



INSTRUCTIONS

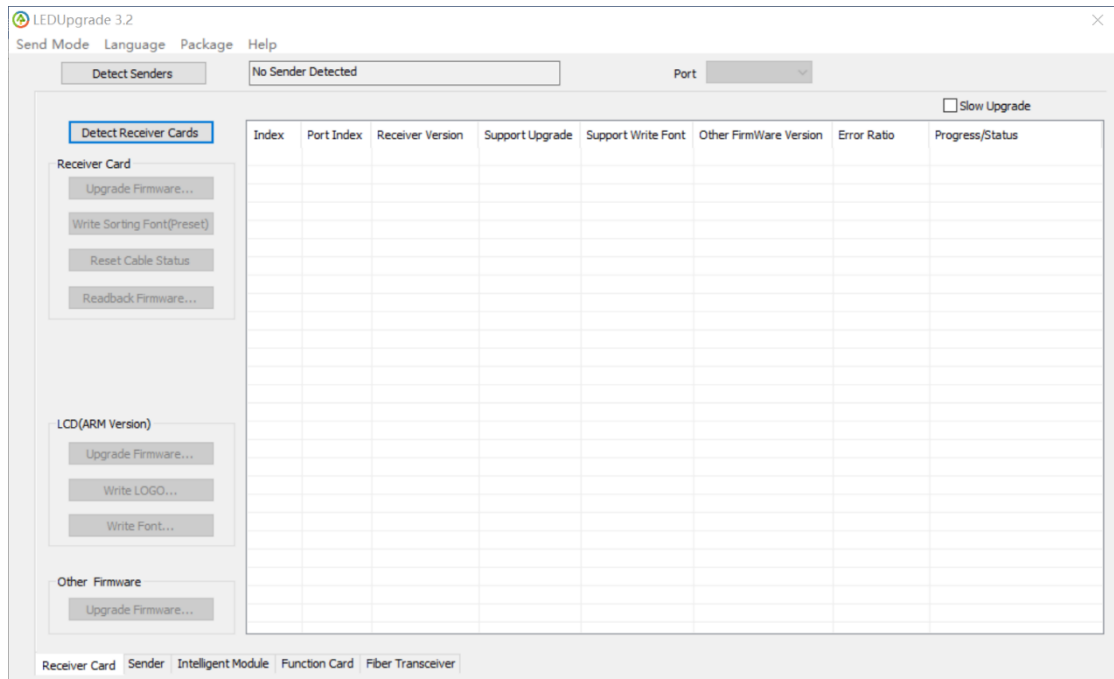
LEDUpgrade

USER MANUAL

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Chapter1 Introduction



1.1 Overview

LEDUpgrade is mainly used for firmware upgrading of hardware products.

In addition, LEDUpgrade also has the following functions:

- ① It can readback the receiver card firmware.
- ② It can be used to upgrade the library of the receiver card.
- ③ It can upgrade the LCD panel of the cabinet, write the LOGO and write font.
- ④ It can write the LOGO and the write font for the LCD panel of the sender.
- ⑤ It can upgrade the play box.
- ⑥ It can upgrade the smart module.
- ⑦ It can upgrade the multi-function card.
- ⑧ It can record the upgrade log.

LEDUpgrade supports products in the following categories:

Receiver Card	New series of lattices series 5A receiver card, pcb edition: v1.0, v2.8, v4.2, v6.0 i5 receiver card, pcb edition: v6.0, v7.0 i5+ receiver card, pcb edition: v7.0, v8.0 i6 receiver card V5 receiver card, pcb edition: v6.0 K5+ receiver card, pcb edition: v3.0, v3.1 i9 receiver card i9+ receiver card 5A receiver card, pcb edition: v6.0, v7.0, v8.0 E80 receiver card, pcb edition: v6.0 E320 receiver card, pcb edition: v6.0
Sender	S2, S4, S4F, HD102, S6, S6F, X1, X2, X2s, X3, X4, X4e, X4s, X6, X7, X8, X12, X16, X16B, X16C, X16 PRO, Z4, Z4F, Z6, Z6 PRO
Play Box	C1, C3, C4, C5, C6, C7, C8, A35
Multi-function card	IM9

LEDUpgrade currently supports two languages: simplified Chinese and English.

1.2 Running Environment

We need Gigabit Ethernet card to detect the receiver card under the net card mode, so Gigabit Ethernet card is necessary.


It contains these characters: Gigabit, GBE, 10/100 / 1000M, RTL8169.

If the card has Fast Ethernet, 10/100, or FE characters, it should be 100 megahertz net card, which does not support upgrade receiver card in the

network card mode.

