Colorlight

ColorAdept

Configuration Manager V1.2

User Manual

Manual Changelog

No.	Version	Date	Author	Description
1	V1.0	2023.1.20	Zhang Bo	Initial release

Contents

1.Introduction

ColorAdept Configuration Manager is the software for configuration of cabinet and module parameters.

2.Installation

Step 1 Download ColorAdept Configuration Manager software from Colorlight's official website: https://www.lednets.com/Support/Software/index.html.

Step 2 Open the downloaded file to begin Setup Wizard.
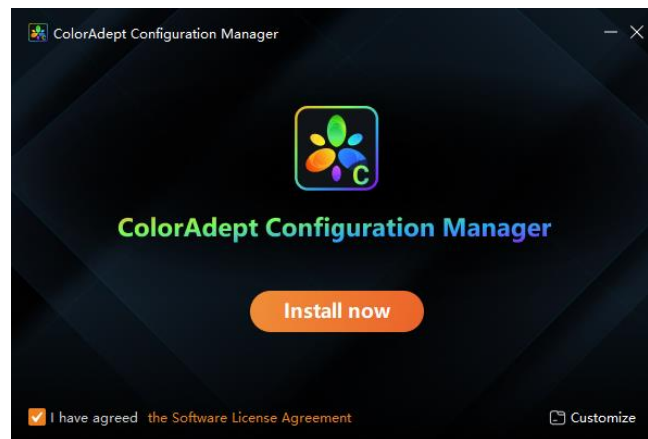

Figure 2.1-1 Install now

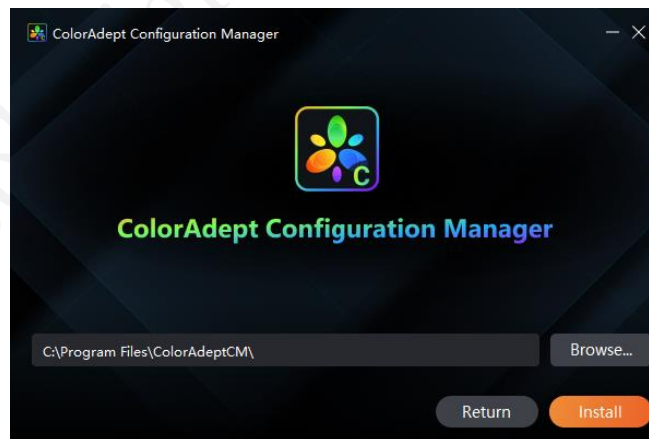Step 3 Click "Install now" or "Customize" to continue.

Figure 2.1-2 Install location

Step 4 When installation has finished, click "Start" to launch the software.
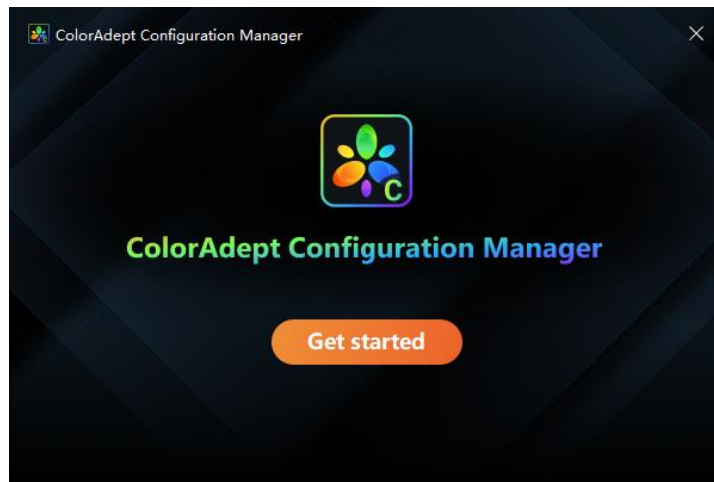
Figure 2.1-3 Finish

3.Quick Start

3.1 Cabinet Detection

After connecting cabinets to PC directly through Ethernet cables, you can select a corresponding network interface to detect cabinets, as shown in Figure 3.1-1.
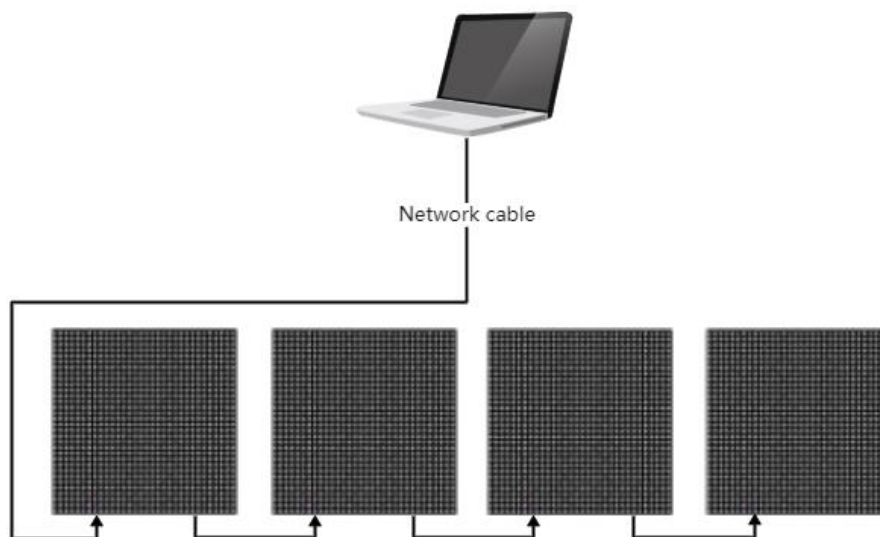

