



USER MANUAL

LG LED Assistant

CONTENTS

LG LED ASSISTANT 3

- System Requirements 3

HOW TO INSTALL AND DELETE LG LED ASSISTANT. 4

- How to Install..... 4
- How to Delete..... 5

LOGIN AND SIGN OUT 5

- Execute 5
- Login..... 6
- Forgot Your Password? 7
- Sign out 7

LED LAYOUT SETTING 8

- Entry into Layout Setting Screen..... 8
- System Controller Connection 9
- Overall Layout Configuration..... 10
- LED Controller Daisy Chain Settings... 11
- LED Module Port Layout and Location Setting..... 12
- Configuration Summary 13
- [Appendix] [Set group for redundant]
- [Appendix] [Power Supply Unit (PSU) Settings]

DASHBOARD 16

DEVICE MANAGEMENT 17

DEVICE CONTROL..... 20

SOFTWARE SETTINGS..... 21

APPENDIX 22

- Used Port Information..... 22
- Items of Device Control for Each Supported Hardware..... 23
- Add an Exclusion to Windows Defender Anti-Virus 25

LG LED ASSISTANT

LG LED Assistant is the easiest and most convenient software to set up LG LED Signage. It provides features to set the LED layout, dashboard and device management, device control and software settings.

System Requirements

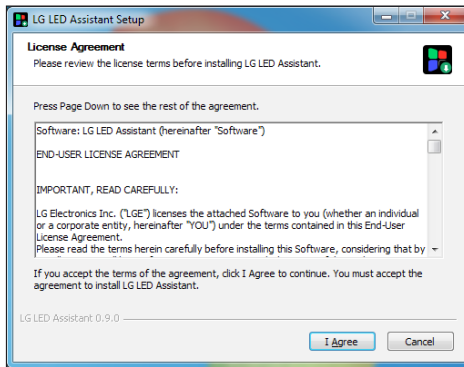
Please check the system requirements to smoothly use the system.

Item	Details
Operating System	Windows 7/10 (64 bit)
Memory	2GB (DDR 3) or higher
CPU (Central Processing Unit)	2.40 GHz, 4-core or higher
Network	100 Mbps or higher
Resolution	1440 x 900 or higher * It is recommended to set the size of text, app and other items to 100%.
Browser	Chrome 70 or later

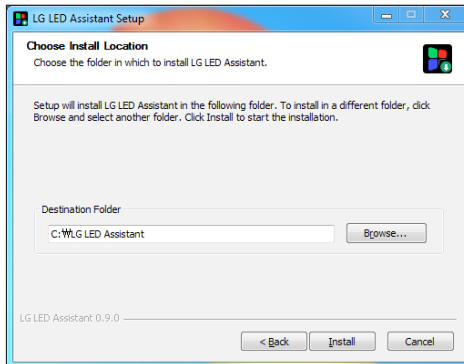
HOW TO INSTALL AND DELETE LG LED ASSISTANT

How to Install

- 1 Double-click the installation file.
 - LG LED Assistant_SETUP_vx.x.x.exe
- 2 Check the license agreement, and click the [I Agree] button.



- 3 Select a folder to install LG LED Assistant, and click the [Install] button.



- 4 When the installation of LG LED Assistant is completed, click the [Finish] button.

How to Delete

- 1 Click the Uninstall LG LED Assistant icon in the LG LED Assistant installation folder or in Start > All Programs > LG LED Assistant.
- 2 Click the [Next] button to proceed with the deletion.
- 3 Click the [DONE] button to finish the deletion.

LOGIN AND SIGN OUT

Execute

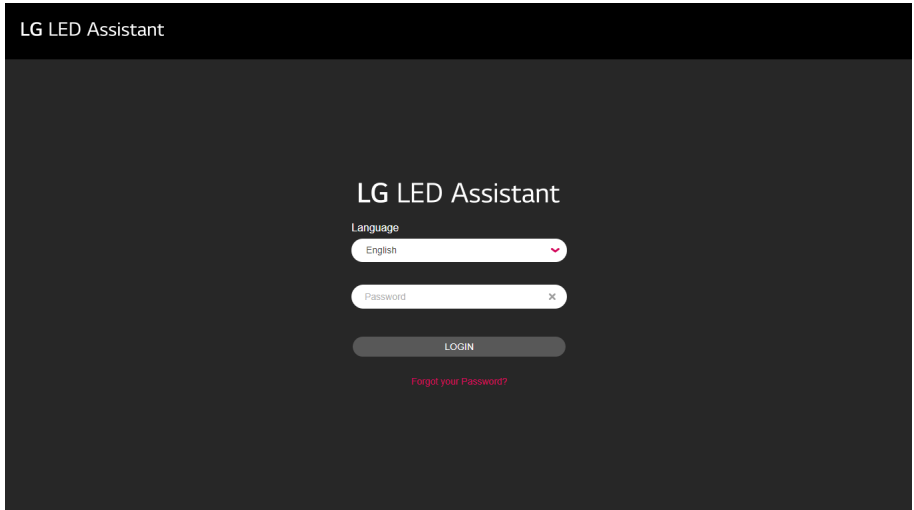
- 1 Click the LG LED Assistant icon in LG LED Assistant Installation folder or Start > All Programs > LG LED Assistant. Or enter *https://Server IP Address:8787* in the Chrome browser.