Chapter2 Installation and Uninstallation

2.1 Installation

1) Double-click  LEDUpgrade_Setup_x.xx.exe icon (for example, LEDUpgrade_Setup_3.2.exe), select the software installer language (Simplified Chinese or English), and click on "OK" (as shown in Fig.2-1);

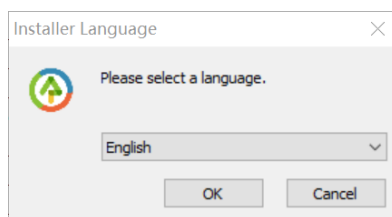


Fig. 2-1 Select Installer Language

2) Choose the installation location and confirm to install. Click on [Next] (as shown in Fig.2-2);

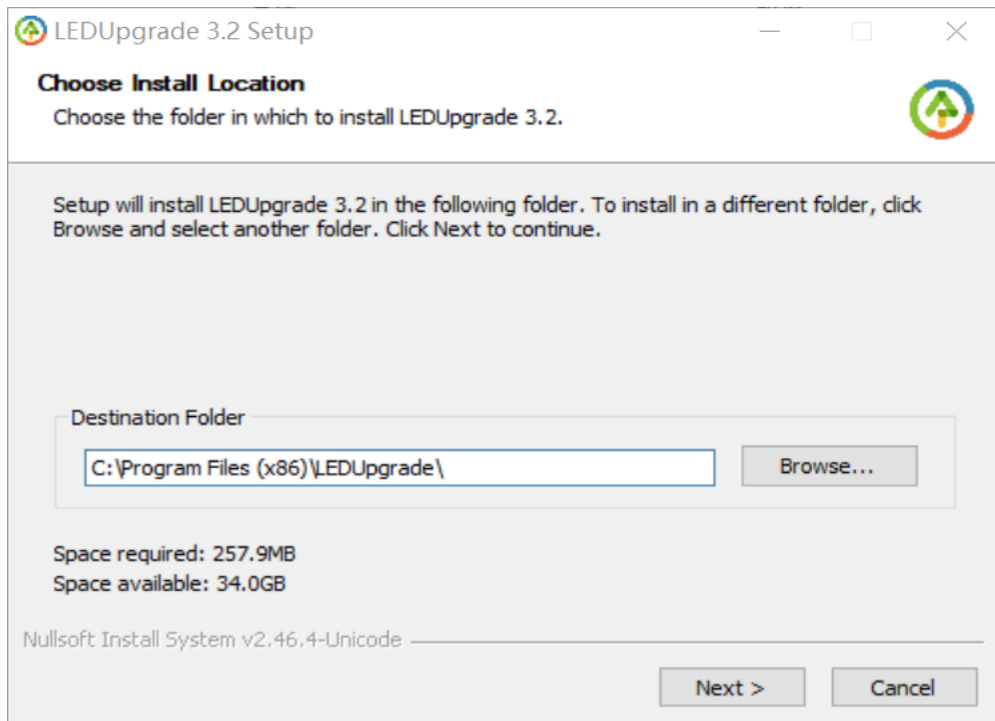


Fig. 2-2 Choose Install Location

3) Choose components according to actual requirements (If this is the first time to install, we suggest check all) and then click on [Install] (as shown in Fig.2-3);

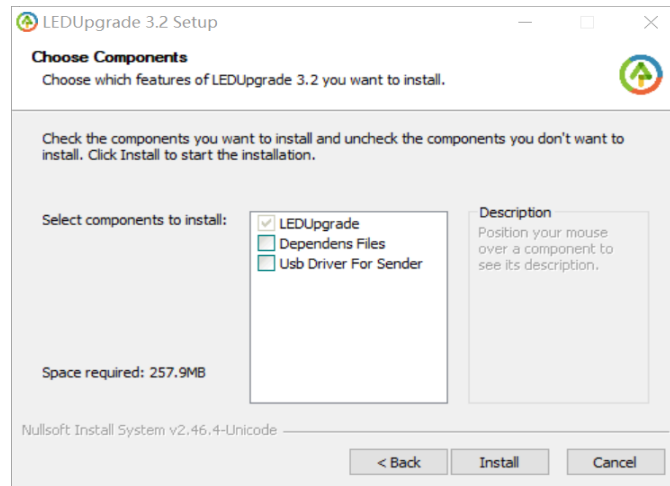


Fig. 2-3 Choose Components

4) Complete the installation. Select on [Finish] (as shown in Fig.2-4);

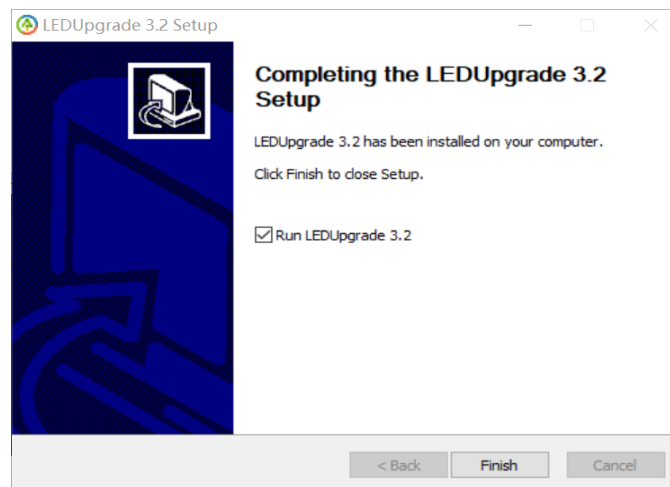


Fig. 2-4 Installation Completed

5) A desktop shortcuts  will be generated on the desktop automatically by system after installation.