Figure 3.1-1 Connection diagram via network interface mode

Another option is to connect cabinets to a processor, which is connected to a PC through an Ethernet cable or an Ethernet switch, and then select a corresponding processor to detect cabinets, as shown in Figure 3.1-3.
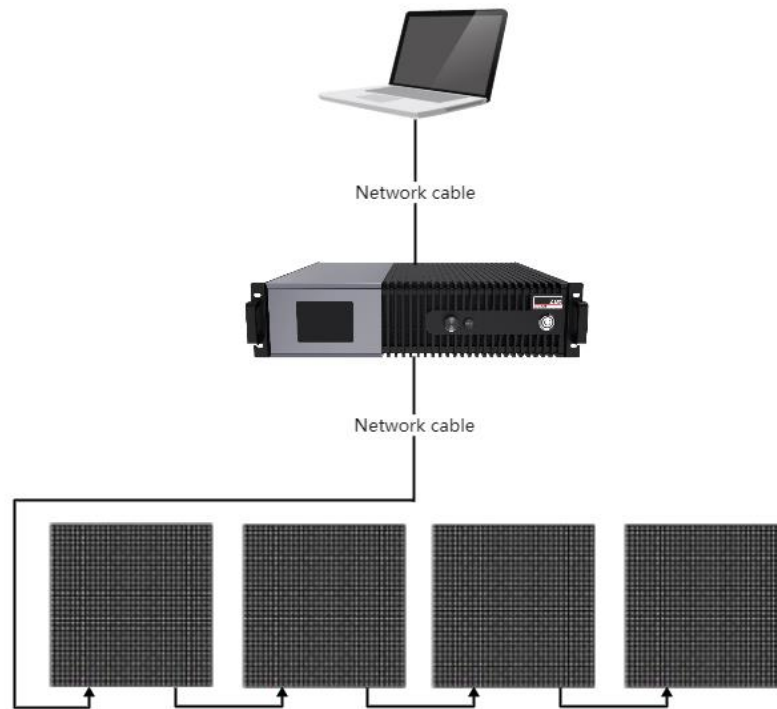
Figure 3.1-2 Connection diagram via processor mode

Note:
Make sure the processor and the PC are connected to the same network segment.

3.2 Cabinet Library Configuration

Step 1 Click "Settings" on the menu bar and select "Cabinet library" to enter the cabinet library interface.
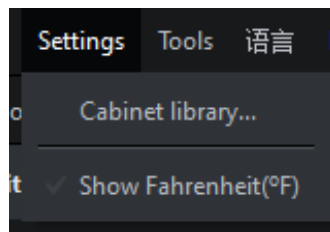

Figure 3.2-1 Cabinet library

Step 2 Click "Manage packs" to enter the cabinet pack management interface.
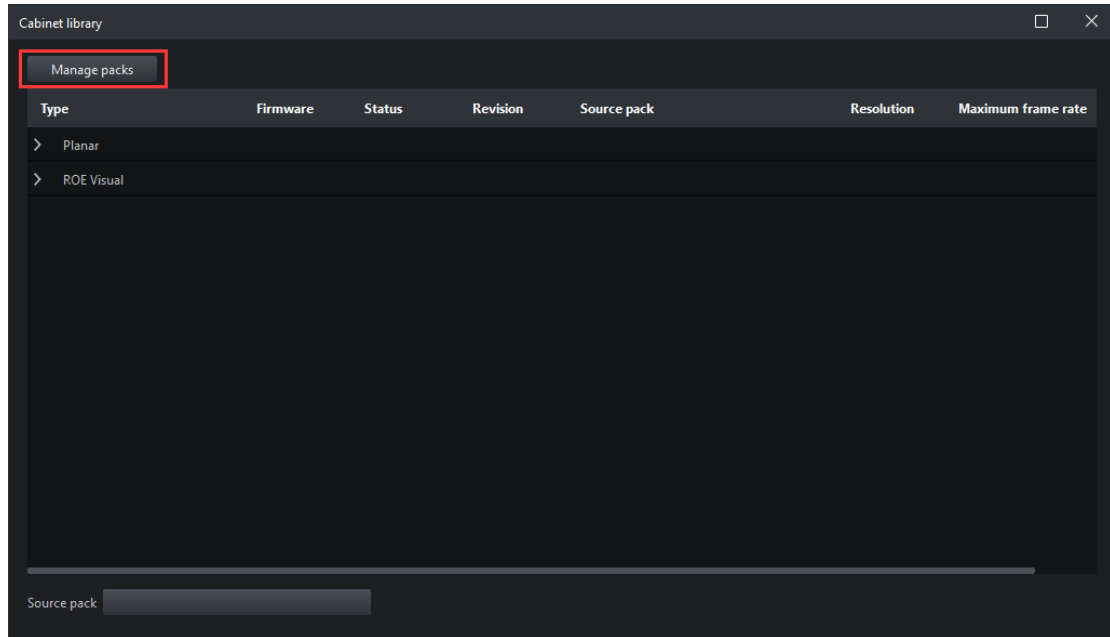
Figure 3.2-2 Cabinet library interface

