Colorlight

S2 Sending Card

USER MANUAL

Contents

1. Introduction

S2 sending card is a new generation of sending card, and its performance has improved significantly with the product chipset upgrades comprehensively.

S2 equips dual USB2.0 as the communication interface to achieve high-speed communication between the PC and sending card, also are convenient and reliable for multiple cards cascading. S2 possesses PCI-E 1X interface, which is more versatile.

2. Interface Description

No	Interface	Function	Remarks
1	Output Port A	RJ45, to transmit network signals	The control area of the two outputs can be separately set
2	Output Port B	RJ45, to transmit network signals	
3	Audio Input	Input audio signal and transmit to the screen via Ethernet cable	In conjunction with multifunction card
4	USB TYPE-A	USB output	
5	USB TYPE-B	USB input	
6	DVI Input	DVI output interface, connect to the graphics card	
7	PCI-E 1X	Match with computer 1X PCI-E slot for sending card power on	
8	Power Supply	Connect to DC3.8V-12V	

4. LEDVISION Installation and Preliminary Configuration

4.1 Computer Configurations

- CPU Frequency>= 2.0GHZ

- Host Memory>=1G

- Graphic card with DVI/HDMI interface: Memory ≥512MB

- The resolution of PC's graphic card should be equal to or larger than the actual LED display's.

Computer configuration can be adjusted according to the actual situation. Adjustment mainly aims at total pixels of LED display, the complexity of playing contents and whether playing HD video or not.

4.2 USB Driver Installation

First download the installation package of LEDVISION software from Colorlight's official website **www.colorlightinside.com,**

and complete the installation according to the diagrams shown below.

1.   Run the software package, and select **[English]** for installer language. Click **[OK]** to move on.

Note: Run LEDVISION version 4.18 or higher while using S2.

2. After selecting a language, an installation wizard like below will appear. Click **[Next]**;

Then choose installation location, click **[Browse]** to change default target location, then click **[Next]** after completing.

Choose components according to your own computer status, click **[Install]** to complete.

After the installation is complete you are ready to use LEDVISION.

4.3 Graphic Card Settings

Set up the working mode of the computer graphic card after completing hardware connection and powering S2 on, you can select **Duplicate** mode or **Extend** mode according to the different requirements.

- **Duplicate Mode:** That the contents displayed on LED screen are consistent with computer, that is to say, copy the computer contents onto LED screen, as pic below.

PC Screen   LED Screen

- **Extend Mode**：That the contents displayed on LED screen are inconsistent with computer's, that is, to extend a display image from the right side of PC screen, which was consistent with LED display's, we also call it "background playing", as pic below.

PC Screen   LED Screen

For different computers, there are different ways to change the mode. Take **WIN 7/8** system + **NVIDIA** graphics cards as an example, please read the following settings ways.

- **Method 1**: Hold down the WIN and P keys at the same time, and select the mode as you want in the pop-up window.

- **Method 2:** Right-click and select "Screen resolution" to enter the page of "modify the display appearance"; if your graphics card is not NVIDIA and cannot find the setting interface please refer to the description of the graphics card.

Note: As for other kinds of graphic cards, if there is no corresponding window, please refer to the user manual of the graphic card.

5. Parameter Configuration

First of all, please make sure the software under i Series Mode before setting.

Click the **"Setting"** > **"Software Setting"** to enter the Software Management window, change the mode by inputting password: **168**.

5.1 Confirmation on Hardware Connection

Please make sure the correctness of the hardware connection before setting, use LEDVISION to detect sender and all receiving cards.

5.1.1 Detect Sender and receiving card

Run LEDVISION, click the "Control" > "Screen Control" to enter the Screen Control window.

Select **[Sender Card]** for sending device, Click **[Detect Sender Cards]** in **Sender Card Settings**. Please check the hardware connection or the installation of relevant driver if cannot detect sender cards.

Select network port and click "**Detect Receiver Cards**" respectively, the software will automatically acquire the Receiver (Receiving card) quantity for each network port of the sender card. Please check corresponding cable if the numbers of receiving card are inconsistent with actual status.

5.2 LED Screen Setting

Click **"LED Screen Settings"** and input password [**168**] to enter the LED Screen Setting interface, and set up "Sending device", "Screen parameters", "Connection parameters".

Input Signal Information: Display the sender info that auto acquired via the software, which only provided for reference, and did not support personally set up.

Advanced: Prepare for professionals for special applications settings, no operation allowed for non-professionals.

Advanced settings include the parameters listed below:

Zero Frame Delay: Default uncheck, and should be enabled by technician under special status.

Auto Switch DVI/HDMI: The sender only identifies the video signal that has been set up when unchecked; Auto identify the signal that has been connected first when checked.

Brightness adjustment via multi-function card: Auto adjusts screen brightness via the sensor of multi-function card when checked.

Maximum Transmission Unit (MTU): Default "Standard", and consult with the technician if you need to apply to "Long Frame".

Frame Output: Default "Every Frame", and consult with the technician if you need to apply to "Every Other Frame".

Input Bit Depth: Default "8bit".

Input Type: DVI/HDMI, according to the actual using status.

Sync Method: Default "Auto"

Write logo: Custom, display before video signal input. The image formats should be bmp, jpg or png.

3D Setting: Works only for the function setting of 3D sender, did not apply for S2.

5.2.2 Screen Parameters

Observe the display screen with single cabinet as unit, if all cabinets display normally (it is normal circumstance even the picture between cabinets is not continuous), please ignore this step and directly go to the next step.

Otherwise, enter the following configuration:

Click **[Load],** choose the correct parameter file.

Click **[Send],** to send the loading parameter to the receiving card. Each cabinet should display normally (it is normal circumstance even the picture between cabinets is not continuous), then click **[Save To Receiver]** to save the parameters to the receiver card.

If each cabinet cannot display normally, then contact with the LED screen engineers.

5.2.3 Connection Parameters (Look from front)

You don't need to set up the control area of each net port respectively under i series mode, but set up the connection relationship of the receiver card aiming at each net port loading via the sender card, and the software will auto calculate and set up the control area according to the connection relationship. Detailed Setting Steps as follows:

1) **Set up the quantity of receiving card**

Set how many Receiver (Receiving card) that one port manages in Row Count and Col Count (6*6 as an example), how many pixels that one Receiver (Receiving card) manages in Width and Height (128*128 as an example), you will see LED display mapping area from the right side (Viewing from the front of LED display).

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2) Receiver Card Parameters Setting

Select the target sending card and the net port from the left side, then select the corresponding cabinets of net port actual control area and set the connection lines in the mapping area.

There are two methods to set up:

1. Use mouse to select one by one

A. In the mapping area, select the first receiving card based on the actual connection of the net port (view from the front), and then set up the actual loading width and height of the target receiving card in the right side (128*128 as an example).

B. Click the Receiver (Receiving card) one by one until the last one for this network port loads.

2. Connection Pattern

A. Aiming at the LED screen with standard connection lines.

B. First set up the receiving card information according to the actual loading width and height (128*128 as an example).

C. Select the connection line you want from the right side, then cover the corresponding area of net port loading in the mapping area, finally complete setting.

As the cabinets have multiple specification (that is the inconsistent capacity of the receiving card), you can select the different one to adjust separately after completing setting.

3) Save to Receiver Cards & Save to Sender Cards

Set up all the receiving card parameters and connection line respectively, click **[Send]** to send the correct parameter to the receiving card, and the screen should display normally about this time.

Then click **[Save to Receiver]** to save parameters to corresponding receiving card after confirming.

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