LedOK Express

Instructions

Version：V1.0

Update Record

No.	Version	Details	Date
1	Ver.1.0	Initial	28th June 2020

Note: The document is subject to change without prior notice.

Catalog

Software Introduction

LedOK software is developed and promoted by Xixun company based on the long term market research and user behavior analysis, it fits for all Xixun android controllers except E2X series.

Functions And Features

Friendly user interface： Totally no need professional training, very simple to use.

Rapid response： Brand new software architectural brings fast response for detecting and managing devices, editing and publishing programs without delay and stuck.

Highly integration: With terminal management, program editing and publishing, also including terminal control functions, will solve almost all configuration work.

Smooth text: A new break for text program, fix the problems of shaking when moving, font distortion once for all and bring high satisfaction.

Device encryption: Add device encryption function to make it safe in maximum degree under the circumstance of local usage, frequently and easy to touch devices.

Synchronous function: To realize displaying the same frame effect through Lora, NTP or GPS settings, to enhance advertisement value and attraction for commercial led screen.

Send in group: Can send to multiple terminals in one time which follow the logic of terminal management and program publish of AIPS cloud platform, so that can manage all terminals in the same LAN.

U-disk display: Export the programs to U-disk and then plug it to device and display, so that can update content cross-network.

Software Installation

Hardware Environment

CPU：Pentium 2.6GHz.

RAM: 1G or above.

Software Environment

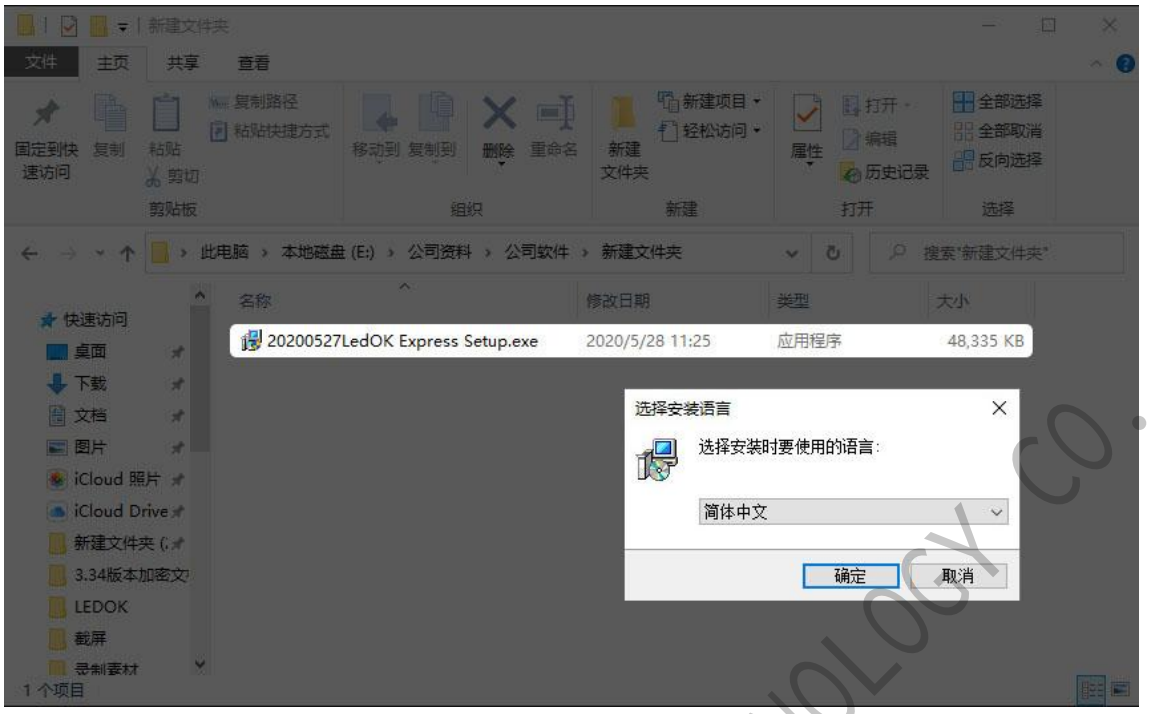
Operation System: Win7/Win8/Win10.

Installation

Download Address：www.ledok.cn

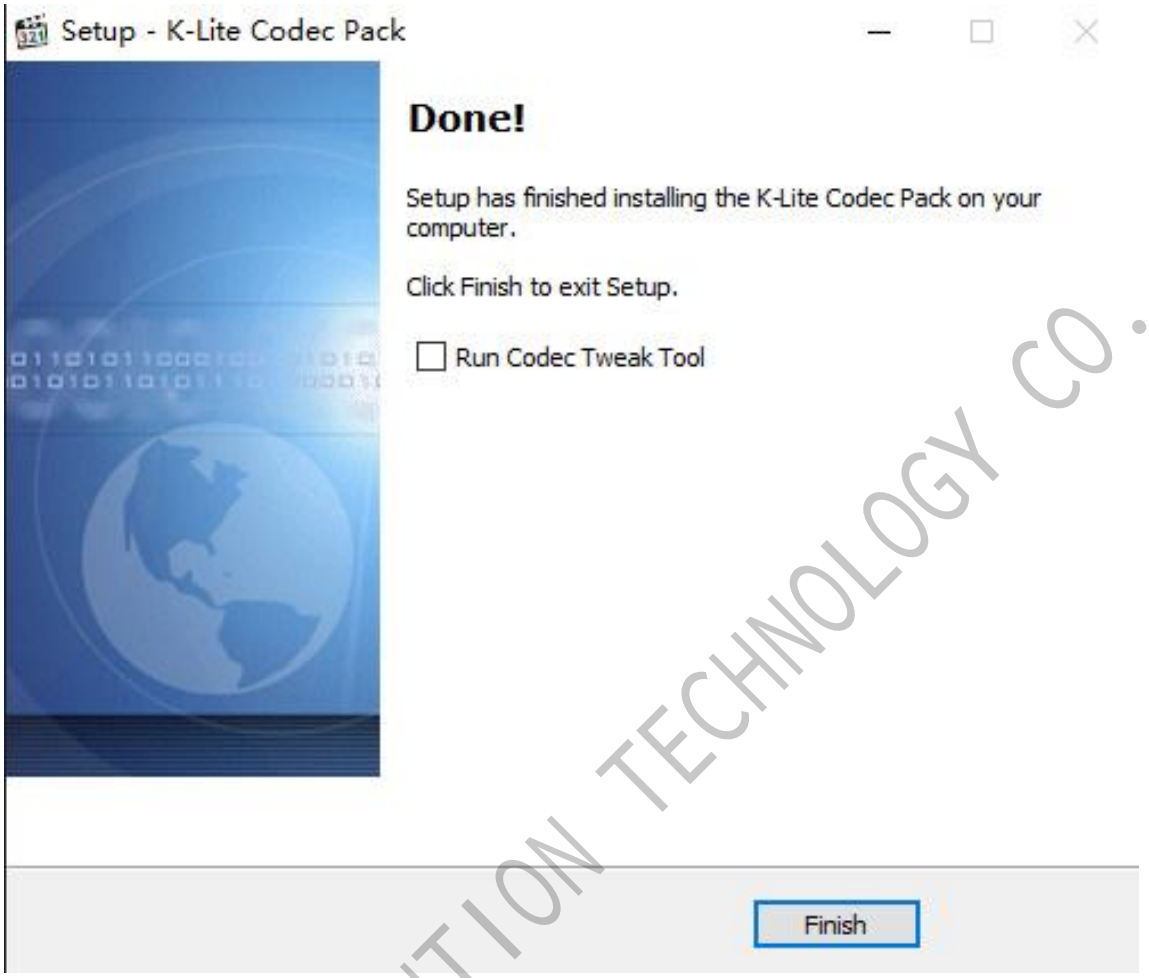
NOTES： Please choose allow software options when antivirus block it.

1. Open the folder where saved the software and click to run, select the installation language and start to install the plugin.

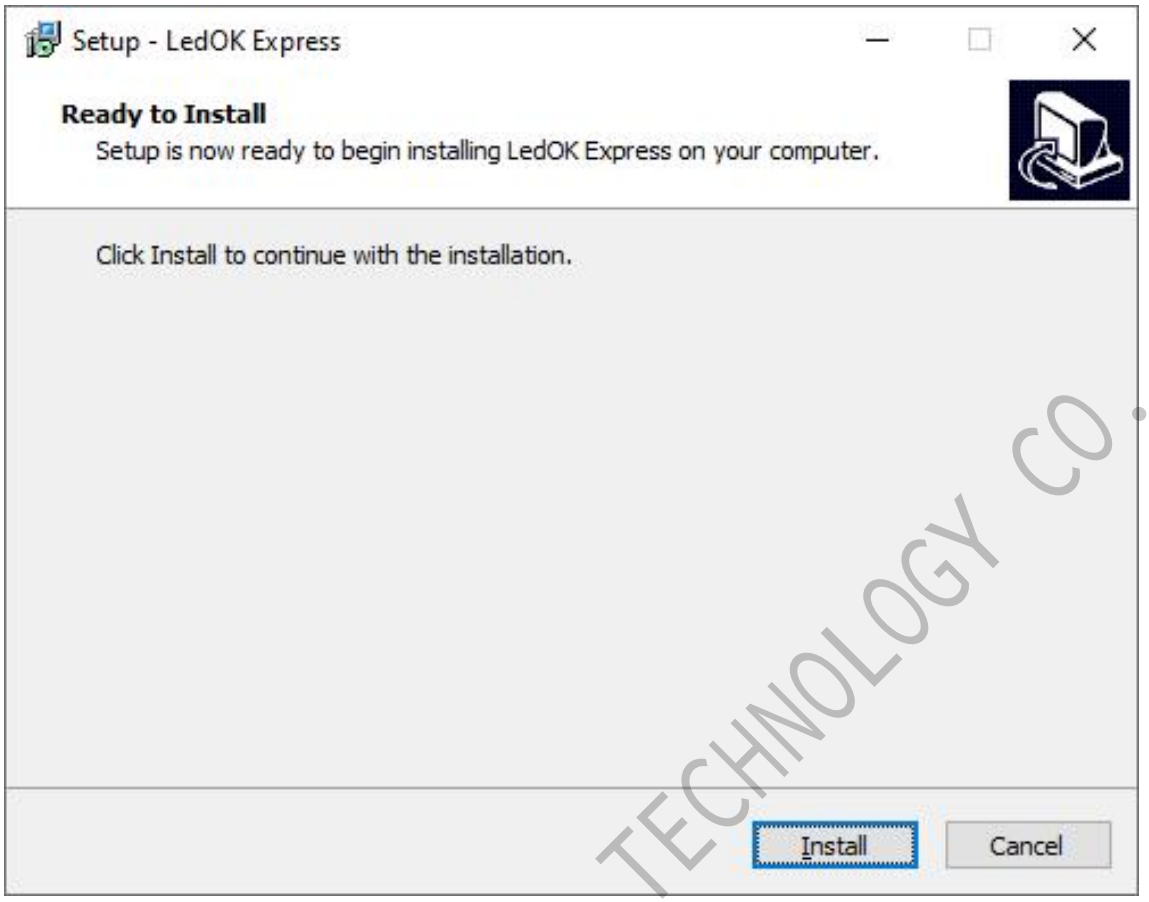


2. Click Next one by one untile finish the installation.

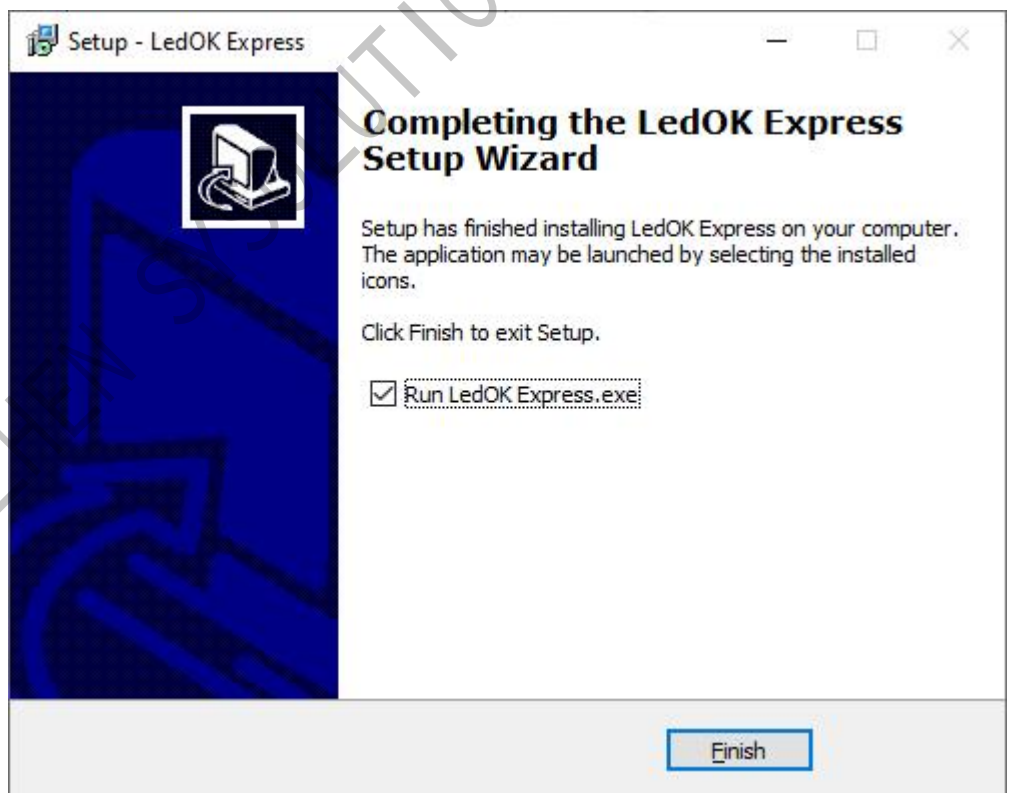
3. Click Finish button and then continue the LEDOK software installation.



4. Select the storage location and then click Next.

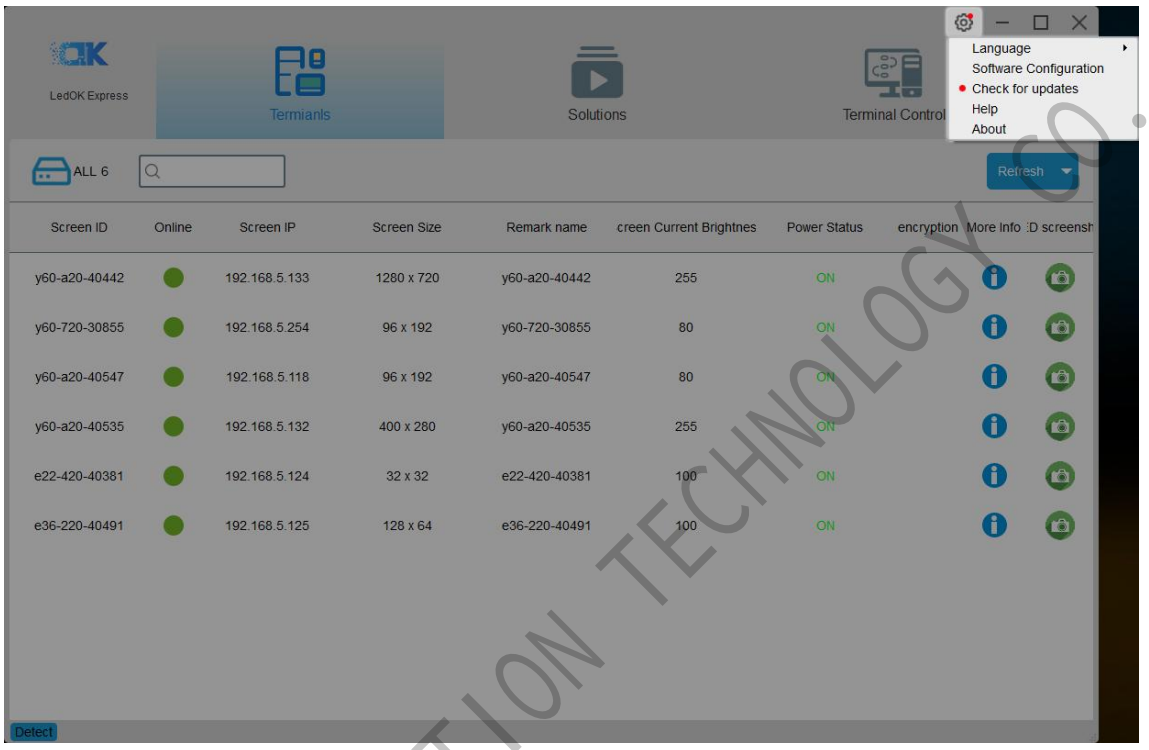


5. Click OK to finish installation.



Update

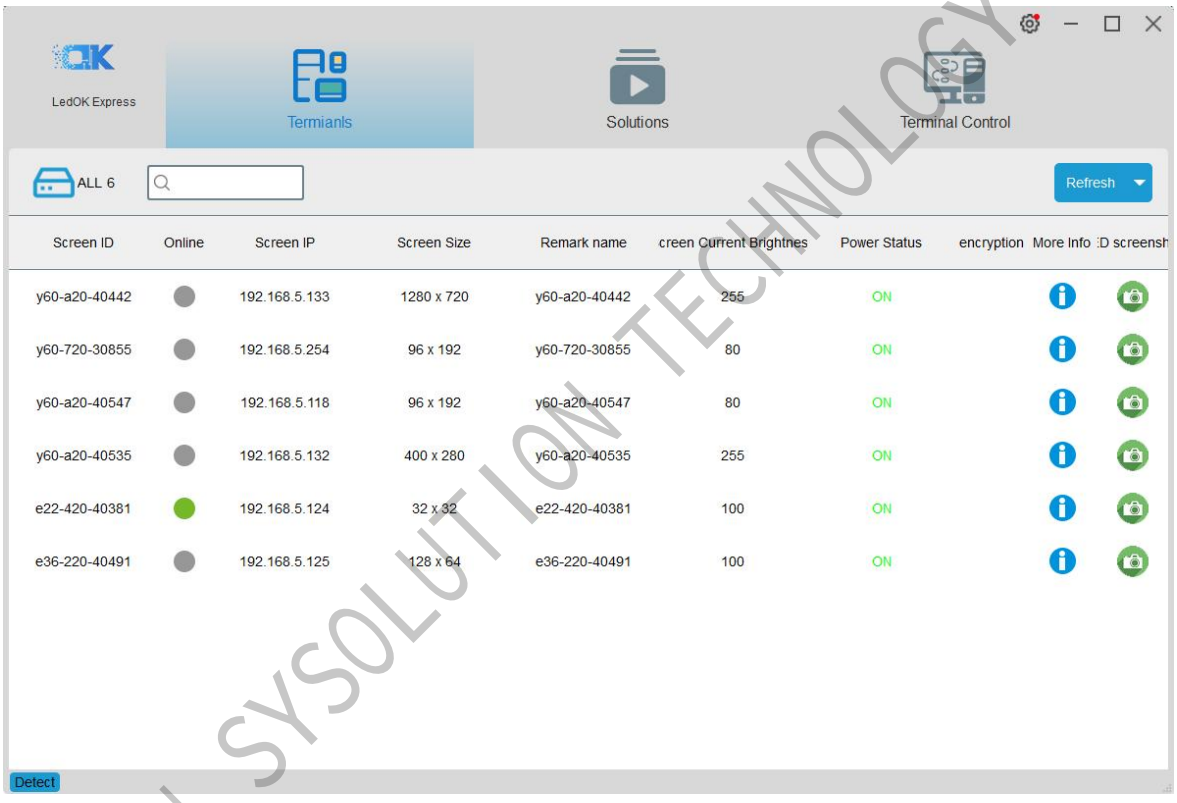
In the right top, can find settings icon, please switch into English and then do check for update and other operations.



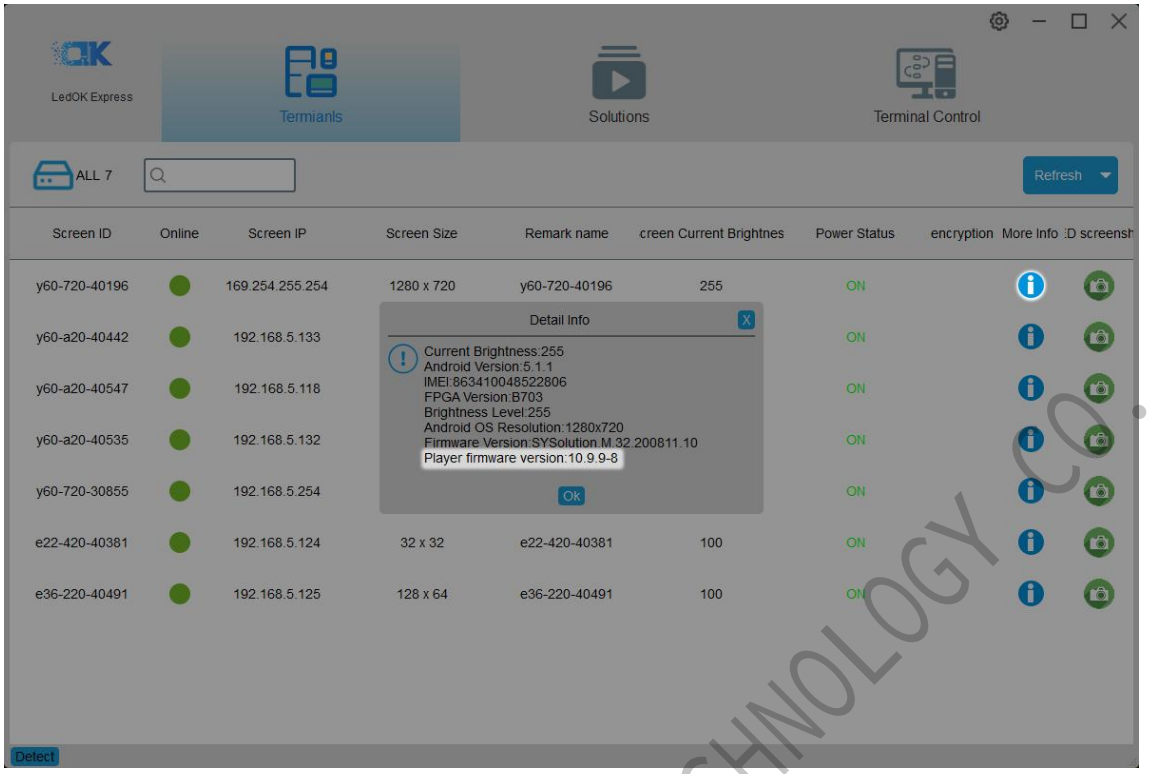
Setup Sending Controller

There are mainly 3 functions: Terminals, Solutions and Terminal Control.

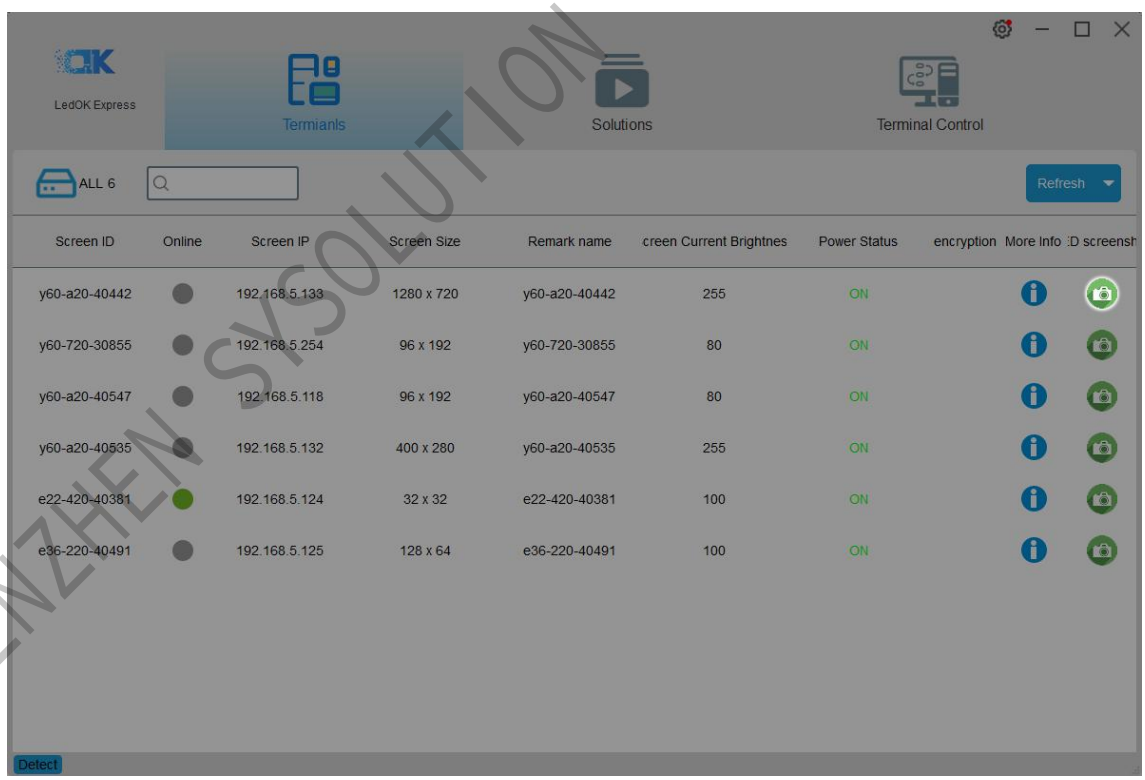
First, Terminals: mainly for detecting controller IP address when controller and laptop in the same local area network or laptop connects to controller' s AP hotspot, also can view the controller resolution and other detail information.



Click the blue icon and will check the controller detail information. Need go to advanced parameter settings and select xixunplayer1099-8.zip file to APK upgrade.