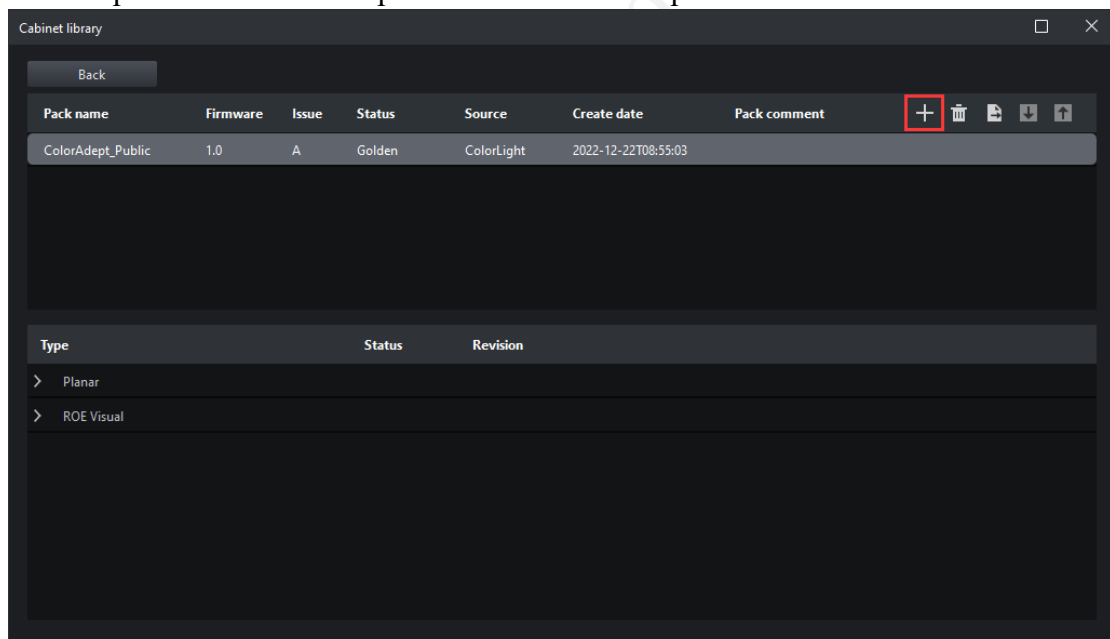Step 3 Click "➕" to import a selected cabinet pack.

Figure 3.2-3 Import a cabinet pack

3.3 Cabinet Configuration

Step 1 Select a cabinet from the cabinet list.

Step 2 Select a cabinet type on the right side panel.

Step 3 Click "Configure" to continue.
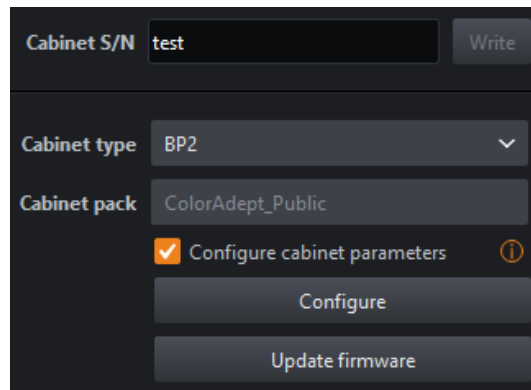
Figure 3.3-1 Cabinet configuration

3.4 Update Firmware

Step 1 Select a cabinet from the cabinet list.

Step 2 Select a cabinet type on the right side panel.

Step 3 Click "Update firmware" to continue.

Figure 3.4-1 Update firmware

4.Main Interface

Send mode includes network interface mode and processor mode. Both have different user interfaces.

4.1 Toolbar

Network interface mode

Figure 4.1-1 Select a network interface

"Select network interface" drop-down menu: You can select detected network interfaces.

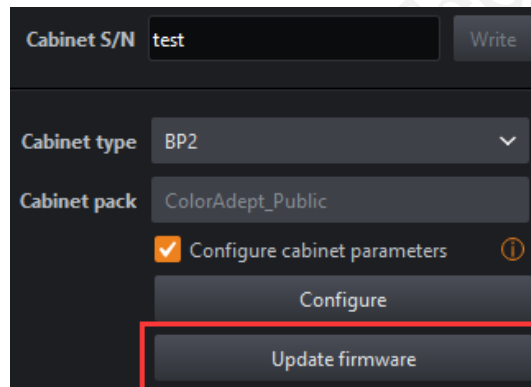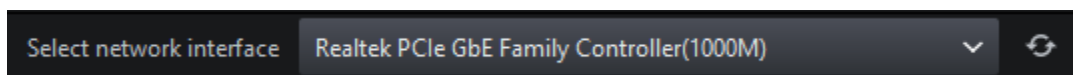"Detect" button: Click to detect the cabinet of the selected network interface.
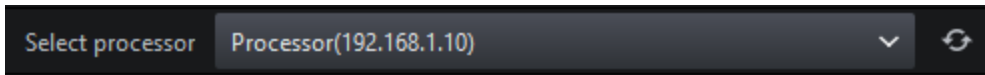
Processor mode

Figure 4.1-2 Select a processor

"Select processor" drop-down menu: You can select detected processors.

"Detect" button: Click to detect the cabinet of the selected processor.

4.2 Cabinet List

Figure 4.2-1 Cabinet list

➤ Port: Output port.

➤ String position: In network interface mode, it indicates the position of the cabinet which is connected to the interface. In processor mode, it indicates the position of the cabinet which is connected to processor.

➤ Type: Cabinet type.

➤ S/N: Cabinet S/N.

➤ Firmware: Firmware version of the cabinet pack.

➤ Error/Total packets: The amount of errors and total packets of the cabinet.

➤ Progress: The progress of configuration or firmware update.

➤ Failed module: The number of the failed module in the cabinet.

➤ Temperature: Cabinet temperature.

➤ Humidity: Cabinet humidity.

➤ Voltage: Cabinet voltage.

➤ Author: Author information.

4.3 Side Panel

Cabinet S/N

It displays the selected cabinet S/N, which can be modified and written in the receiver card.
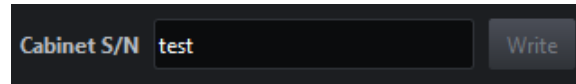
Figure 4.3-1 Cabinet S/N

Cabinet type

It displays the selected cabinet type, which can be modified by selecting from the drop-down menu.