2.2 Uninstallation

Select **All Firmware** → **LEDUpgrade** → **Uninstall** from the **Start** menu in the lower left corner of the computer, and uninstall the software (as shown in Fig.2-5).

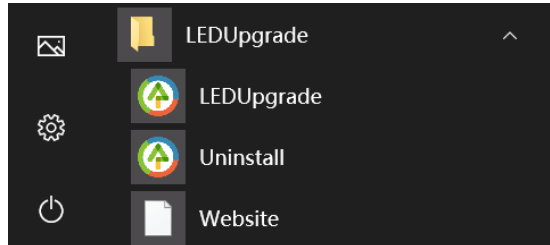


Fig.2-5 Uninstallation

Chapter3 Preset Firmware

3.1 Preset Firmware Description

3.1.1 Receiver Preset Firmware

When upgrading the receiver card firmware, click on the upgrade button, select the preset in the drop-down box, and you can choose the preset firmware in the software to upgrade.

LEDUpgrade3.2 software preset the firmware of receiver card (as shown in the following table).

Receiver card model	Receiver card firmware
5A-75B v6.0、 5A-75E v6.0、 i5 v6.0、 5A-75B v7.0、 5A-75E v7.0、 i5 v7.0	normal =12.01/PWM = 5.13/shixin= 5.34
5A-75B v8.0、 5A-75E v8.0、 E80 v6.0、 E320 v7.0	normal =10.16/PWM = 8.51/shixin= 6.32
i5+ v7.0	normal =7.07/PWM = 7.64/shixin= 6.22/shixin= 7.26

i5+ v8.0	normal =8.01/PWM = 6.12/shixin= 2.00/shixin= 3.00
i6 v6.0	normal =4.56/PWM = 4.30
i9 v7.1、 i9 v7.2	PWM = 4.07/shixin= 1.63
i9+ v6.0	PWM = 1.70
k5+ v3.0	normal =5.01/PWM = 6.22/PWM = 6.23/shixin= 5.20/shixin= 5.34
k5+ v3.1	normal =5.19/shixin= 4.35/shixin= 4.52

3.1.2 Sender preset Firmware

LEDUpgrade3.2 software preset the firmware of sender (as shown in the following table), when upgrading the sender firmware, click on the upgrade button, select the sender preset firmware in the drop-down box, and upgrade.

Sender model	Sender firmware
S2(v3.1、 v3.2)	Sender-S2-PCB3.1PCB3.2-V6.0(Main-ARM 6.0, Main-FPGA 6.0).fw
S4(v3.1)	Sender-S4-PCB3.1-V3.0(Main-ARM 3.0, Main-FPGA 2.12).fw
S6F(v6.0、 v6.1)	Sender-S6F-PCB6.0PCB6.1-V4.10(Main-ARM 4.10, Main-FPGA 4.10).fw
X1(v1.0)	Sender-X1-PCB1.0-V2.20(Main-ARM 2.20, Main-FPGA 2.20).fw

X1(v2.0)	Sender-X1-PCB2.0-V2.20(Main-ARM 2.20, Main-FPGA 2.20).fw
X2(v2.0)	Sender-X2-PCB2.0-V2.20(Main-ARM 2.20, Main-FPGA 2.20, Front-ARM 2.20).fw
X2s(v2.0)	Sender-X2s-PCB2.0-V1.10(Main-ARM 1.10, Main-FPGA 2.20, Front-ARM 1.0).fw
X3(v1.0)	Sender-X3-PCB1.0-V2.20(Main-ARM 2.20, Main-FPGA 2.20).fw
X3(v2.0)	Sender-X3-PCB2.0-V2.20(Main-ARM 2.20, Main-FPGA 2.20).fw
X4(v2.0)	Sender-X4-PCB2.0-V2.20(Main-ARM 2.20, Main-FPGA 2.20, Front-ARM 2.20).fw
X4s(v2.0)	Sender-X4s-PCB2.0-V1.10(Main-ARM 1.10, Main-FPGA 2.20, Front-ARM 1.0).fw
X6(v2.0)	Sender-X6-PCB2.0-V1.20(Main-ARM 1.20, Main-FPGA1 1.20, Main-FPGA2,3 1.0,Front-ARM 1.20).fw
X7(v2.0)	Sender-X7-PCB2.0-V1.20(Main-ARM 1.20, Main-FPGA1 1.20, Main-FPGA2,3 1.0,Front-ARM 1.20).fw
Z4(v3.0)	Sender-Z4-PCB3.0-V2.10(Main-ARM 2.10, Main-FPGA1 2.10, Main-FPGA2 1.27,Front-ARM 1.0).fw
Z4F(v2.0)	Sender-Z4F-PCB2.0-V1.0(Main-ARM 1.0, Main-FPGA1 2.50, Front-ARM 1.0).fw
Z4F(v3.0)	Sender-Z4F-PCB3.0-V1.0(Main-ARM 1.0, Main-FPGA1 2.50, Front-ARM 1.0).fw
Z6(v5.1)	Sender-Z6-PCB5.1-V3.0(Main-ARM 3.0, Main-FPGA1 1.80, Main-FPGA2 3.02,Front-ARM 1.80).fw

3.2 Mode Selection

3.2.1 Send Mode Selection

There are three modes: **net card mode**, **sender mode** and **play box mode** (as shown in Fig.3-1).