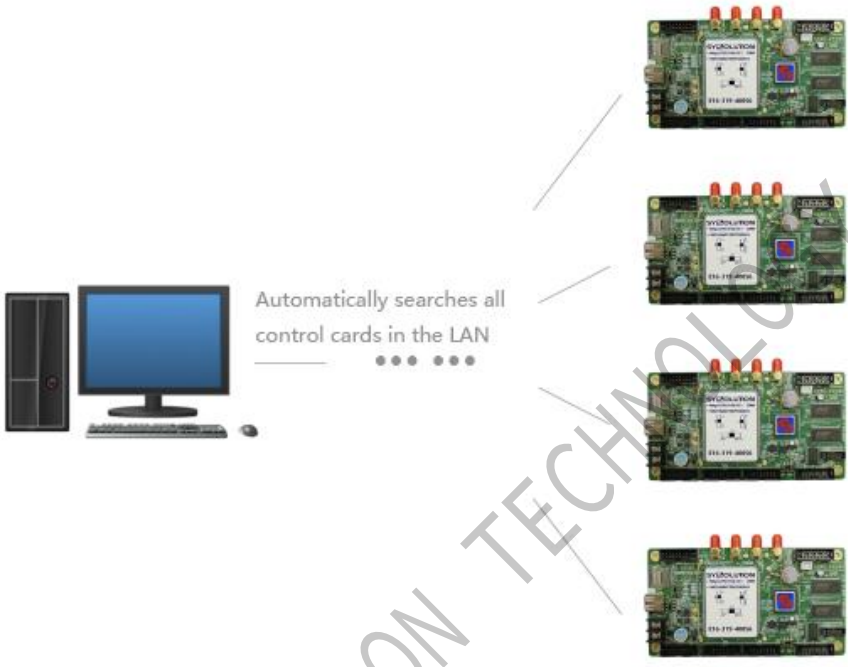


Click this green icon and will get screenshot of current display image.



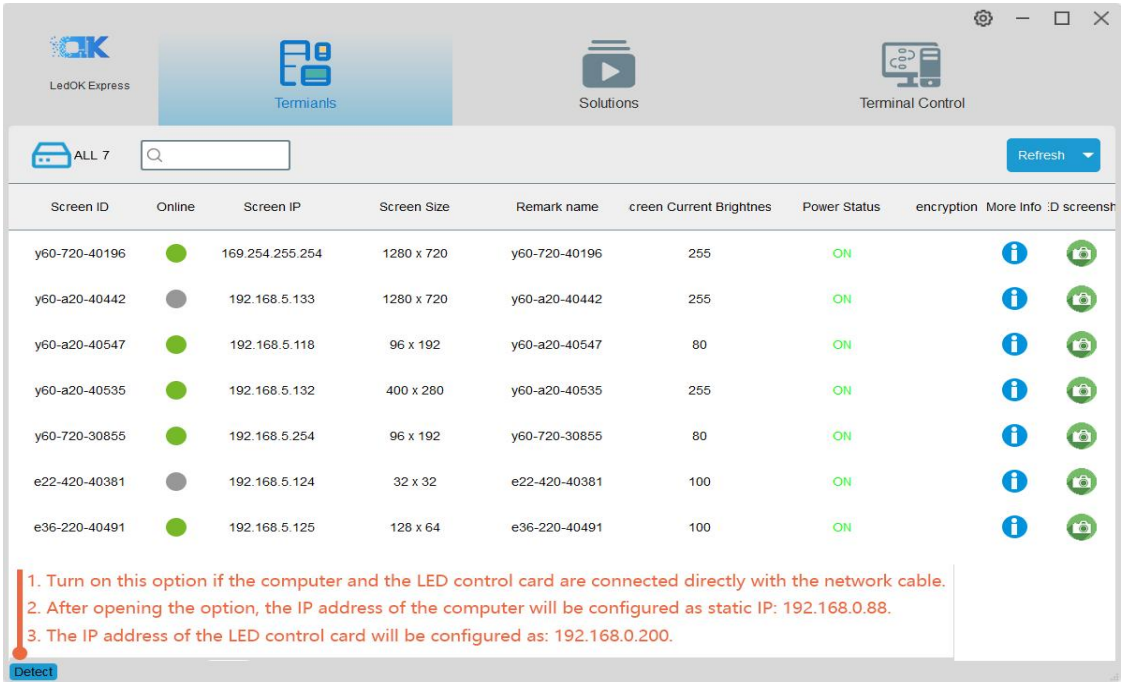
Detect Controller IP Address

Local network area: When computer and controller under the same local area network, the software will auto search and detect the controller IP address and auto show up.



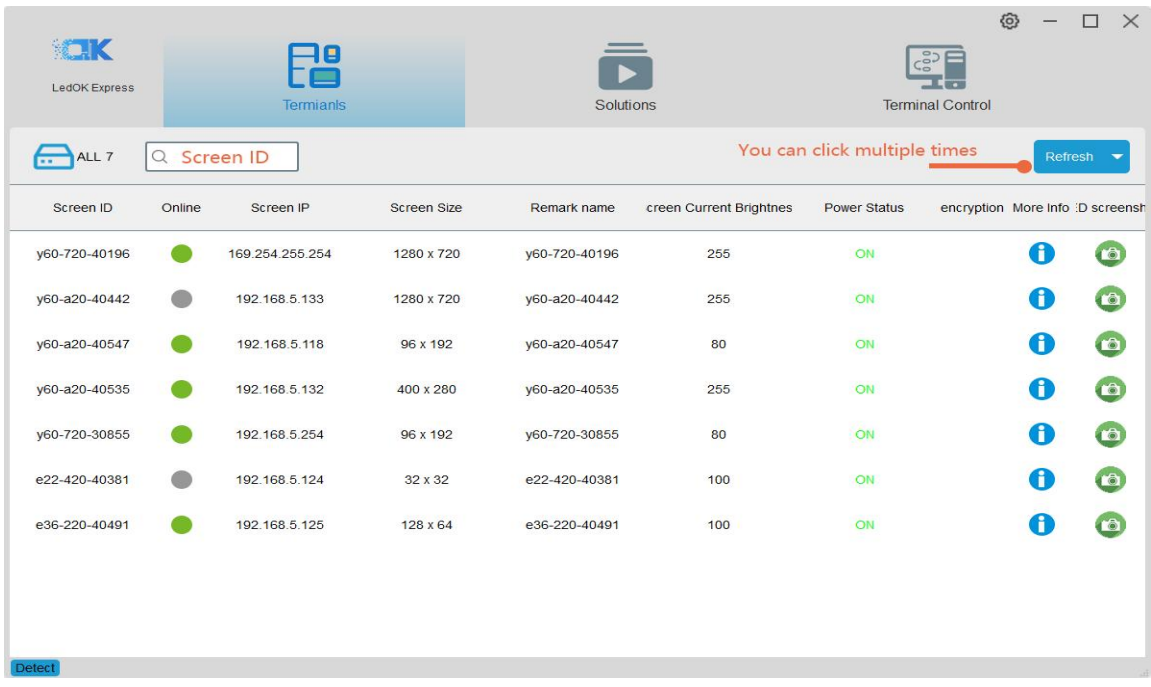
Detect

Please click detect button in the left bottom, it will auto detecting the controller IP address in the same local area network or directly LAN cable connection.



Other

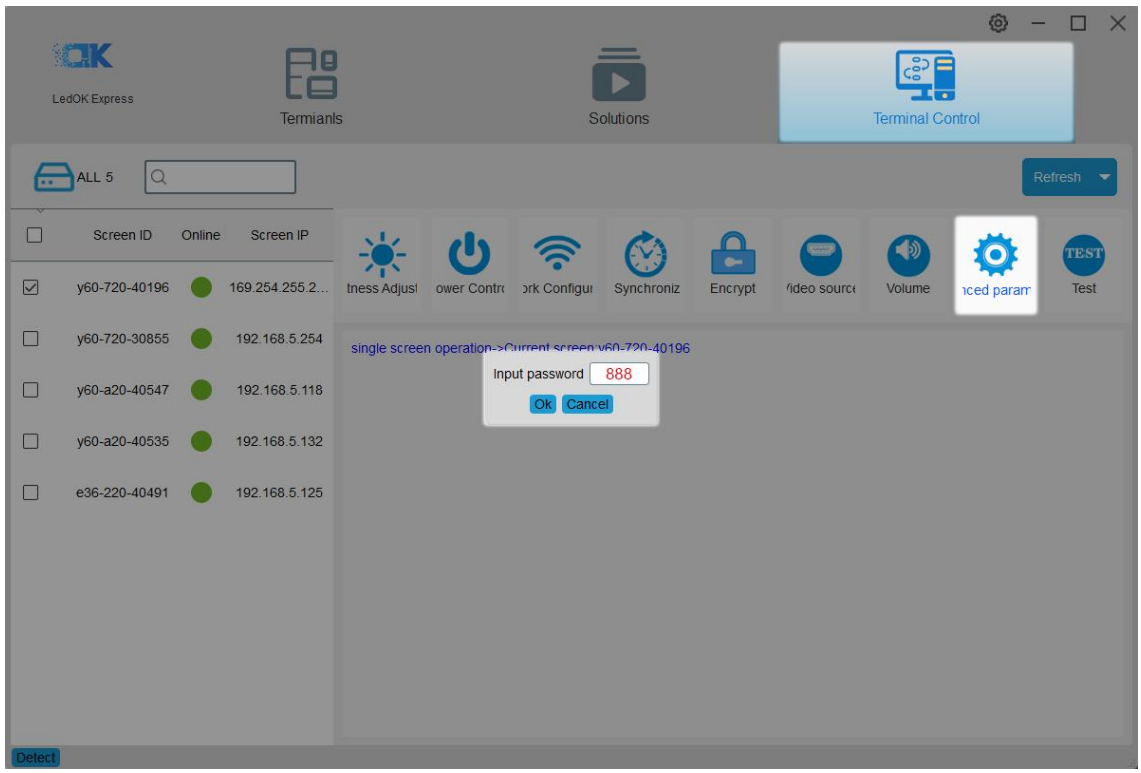
When new controller accessing in, please click refresh button to find all terminals, or input the controller serial id to find the controller you want when there are more than one controller in the list.



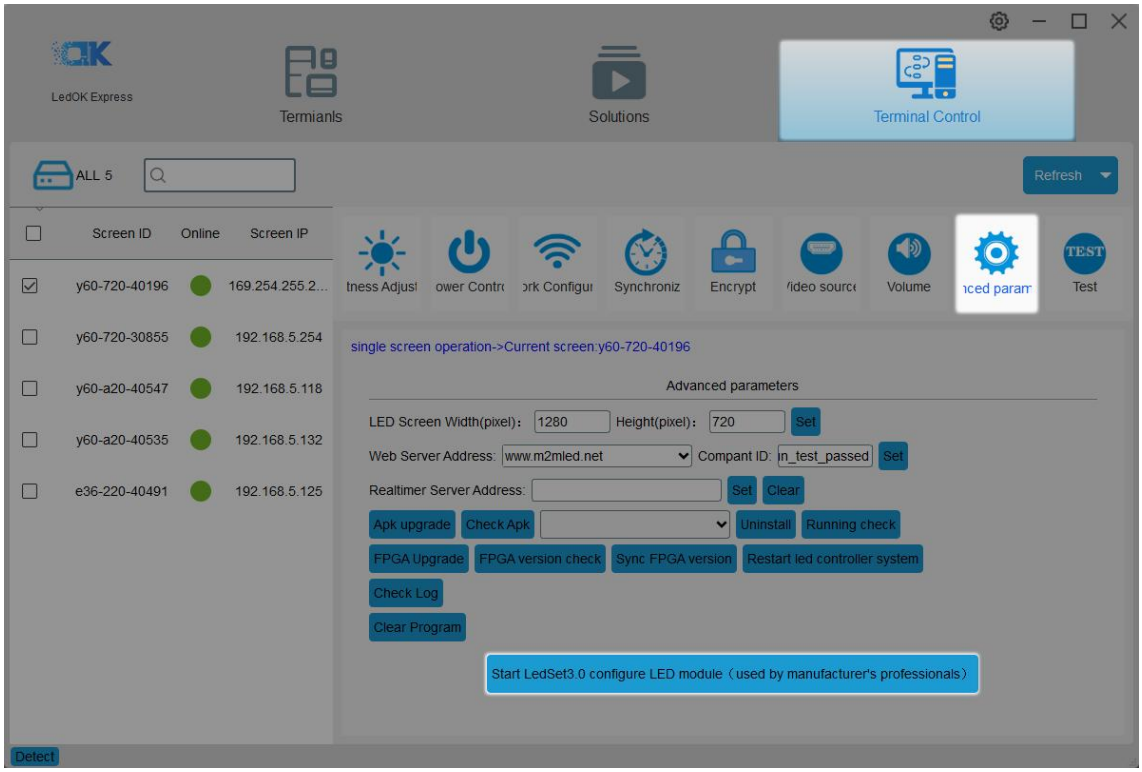
Basic Settings

Sender Connecting

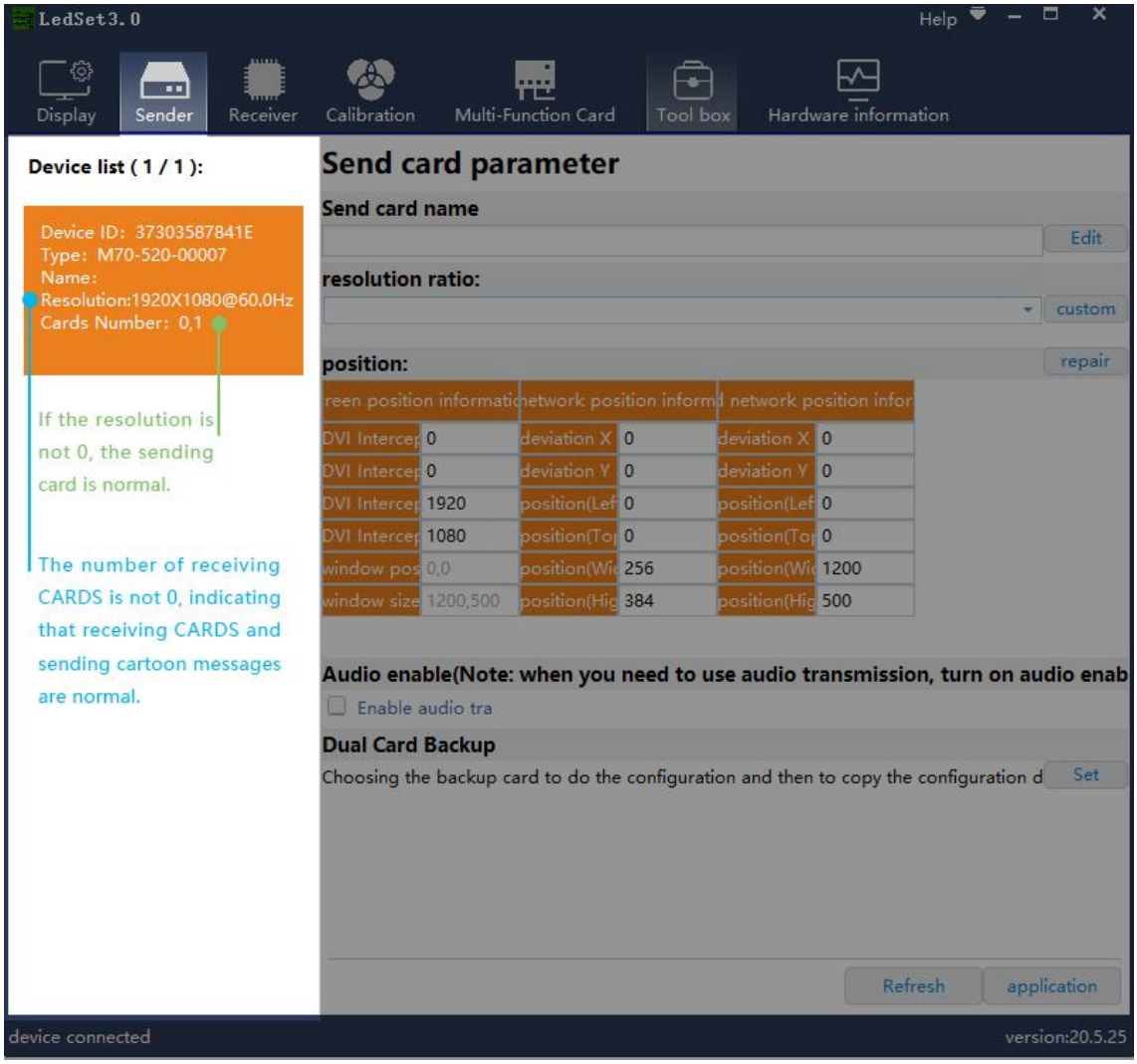
1. Select the controller id and go to terminal control-->enter advanced parameter , password is 888.



2. Then click “Start Ledset3.0 configure led module” button in the bottom and enter ledset3.0 software.



3. Choose Sender and make sure sender card resolution and receiver cards quantities all correct.

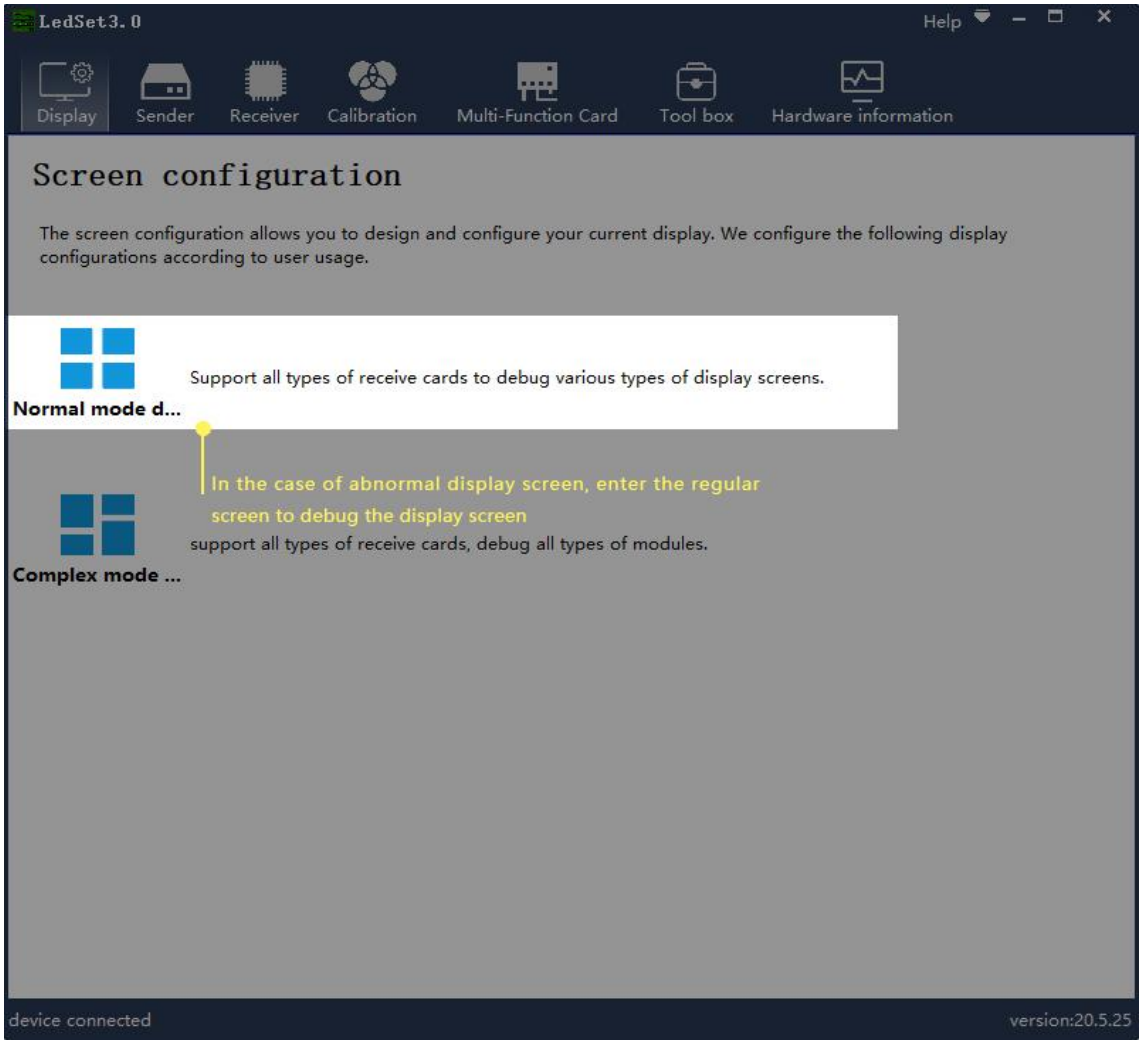


Resolution correct, cards number at least 1, means communication between sender and receiver is good.

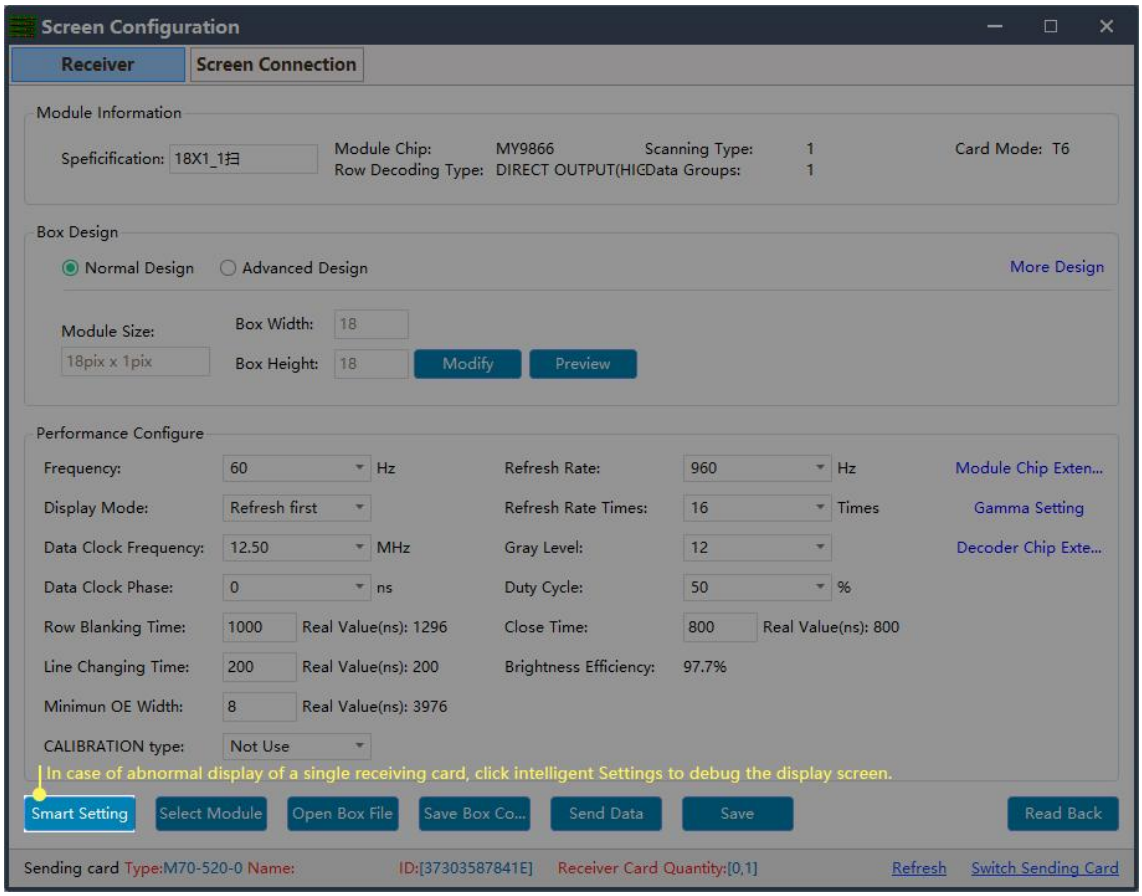
NOTES: Please exit antivirus software and turn off windows firewall if can not detect device.

Smart Setup

1. Choose Normal mode debug.



2. Choose Smart setup wizard and start configuration.



3. Please enter the correct parameters to the smart setup dialogue box .

① **Module width/height:** Input the actual pixel of the current pixel.

② **Module data group:** View the interface definition of module data input port and calculate according to the actual data line number and grouping mode of module.(Generally，three lines are parallel，so an RGB is a set of data. For example，if a module has two sets of RGB，then the module data group is 2)

③ **Card type:** Type of receiving card currently used for debugging which can directly view according to the identity on the receiving card.

④ **Blanking polarity:** Low/high effective，normally use the default one.

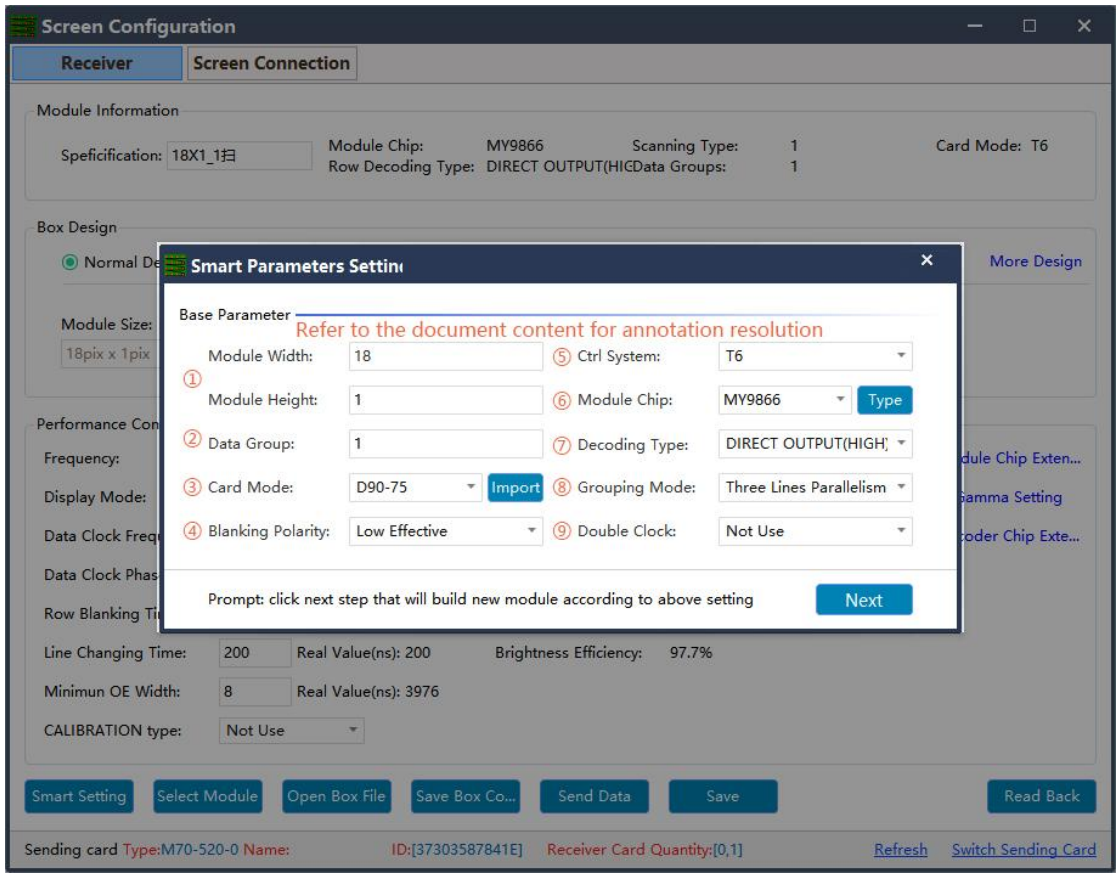
⑤ **Contrl system:** Please choose T6(D90 series) or FPGA(D80 series) according to your receiver card types.