Figure 4.3-2 Cabinet type

Cabinet pack

It displays the cabinet pack of the selected cabinet type. If the current cabinet type exists in two or more cabinet packs, you can change the pack via drop-down menu.
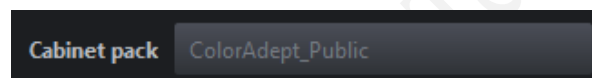
Figure 4.3-3 Cabinet pack

Configure
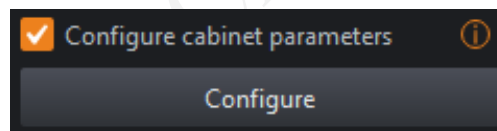
Figure 4.3-4 Cabinet parameter configuration

After checking "Configure Cabinet Parameters", you can click "Configure" to write cabinet parameters to the receiver card. Configuration progress is displayed in the cabinet list.

Update firmware

Select one or more cabinets and you can update firmware.
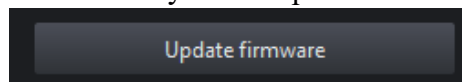
Figure 4.3-5 Update firmware

📖Note:

Make sure the error rate of the selected cabinet is lower than 1/1000000 when updating the firmware.

Test pattern

There are 22 different test patterns available. You can simultaneously modify test patterns of multiple cabinets.
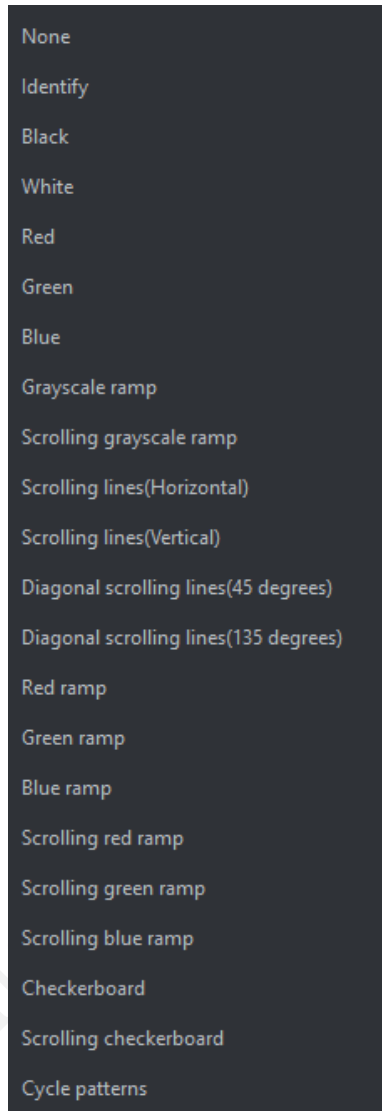
Figure 4.3-6 Test pattern

Calibration mode

The calibration mode of the selected cabinet is switchable.
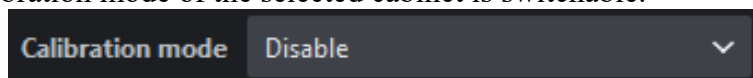
Figure 4.3-7 Calibration mode

Brightness

The maximum brightness of the selected cabinet is marked on the slider.

Figure 4.3-8 Brightness

5.Menu Bar

5.1 Send Mode

Send mode includes Network interface mode and processor mode, which can be selected as needed.

Figure 5.1-1 Send mode

5.2 Settings

5.2.1 Cabinet Library

Figure 5.2-1 Cabinet library interface

➢ Type: Cabinet type.

➢ Firmware: Firmware version of the cabinet pack.

➢ Status: Release status of the cabinet type.

➢ Revision: Revision of the cabinet type.

➢ Source pack: Source pack to which the cabinet belongs.

➢ Resolution: Corresponding resolution of the cabinet type.

➢ Maximum frame rate: Maximum frame rate of the cabinet type.

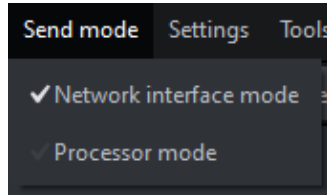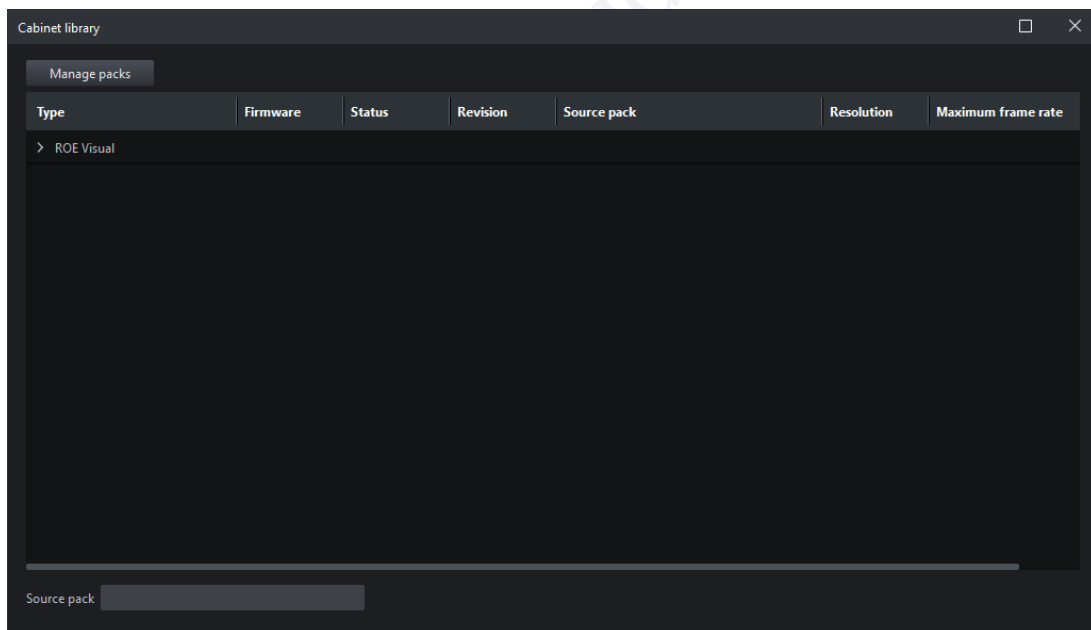➢ Source pack drop-down menu: It displays the name and the firmware version of the cabinet pack to which the cabinet type belongs. If the current cabinet type exists in two or more cabinet packs, drop-down list is available for changing the pack of the selected cabinet type.