NOTE

- When you access in the Chrome browser, the LED Layout Setting feature is disabled.

Login

- 1 Double-click the LG LED Assistant icon to run the program.
- 2 Enter the password, and click the [LOGIN] button.



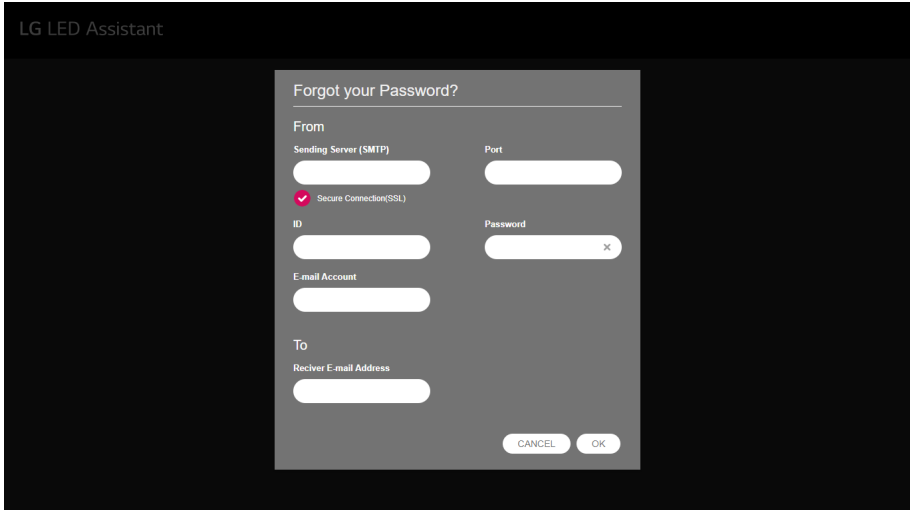
! NOTE

- The default password is "000000".
- The default language is set as the system language, and after you log in, the default language will be changed into a language that you select.
- When you access in the Chrome browser, the password reset feature is disabled.

Forgot Your Password?

You can initialize the password via the Simple Mail Transfer Protocol (SMTP) server.

- 1 Click the [Forgot your Password?] button on the Login screen.
- 2 Enter the e-mail account settings, and click the [OK] button.
 - The initialized password will be sent to the entered e-mail account.



! NOTE

- The SMTP server specifications comply with the relevant SMTP server standard.

Sign out


- 1 Click the Sign out icon (👤) on an upper right side of the program.

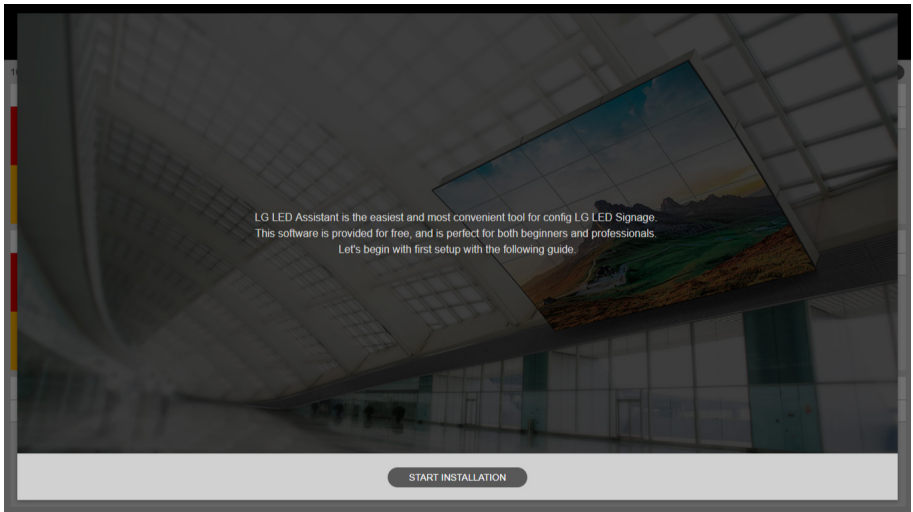
LED LAYOUT SETTING

The LED Signage layout setting is a process to synchronize the installation information between the LG LED Assistant and the installed LG LED Signage. If this step of setting is finished, you can manage and control LG LED Signage devices.

Set the LED layout in 5 steps after selecting the system controller > overall layout configuration (setting the system controller port layout) > setting the daisy chain of the LED controller > configuration of the LED module > summary of configuration.

Entry into Layout Setting Screen

- When there is no LG LED Signage installed, click the [START INSTALLATION] button on a lower side of the program introduction screen.
- When there is an LG LED Signage installed, click the Installation icon () on an upper right side of the program.