⑥ **Drive chip:** Select the type of drive chip used in the current module，such as: conventional chip，MBI5153，ICN2053，etc.

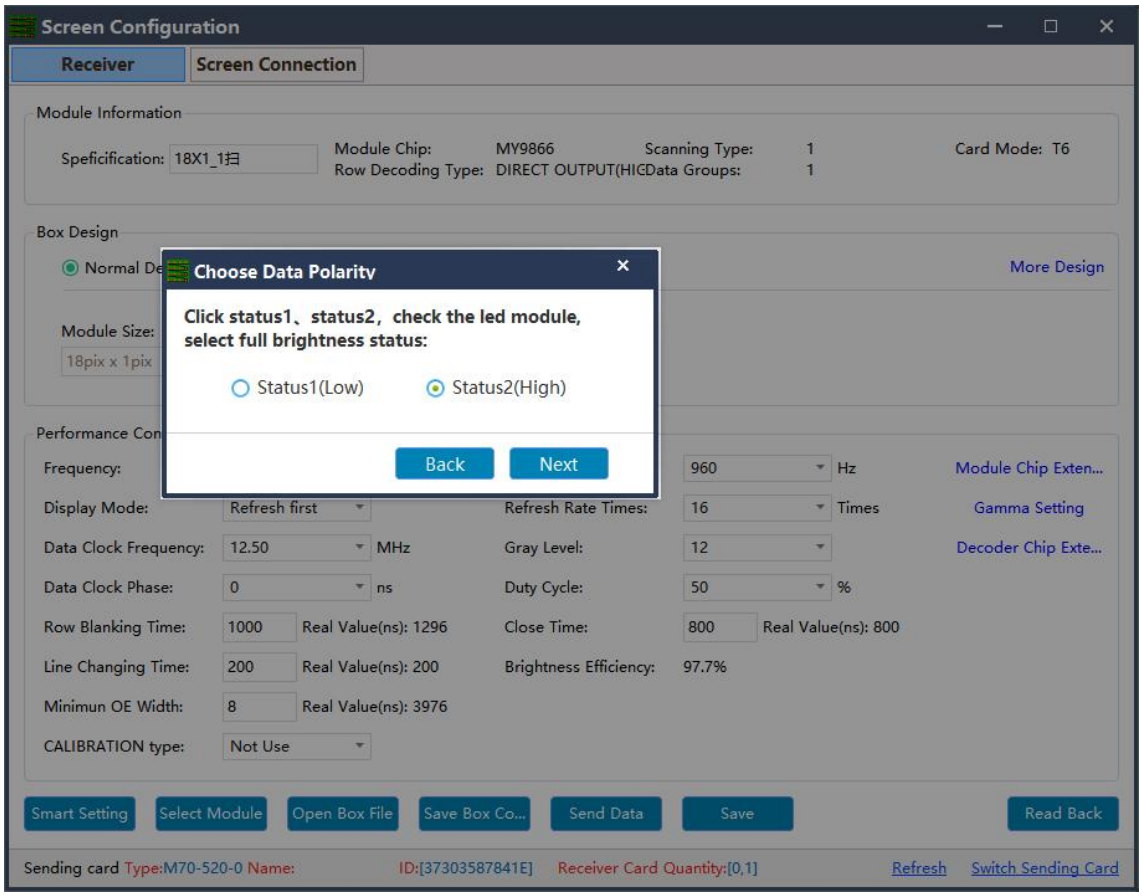
⑦ **Decoding method:** “138 decoding”，“5958 decoding”，“high direct output”，etc.

⑧ **Grouping mode:** Viewing the interface definition of the current module data input port，if having R/G/B three colors (red，green and blue) signal data (red，green，and blue lights on driver chip is separate connection，and no string between them，thus choose “parallel three line”;If there is only one color signal data on the module or only one R data (In addition to the single color screen，and the chip controlling the red，green and blue LED lights is connected together)，then select “RGB serial”.

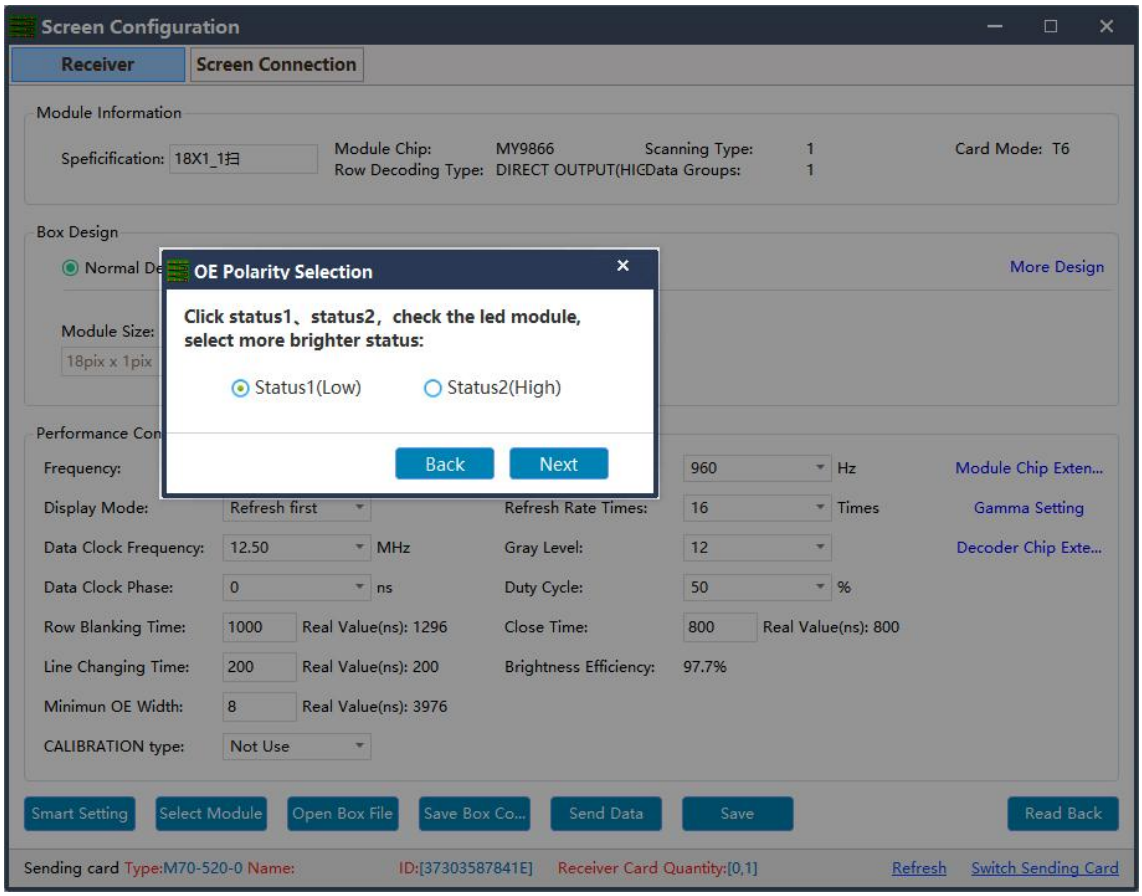
⑨ **Double clock:** No need to choose when configure normal module. Only need to choose D，E，F signal for second clock when configure double clock led module.



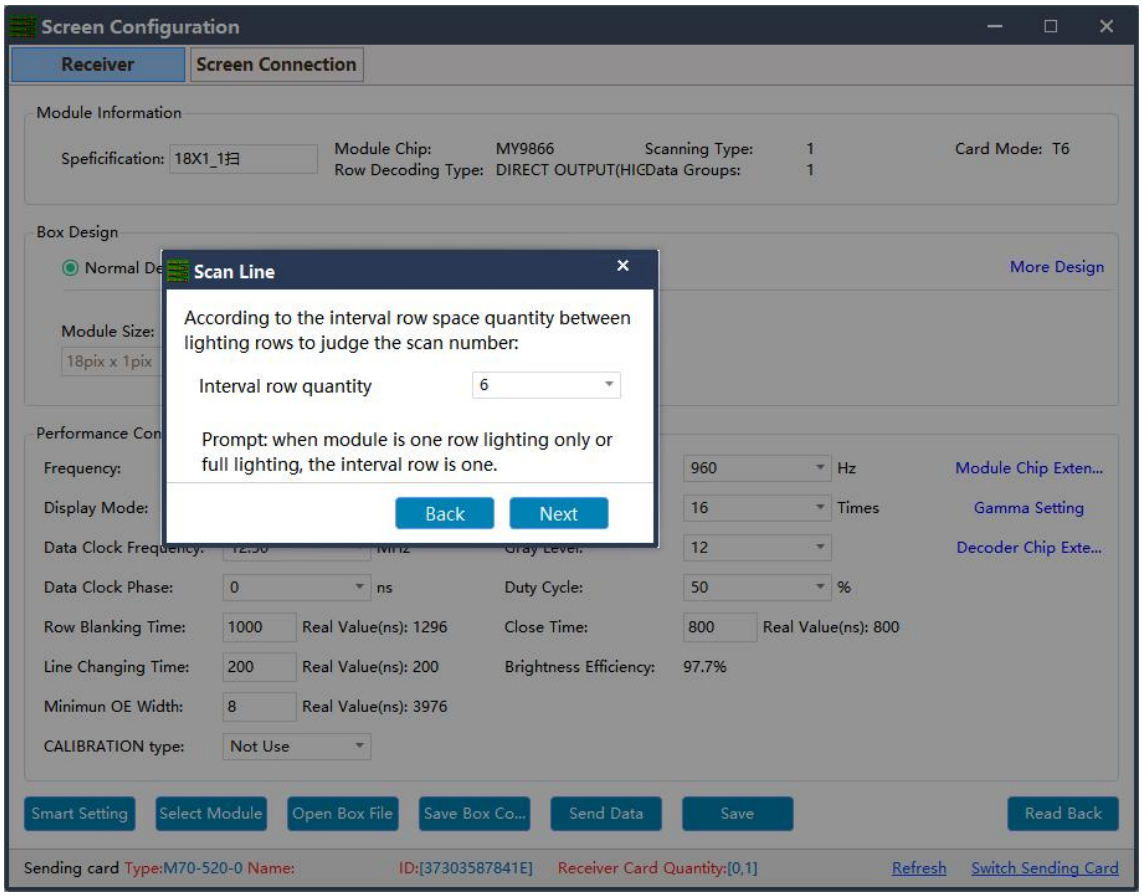
4. Click Next step and enter choose of Data polarity，please choose correct according to screen changes.



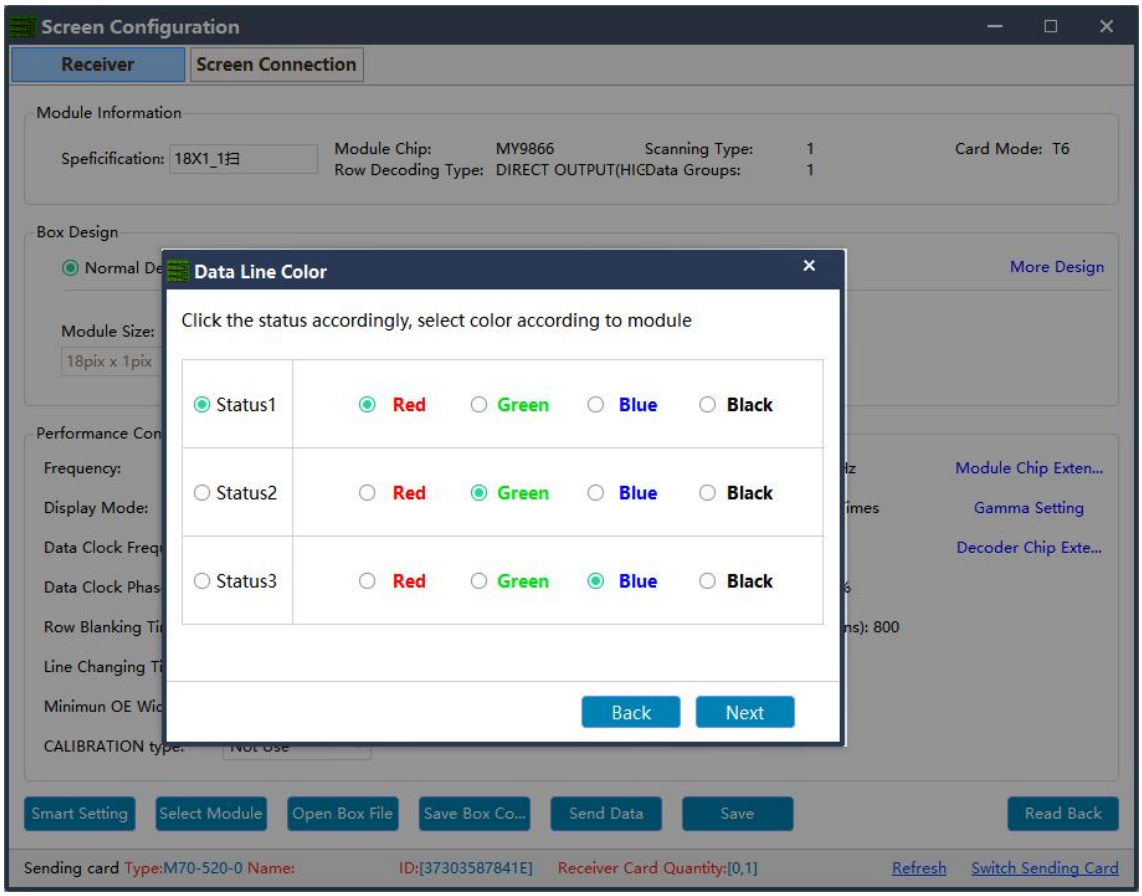
5. Click "Next Step" to enter the" OE polarity selection window" .Select the corresponding state according to the actual display of the current module.



6. Click “Next Step” to enter the “scan line number” window and select the scan line according to the actual display of the current module.

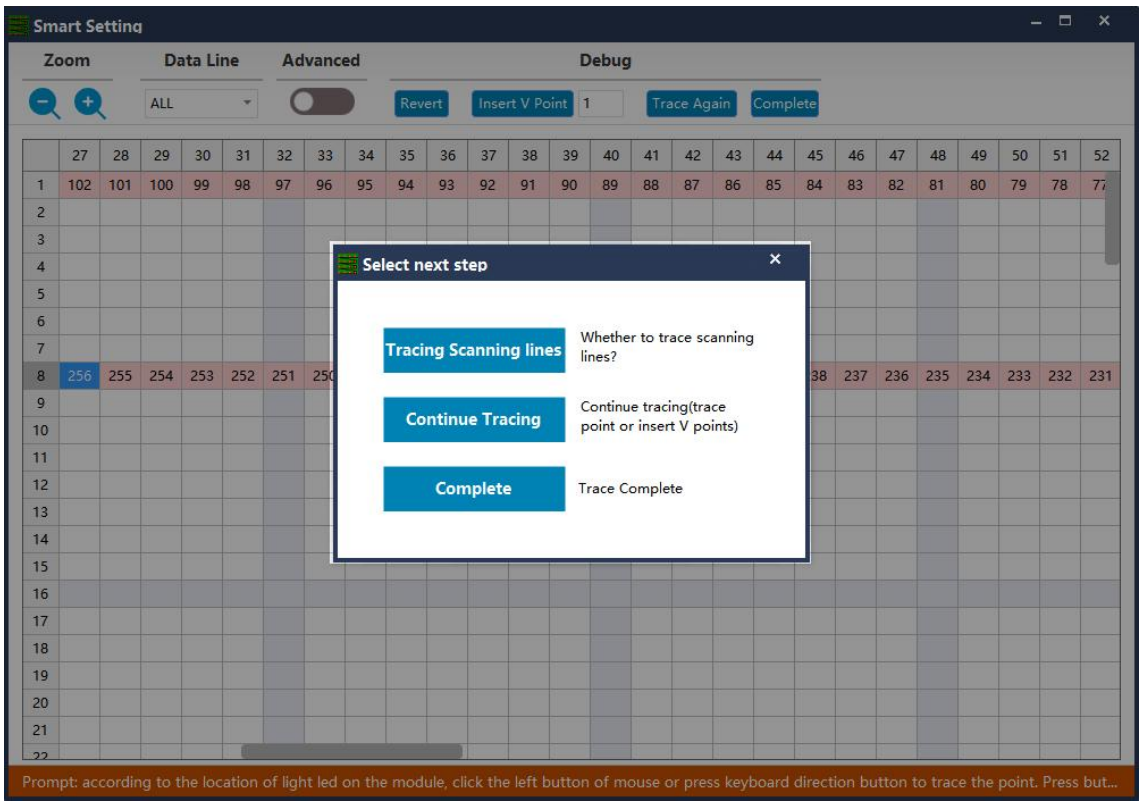


7. Click “Next Step” to enter the select color window.Select the corresponding display color according to the state mode.

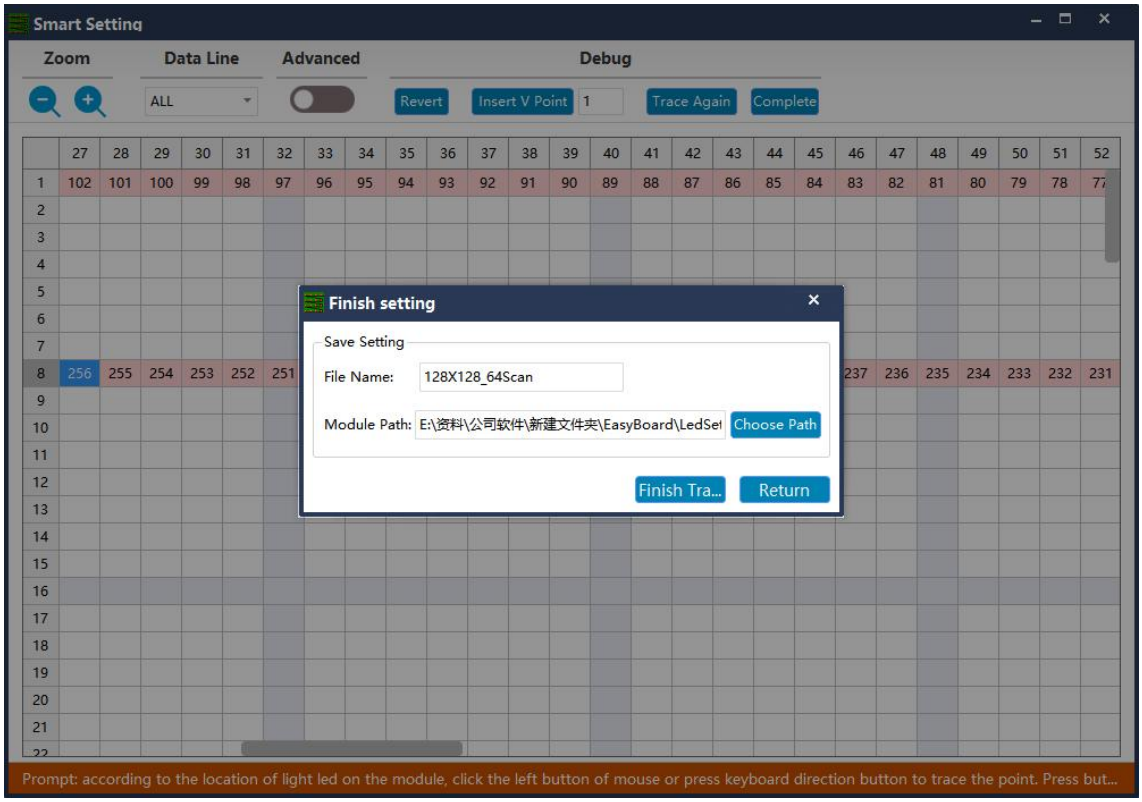


8. Click "Next step" to enter the "intelligent Settings" window and do the walk-points according to the actual display of the module.

9. Click Complete to finish the smart setup.

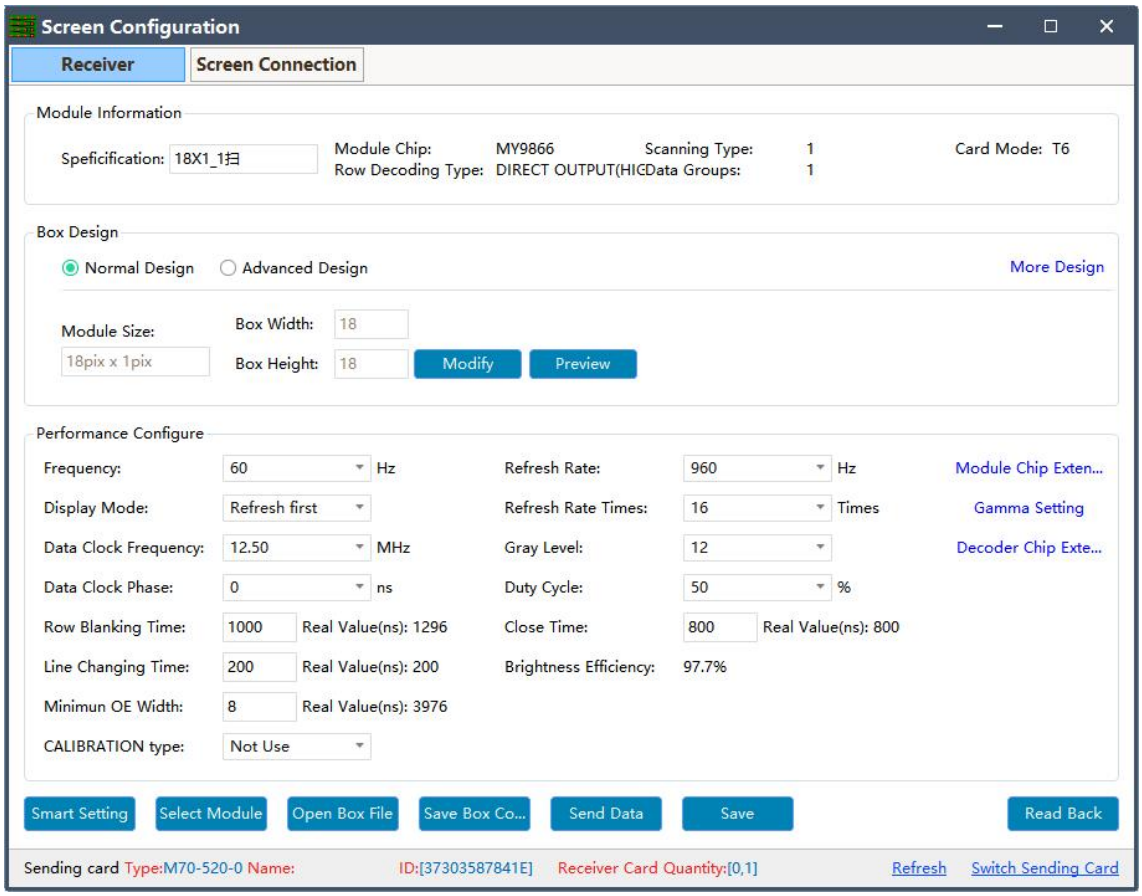


10. Click finish.



Receiver Card Setup

1. It can be configured by means of "smart setting" or by default "option modules" (applicable to receiving cards D90-75) to load module file or by "open box file" after loading preservation cabinet file.



2. Box Design，choose Normal design and click Modify ，then enter the box width and height pixels according to your cabinet and choose the correct cascading direction and click complete.

① **Output mode：** With symmetrical to quadruple strip outputs，It can give full play of the receiving card performance to make the screen higher refresh rate according to actual needs. For example(cascade way： from right to left)

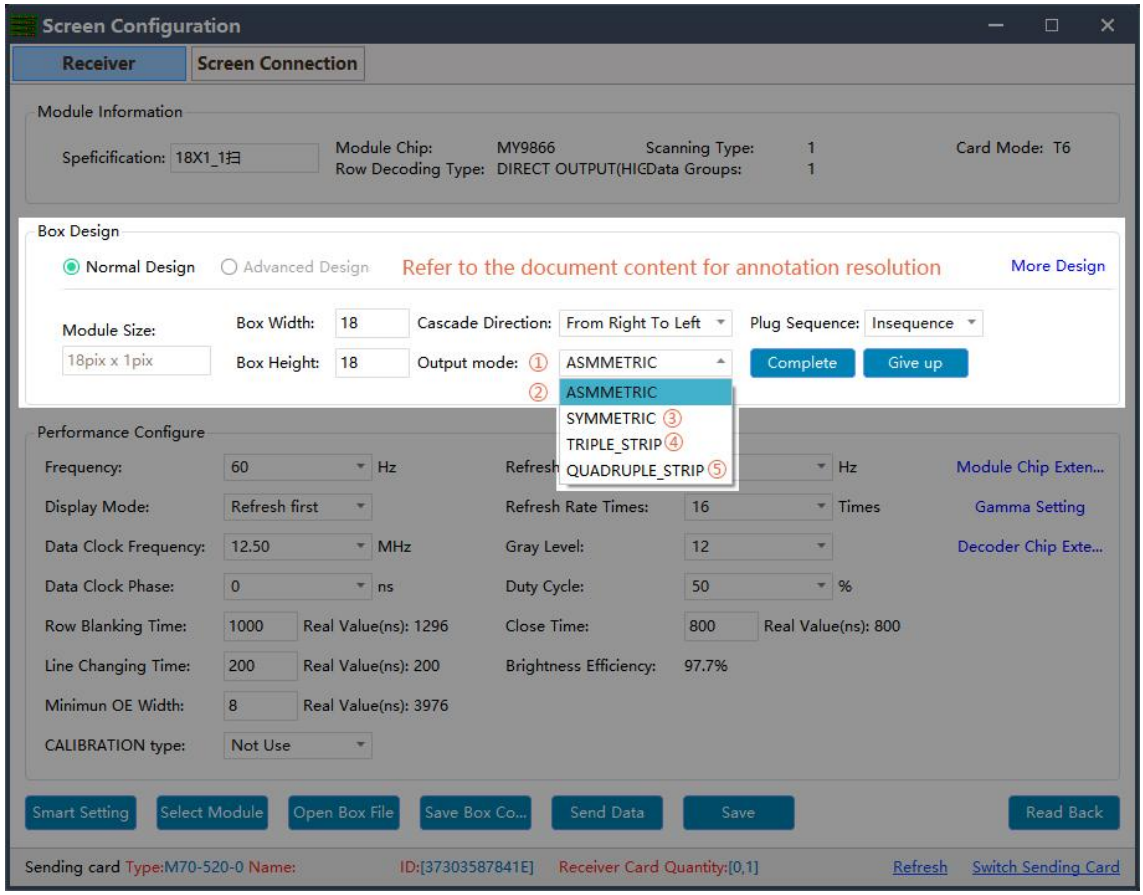
② **Normal output：** 1 to 24 sets of data are loaded from top to bottom.