Select the net card mode if connect the screen via **net card**; Select sender card mode if connect the screen via **sender**; Select play box mode if connect the screen via **play box mode**.

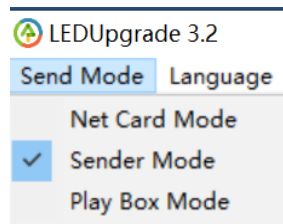


Fig. 3-1 Send mode selection

3.2.2 Upgrade Object Selection

The software has [Receiver card] 、 [Smart Module] and [Multi-function Card] 3 tab pages under net card mode (as shown in Fig.3-2). If the receiver card is upgraded or reread, the tab page chooses the receiver card; if the smart module is upgraded, the tab page chooses the Smart module. If the Multi-function Card is upgraded, the tab page chooses Multi-function Card.

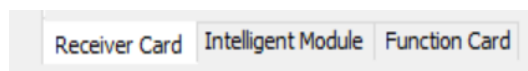


Fig. 3-2 Upgrade object selection under net card mode

The software has [Receiver card]、 [Sender] 、 [Intelligent Module] 、 [Function Card] and [Fiber Transceiver] 5 tab pages under sender mode (as shown in Fig. 3-3). If the receiver card is firmware updated or reread, the tab page shall select the [Receiver card]; if the sender is firmware updated, the tab page shall select the [Sender]; if the smart module is updated, then the tab page shall select the [Intelligent Module] correspondingly .if the Multi-function Card is upgraded, the tab page chooses [Function Card].if

the fiber transceiver is upgraded, the tab page chooses [Fiber Transceiver].

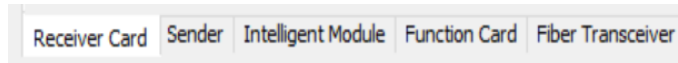


Fig. 3-3 Upgrade object selection under sender mode

The software has [Receiver card] and [Play Box] 2 tab pages under play box mode (as shown in Fig. 3-4). If the receiver card is firmware updated or reread, the tab page shall select the [Receiver card].if the play box is upgraded, the tab page chooses [Play Box].

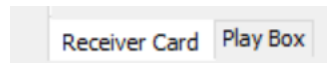


Fig. 3-4 Upgrade object selection under play box mode

3.3 Upgrade Steps

3.3.1 Upgrade the receiver card under net card mode

Step 1: Send mode selection

Click on send mode - network card mode, tab page select receiver card.

Step 2: Settings – Net card settings

Click on [Setting]-[Net Card Setting], then select the corresponding net card.

Step 3: Detect receiver card

Click on [Detect Receiver Cards] to detect. If the receiver card is detected, the software will display [Index], [Version], [Support Upgrade], [Support Write Font], [Error Ratio], [Progress /status] and the actual number of (as shown in Fig.3-5). If [Support Upgrade] shows yes, then you can use the software to upgrade; If shows no, then you cannot use the software to upgrade.