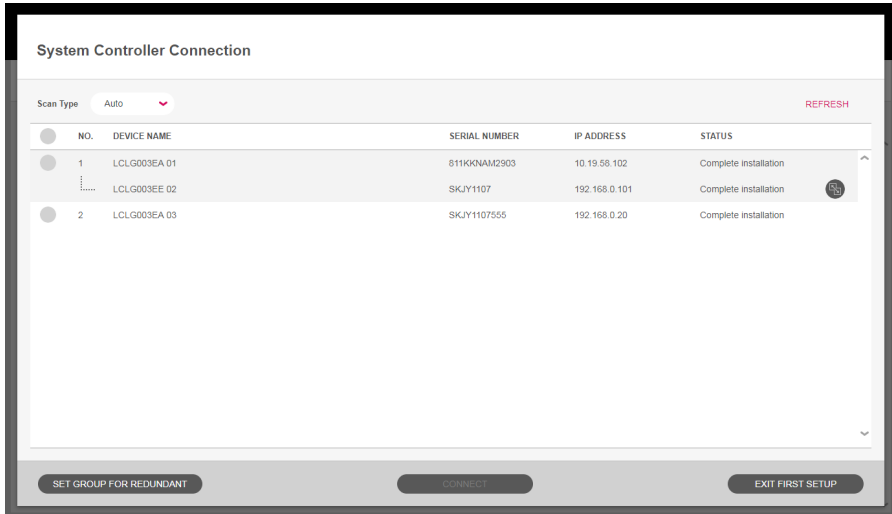


NOTE

- Standard devices (LAA015) have two-step settings of 'Select System Controller > Configuration Summary' to complete LED layout settings.

System Controller Connection

- 1 Select a system controller to set an LED layout, and click on the [CONNECT] button.



NOTE

- If you know the IP of the system controller, you can connect to the set by searching the device.
 - Click the [Scan Type] and [Manual] buttons, enter the IP, and click the [SCAN] button.

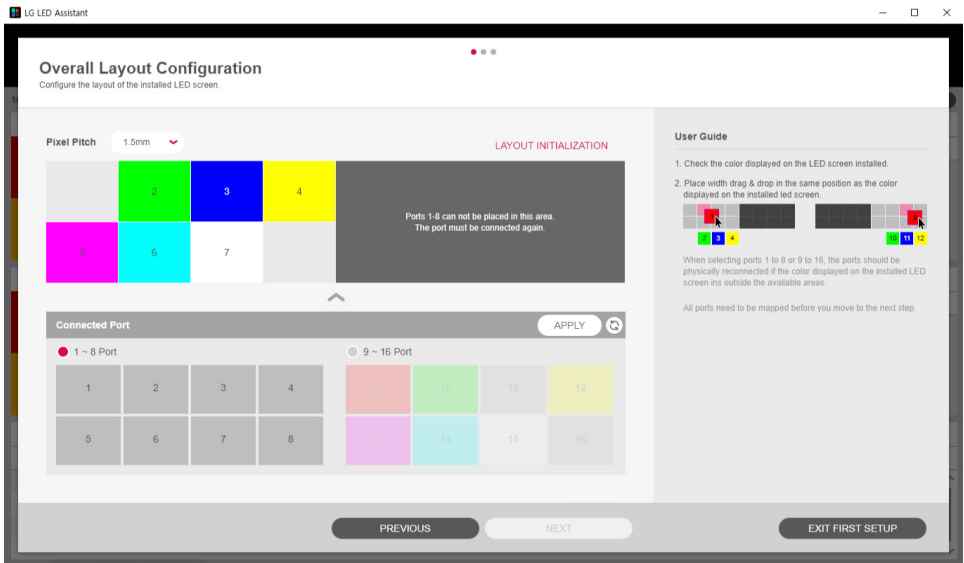
Scan Type Manual Start 192 • 168 • 1 • 11 End 192 • 168 • 1 • 99 SCAN

- If you do not know your system controller's IP address, go to Control Manager or [EZ SETTING] > [Server Setting] > Control Server on your device to set up the LG LED Assistant.
- You can set the redundancy of the system controller via the Set group for redundant. Thereby you can secure continuity of the service operation when there is a problem with the LG LED Signage or any other device.
 - Click the [SET GROUP FOR REDUNDANT] button > set the redundancy
- Standard devices (LAA015) and non-standard devices cannot be simultaneously connected.
- When the master device is successfully set, the Clone device icon (👤) of the slave device will be activated.

Overall Layout Configuration

This is a step where you set the installation information (port connection) between the system controller and the LED controller.

- 1 Select [Pixel Pitch].
- 2 Set the port layout of the installed system controller, and click the [NEXT] button.
 - [LAYOUT INITIALIZATION]: Initializes the whole setting information.
 - [REFRESH]: Refreshes the port layout setting screen.
 - [APPLY]: Applies the port layout setting to the system controller, and ensure that the installation is done according to the setting by the user.



