CLAIMS OF ANY KIND MADE BY USERS OF THIS UNIT OR MADE BY THIRD PARTIES.
- SONY WILL NOT BE LIABLE FOR THE TERMINATION OR DISCONTINUATION OF ANY SERVICES RELATED TO THIS UNIT THAT MAY RESULT DUE TO CIRCUMSTANCES OF ANY KIND.

LSM-120P1

By installing this license, input signals for 4K/120P and 4K/3D (60Hz per eye) become available, and the following menus can be set.

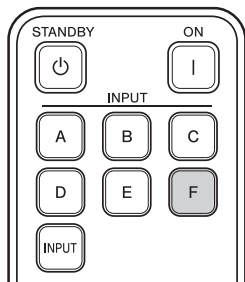
- Function Menu: “3D Settings”
 - Installation Menu: “3D” of “Trigger Select”
- “DisplayPort 1/2/3/4” can also be selected by the F button of the remote control.

Tips

- “Stream Format” in the Function  menu must be “Single” or “3D” when “DisplayPort 1/2” or “DisplayPort 1/2/3/4” is selected.
- For viewing video images of 4K/120P input signals, set “Stream Format” to “Single.” For viewing 3D video images of 4K/120P input signals, set “2D-3D Display Sel.” of “3D Settings” to “3D.”
- For viewing video images of 4K/3D (60Hz per eye) input signals, set “Stream Format” to “3D.”

Note

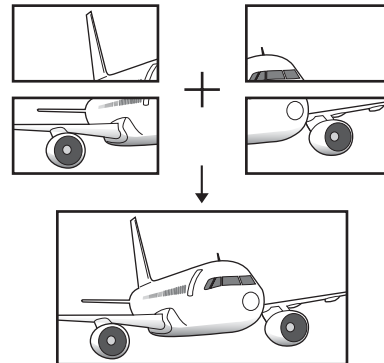
The smooth gradation function is not available with this license installed.



- The 4K/120P format, which can be input through “DisplayPort 1/2/3/4,” is “HV Split” (page 4).
- The preset number for 4096×2160/120P is No.99, and for 3840×2160/120P is No.100.

HV Split Display

Signals transferred after an image is split into 4 with “4096 × 2160” or “3840 × 2160” resolution are projected.



- 1** Connect the DisplayPort outputs of the workstation to the DisplayPort inputs of the projector. Connect the DisplayPort 1 to 4 outputs of the workstation to each DisplayPort 1 to 4 input of the projector.
- 2** Turn on the power of the projector and workstation.
- 3** Select “DisplayPort 1/2/3/4” by the F button of the remote control or in the input palette.
- 4** Select either “2048 × 1080” or “1920 × 1080” resolution in the setting screen on the workstation*.
* For information on the setting screen, as operation differs depending on the OS or the graphic boards which are installed in the workstation, consult with the manufacturer of the workstation or graphic boards.
- 5** Select 120Hz for the refresh rate.

Note

Input the synchronized signals output from the same signal system in the same signal format to DisplayPort.

For details on using menus, refer to the projector Operating Instructions.


Function Menu

Setting items	Description
3D Settings	You can change the settings of the 3D function.
2D-3D Display Sel.	For switching video images to “2D” or “3D.” 2D: Displays 2D video images. 3D: Displays 3D video images. Tips <ul style="list-style-type: none">• This item is displayed only when 4K/120P signals are input. For displaying 3D video images of 4K/120P signals, set “2D-3D Display Sel.” of “3D Settings” to “3D.”• The menu display may have a ghost while a 3D video image is displayed and is best viewed with the 3D glasses.
3D Brightness	For adjusting the brightness of the picture when watching 3D video images. You can select the brightness from “High” or “Standard.”

Installation Menu

Setting items	Description
Trigger Select	Switches the output function of the TRIGGER 1/TRIGGER 2 connector. Off: Turns off the TRIGGER connector function. Power: Outputs 12 V signals from the TRIGGER 1/TRIGGER 2 connectors when the unit is on. The TRIGGER 1/TRIGGER 2 connectors do not output any signals when the unit is in standby. 2.35:1 Zoom: Works with the “Aspect” setting's “2.35:1 Zoom” and outputs a 12 V signal from the TRIGGER 1 or TRIGGER 2 connector. 3D: Outputs a 12 V signal from the TRIGGER 1 or TRIGGER 2 connector when the 3D signal is input.

Note

When inputting 4K/3D (60Hz per eye) signals, the “DisplayPort 1/2” or “DisplayPort 1/2/3/4” setting of “Stream Format” in the Function  menu must be changed to “3D.”

Projecting the 3D Video Images


With VPL-GTZ280, powerful 3D video images can be projected by using the optional Active 3D Glasses (TDG-BT500A).

- 1 Turn on the equipment for 3D compatibility connected to the unit, then play the 3D content. For details on how to play 3D content, refer to the operating instructions for the connected equipment.
- 2 Turn on VPL-GTZ280, and project the 3D video image.
- 3 Turn on the 3D glasses, and then put them on so that they fit comfortably. For details on how to use the 3D glasses, see “Using the 3D Glasses” (page 6).