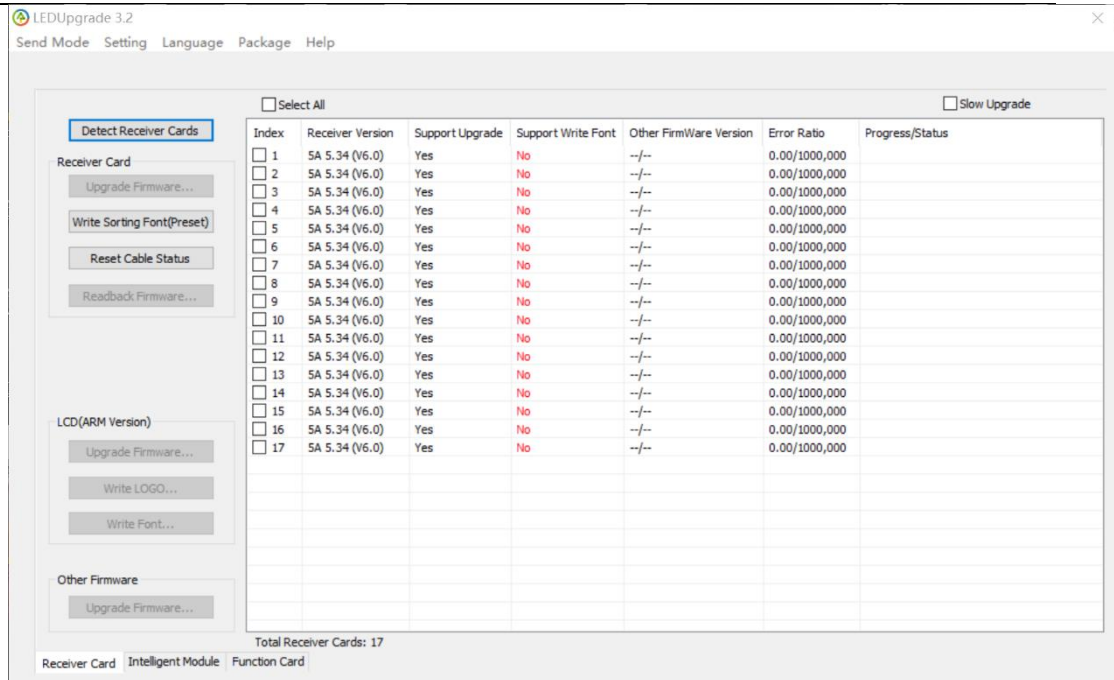


Fig.3-5 Detect receiver card under net card mode

Step 4: Upgrade receiver cards firmware

Choose a receiver card that needs to be upgraded. You can choose one or more. Click on the "upgrade" button, and there are two options under the "upgrade" button: Browse and preset procedures (as shown in fig.3-6). Select "browse", you can choose the firmware in the computer to upgrade; Select "preset" and you can select the preset firmware in the software to upgrade.

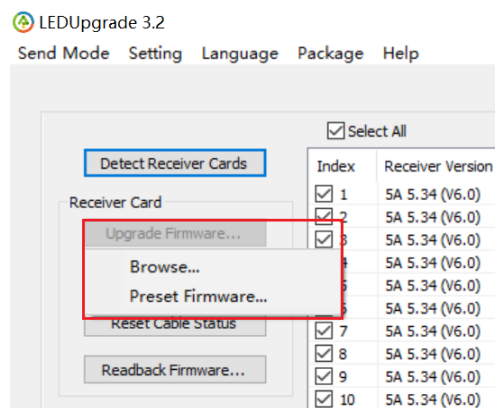


Fig. 3-6 Upgrade receiver card firmware

After selecting the firmware, the software begins to upgrade the

firmware. During the upgrade process, no operation is required, waiting for the upgrade to be completed. After completing the upgrade, you shall power the upgraded receiver card off and then power on.

Receiver card firmware.

Please pay attention that does not power the receiver card off while upgrading the receiver card. If you failed to upgrade, do not power off, re-upgrade firmware. If you fail to upgrade continuously, please do not power down, and contact with Colorlight technical people in time (phone: 4008770775).

3.3.2 Upgrade the receiver card firmware under sender mode

Step 1: Send mode selection

Click on send mode - sender mode, tab page select receiver card.

Step 2: Detect Sender

Click on [Detect Sender] button to detect the sender.

Step 3: Select Port

After detecting the sender, select the corresponding sender network port, select the individual network port, or select all the network ports (as shown in Fig.3-7).

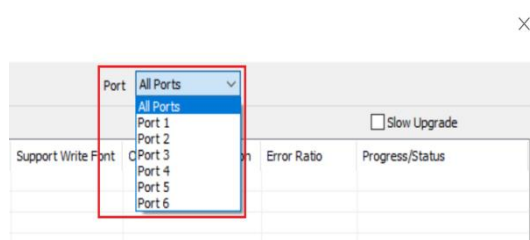


Fig.3-7 Select sender net port

Step 4: Detect receiver card

Click on [Detect Receiver Cards] to detect receiver cards. If the receiver card is detected, the software will display [Index], [Port Index], [Version], [Support Upgrade], [Support Write Font], [Error Ratio],

[Progress /status] (as shown in Fig.3-8). If [Support Upgrade] shows yes, then you can use the software to upgrade; If shows no, then you cannot use the software to upgrade.