Pack management interface

Click "Manage packs" at the upper left of cabinet library interface to display pack management interface.
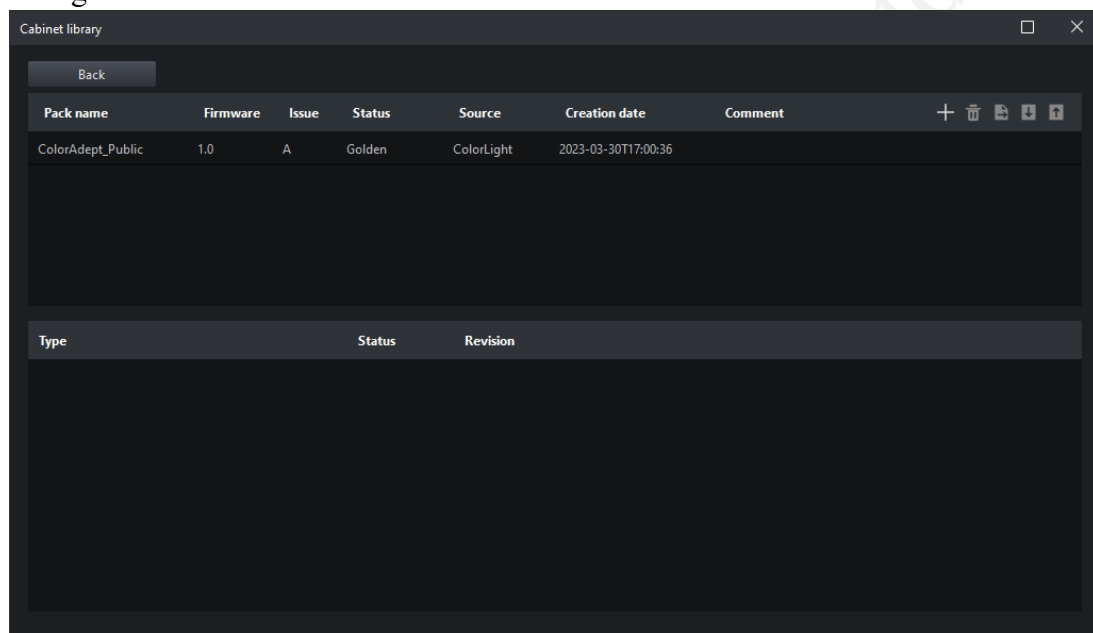

Figure 5.2-2 Pack management interface

➢ Back: Return back to cabinet library interface.

➢ Import: Import the selected cabinet pack.

➢ Delete: Delete the selected cabinet pack.

➢ Export: Export the selected cabinet pack.

➢ Move up/down: Move the selected cabinet pack to adjust its priority.

Cabinet pack list

Figure 5.2-3 Cabinet pack list

➢ Pack name: Name of the cabinet pack.

➢ Firmware: Firmware version of the cabinet pack.

➢ Revision: Revision of the cabinet pack.

➢ Status: Release status of the cabinet pack.

➢ Source: Source of the cabinet pack.

➢ Created date: Created date of the cabinet pack.

➢ Pack comment: Comment of the cabinet pack.

Cabinet type list

Figure 5.2-4 Cabinet type list

➢ Type: Cabinet type.

➢ Status: Release status of the cabinet type.

➢ Revision: Revision of the cabinet type.

5.2.2 Show Fahrenheit (℉)

The temperature is displayed in Fahrenheit (℉) after checking this feature.
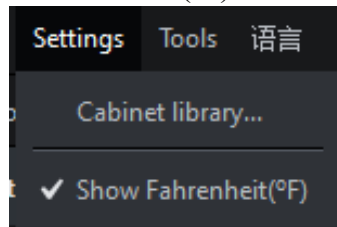
Figure 5.2-5 Show Fahrenheit (℉)

5.3 Tools

5.3.1 Read/Write Module S/N

Click "Read/Write module S/N" to pop up the following interface if there are modules within the cabinets, as shown in Figure 5.3-1.
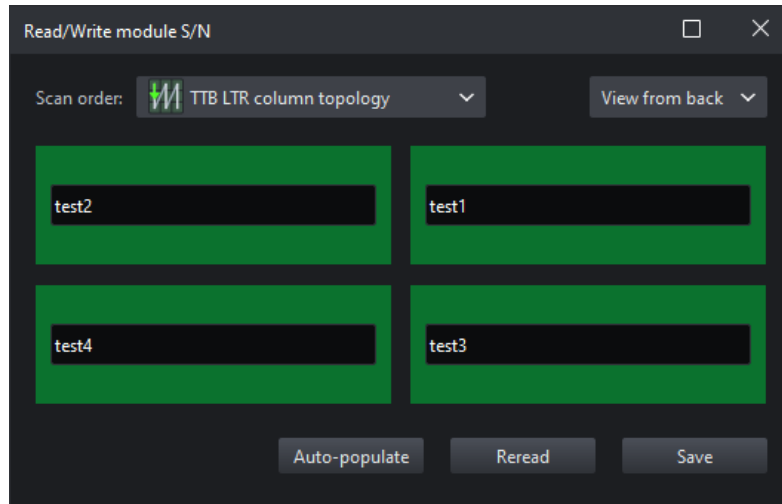

Figure 5.3-1 Read/Write module S/N interface with modules in the cabinet

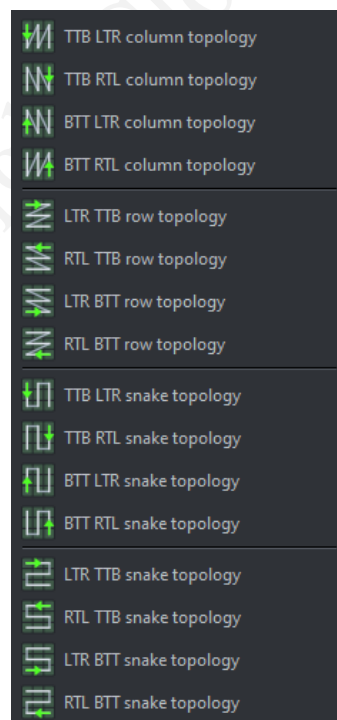➢ Scan order: 16 scan orders are available.