③ **Symmetrical：** The data of the receiving card (1-12) group is equipped with the left half lamp board，and the data of (12-24) group is equipped with the right half lamp board，with the same width/height.

④ **Triple strip mode：**1-8，9-16，17-24，Each 8 sets of data are carried in three parts

horizontally with the same width and height.

⑤ **Quadruple strip:** 1-6, 7-12, 13-18, 18-24, Each 6 sets of data are carried in four parts horizontally with the same width and height.

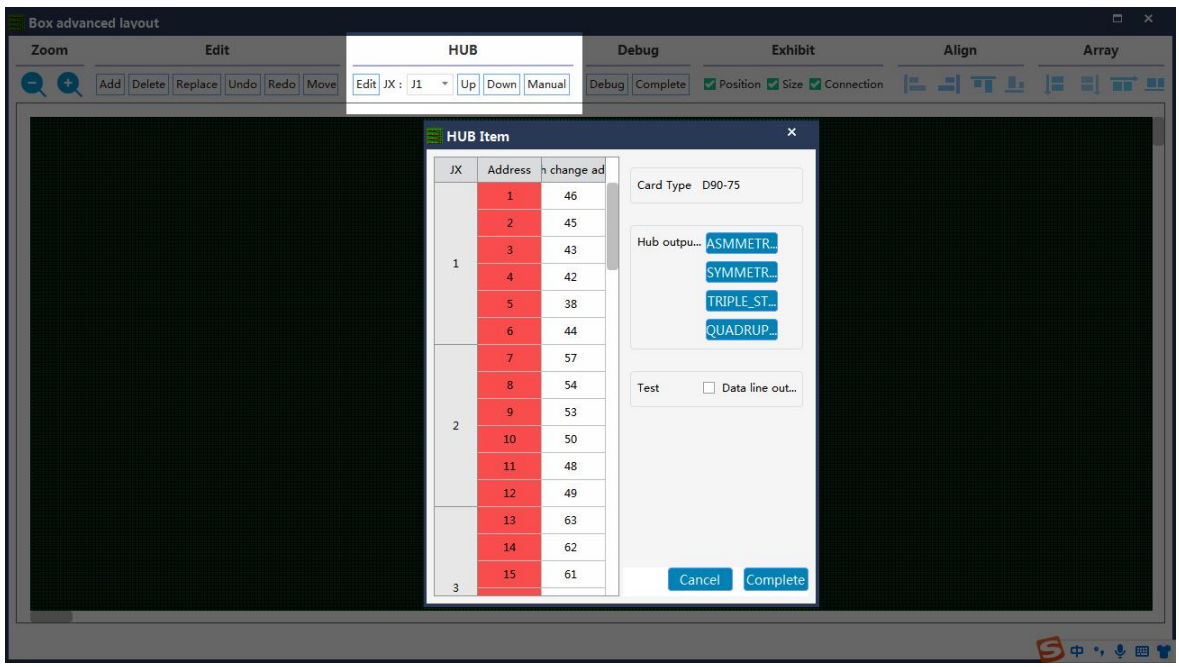


Construction of Miscellaneous Cabinets Select Advanced Design in Cabinet Design, and click Advanced Layout to enter the Advanced Layout of Cabinets to construct complex cabinets.

HUB Port Swap: Select the corresponding module, directly change it to the actual connected HUB port under the HUB column, or move the module to exchange.

① **Data Line Exchange:** Click the "Edit" button under the HUB column to enter the data address editing interface. In this interface, check the data line output test, find the HUB port corresponding to the module in the "Jx" column of the HUB entry, and change

the data line address in the "Exchange Address" column of the HUB entry until the cabinet is The color displayed above is the same as the color in the "Address" column of the same line in the HUB entry, and when the corresponding module layout (module structure) is on the HUB port, it means the change is correct. Similarly, after all the HUB address lines are defined, uncheck the box. "Data line test", and finally click the "Finish" button to exit the data line exchange editing interface.



3. The System will auto calculate the performance configuration parameters after done box design，you can also adjust some options to make display effect better.

   Refresh rate : An important indicator of the Led screen.Increasing the refresh frequency can improve the water ripple when using the camera to take pictures.

   Display mode : It can be divided into refresh priority and Grayscale priority. Refresh priority: In this mode，the brightness efficiency will be reduced while the refresh rate of the module can be greatly improved. Grayscale priority: This mode will have a better grayscale effect at low brightness.

Refresh rate times: High brush algorithm for improving visual refresh rate, default.

Data clock frequency: It is related to the design of LED module circuit and the driving chip used.If the well-designed high brush IC is used , the module can be reached higher clock while gray degree and refresh frequency can be supported higher with the same load area.

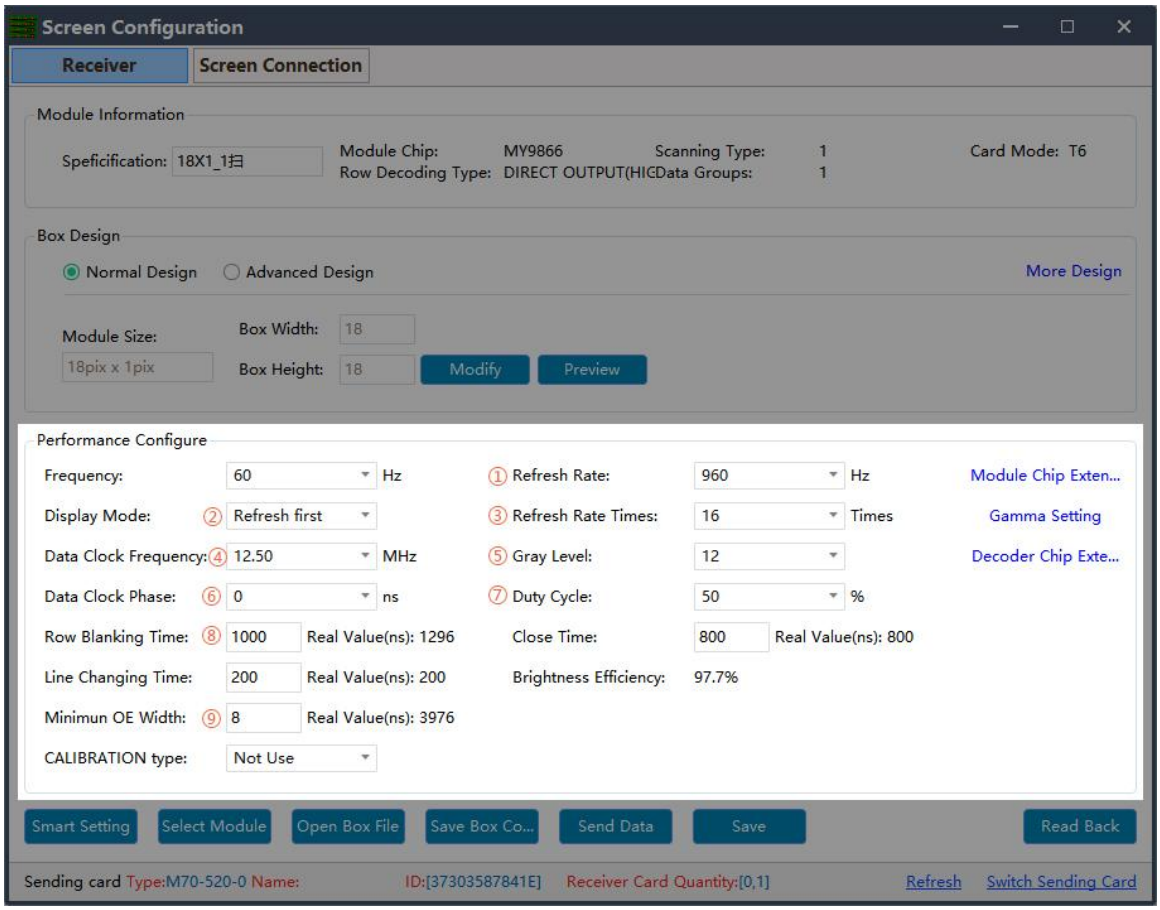
Grayscale: Increasing the grayscale according to the requirements of the LED. The higher the grayscale, the better the picture quality. Generally, it is 12 to 14bit, (12bit grayscale is equal to 4096 gradation grayscale)

Data clock phase: Timing starting point of the clock setting.It can be adjusted when the screen body has flash point , flower screen and other abnormal phenomena.Generally 12.5~17.86.

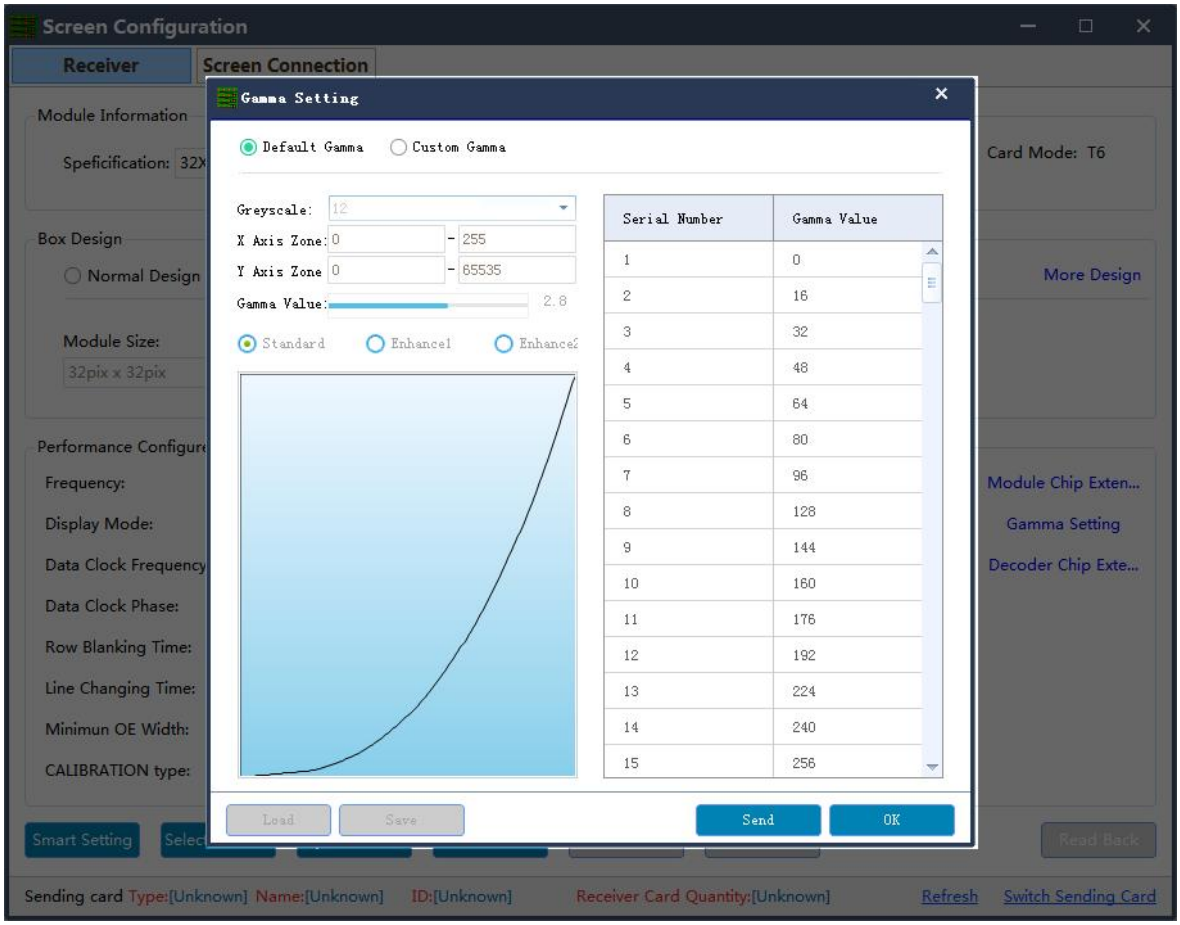
Duty cycle: Refers to the duty cycle of the clock phase. Changing this data can make the scanning clock phase higher generally set to 50%.

Line changing time/discharge time/sweeping position: Mainly adjust the scan screen afterglow, the newline value time can be increased if serious , generally take the default values.

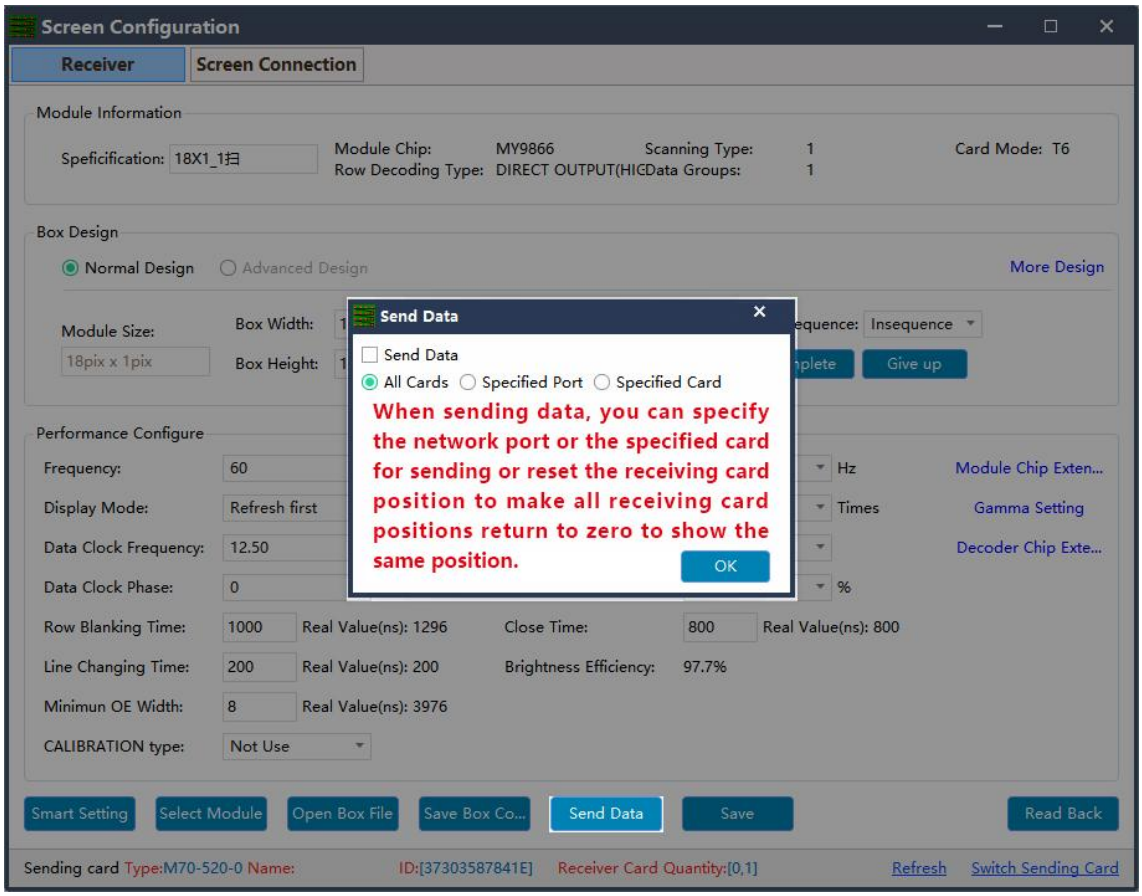
Min OE width : Min response time. When the refresh cannot be improved effectively, try to reduce it.



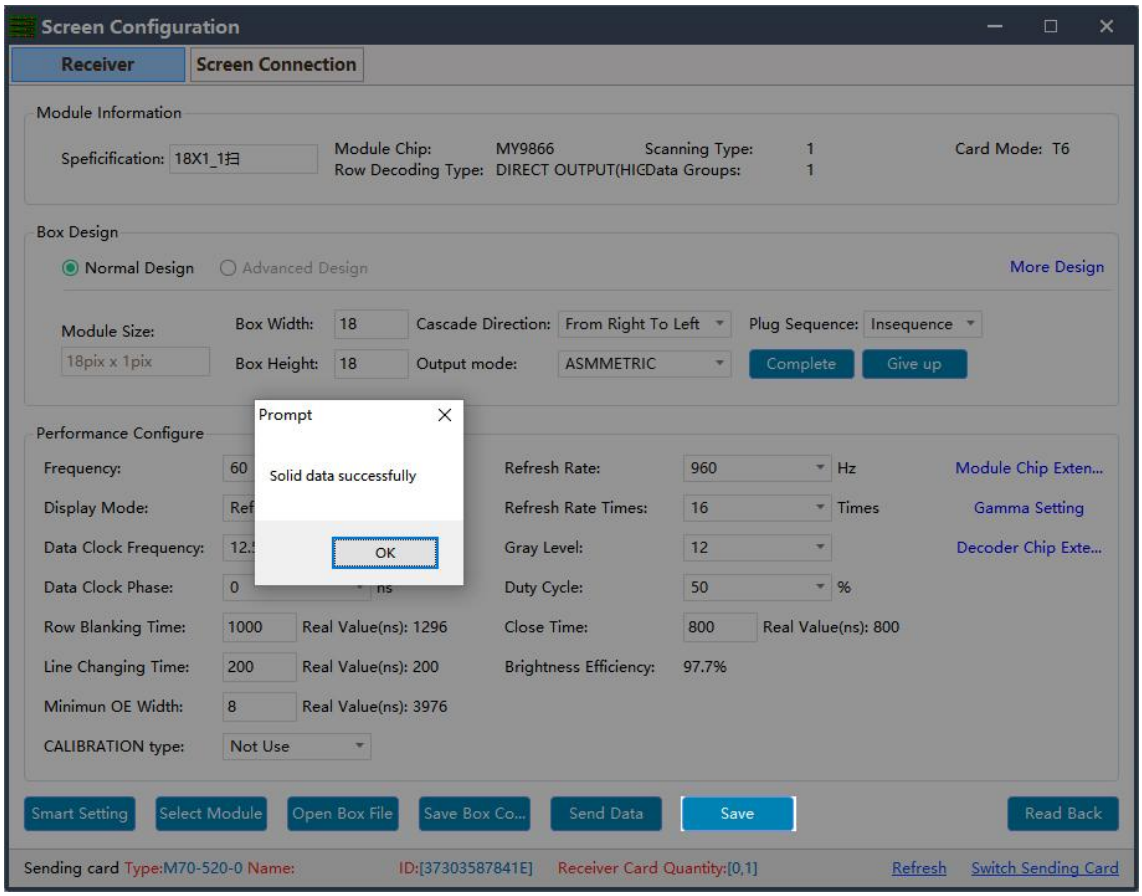
Gamma Configure : Gamma represents the metric parameter of the original signal, which refers to the distortion of the output image of the display to the input signal, and the Gamma value refers to the specific value of this distortion. Adjust the desired Gamma on the Gamma setting column, the default value is 2.8, you can also use a custom Gamma value to edit or load an external Gamma table. After debugging, click Send to save the adjustment effect to the receiving card.



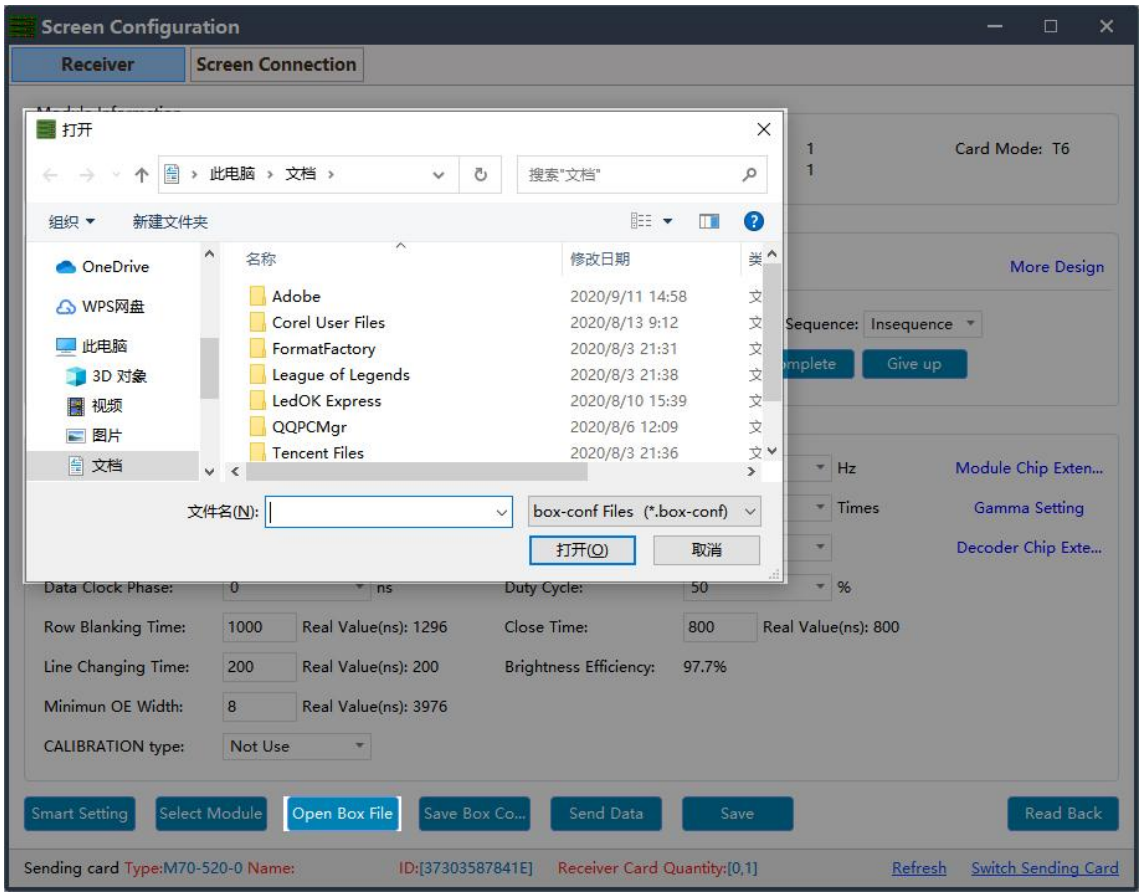
4. Click the" send data" button to send the program to the receiving card.



5. Observe whether the box is displayed normally. Then click the "save" button and solidify the data to the receiving card to prevent data loss from power off and restarting.



6. Finanlly click Save Box Config button and save the configuration file to laptop.



Screen Connection

1. While the receiving card is configured, click the "screen connection" button in the menu bar of the receiving card configuration interface to enter the screen window interface.

① **Load:** Load the saved screen configuration file.

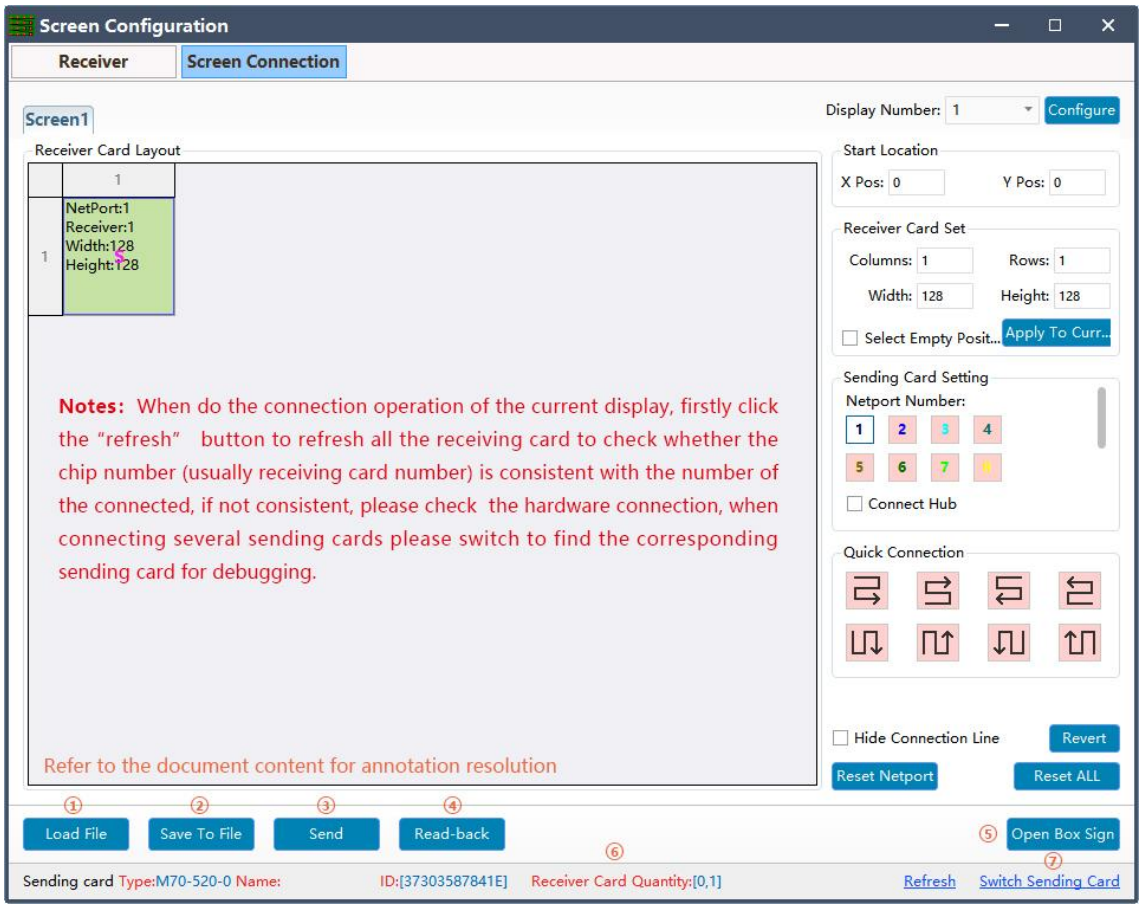
② **Save to file:** Save the display configuration information to the computer in (.* dcc) format.