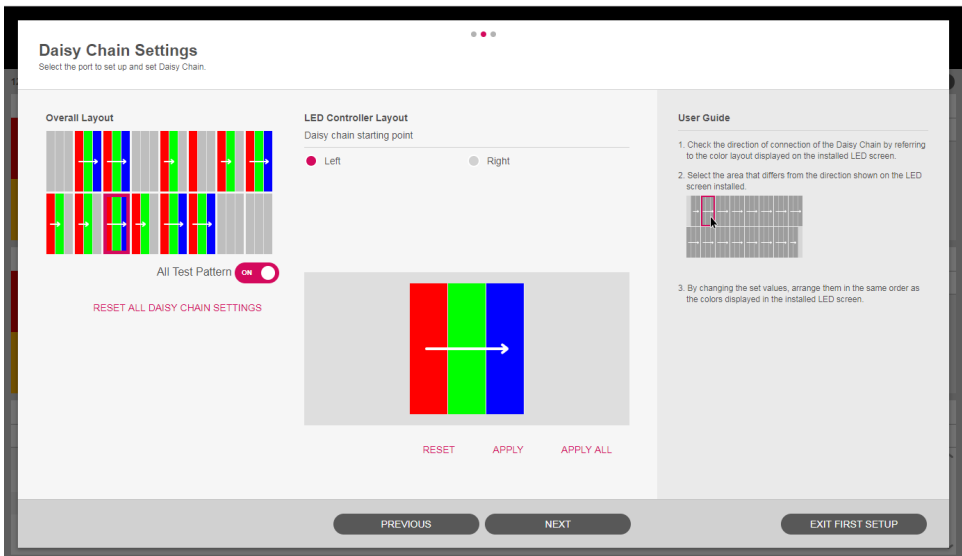
! NOTE

- If Pixel Pitch is not set up, layout setting features will be restricted.

LED Controller Daisy Chain Settings

This step is where you set the daisy chain connection direction of each LED controller.

- 1 Set the daisy chain of the installed LED controller, and click the [NEXT] button.
 - [RESET ALL DAISY CHAIN SETTINGS]: Initializes the daisy chain setting information set for all ports.
 - [APPLY ALL]: Applies the set daisy chain setting information to all ports, and checks if the installation is done according to the setting by the user.
 - [RESET]: Initializes the daisy chain setting information set for a selected port.
 - [APPLY]: Applies the set daisy chain setting information to a selected port, and checks if the installation is done according to the setting by the user.



! NOTE

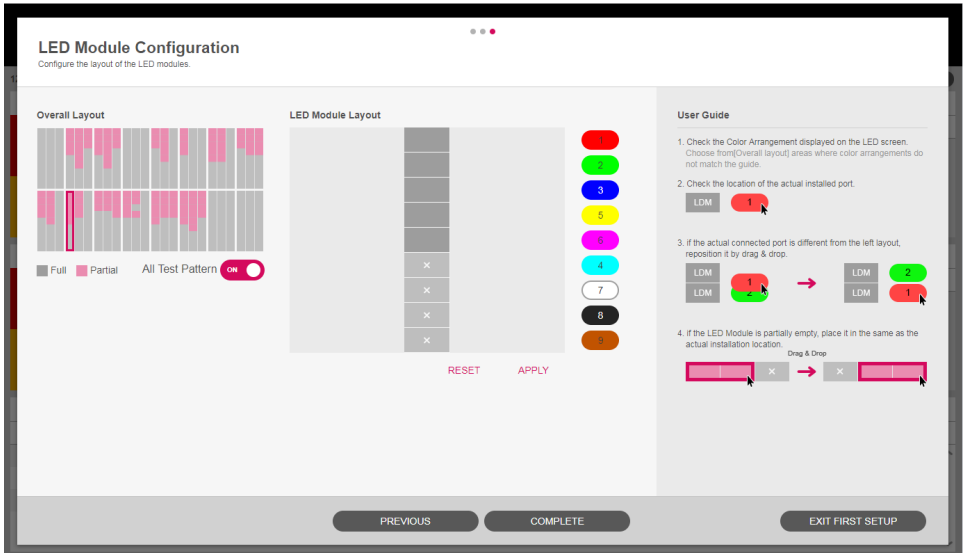
- Depending on the pixel pitch that is set, the daisy chain setting configurations are different.

1.5 Pixel Pitch	2.0 Pixel Pitch	2.5 Pixel Pitch

LED Module Port Layout and Location Setting

This is a step where you set the installation information (port connection) between the LED controller and the LED modules and the location of each LED module.

- 1 Set the port layout and location of the LED module installed, and click the [COMPLETE] button.
 - [RESET]: Initializes the setting information about the LED connected to the selected LED controller.
 - [APPLY]: Applies the port layout setting to the system controller, and ensure that the installation is done according to the setting by the user.