Figure 5.3-2 Scan order

➢ Front view: It displays module position in the front view.

➢ Rear view: It displays module position in the rear view.

➢ S/N input box: It displays the module S/N which can be edited.

➢ Auto-populate: Module S/N is automatically populated in order.

➢ Reread: Reread module S/N.

➢ Save: Write the S/N to the module.

5.3.2 Read/Write Module Current Gain

Click "Read/Write module current gain" to pop up the following interface if there are modules within the cabinets, as shown in Figure 5.3-2.
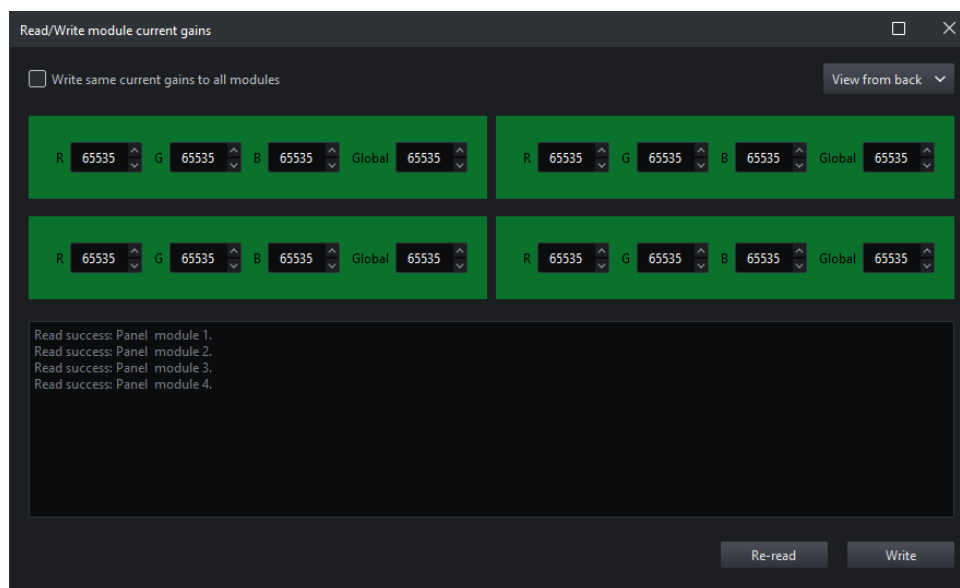

Figure 5.3-3 Read/Write module S/N interface with modules in the cabinet

Write the same current gain to all modules: After checking this feature, only the red, green, blue, and global current gains of the first module are displayed on the interface. Click "Write" to save the parameters to all modules.
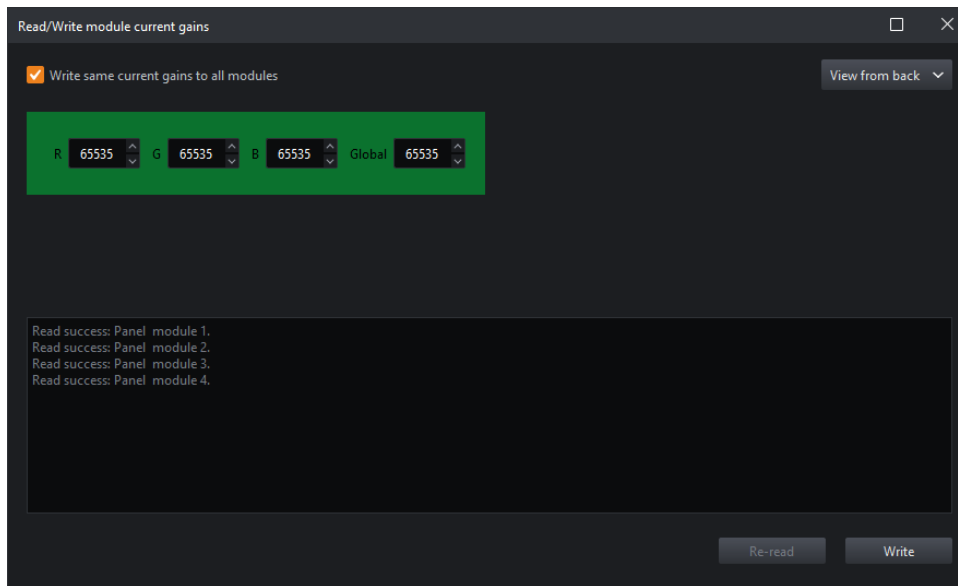
Figure 5.3-4 "Write the same current gain to all modules" interface

➤ Front view: It displays module position in the front view.

➤ Rear view: It displays module position in the rear view.

➤ Information box: It displays the operation progress of reading or writing current gains of each module.

➤ Reread: Reread module current gains.

➤ Write: Write the current gain parameters set on the current interface to the modules.