③ **Send :** Send screen configuration information to the sending and receiving cards.

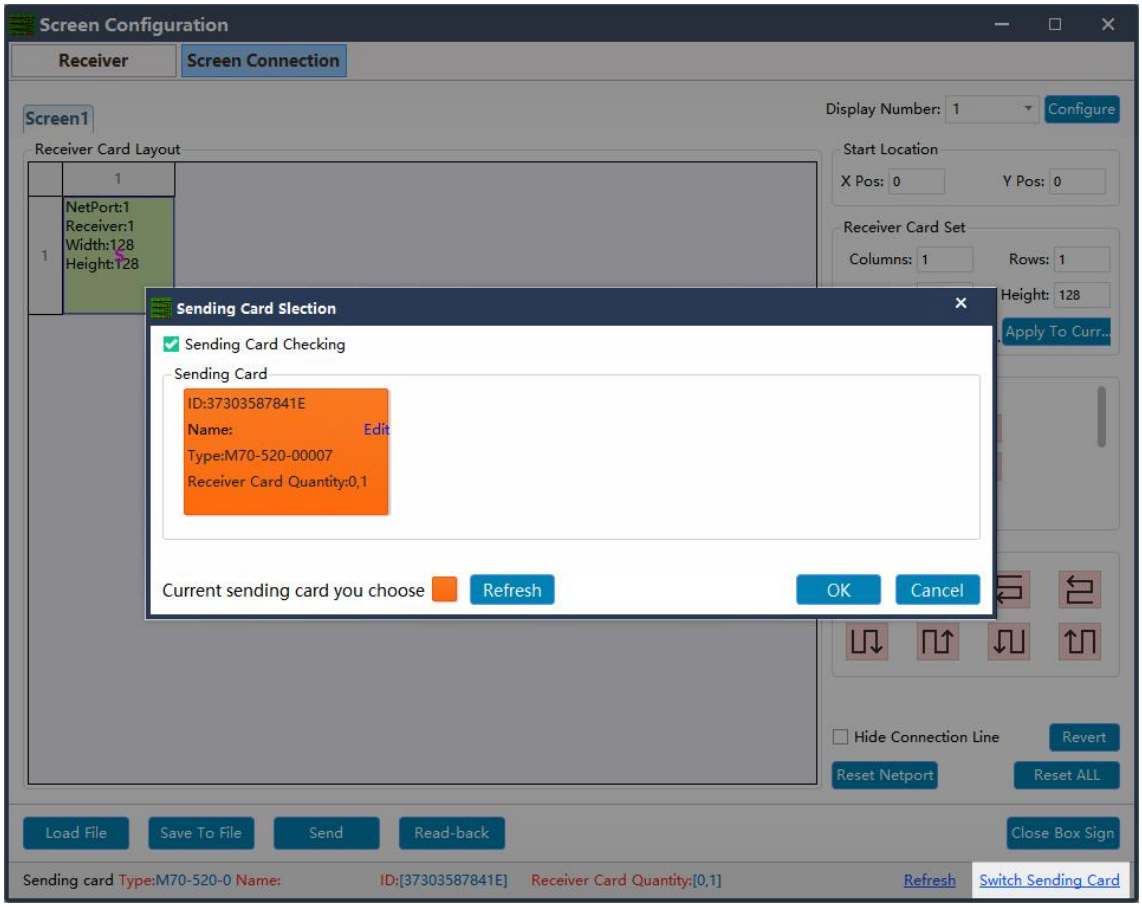
④ **Read back：** Click this button will read back the existed screen connection configuration from the good working receiving card so that can quickly send to the new receiving card.

⑤ **Open Box sign：** Click this button then will auto show the receiving card numbers in correct order in each cabinet.

⑥ **Receiving card quantity：** It will show all receiving cards numbers，there are normally two digits，for example：[1.0] means Ethernet port 1 of sending card has connected 1 receiving card，while Ethernet port 2 of sending card no receiving card.



⑦ **Switching sending card：** If there are more than one sending cards in the same network，can switch to the correct sending card when sending parameters.



2. In the screen connection interface, the cascade mode of receiving card as well as the width and the height can be set according to the actual situation of large screen, (the width and height of the dots of each receiving cards can be different), Please setup the cascading way including receiver card width and height pixels correctly.

① **Display Number:** Number range 1-20, please select according to real situation, click Configure button after choose. If choose 2 means LED screen is double sides, you need do screen connection one by one.

② **Starting location:** LED display interception position of input signal source.The default state is (0, 0), which means that the LED display starts at the point (0, 0) of the video source.

③ **Receiving card Settings：** Set the rows and lines and the dots of the width of each receiving cards according to the actual number of cards used in the screen .

④ **Position blank：** Click the “Select Empty position” button ，and then select the blank. When set，click the button again to exit the select blanks operation.

⑤ **Apply to current port ：** Set the size of all boxes connected to this port to the current column width and column height.

⑥ **Sending card setting：** Select the output port of sending card.

⑦ **Connect hub：** If adopt the hub in the big screen can do following operations：

- Choose the “Connect HUB” option;
- Select the sending card Ethernet port and setup the “hub address”；
- Choose “hub address” and do screen connection;

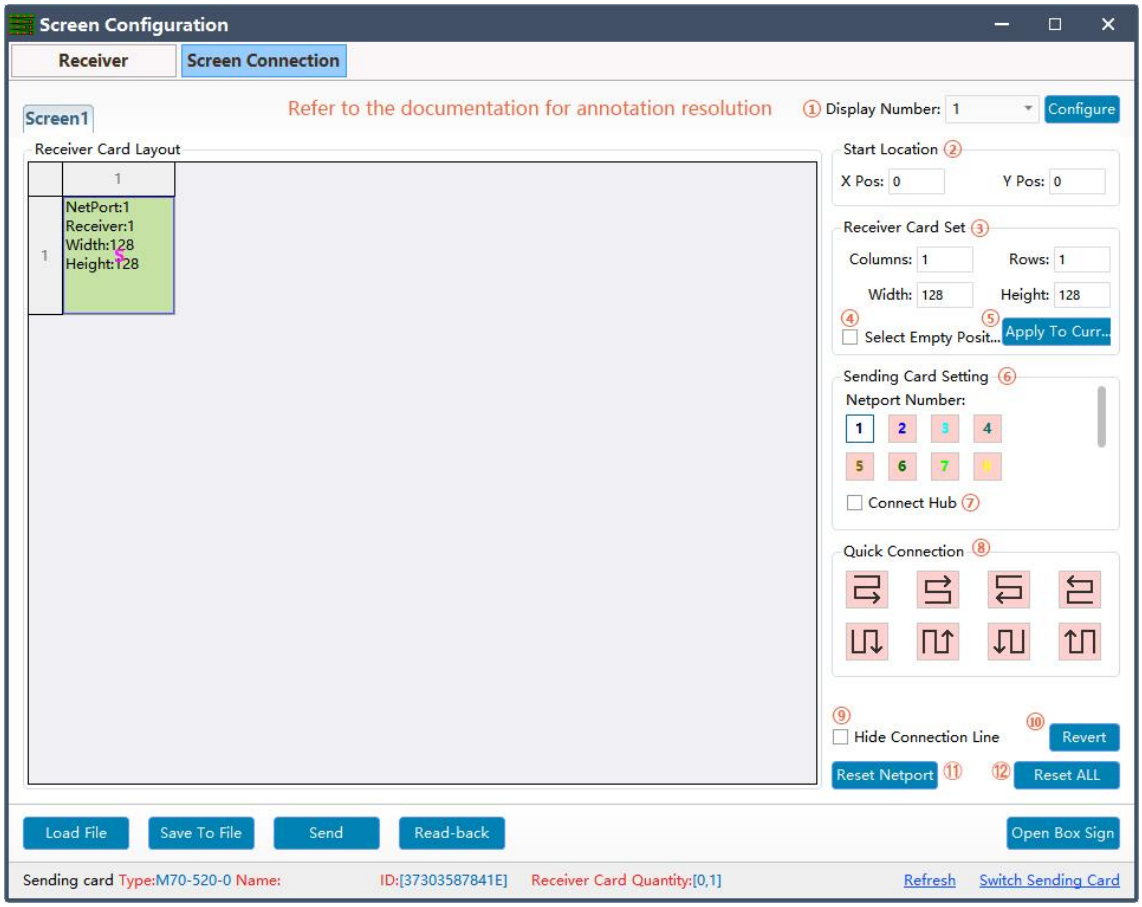
⑧ **Quick connect：** The entire screen is loaded with only one network cable and the receiving card's network cable is regularly cascaded.

⑨ **Hidden connection line：** When checking the hidden connection line box，the display wire knowledge will be hidden.

⑩ **Revert：** Cancel the lastest operation.

⑪ **Reset Netport：** Will revert all setup for current Ethernet port.

⑫ **Revert ALL：** Will revert all setup for all network ports.



3. Click send and choose “as the main sender” and save to device; or choose “As the backup sender” to save to backup sender device. For double sender backup only work for synchronous controller.

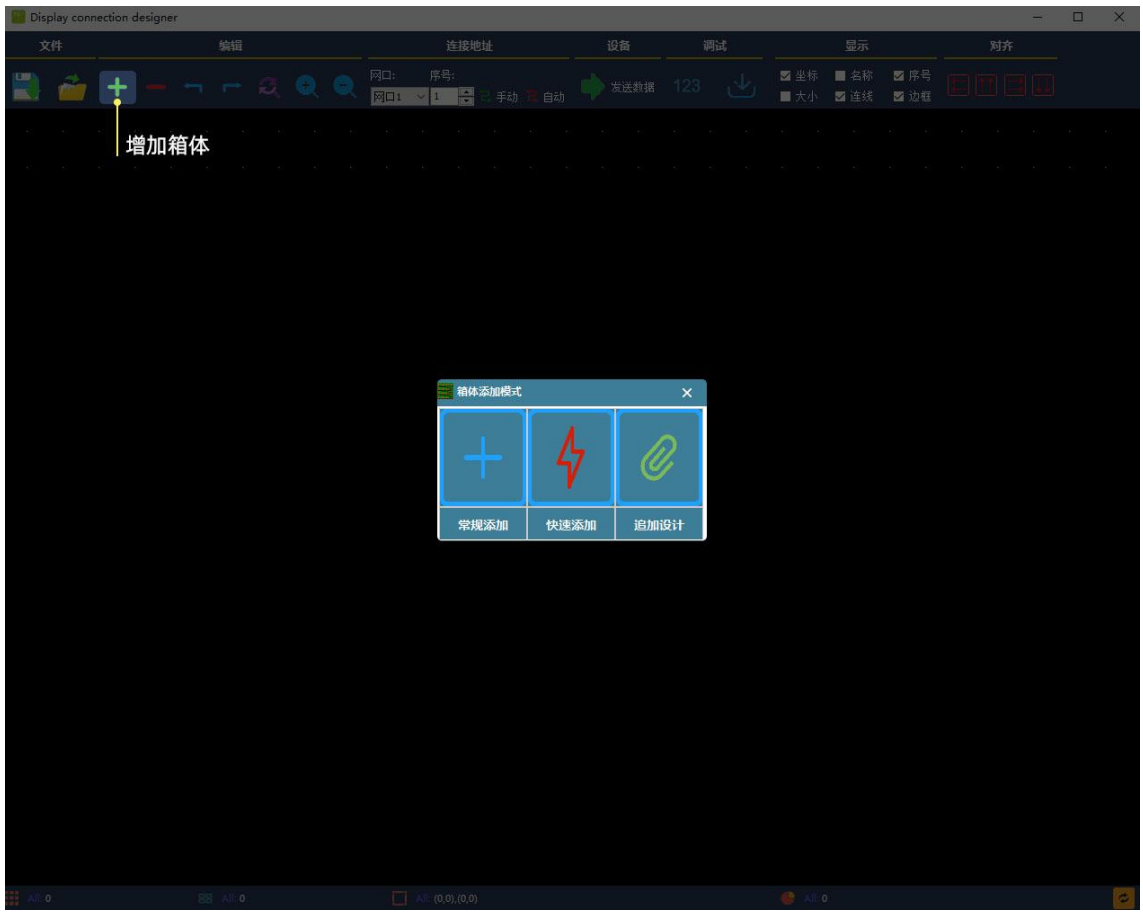
Other Settings

Complex Mode

Complex mode only work for special shaped screen, which make screen connection convenient and intuitive.

Add Cabinet

Upload .box-conf file, open complex mode window and choose + icon, there are 3 ways of adding screen config file.

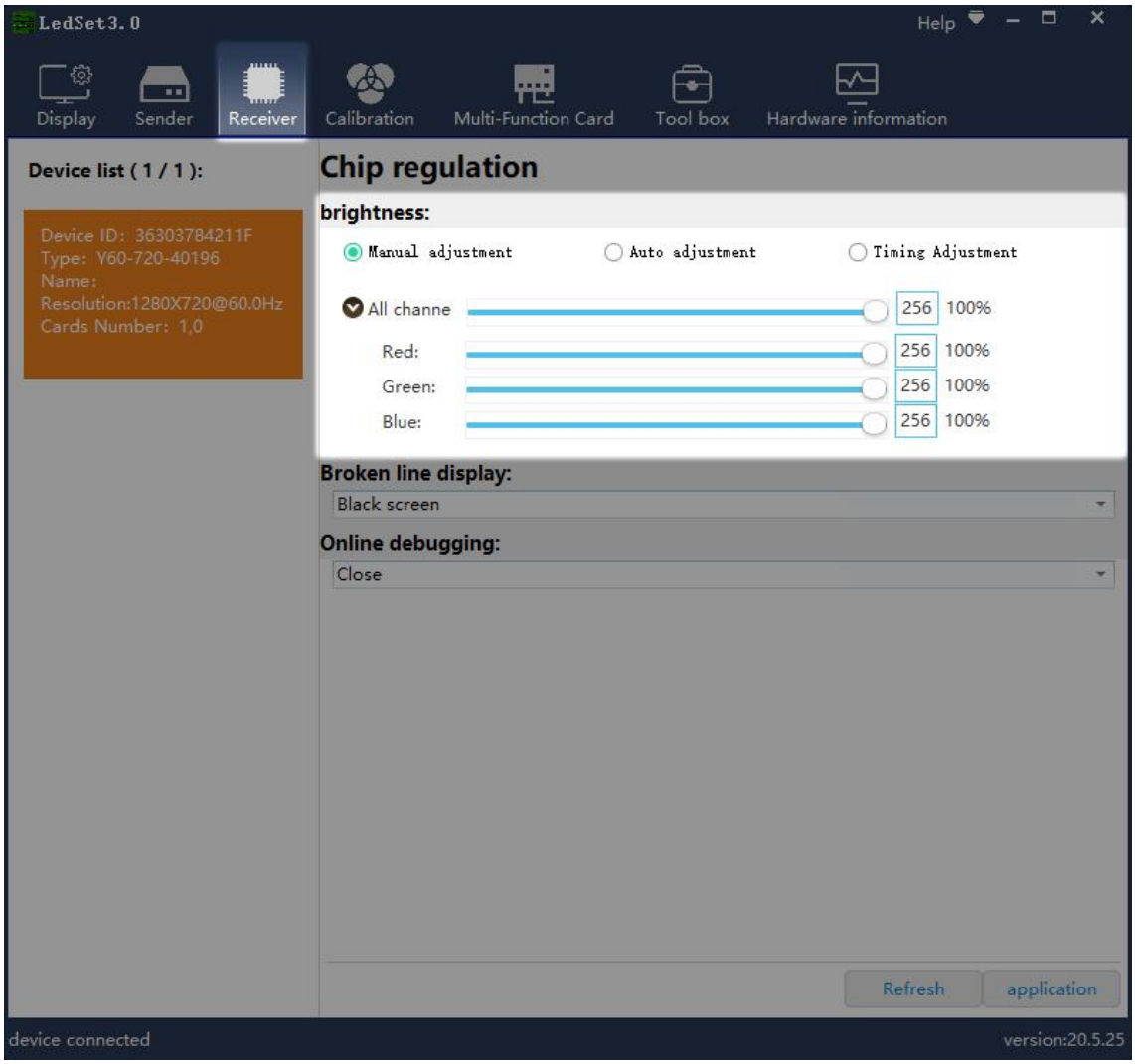


If the led screen contains various types of cabinets (different cabinet size, different driver ic or module design), please choose the first way (general add) and then click view

button and select the .box conf file and import.

Receiver——Brightness

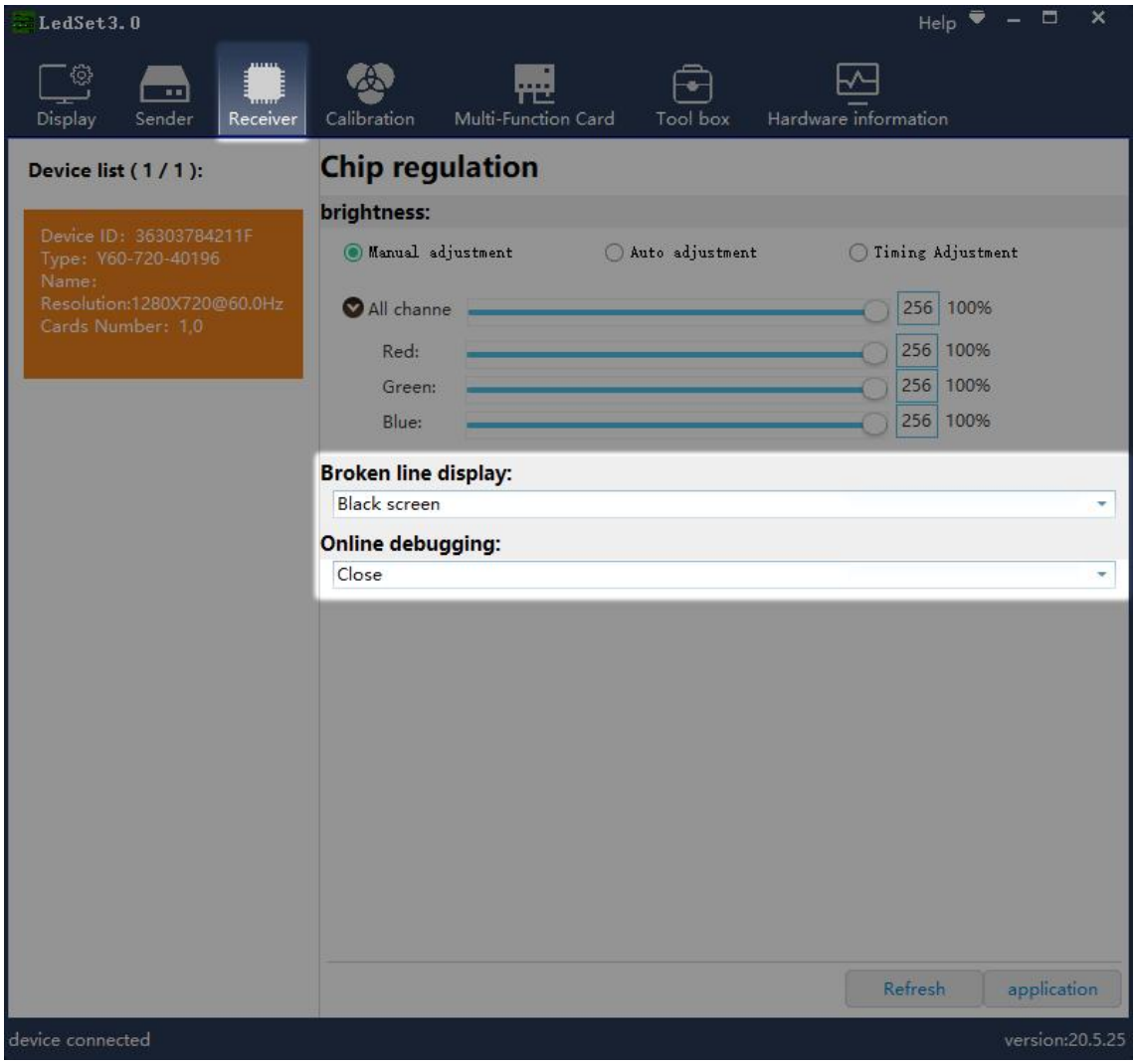
Select Receiver and enter brightness adjustment, you can do manual or auto adjustment.



Receiver----Broken Line Display

Broken line display means when receiver disconnect from sender card, the led screen has 3 modes to display: black screen, standby mode and last frame.

While the standby mode is ex-factory default type of red, green, blue and black color bars. Normally Choose Black screen mode. After done this, click application and exit.



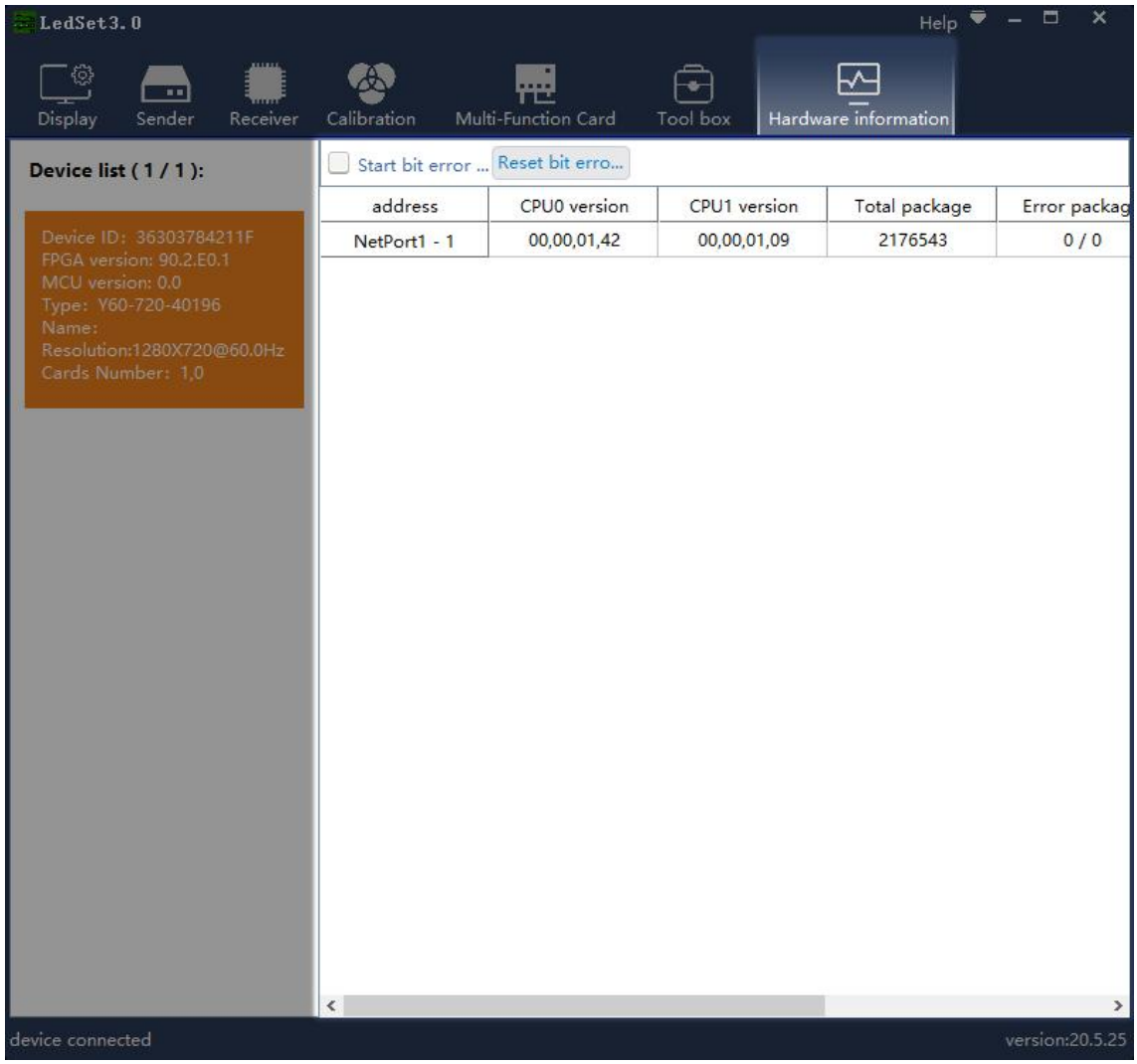
Hardware Information

After enter hardware information, will see following information:

Left side will show sender information, right side show the receivers firmware version and error package.when there is communication bug, will appear error package data, the first digital will greater than 4 and will keep increasing. At this time, customer needs to check the Ethernet cable connection for current and previous receiver and then click

“reset bit error rate” to make error package digital into 0.