NOTE

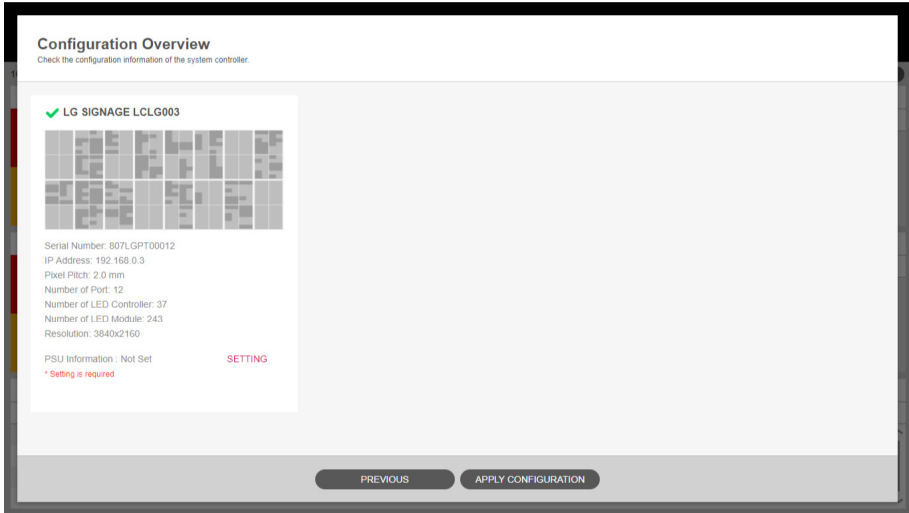
- Depending on the pixel pitch that is set, the port and position setting configurations are different.

1.5 Pixel Pitch	2.0 Pixel Pitch	2.5 Pixel Pitch

Configuration Summary

This is a step to finally check the information that has been set.

- 1 Check the configuration information of the system controller, set the Power Supply Unit (PSU) information, and then click the [APPLY CONFIGURATION] button.
 - [SETTING]: Sets the total number of PSUs, the IP of each PSU, and port information.



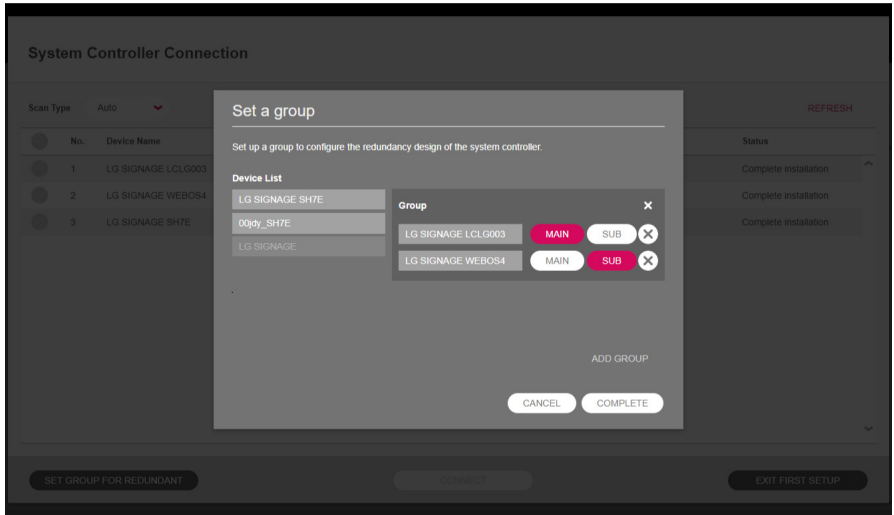
! NOTE

- Depending on the type of the LG LED Signage device, different PSU setting features in the step of configuration overview are provided.
 - Device with PSU Settings: The PSU information setting feature is provided. In addition, if the PSU information is not set, the layout setting will not end.
 - Device with No PSU Settings: The PSU information setting feature is not provided.
- The time to apply the configuration may vary depending on the information of the set LG LED Signage.
- For standard devices (LAA015), ensure that the installed LED screen and the preview area display the same pattern image.

(Appendix) [Set group for redundant]

Group the system controller into a master-slave structure, and click the [COMPLETE] button.

- [ADD GROUP]: Adds a new group.



! NOTE

- A group can be formed with LG LED Signage devices of the same model name.
- Standard devices (LAA015) do not support duplex group settings.

[Appendix] [Power Supply Unit (PSU) Settings]

Set the IP of each PSU, and click the [SAVE] button.

- [BATCH ADD]: Adds in a lump by increasing the last digit one by one as many as the number of entered PSUs based on the starting IP address.
- [ADD]: Adds a new PSU input field.
- [DELETE ALL]: Deletes all PSU information screens entered.
- [RESET]: Initializes the PSU information saved in a set.

Power Supply Unit (PSU) Settings

Based on the starting IP address, increment the end of the IP address by 1 and add it in a batch. Additional PSU information can be modified.

Number of PSU

Port Number

IP Type

Starting IP Address

BATCH ADD

9761

IPv4

BATCH ADD

Total : 0 PSU(s)

ADD

DELETE ALL

RESET

No.	ID	IPv4	IPv6	Port
There is no item.				

CANCEL

SAVE

! NOTE

- The port number of PSU is fixed as "9761" for the service.

DASHBOARD

You can check the error status and log reports of the system controller, LED controller, PSUs, and LED modules that you have finished the layout setting.

- 1 Click the [Dashboard] button on an upper side of the program.