5.3.3 Read/Write Cabinet Color Gamut Data

Figure 5.3-5 "Read/Write cabinet color gamut data" interface

Without/With calibration

➢ Red, Green, Blue, White

■ Measuring colors: Automatically measure color gamut of selected cabinet with color analyzer.
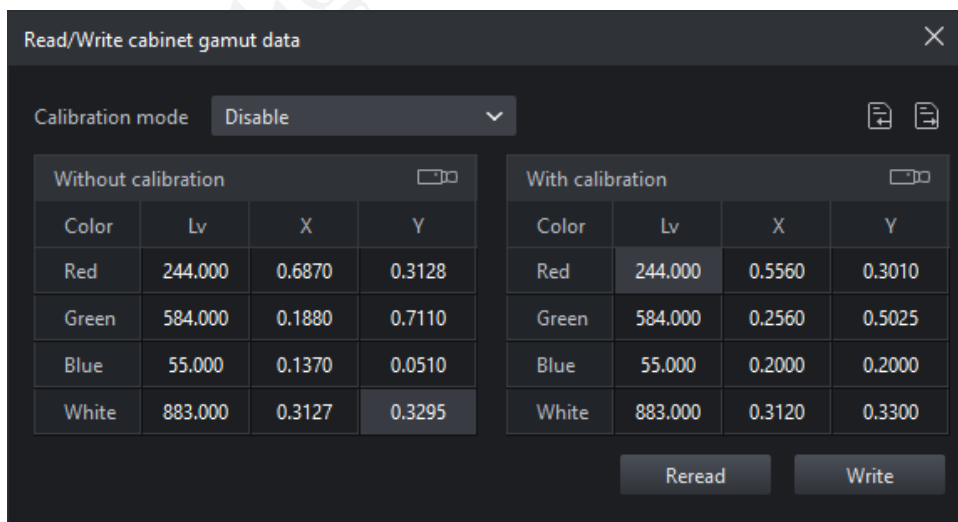
■ Brightness: Brightness of red/green/blue/white without/with calibration.

■ X-coordinate: The X-coordinate of red/green/blue/white points without/with calibration.

■ Y-coordinate: The Y-coordinate of red/green/blue/white points without/with calibration.

📖Note:

When multiple cabinets with different color gamut data are selected, "--" indicates different brightness, and "-.----" indicates different X/Y coordinates.

➢ Calibration mode: Switch calibration mode.

➢ Import: Import .cmcgf parameter files.

➢ Export: Export color gamut data locally.

➢ Reread: Reread color gamut data of the corresponding cabinet.

➢ Write: Write color gamut data to the corresponding cabinet.

5.3.4 Read/Write Calibration Data
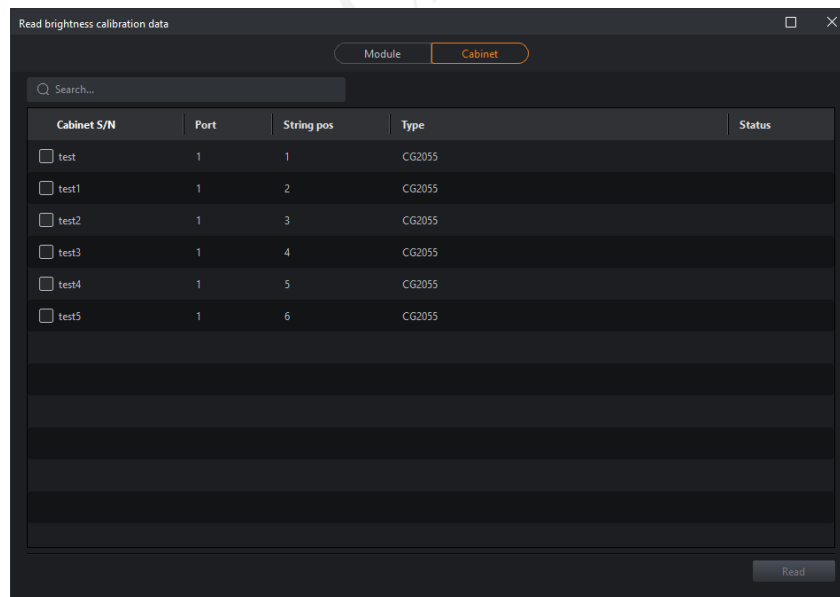
Read calibration data

Figure 5.3-6 Read brightness calibration data

➢ Module/Cabinet: List of modules/cabinets.

➢ Search: Search for target module/cabinet.

➢ Read: Read and save calibration data of selected module/cabinet locally.

➢ Status: Result of reading operation.
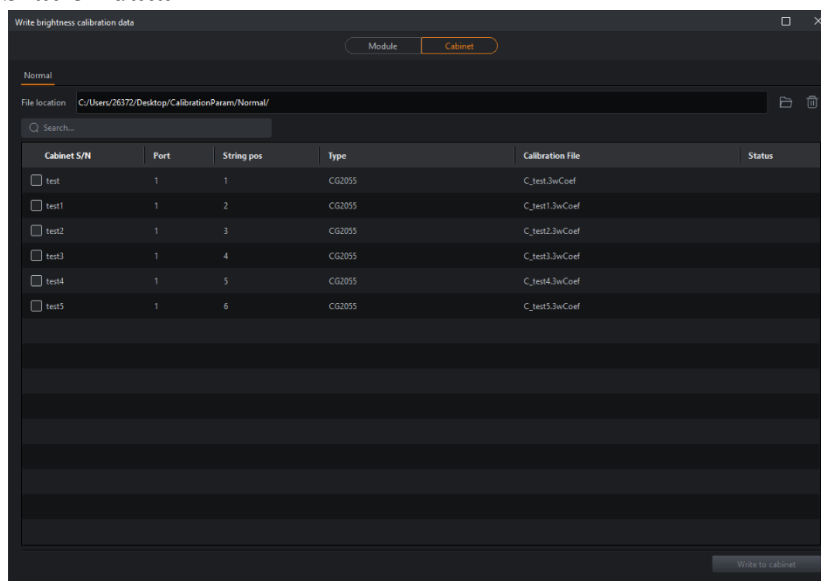
Write calibration data

Figure 5.3-7 Write brightness calibration data

➢ File location: Show the absolute path of selected folder.

➢ Browse: Select file location of the calibration file.