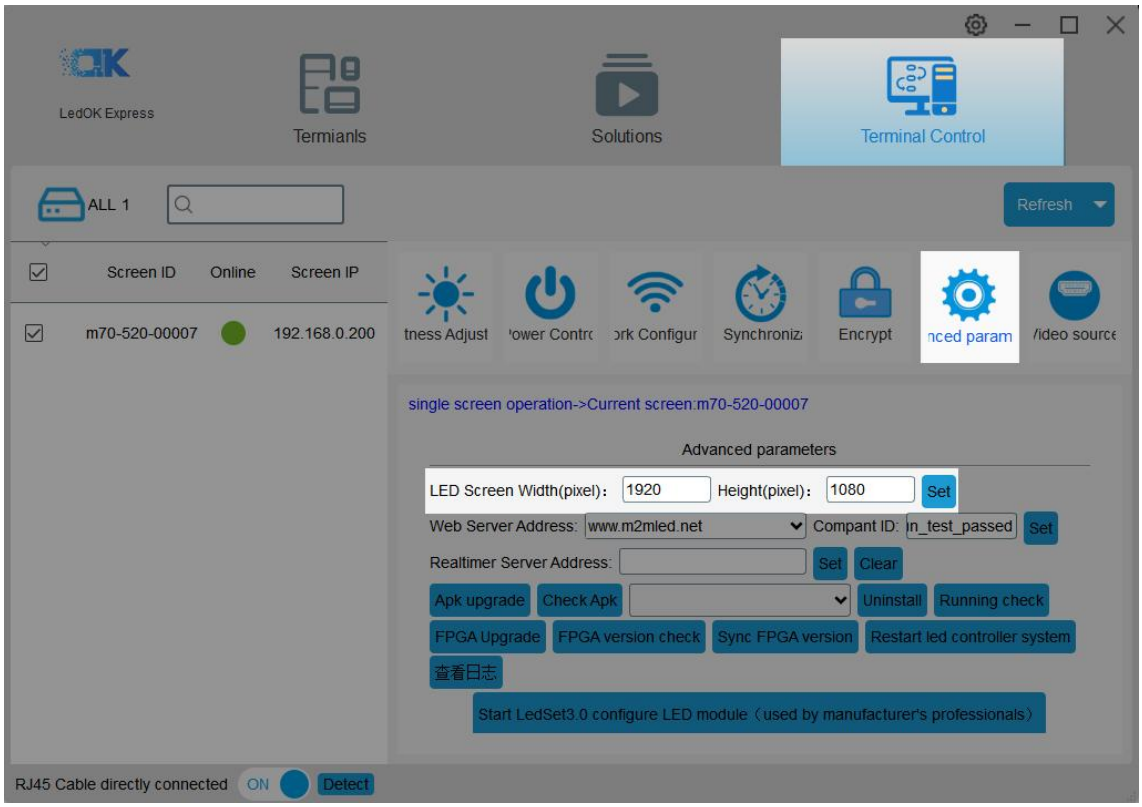
When click “start bit error rate” option, system will auto enter self testing status, that is display red, green, blue and scanning information when there is communication bug, this self testing status will over unless fixed the bug and cancel the “start bit error rate” option.



Terminal Control

Advanced Parameters——Setup Led Screen Width And Height Parameters

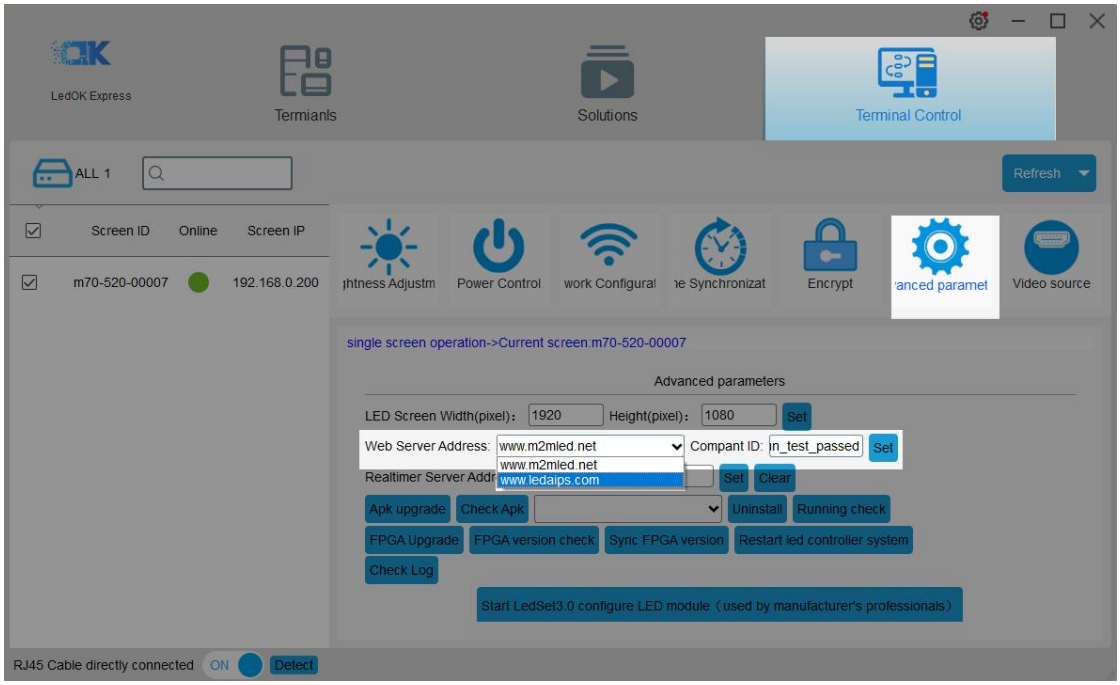
Select advanced parameters with password 888, Setup the led screen width and height pixels and click set button.



Advanced Parameters——Web Server Address

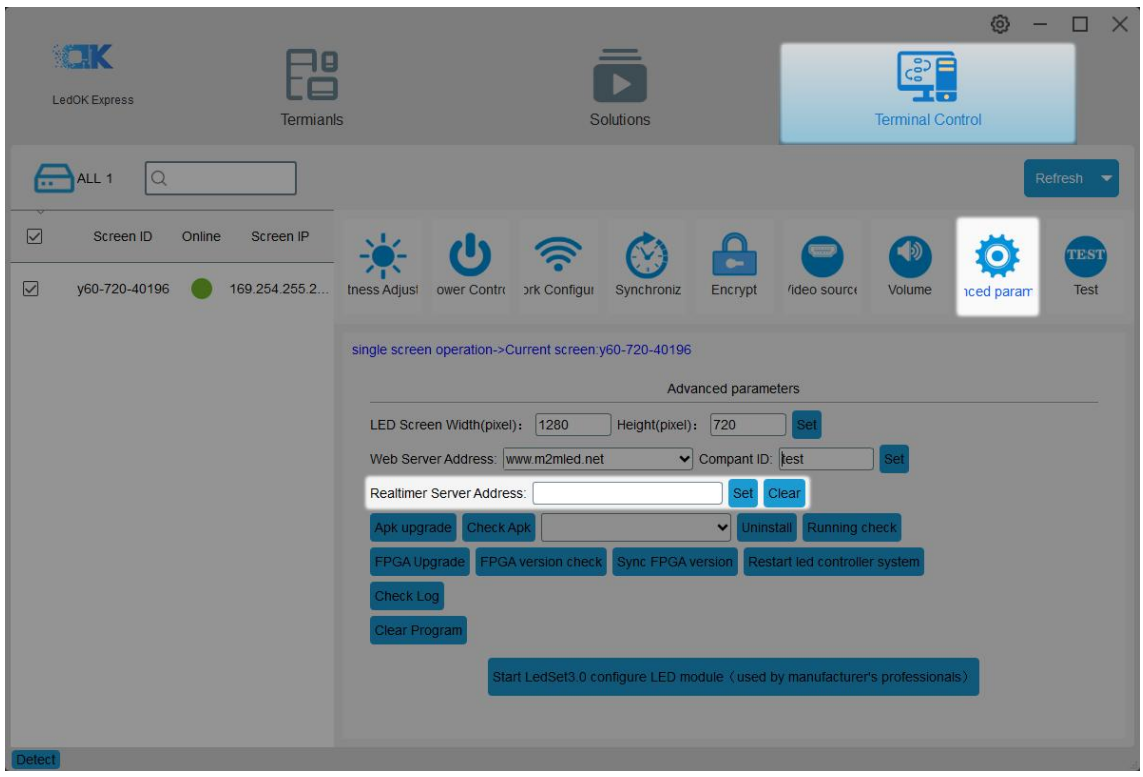
Enter web server address and correct company ID and click set.

Oversea web server address：www.ledaips.com.



Advanced Parameters——Real Time Server Address

Only customized development users need set this.



Advanced Parameters——APK/FPGA

First, click Check APK will get all apk versions of sending card.

Second, APK upgrade-----update software version for sending card, including install latest xixunplayer, also can install third party APK.

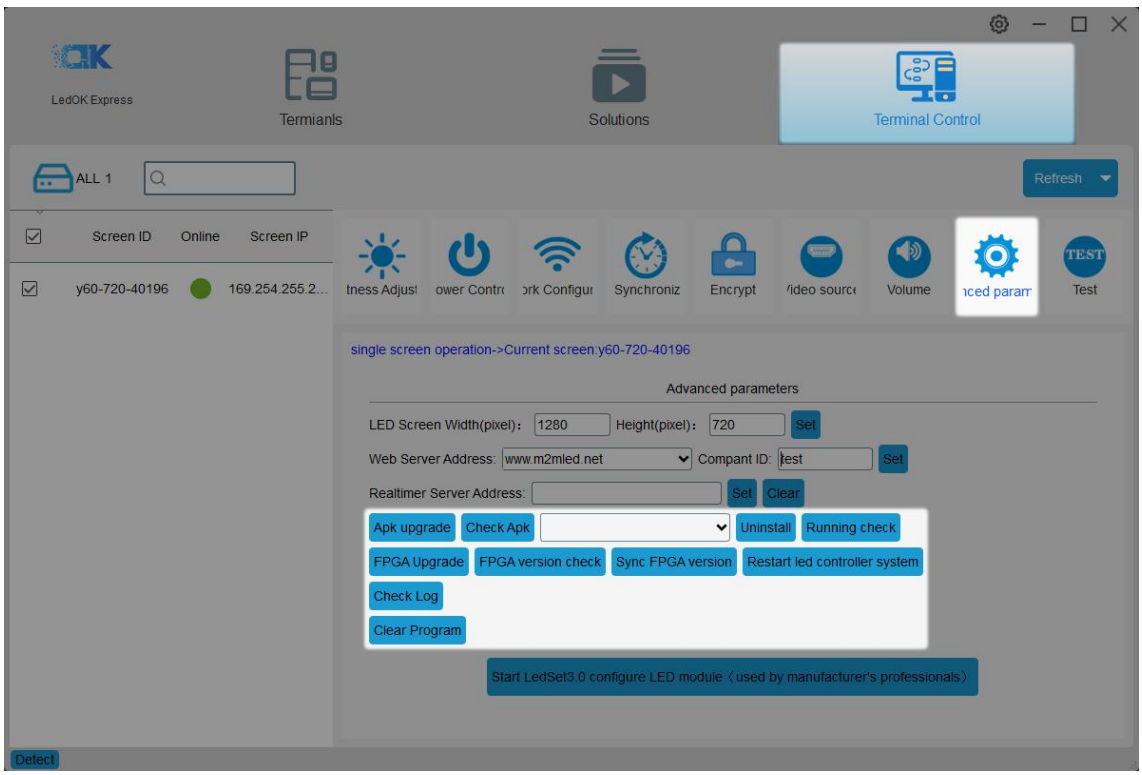
Third, uninstall----uninstall xixunplayer or other third party APK.

Fourth, running check----check specific apk running status.

Fifth, FPGA upgrade----only work for Y10, E10 cards.

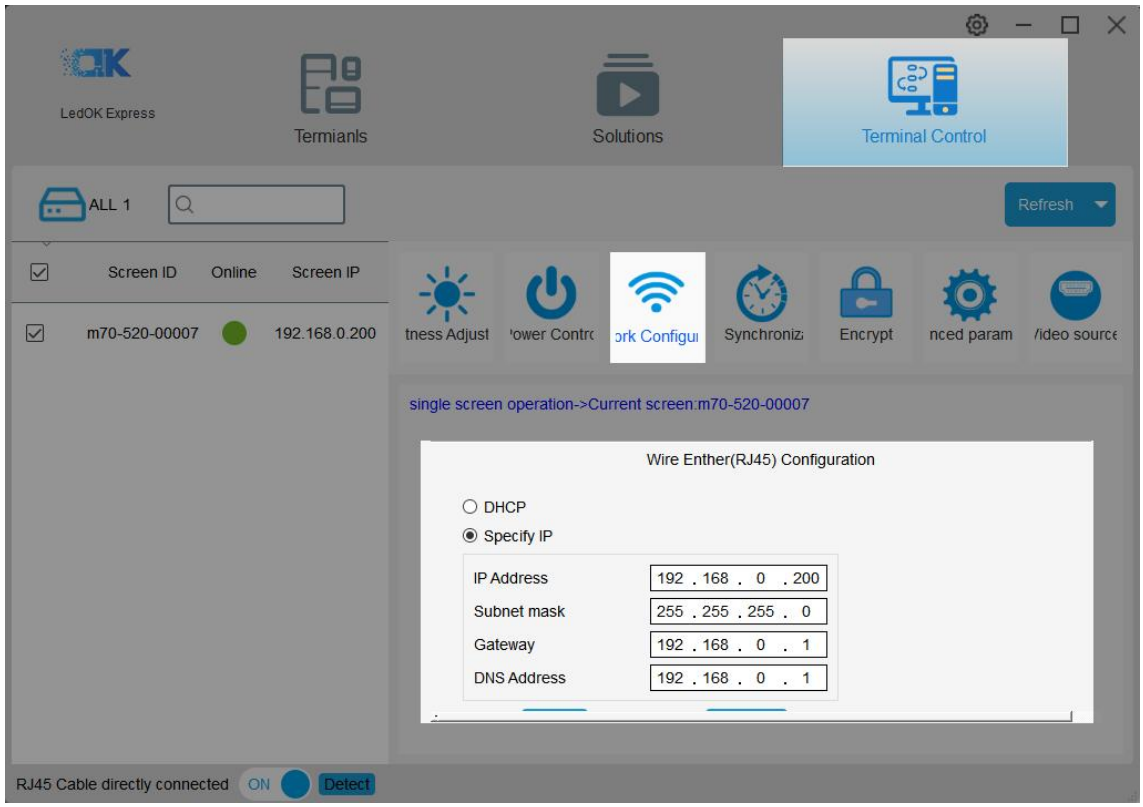
Sixth, FPGA version check----check sender card hardware version.

Seventh, check log----checking controller working log.



Network Configuration——Wire Setup

Network configuration，first is Wire，can setup the controller IP address.

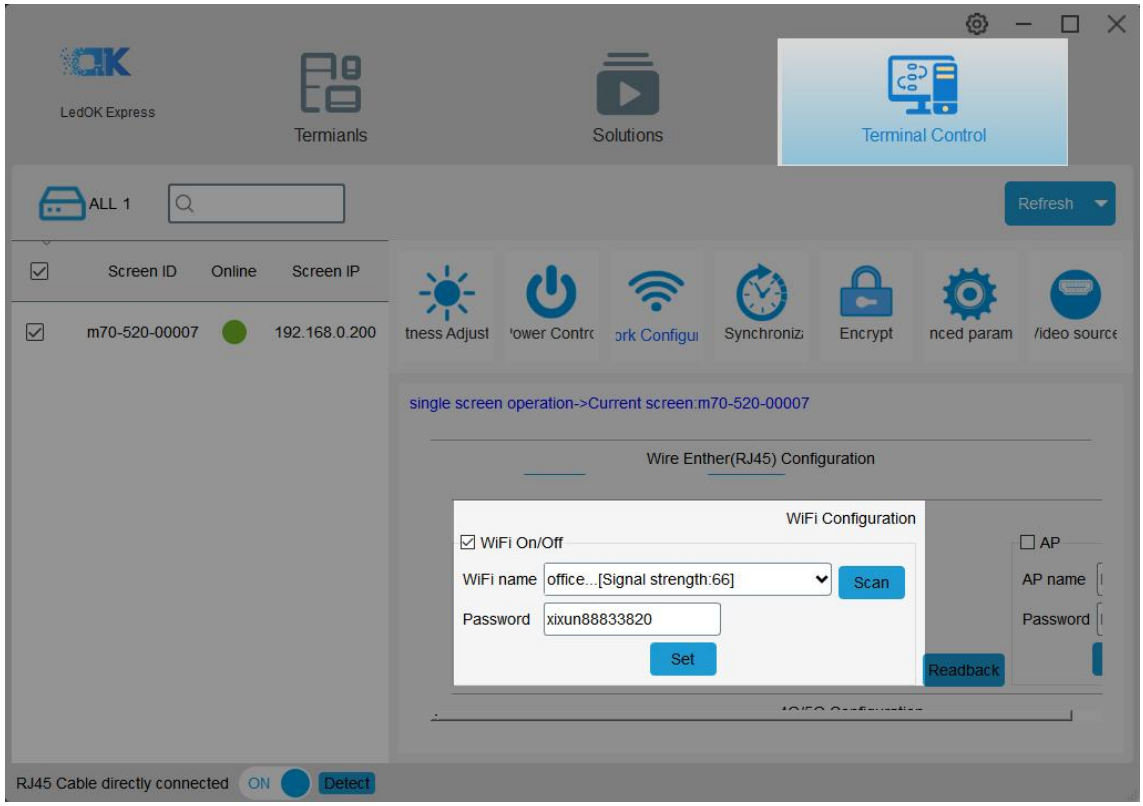


NOTES:

1. Controller will get access to internet by wire as first priority.
2. Must remove the LAN cable from controller if choose WIFI or 3G internet and choose automatically acquisition IP.

Network Configuration——WiFi Configuration

Turn on WIFI and scanning WIFI hotspot，then enter wifi password and click save.



Wait for about 3 minutes, controller will come online. Please watch the "Internet" light, if it flashing regularly means online success, go to AIPS platform and check it.

NOTES:

1. If could not scanning the WiFi, please try to turn on/turn off Software or WiFi Switch.
2. If controller can' t get access to internet through WiFi, please double check the steps below:

   A.WiFi antenna plug correctly.

   B.WiFi password is correct or not.

   C.If the Wireless router being accessed too many terminals?

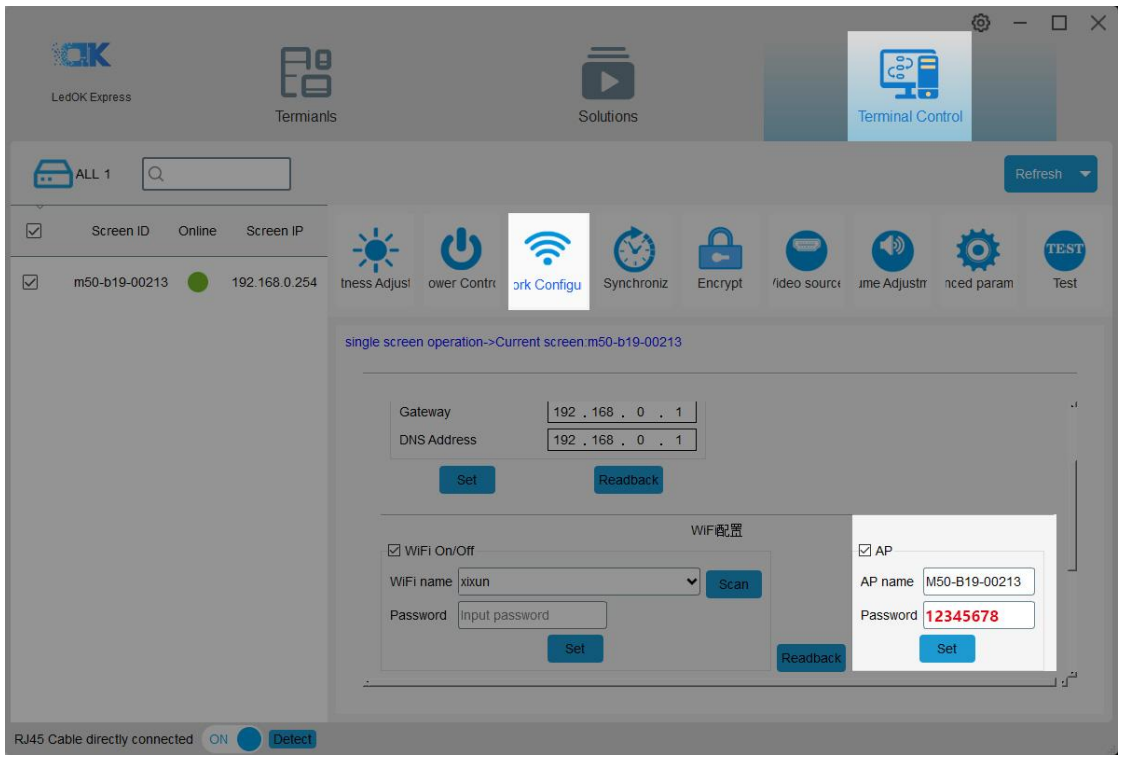
   D.E series controller switch on WIFI mode?

   E.Try another WIFI hot spot.

F.Y/M series controller，please make sure the LAN cable removed.

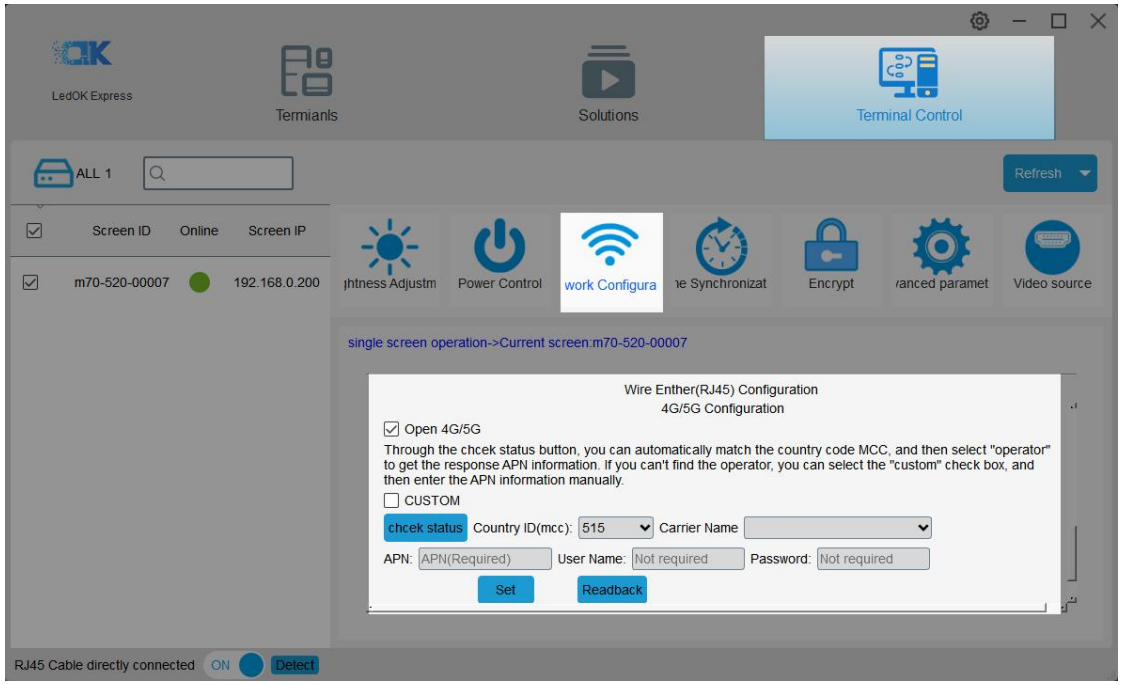
Network Configuration——AP Configuration

Enable AP option and write down new AP name and password, click set, then controller will issue a hotspot when running.



Network Configuration——3G/4G Setup

Enable 4G/5G option，click" Check" button will auto match the country code MMC and choose the operator name to get the APN ，if can not find your country code，please enter by click custom option.



After save 3G parameters，waiting for about 5 minutes，please check if card online in AIPS platform. “ Internet” light will flashing fast for dialing up then flashing regularly means get online success.

NOTES:

If controller can’ t get online success，please checking following things:

A.3G antenna has plugged correctly?

B.Y/M series controller，make sure the LAN cable removed.

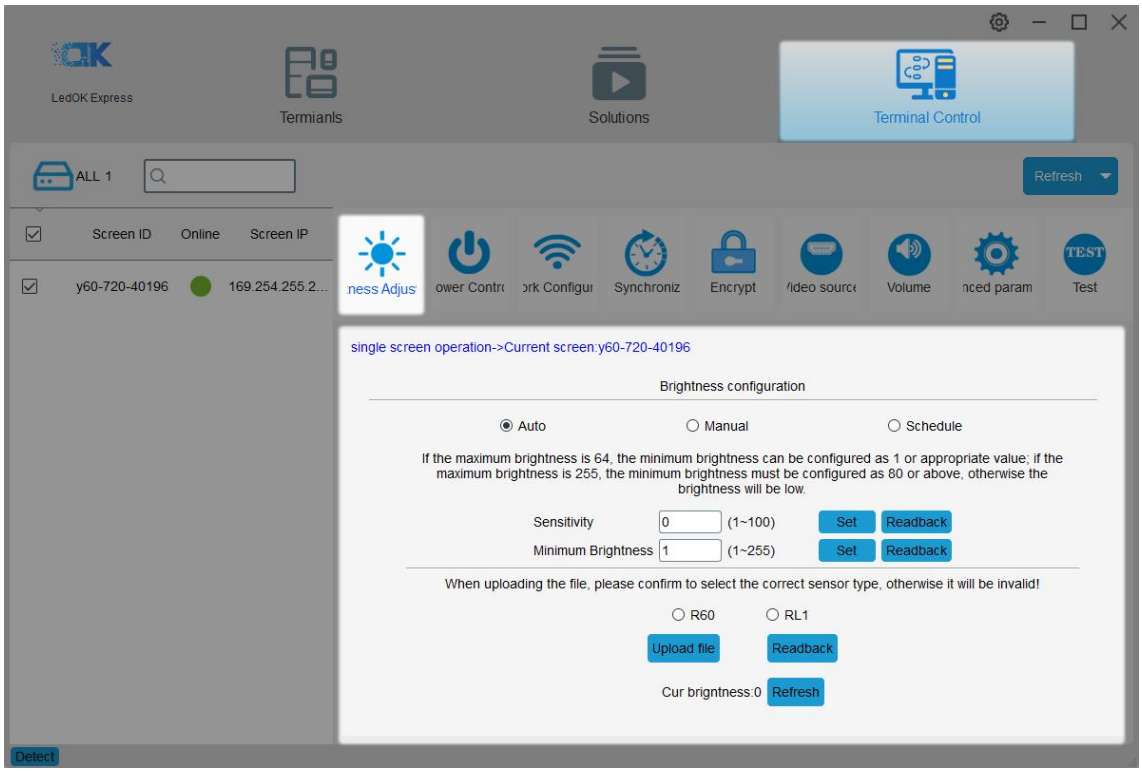
C.APN is correct or not?

D.SIM card has activate? SIM card has enough money and 3G data service?

E.Check 3G signal at least 13 and above? Click Network status detection to check 3G signal.