The screenshot displays the LG LED Assistant Dashboard with the following components:

- System Controller:** Shows 3 connected system controllers. It has 3 errors (red) and 0 warnings (yellow). The error list includes:

No.	Status	ID	Type	More Info.	Power (System Controller)	Action
1	Error	2	Signal	-	On	[Move]
2	Error	1	Fan	-	On	[Move]
3	Error	1	Signal	-	On	[Move]
- LED Controller:** Shows 37 connected LED controllers. It has 2 errors (red) and 0 warnings (yellow). The error list includes:

No.	Status	ID	Type	More Info.	Power (System Controller)	Action
1	Error	1-6-2	Signal	-	On	[Move]
2	Error	2-6-2	Fan	-	On	[Move]
- Power Supply Unit (PSU):** Shows 9 connected PSUs. It has 1 error (red) and 0 warnings (yellow). The error list includes:

No.	Status	ID	Type	More Info.	Power (System Controller)	Action
1	Error	2-1	PSU Power	-	On	[Move]
- LED Module:** Shows 243 connected LED modules. It has 0 errors (red) and 0 warnings (yellow). The message states: "There is no item."
- Log Report:** A table showing error logs for all equipment.

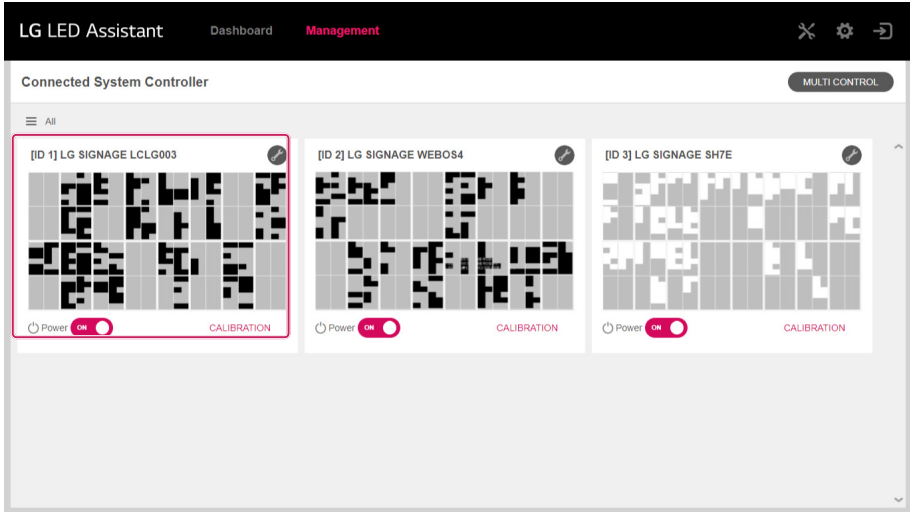
ID	Device	Type	Status	More Info.	Duration	Start Time	End Time
2	System Controller	Signal	ERROR	-	-	2018-01-01 08:36:40	-
1	System Controller	Fan	ERROR	-	-	2018-01-01 01:06:33	-
1	System Controller	Signal	ERROR	-	-	2018-01-01 01:06:33	-
1	System Controller	Fan	ERROR	-	00:30:33	2018-01-01 00:35:29	2018-01-01 01:06:03

No.	Item	Description
1	[System Controller]	Outputs the error status of the temperature, fan, and signal of the system controller. Click the Move icon to move to the device control screen of the relevant system controller.
2	[LED Controller]	Outputs the error status of the temperature, signal, and power supply of the LED controller. Click the Move icon to move to the LED Controller management screen of the relevant system controller.
3	[Power Supply Unit (PSU)]	Outputs the error status of the power supply, temperature, and fan of the PSU. Click the Move icon to move to the device control screen of the relevant system controller.
4	[LED Module]	Outputs the error status of the temperature of the LED module. Click the Move icon to move to the LED module management screen of the relevant system controller.
5	[Log Report]	Outputs the error status of all equipment. Click the [SEE ALL] button to use the Export function (Excel).

DEVICE MANAGEMENT

You can manage devices that you have finished the layout setting.

- 1 Click the [Management] button on the upper side of the program.




- 2 Click the layout image of the system controller.

- [Power]: You can manage the power of each system controller.
- [CALIBRATION]: You will move to the LED module management screen of the relevant system controller.
- [MULTI CONTROL]: Provides the functions for multiple power supply management and device control. However, in the case of multiple device control, it only provides the control of the functions of picture and time.

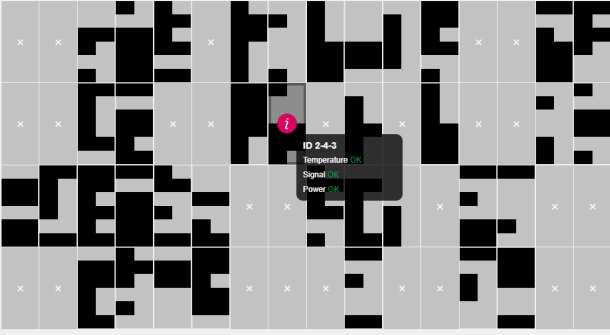
! NOTE

- The device management and control are provided only for those devices with the power on.

- 3 Check the status of each LED controller, and click on the area of the LED controller to manage.
 - Hover over each LED controller to check the status summary information.
 - Hover over each LED controller and click on the created icon () to check specific status information.