Notes

- Use the 3D glasses within the communication range (page 6).
- There are differences in perception of 3D video images among individuals.
- When the temperature of the usage environment is low, the 3D effect may be diminished.

Adjusting/Setting the 3D functions

You can adjust/set the 3D functions with the “3D Settings” of the Function  menu. For details, see “3D Settings” (page 5).

Using the 3D Glasses

- 1 Turn on the 3D glasses, and register them to VPL-GTZ280. For details on how to register the 3D glasses, refer to the operating instructions supplied with the 3D glasses.
- 2 Put on the 3D glasses.

Precautions for use

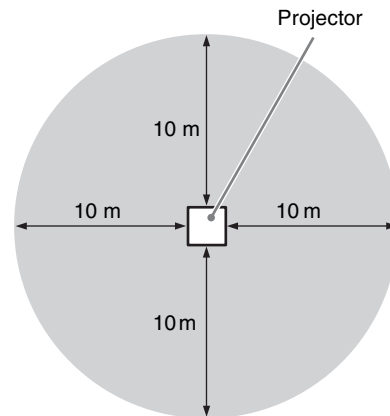
Misoperation may occur if:

- The viewing position is too far from the projector
- There are other communication devices, such as a wireless LAN (IEEE802.11 b/g/n) or a microwave with a bandwidth of 2.4 GHz, near the unit

3D glasses communication range

The following figure indicates the communication range of the 3D glasses. If you try to watch 3D video images from a distance greater than the communication range or install VPL-GTZ280 outside the communication range, the 3D glasses may not be able to display the images properly. Also, the distance varies depending on the environment of the room and installation environment of VPL-GTZ280.

Top or side view




LSM-BRIN1

By installing this license, the following menus can be set.

For details on using menus, refer to the projector Operating Instructions.

Picture Menu

Setting items	Description
Cinema Black Pro	
Advanced Iris	Brightness: The higher the setting, the brighter the picture. The lower the setting, the darker the picture. Tips <ul style="list-style-type: none">• Adjust “Brightness” according to the brightness of the room and the picture itself.• You can use “Advanced Iris” only when using the VPLL-Z7013 projection lens and “Constant Brightness” is set to “On” on the Setup  menu.

Setup Menu

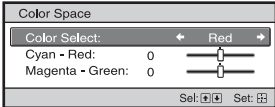
Setting items	Description
Constant Brightness	On: The light output decreases and enables constant brightness for a long period. Off: Turns off the Constant Brightness function. Tip If you use the unit with this item set to “On” for a long time, the fan speed may increase to maintain the product reliability of its components and the fan noise may become louder.

LSM-HDR1

By installing this license, the following menus can be set.

For details on using menus, refer to the projector Operating Instructions.

Picture Menu

Setting items	Description
Expert Setting	
HDR	<p>Sets how to play back HDR content.</p> <p>HDR10: Set when playing back HDR10-compatible content.</p> <p>HLG: Set when playing back HLG-compatible content.</p> <p>Off: Set when playing back content other than HDR content.</p> <p>Note</p> <p>If the setting is not correct for the input content, the bright and dark areas of the video may appear too bright or too dark.</p>
Color Space	<p>Converts the color space.</p> <p>BT.709: An ITU-R BT.709 color space. The color space is equivalent to sRGB.</p> <p>BT.2020: A color space suited for watching HDR contents.</p> <p>Color Space 1: A color space suited for video images.</p> <p>Color Space 2: A color space suited for watching movies or video images.</p> <p>Color Space 3: A color space suited for watching movies.</p> <p>Custom: You can adjust the color space setting.</p>  <p>Tips</p> <ul style="list-style-type: none">• You can adjust each item to a color space according to your preference.• “BT.2020” becomes selectable.

LSM-NVG1

By installing this license, the following menus can be set.

For details on using menus, refer to the projector Operating Instructions.

Function Menu

Setting items	Description
Infrared Settings	Infrared: Sets the infrared wavelength. On: Projects the video images that include the infrared wavelength. Off: Projects the normal video images. Output: Adjusts the infrared transmission. Dimming Filter: Reduces the quantity of light except for the infrared wavelength.

LSM-AC1

By installing this license, DSMA-PM1 can be used as an option.

For details on DSMA-PM1, refer to the website:

For customers in Japan

For VPL-GTZ270/VPL-GTZ280: <http://www.sony.jp/vpl/support/download/>

For VPL-VW5000: <http://www.sony.jp/support/projector/download/>

For customers in the United States

For VPL-GTZ270/VPL-GTZ280: <https://pro.sony.com/bbsc/ssr/catprojectors/resource.downloads>

For VPL-VW5000: <https://esupport.sony.com/>

For customers in China

http://www.pro.sony.com.cn/pro/support/software/SET_161116_PSG

For customers in other countries

http://www.sony.co.uk/pro/support/software/SET_161116_PSG