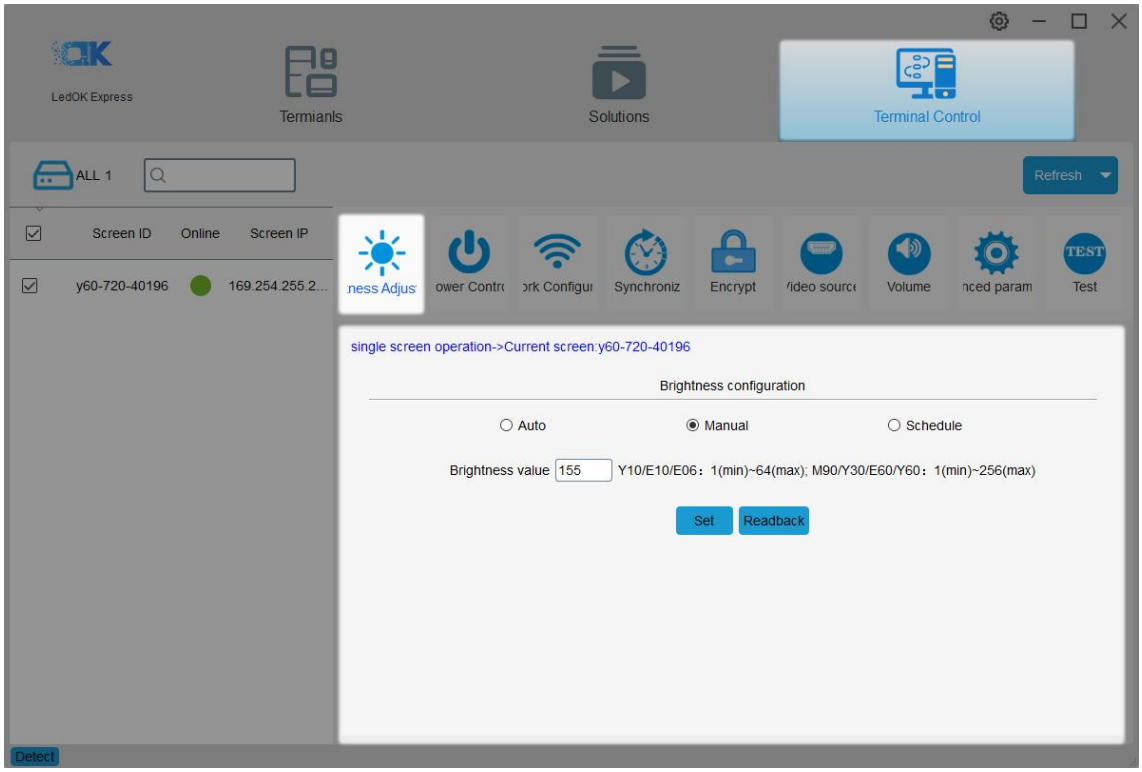
Brightness Adjust——Auto

Please read the remind message first and then set proper sensitivity number and min brightness level and click set. Higher sensitivity value, dimmer brightness in night.



Brightness Adjust——Manual

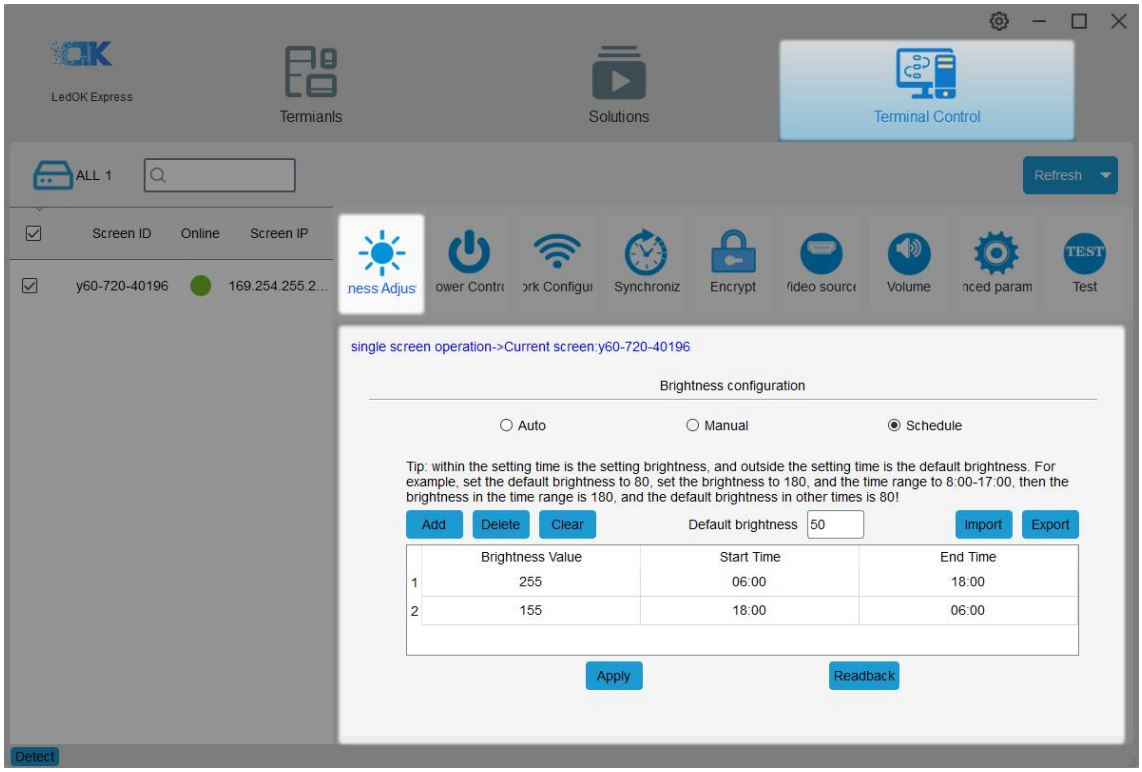
Can set the brightness level by manual and click set.



Brightness Adjust——Schedule

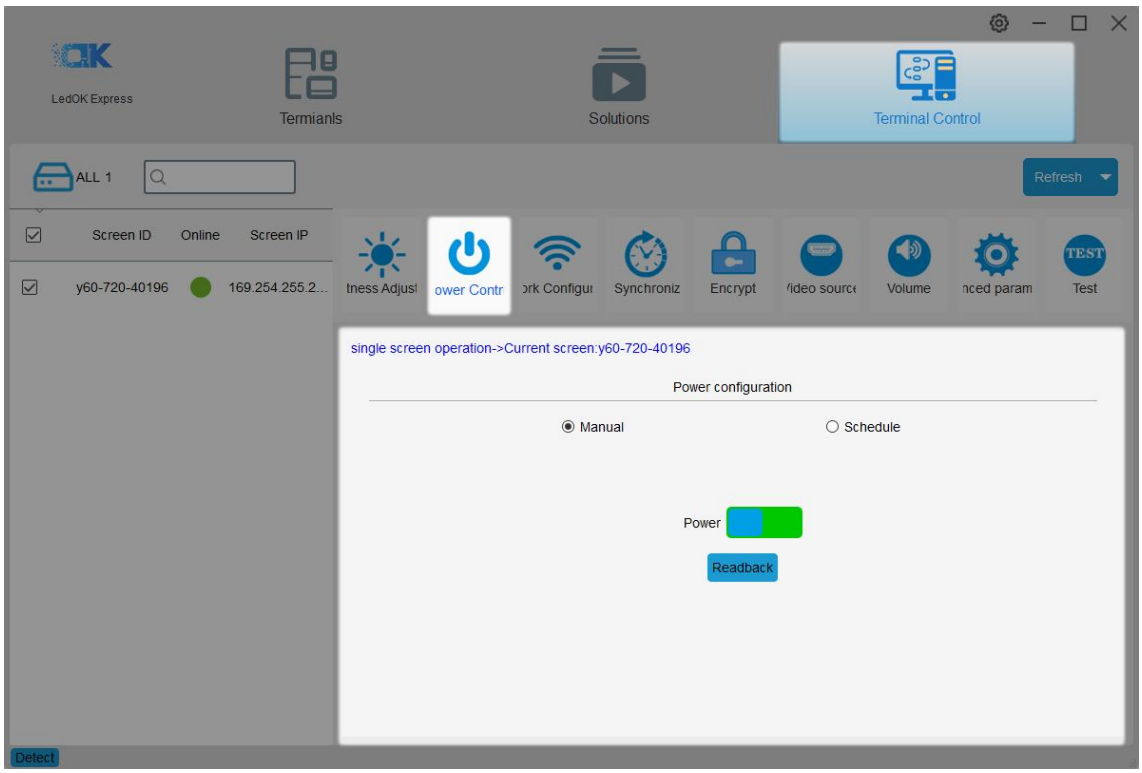
Please read our tips first if do not know how to make schedule.

Here can add, delete and modify the brightness schedule commands. Click Apply after done.



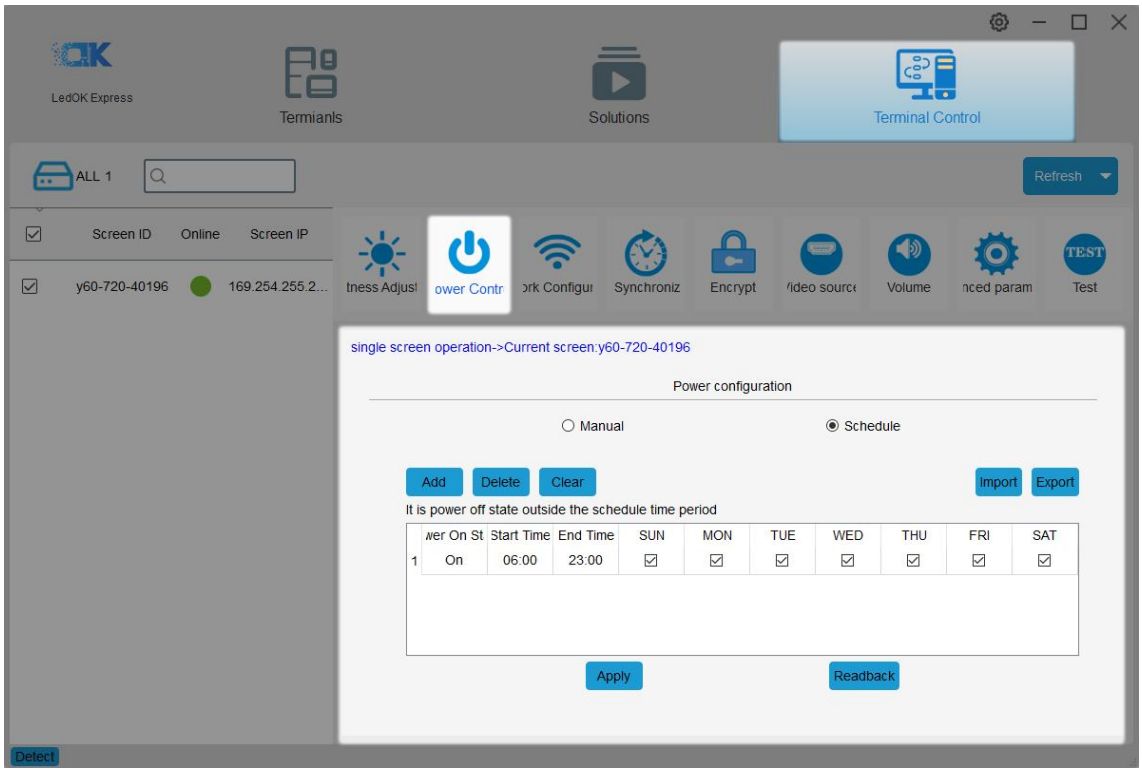
Power Control——Manual

Can turn on/off led screen from software. This is not physically power off.



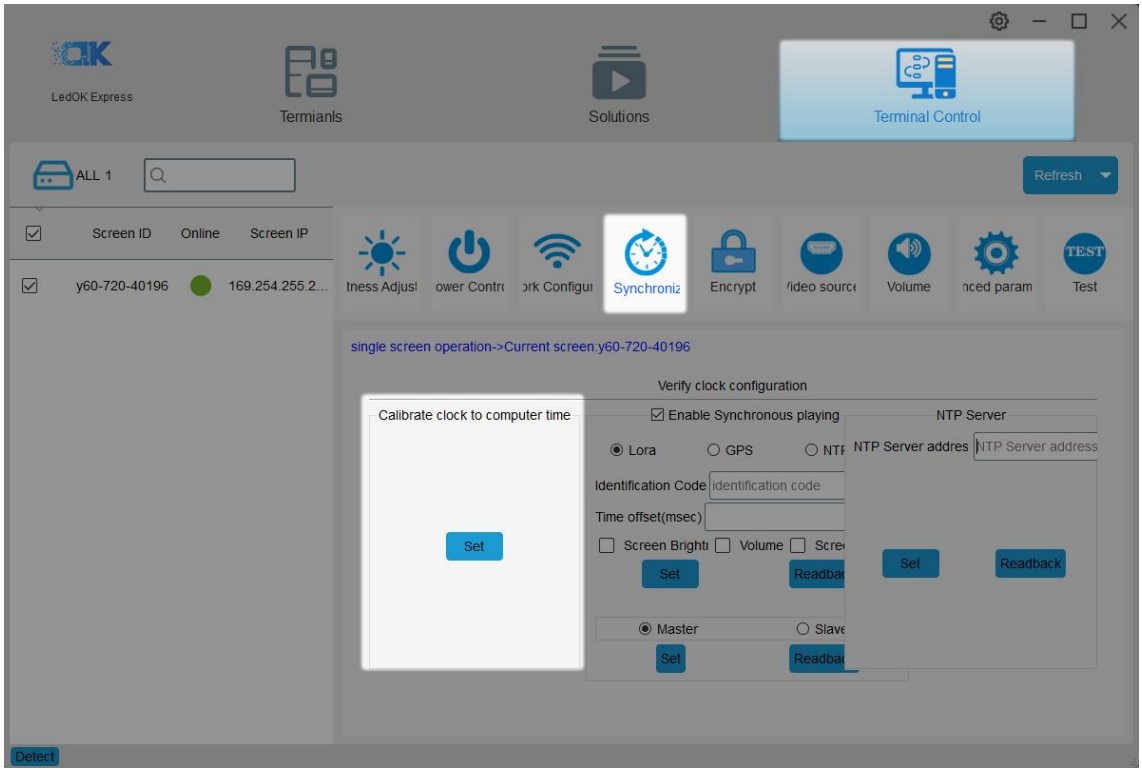
Power Control——Schedule

Just need set the power on time range according to requests, click apply after done.



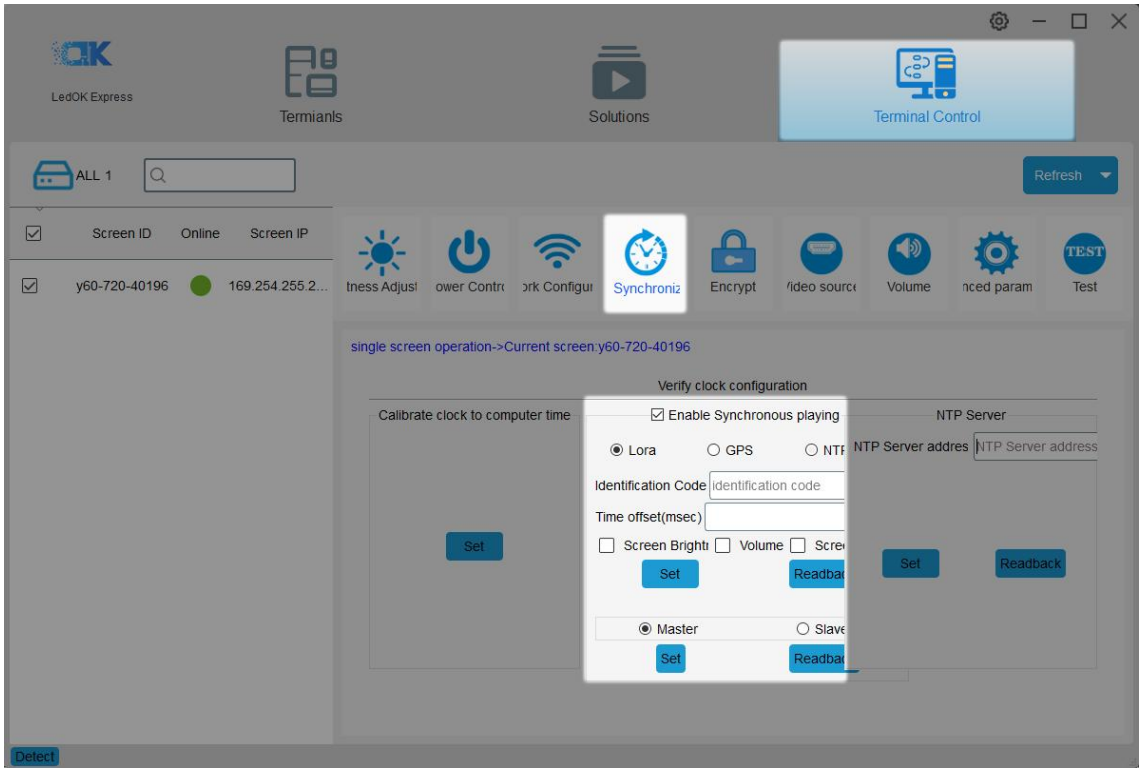
Synchronize——Calibrate Clock To Computer time

This is to calibrate computer time to the led controller. So that led controller clock will keep sync with computer’ s.



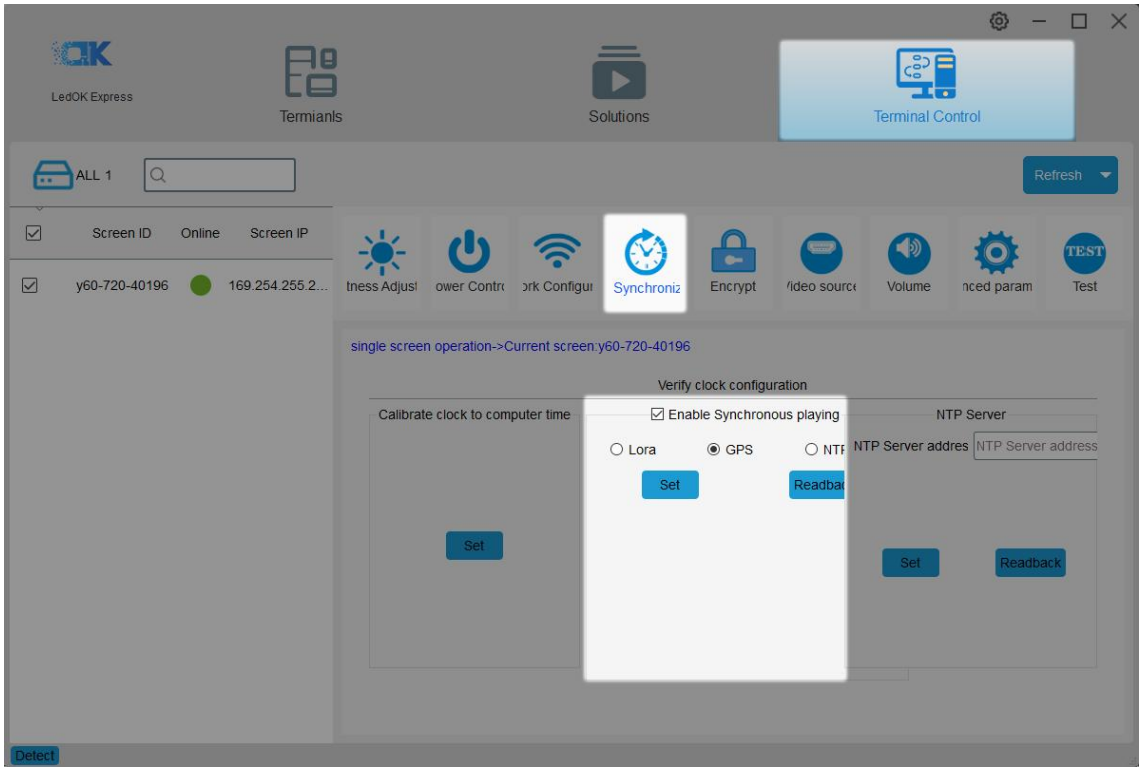
Synchronize——Use Lora Modem To Synchronize Image

Lora modem belongs to hardware accessory, with its help, we can make multiple led screen display the same frame always. It has master and slave modem, one master can bring more slave ones, so that all slave modems will follow the master modem clock and realize the synchronize image.



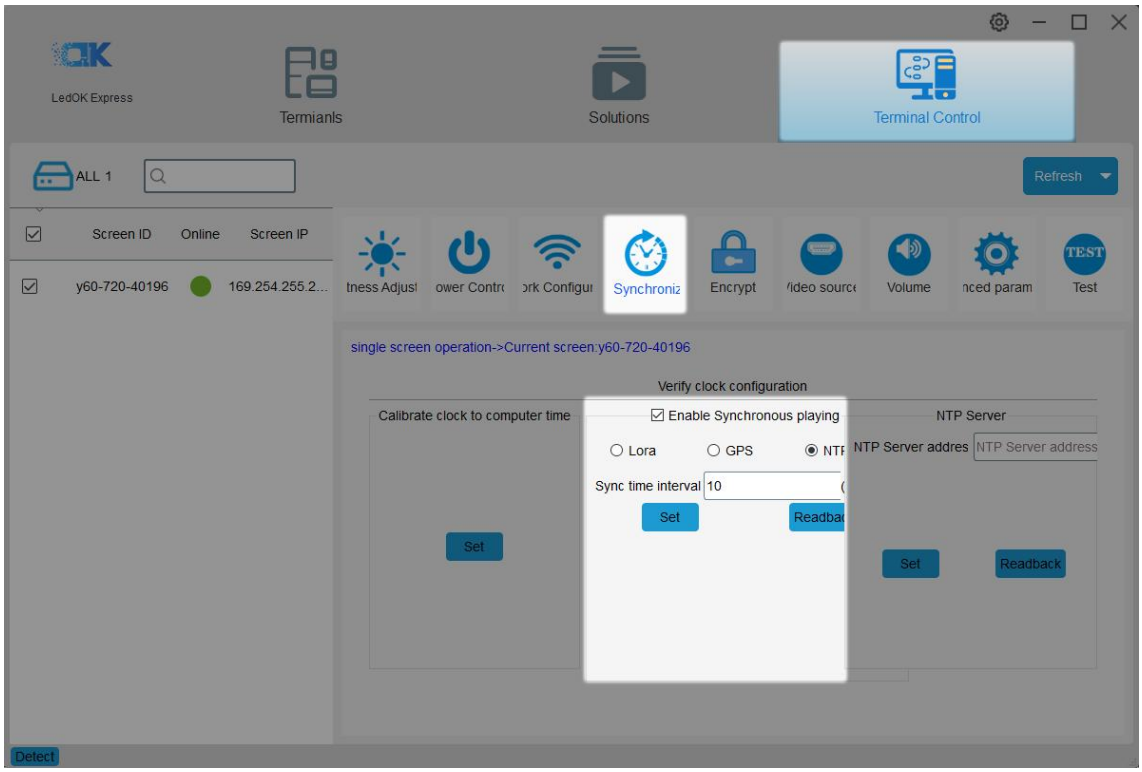
Synchronize——GPS Sync Image

Need to plug GPS antenna, then adjust clock by gps and realize sync image.



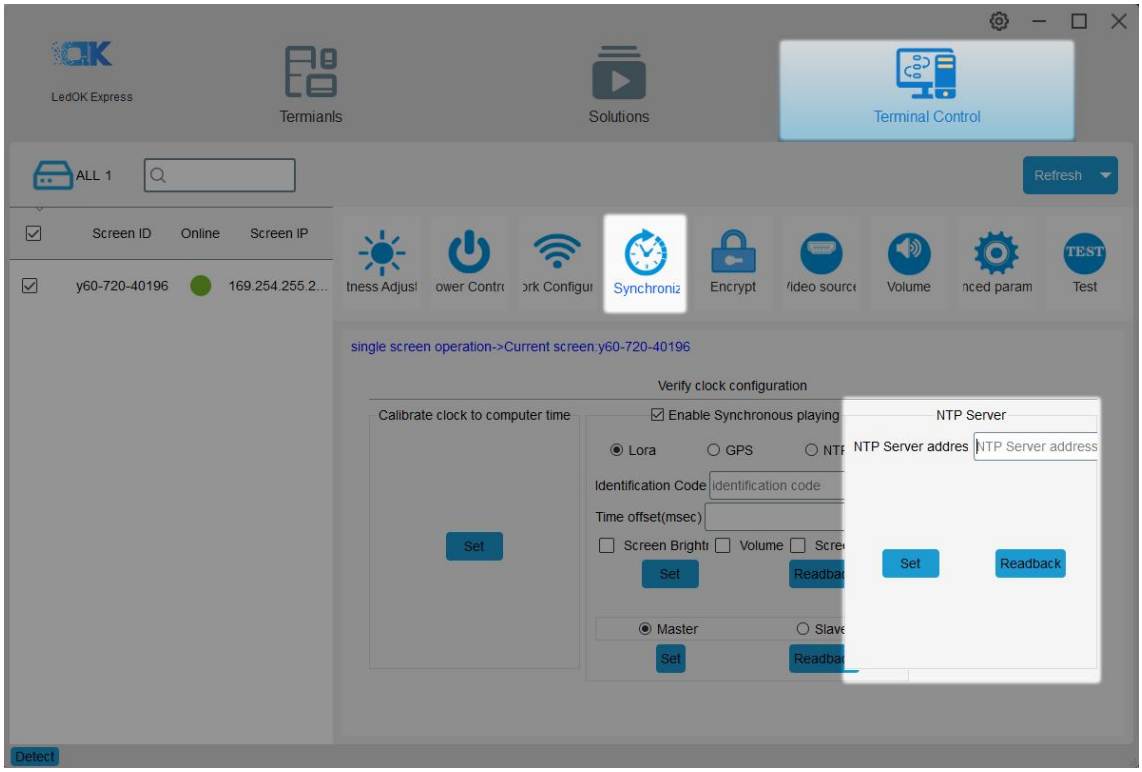
Synchronize——NTP Sync Image

Choose NTP then controller will auto adjust clock through NTP server address.