LG LED Assistant Dashboard Management

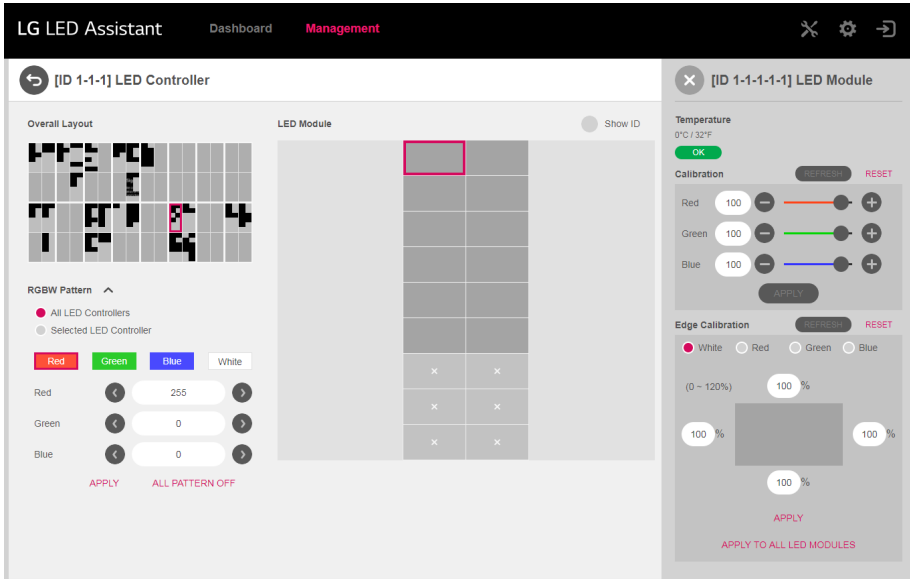
[ID 2] LG SIGNAGE LCLG003 Show ID



LED Controller Status

	✓ Error	✓ Warning
Temperature	✓ 0	✓ 0
Signal	✓ 0	✓ 0
Power	✓ 0	✓ 0

ID 2-4-3
 Temperature OK
 Signal OK
 Power OK



4 Check the status information about each LED module.

- Hover over each LED module to check the status summary information.
- Click each LED module to check the status information and change the calibration value and the edge calibration value.
- When an LDM module is clicked while pressing Ctrl, the selected LED module flashes.

Calibration

- [REFRESH]: Refreshes into the calibration value applied to the selected LED module.
- [RESET]: Initializes the calibration value set for the selected LED module.
- [APPLY]: Applies the changed calibration value to the selected LED module.

Edge Calibration

- [REFRESH]: Refreshes into the edge calibration value applied to the selected LED module.
- [RESET]: Initializes the edge calibration value set for the selected LED module.
- [APPLY]: Applies the changed edge calibration value to the selected LED module.
- [APPLY TO ALL LED MODULES]: Applies the changed edge calibration value to all LED modules.

5 RGBW pattern colors are displayed on each LED controller.

- RGBW patterns can be displayed on all or selected LED controllers.

RGBW pattern

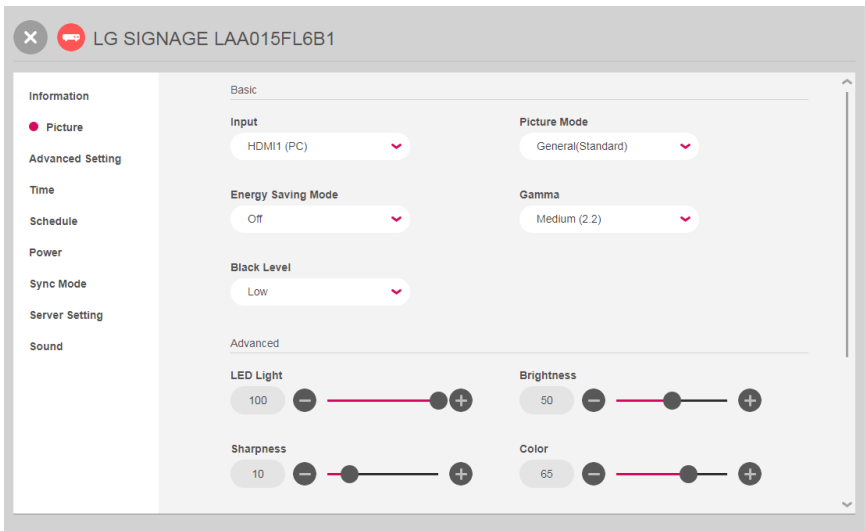
- [Apply]: Apply the RGBW pattern value set in the LED controller area selected by the user.
- [All Pattern Off]: Stop showing RGBW patterns applied to all LED controllers.

DEVICE CONTROL

You can check or change specific functions of the system controller.

You can control information, image, advanced settings, output settings, time, schedule, power, sync mode, server settings, and acoustic items.

- 1 Click the Control icon (🔧) of the system controller at the Management tab.
- 2 It checks or changes the specific functions of each item.