➢ Clear: Remove file location of the selected calibration file.

➢ Write to modules/cabinets: Write calibration data to modules/cabinets.

➢ High brightness calibration: The "Regular" tab will be displayed if the receiver card does not support multi-layer calibration. On the contrary, "High layer" and "Low layer" tabs will be displayed for receiver cards supporting multi-layer calibration.

➢ Low brightness calibration: The "Chip low brightness" tab will be displayed for chips supporting low brightness calibration.

Modules/Cabinets calibration files list

Module S/N	Port	String pos	Row	Column	Type	Calibration File	Status
test1	1	1	1	1	CS2055	M_test1.3wCoef	
test2	1	1	1	2	CS2055	M_test2.3wCoef	
test3	1	1	2	1	CS2055	M_test3.3wCoef	
test4	1	1	2	2	CS2055	M_test4.3wCoef	
test6	1	2	1	1	CG2055	M_test6.3wCoef	
test5	1	2	1	2	CG2055	M_test5.3wCoef	
test8	1	2	2	1	CG2055	M_test8.3wCoef	
test7	1	2	2	2	CG2055	M_test7.3wCoef	

Figure 5.3-8 Modules calibration files list

➢ S/N: S/N of modules/cabinets.

➢ Port: The sequence number of the port connected to cabinet.

➢ String position: The position of the receiver card connected to the cabinet port.

➢ Row: The position of module in terms of row.

➢ Column: The position of module in terms of column.

➢ Type: The type of cabinet.

➢ Calibration file: Calibration file name corresponding to module.

➢ Status: Result of the writing operation.

📖Note:
The list of cabinet calibration is the same as that of module calibration except for the absence of "Row" and "Column".

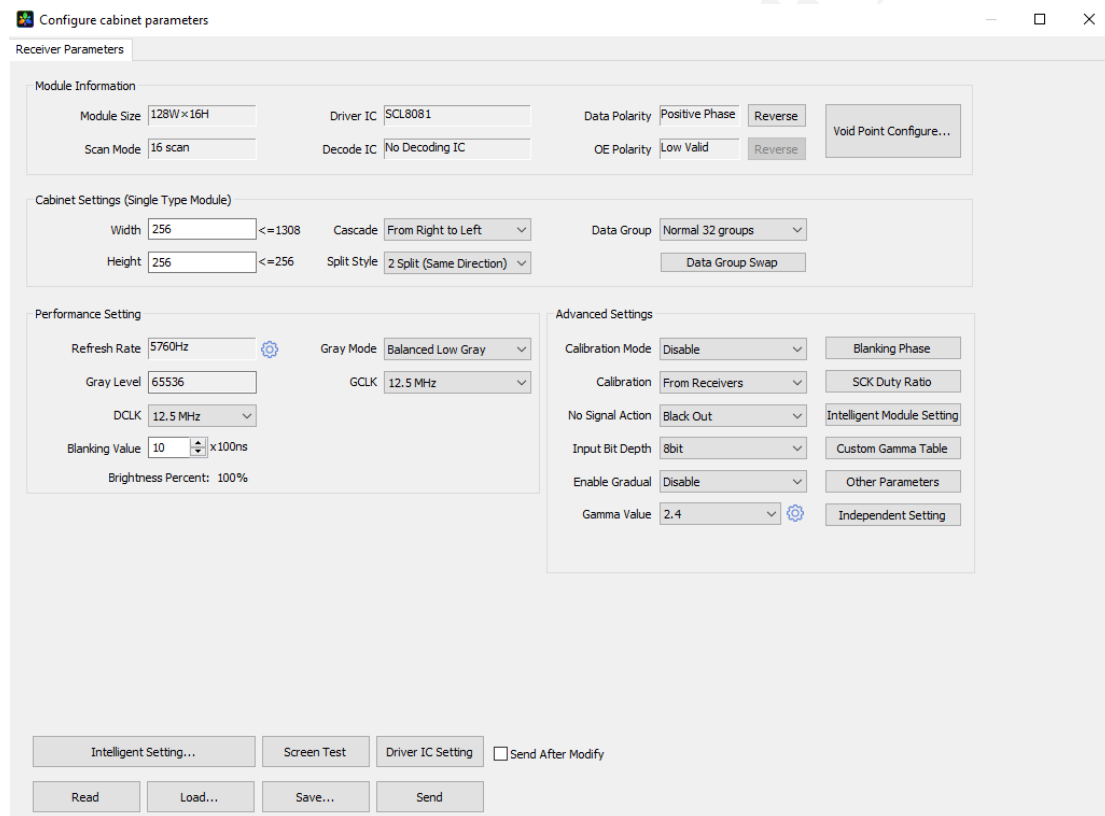## 5.3.5 Configure Cabinet Parameters

Figure 5.3-9 "Configure cabinet parameters" interface

➢ Read: Read cabinet parameters.

➢ Load: Import a local parameter file in .rcvbp format.

➢ Save: Save cabinet parameters in .rcvbp file format locally.

➢ Send: Send cabinet parameters in the current interface to the receiver card.

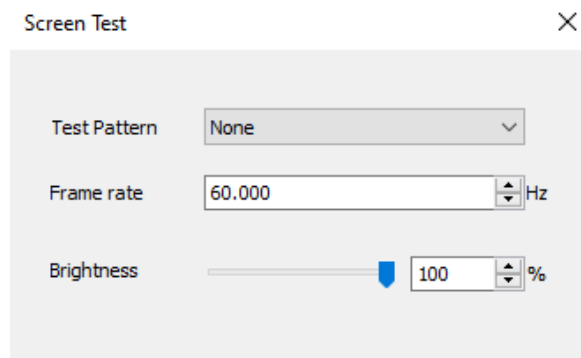➢ Screen test: Set screen test pattern and brightness.

Figure 5.3-10 "Screen Test" interface

Statement

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