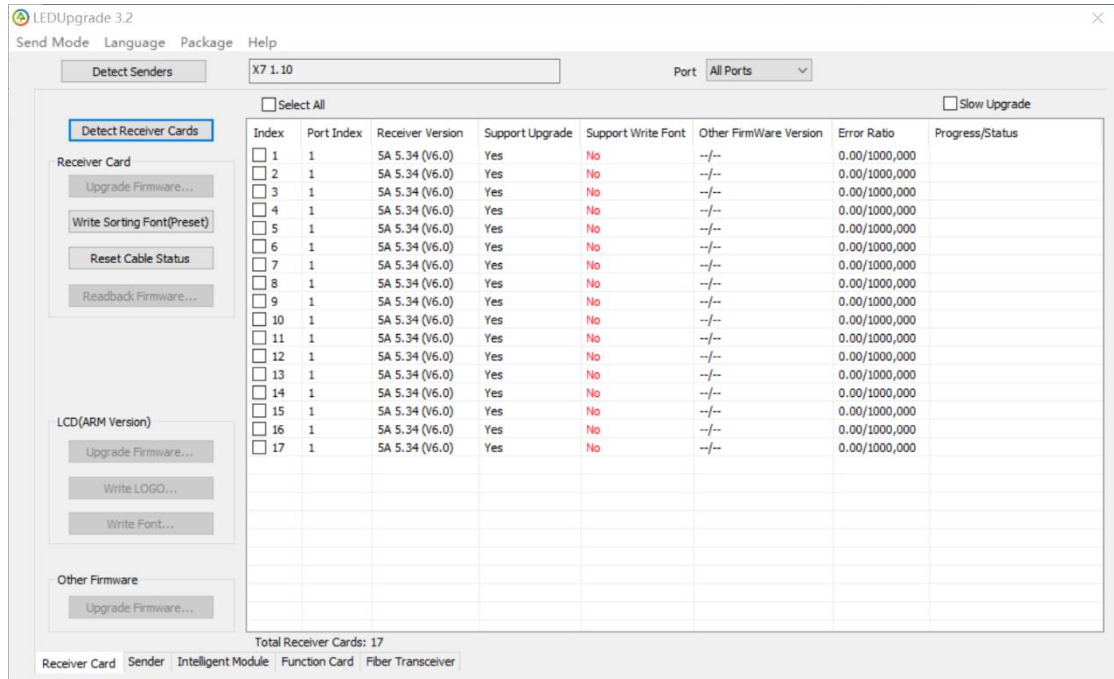


Fig.3-8 Sender mode detects receiver card

Step 5: Upgrade receiver cards firmware

Choose a receiver card that needs to be upgraded. You can choose one or more. Click the upgrade firmware button, and there are two options under the update button: browse and preset. Select "browse", you can choose the firmware in the computer to upgrade; Select "preset" and you can select the pre-set firmware in the software to upgrade.

After selecting the firmware, the software begins to upgrade the firmware. During the upgrade process, no operation is required, waiting for the upgrade to be completed. After completing the upgrade, you shall power the upgraded receiver card off and then power on.

In particular, do not power off the receiver card when upgrading the receiver card firmware. If you fail to upgrade, don't power off, re-upgrade, and until the upgrade is successful. if you fail to upgrade continuously,

upgrade the preset firmware in the software.

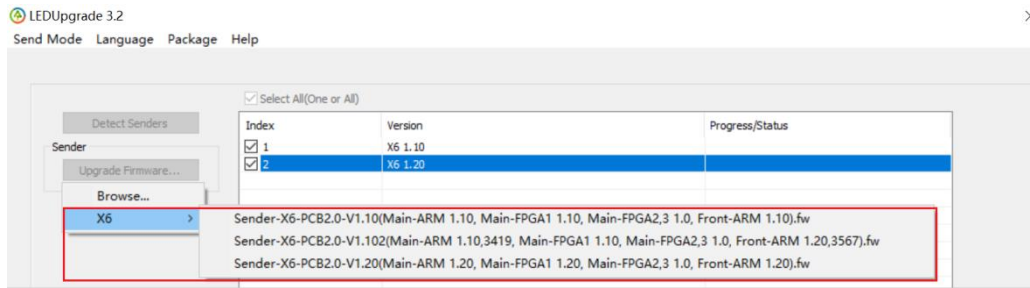


Fig. 3-10 Upgrade sender

After selecting the firmware, the software begins to upgrade the firmware. During the upgrade process, no operation is required, waiting for the upgrade to be completed. After completing the upgrade, you shall power the upgraded sender off, then power on.

Note that during the upgrade of the card firmware, do not power off the sender. If you fail to upgrade, don't power off, re-upgrade, and until the upgrade is successful. If you fail to upgrade continuously, please do not power down, and contact with Colorlight technical people in time. (phone: 4008770775)

3.3.4 Upgrade Multi-function firmware

Step 1: send mode selection

If the multi-function card is connected in the Net card mode, the transmission mode selects the Net card mode. If the multi-function card is connected in the send mode, the send mode selects the sender mode.

After selecting the send mode, the tab page selects the multi-function card.

Step 2: Detect multi-function card

Click the "Detect Multi-Function Card" button to detect the multi-function card. If the software detects a multi-function card, the software will display the multi-function card “Index”, “version”, “progress/status” (as is shown in Figure 3-11).

During the upgrading process, you don't need to do anything, just wait for the upgrade to complete.

After the multi-function card firmware is successfully upgraded, the upgraded multi-function card should be powered off and then powered on.

In particular, do not power off the multifunction card while upgrading the multifunction card firmware. If you encounter an upgrade failure, do not power off and re-upgrade the firmware until the upgrade is successful. If the upgrade failed, please don't power off, and contact Carlet technical staff (phone: 4008770775).

3.4 Readback the Receiver Card firmware

Step 1: Send Mode Selection

If the Receiver Card is connected in the **Net card** mode, the send mode selects the **Net card** mode. If the Receiver Card is connected in the sender mode, the send mode selects the sender mode.

After selecting the send mode, the tab page selects the Receiver Card.

Step 2: Detect receiver card

Click on **[Detect Receiver Cards]** to detect. If the receiver card is detected, the software will display **Receiver Card [Index], [Version], [Support Upgrade], [Support Write Font],[Error Ratio],[Progress /status]** and the actual number of Receiver Cards . If **[Support Upgrade]** shows yes, then you can use the software to readback; If shows no, then you cannot use the software to readback.