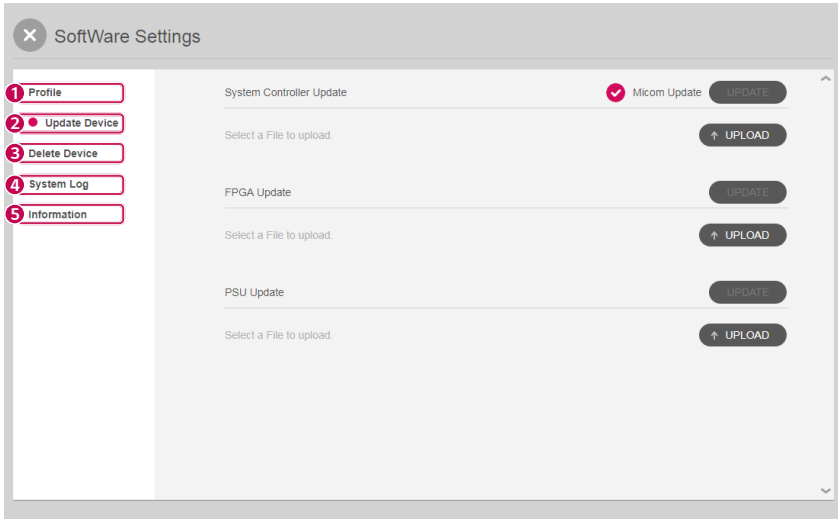
! NOTE

- The items of specific control available may vary depending on whether a function is supported or not by each device.
- Please check the “Appendix - Items of Device Control for Each Supported Hardware (Device Control Items by Supported Hardware)” for detailed control items per supported hardware.

SOFTWARE SETTINGS

You can check or change the account information, device information, and software information about the software of LG LED Assistant.

- 1 Click the Software Settings icon (⚙️) on the upper right side of the program.
- 2 It checks or changes the specific functions of each item.



No.	Item	Description
1	[Profile]	You can check and change your e-mail account. You can change your password.
2	[Update Device]	You can update the F/W of the equipment that you have finished the layout setting. - System controller, FPGA, Power Supply Unit (PSU)
3	[Delete Device]	You can delete the information of the equipment with layout settings completed.
4	[System Log]	You can change the automatic deletion cycle of the system log saved in the installation folder of LG LED Assistant.
5	[Information]	You can check the software information about the LG LED Assistant.

APPENDIX

Used Port Information

The LG LED Assistant server is operated via the port below.

Port Number	Function	Protocol Type
8787	LG LED Assistant server	TCP/IP
6380	Redis DB	TCP/IP
9	WOL(Wake On Lan)	UDP
3000	Device Communication (http)	TCP/IP
3001	Device Communication (https)	TCP/IP
6960	Device Search	TCP/IP

Items of Device Control for Each Supported Hardware

The items of device control for each supported hardware are as follows.

Classification	Detailed Control Items	Presence or Absence of Supported Hardware		
		LCLG003	LCLG005	LAA015
Information	<ul style="list-style-type: none"> Information on Setting for Redundant: Status of the sub device, Clone Settings Information: Device Name, Model Name, Serial Number, Software Version, WebOS Version, Micom Version, FPGA Version, PSU Version Status: Signal, Temperature, Fan Network Status: IP Address, Subnet Mask, Gateway, Basic DNS, MAC Address 	0	△ (PSU version not provided)	△ (Information on Setting for Redundant, PSU version not provided)
Picture	<ul style="list-style-type: none"> Default: Input, Picture Mode, HDR Picture Mode, Dynamic Tone Mapping, Energy Saving Mode, Gamma, Black Label Advanced: LED Light, Brightness, Sharpness, Color, Tint, Contrast, Color Temperature 	0	0	0
Advanced Setting	<ul style="list-style-type: none"> Basic: UHD Deep Color, HDMI IT Content, OPS Control Interface Selection Input Manager Fail Over 	0	0	0
Video Scaler	<ul style="list-style-type: none"> Basic: Reference resolution, Custom resolution, Input/Output window 	0	0	X
Time	<ul style="list-style-type: none"> Basic: Date, Time, UTC Daylight Saving Time 	0	0	0

Schedule	<ul style="list-style-type: none"> • Power On/Off Schedule • Holiday Setting • LED Light Schedule 	0	0	0
Power	<ul style="list-style-type: none"> • Basic: No Signal Power Off, DPM, DPM Wake Up Control, PM Mode, Power On Delay, Power On Status, Power On/Off History • PSU: PSU Power Management, PSU Information, PSU Status 	0	△ (PSU features not provided)	△ (PSU version not provided)
Sync Mode	<ul style="list-style-type: none"> • RS-232C Sync 	0	0	0
Server Setting	<ul style="list-style-type: none"> • SuperSign CMS Server • Status Mailing 	0	0	0
Sound	<ul style="list-style-type: none"> • Default: Sound Mode, volume, mute 	X	X	0

 **NOTE**

- The device control item may differ depending on the model versions.

Add an Exclusion to Windows Defender Anti-Virus

Windows 10

If Windows Defender anti-virus detects LG LED Assistant program as malware, you can add the folder to its exclusion list to prevent it from blocking the program.

- 1 Go to Start > Settings > Updates & Security > Windows Security > Virus & threat protection > Virus & threat protection settings > Add or remove exclusions.
- 2 Under Add an exclusion, select the folder where LG LED Assistant is installed.



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