Step 3: Readback receiver card firmware

Select the target Receiver Card, click on **[Readback Firmware]** button, and choose the target saving place, then begin to readback. (As is shown in Figure 3-13).

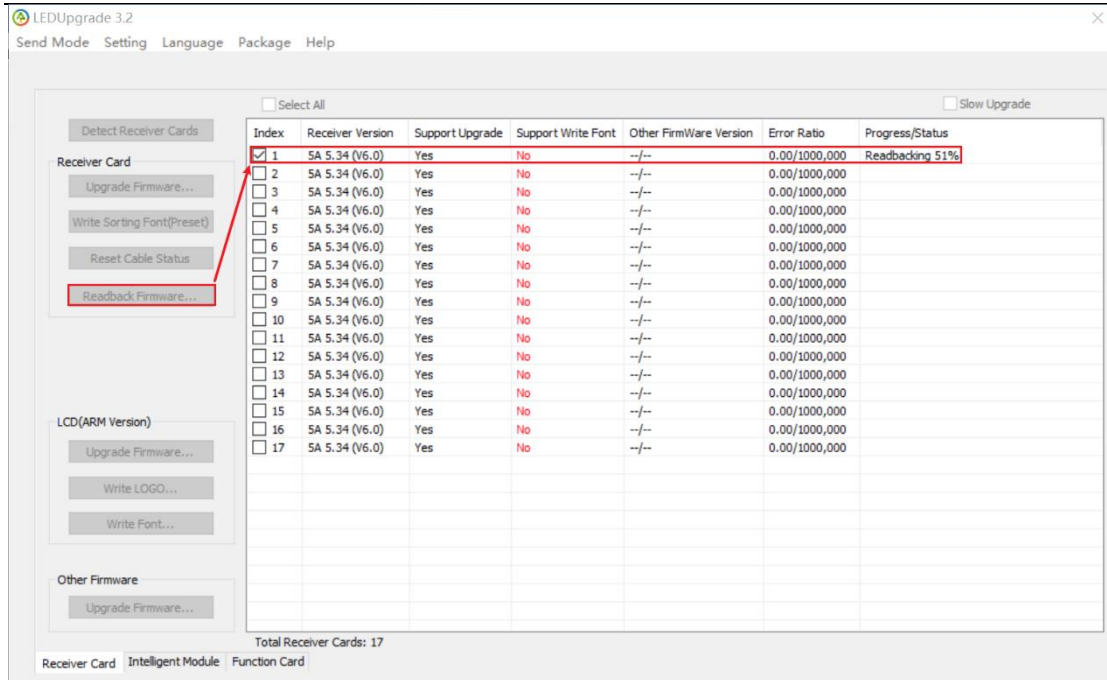


Fig. 3-13 Readback receiver card firmware

No further action required during readback procedure but wait.

Note: when reading to the receiver card firmware, you can only select one receiver card, and you cannot select multiple receiver cards for the firmware to read.

Chapter4 Receiver Card write font library

4.1 Receiver Card write font library

Step 1: Send mode selection

If the Receiver Card is connected in the Net card mode, the send mode selects the Net card mode. If the Receiver Card is connected in the sender mode, the send mode selects the sender mode.

After selecting the send mode, the tab page selects the Receiver Card.

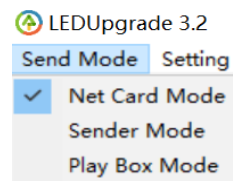


Fig.4-1 Send mode selection

Step 2: Detect receiver card

Click on receiver card button to detect the receiver card.

If the software detects the Receiver Card, it will display the Receiver Card [Index], [Version], [Support Upgrade], [Support Write Font], [Error Ratio], [Progress /status] and the actual number of Receiver Cards. If the software "supports write font "is "yes", it can be operated on the receiver card write font; If the software "supports write font "is "no", it cannot carry out the receiver card write font operation (as shown in Fig.4-2).

Index	Receiver Version	Support Upgrade	Support Write Font	Other FirmWare Version	Error Ratio	Progress/Status
<input type="checkbox"/> 1	SA 3.24 (V6.0)	Yes	Yes	--	0.00/1000,000	
<input type="checkbox"/> 2	SA 3.24 (V6.0)	Yes	Yes	--	0.00/1000,000	
<input type="checkbox"/> 3	SA 3.24 (V6.0)	Yes	Yes	--	0.00/1000,000	
<input type="checkbox"/> 4	SA 3.24 (V6.0)	Yes	Yes	--	0.00/1000,000	
<input type="checkbox"/> 5	SA 3.24 (V6.0)	Yes	Yes	--	0.00/1000,000	
<input type="checkbox"/> 6	SA 3.24 (V6.0)	Yes	Yes	--	0.00/1000,000	
<input type="checkbox"/> 7	SA 3.24 (V6.0)	Yes	Yes	--	0.00/1000,000	
<input type="checkbox"/> 8	SA 3.24 (V6.0)	Yes	Yes	--	0.00/1000,000	
<input type="checkbox"/> 9	SA 3.24 (V6.0)	Yes	Yes	--	0.00/1000,000	
<input type="checkbox"/> 10	SA 5.34 (V6.0)	Yes	No	--	0.00/1000,000	
<input type="checkbox"/> 11	SA 5.34 (V6.0)	Yes	No	--	0.00/1000,000	
<input type="checkbox"/> 12	SA 5.34 (V6.0)	Yes	No	--	0.00/1000,000	
<input type="checkbox"/> 13	SA 5.34 (V6.0)	Yes	No	--	0.00/1000,000	
<input type="checkbox"/> 14	SA 5.34 (V6.0)	Yes	No	--	0.00/1000,000	
<input type="checkbox"/> 15	SA 5.34 (V6.0)	Yes	No	--	0.00/1000,000	
<input type="checkbox"/> 16	SA 5.34 (V6.0)	Yes	No	--	0.00/1000,000	
<input type="checkbox"/> 17	SA 5.34 (V6.0)	Yes	No	--	0.00/1000,000	

Fig.4-2 Detect receiver card

Step 3: Receiver card write font library

The software has already prepositioned the receiver card font library, and when writing the library, click on the " write Sequencing font library(preset)" button (as shown in Fig.4-3), and you can write font library for all the receiver cards supported (as shown in Fig.4-3).

Note: Don’ t power the receiver card off when the font library is written. If the receiver card font library is written successfully, it will come into effect immediately, don’ t need to power the receiver card off.

If the receiver card firmware does not support the font library, it can upgrade the receiver card to the firmware supporting the font library, and then write the font library to the receiver card.

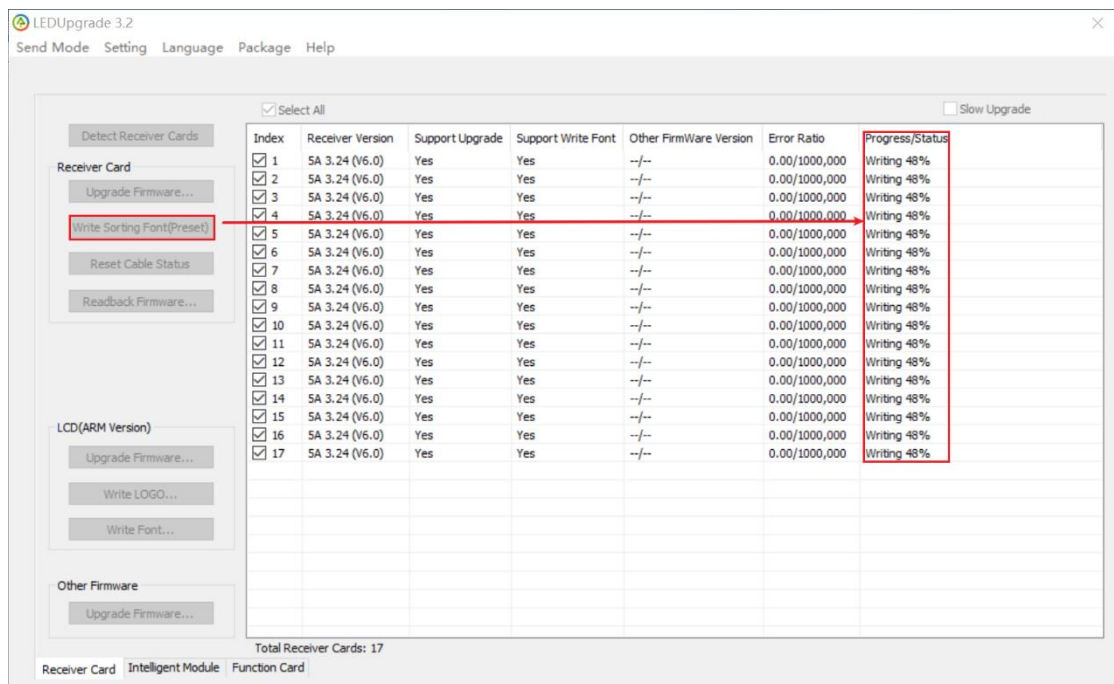


Fig.4-3 Receiver card write font library

4.2 Sender LCD panel to write LOGO, write font

Step 1: Send mode selection

Click on send mode - sender mode, tab page selects sender.

reasonable LOGO size of HD102, X2 and X4, X4e, Z4 is 160 * 128.

Step 4: LCD Panel Write Font

The software presets the write font library of the sender, the LCD panel, select the sender that needs the write font library, you can choose the single sender, or you can choose all the senders. After selecting, you can click on the "write font library (preset)" button in the LCD panel, then you can operate LCD panel library. After writing, the sender must be powered off and then power on.

Note: Don't power off the sender in the write font library process of sender LCD panel.

Chapter 5 Contact Us

For more technical issues, welcome to our official network (www.colorlightinside.com) to learn and exchange, or through the mail feedback of “help” menu of the software main interface to contact with us, or call Colorlight service hot line 4008770775.



Visual Future

Colorlight Cloud Tech Ltd
www.colorlightinside.com