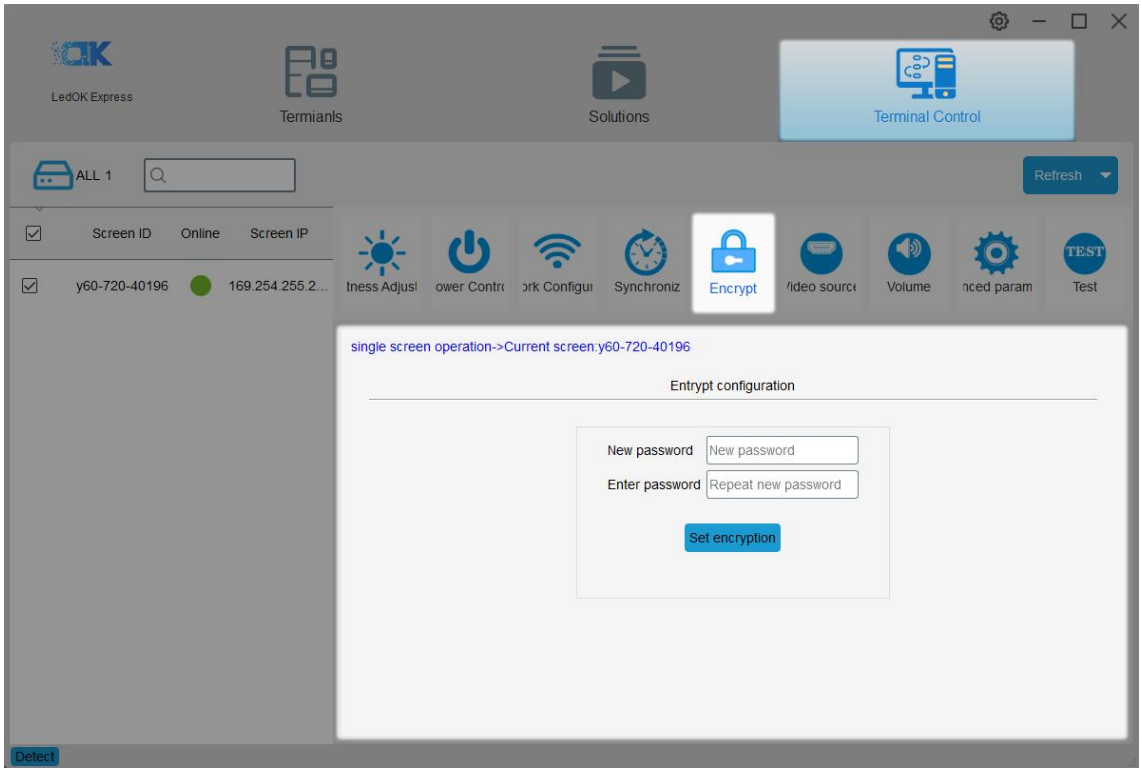
Synchronize——NTP Server

Setup the NTP time server address and click set.



Encrypt

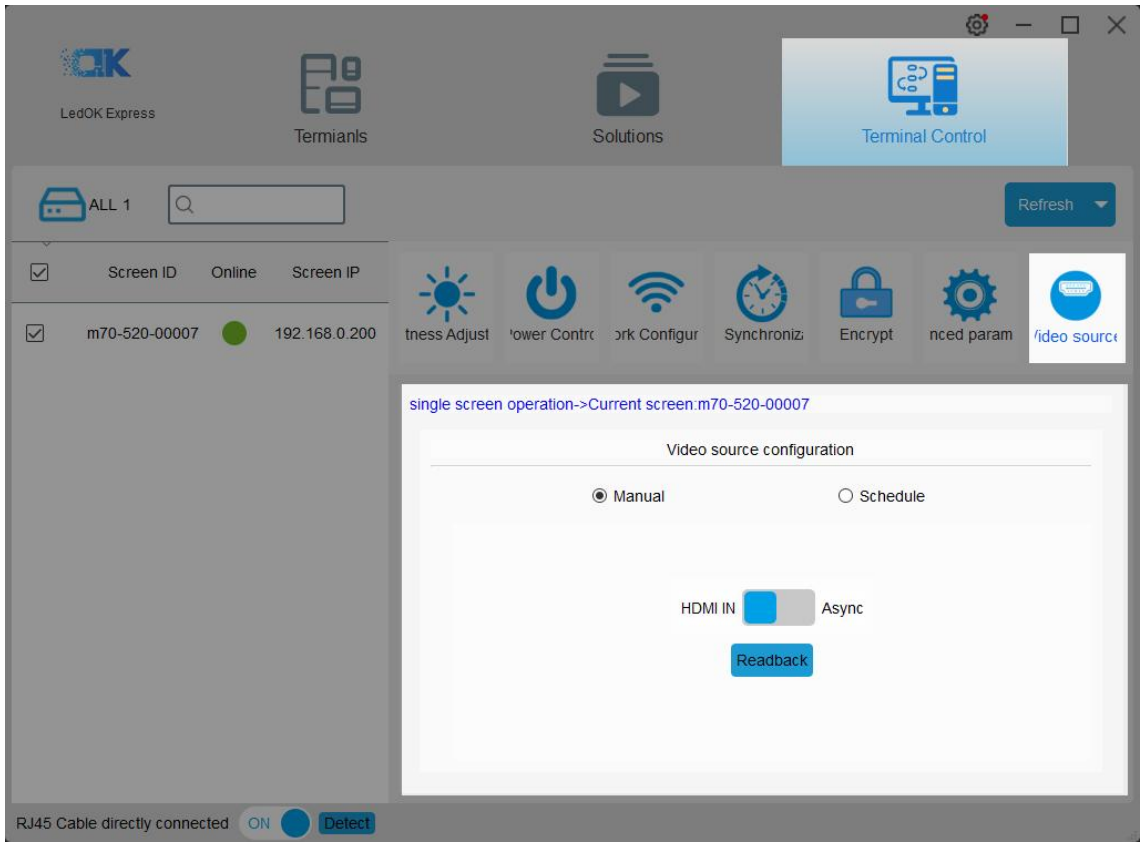
After encrypt controller with passwords, then can not send program to controller unless you know the password , but can also do other operations.



Sync&Async Setup——Button Of Sync&Async Setup

Running LedOK Express software，enter terminal control，and open sync&async setup，select the controller and choose the way of switch.

Manual or schedule. Also can click read back button to know controller current mode.

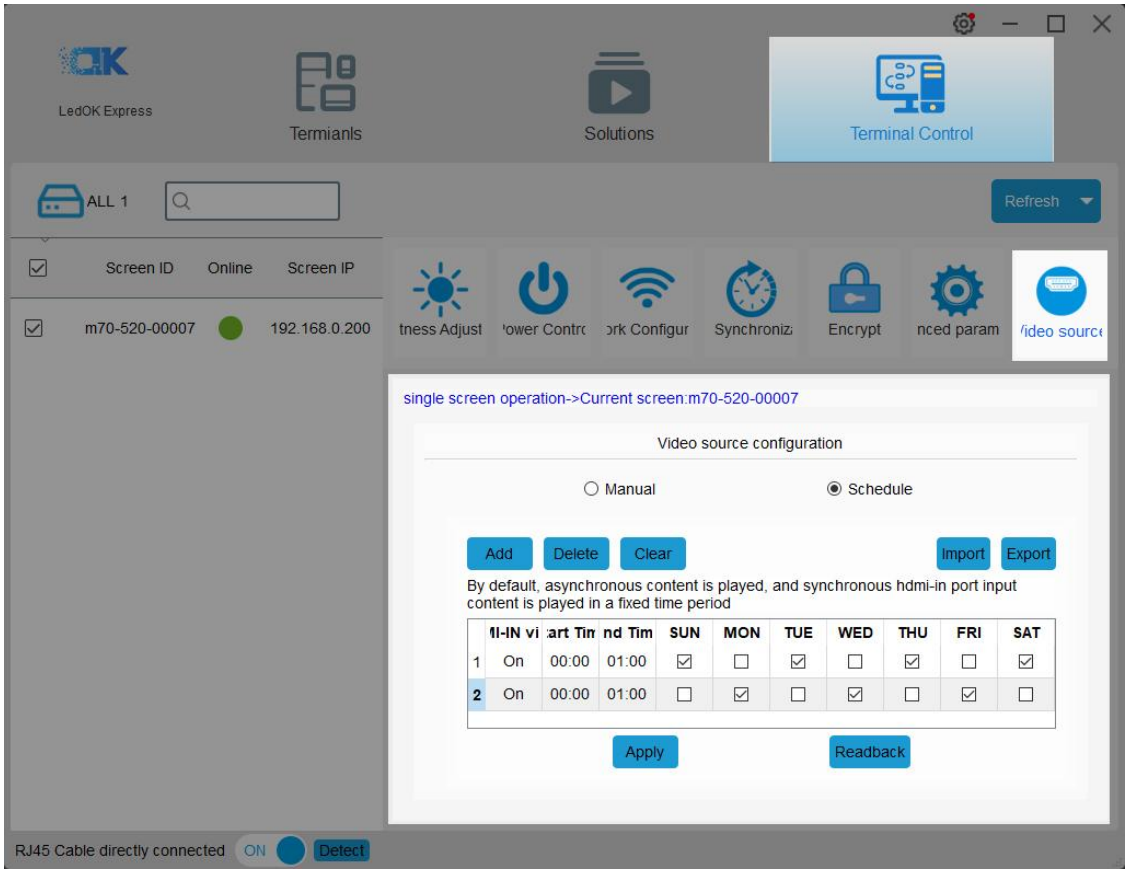


Sync&Async Setup——Switch Schedule

In schedule setup interface，can add schedule tasks according to customer requests，default status is displaying asynchronous content.

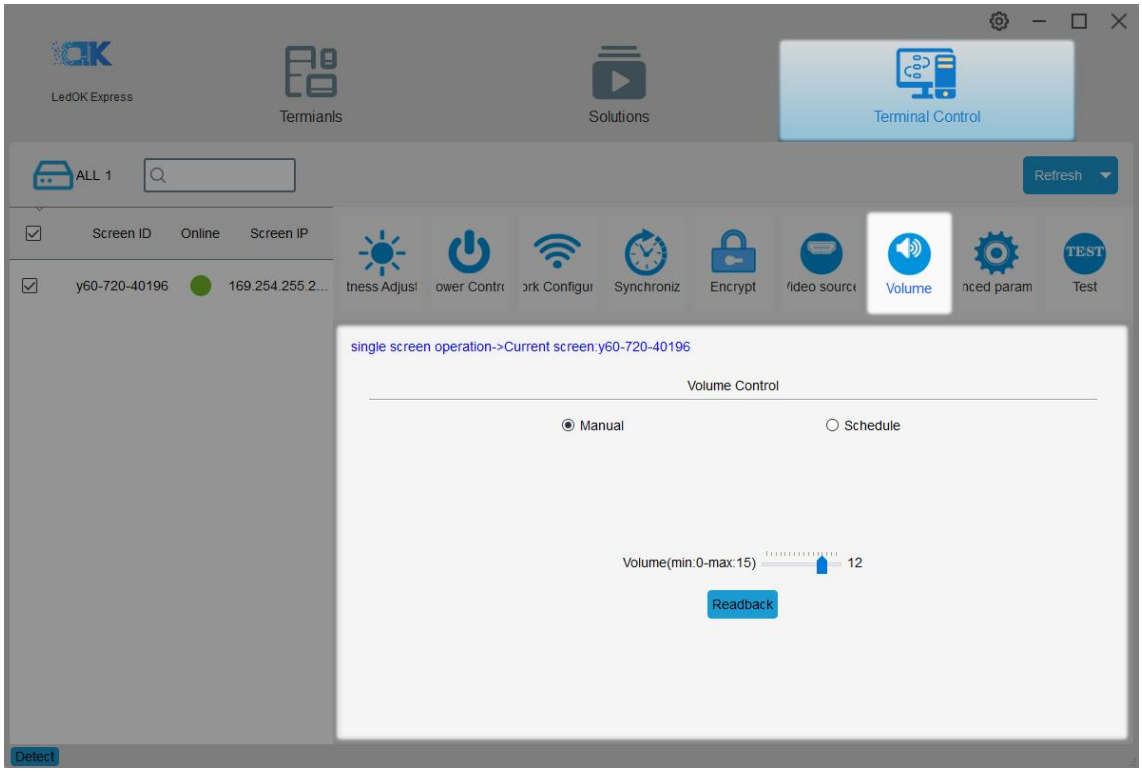
After finishing setup，click apply.

Can also export the schedule task from software to computer, or you can import the schedule tasks into software.



Volume——Manual

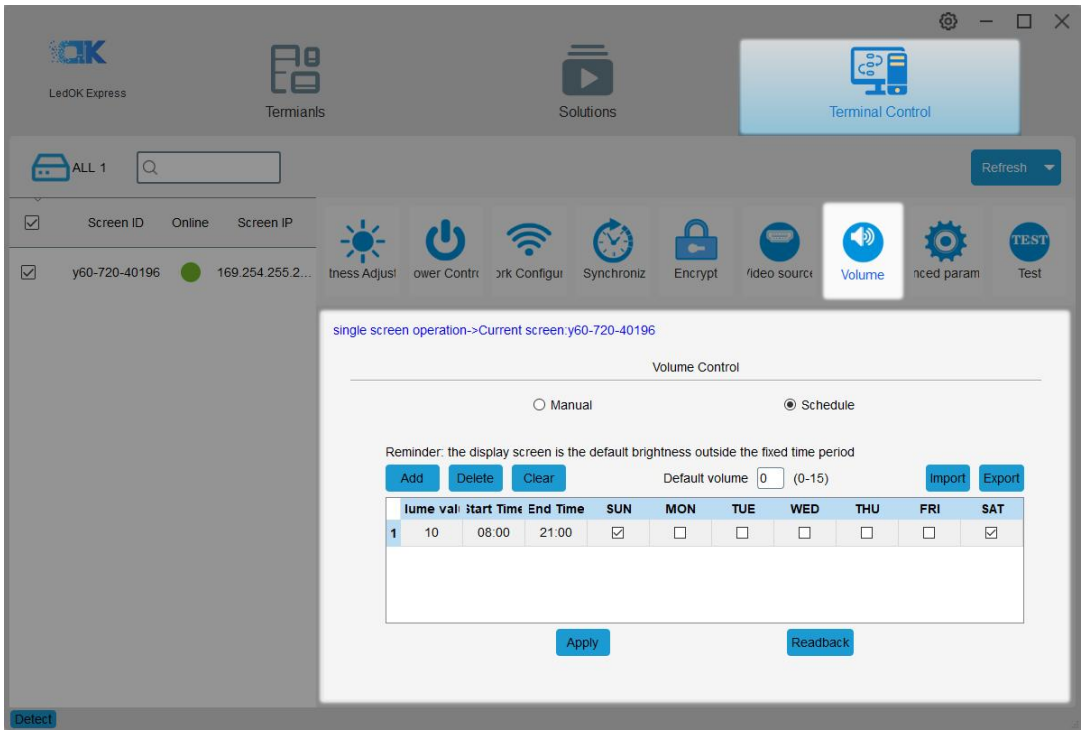
Select controller, then choose the volume range from 0 to 15, 0 is silence.



Volume——Schedule

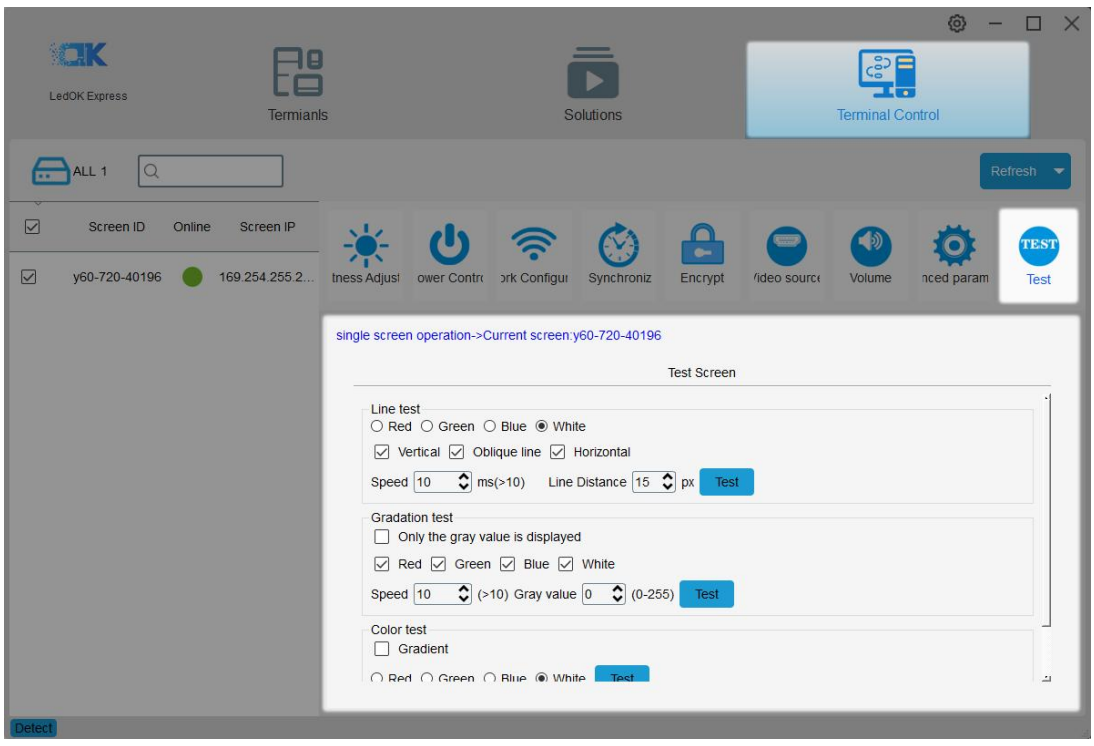
Can add volume schedule commands according to requests, add or clear the commands.

Support import and export schedule from or to computer.



TEST

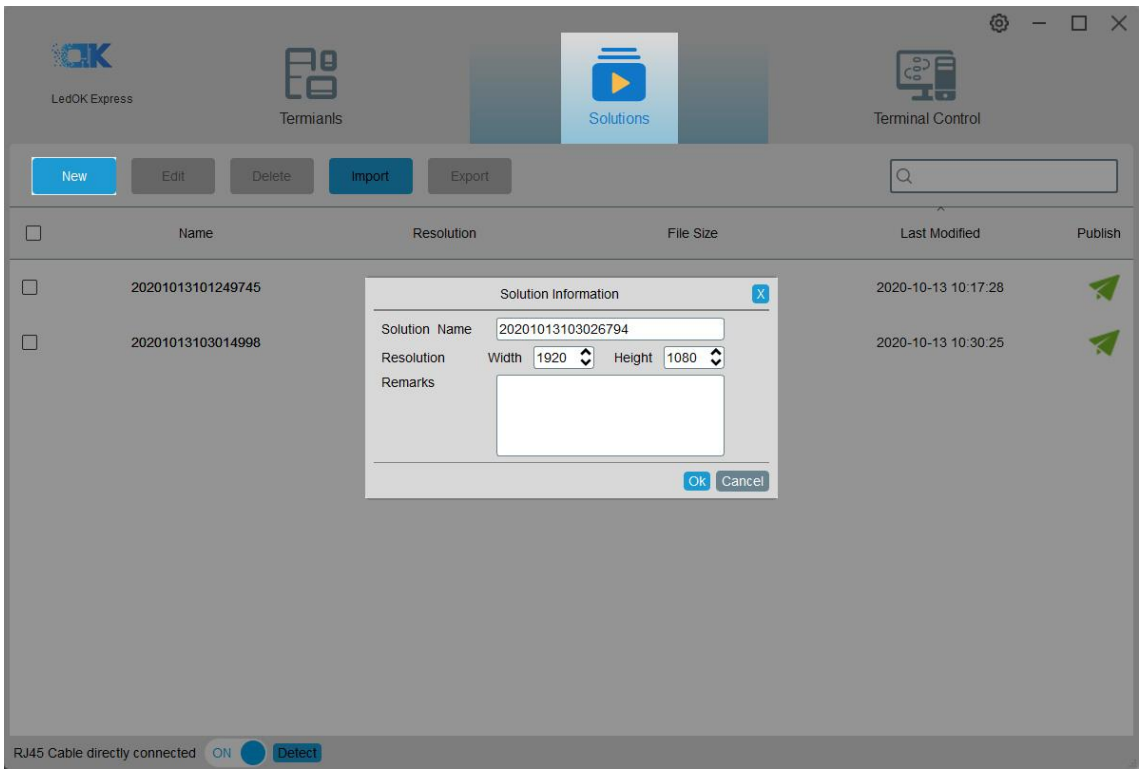
There are line test, gradation test and color test, mainly to check if configuration is correct. Please click Stop button in the bottom when done.



LedOK Upload /Publish Program

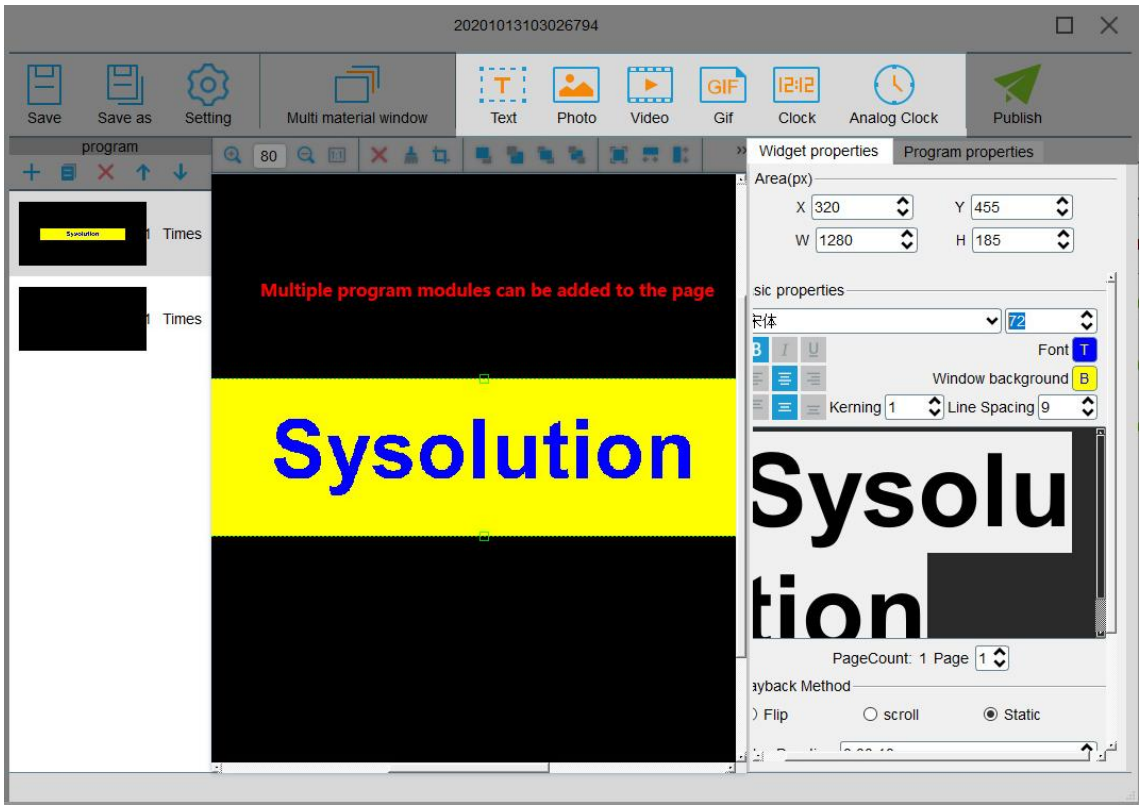
Add/Send Program

Open the program management interface, its name is Solution in software, then click New then input the program name and size information in the dialogue box and enter the editing interface.



Please insert the properties for each program type after selecting from the left side column.

Widget Properties: Can setup the properties for the text, image or video program,like program size, display times; while different widget properties for different types of program.



Program Properties: Can setup the program name, play times, valid date or play plans according to own requests.

① add page

② copy page

③ delete page

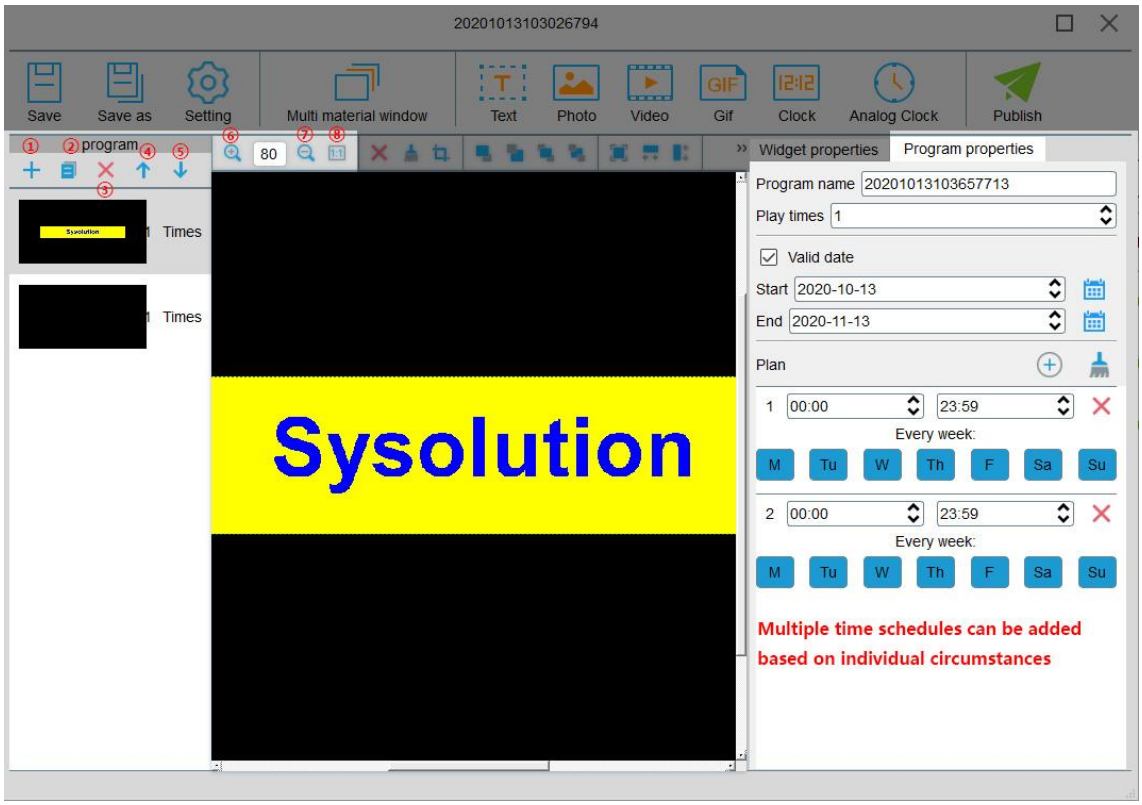
④ move up

⑤ move down

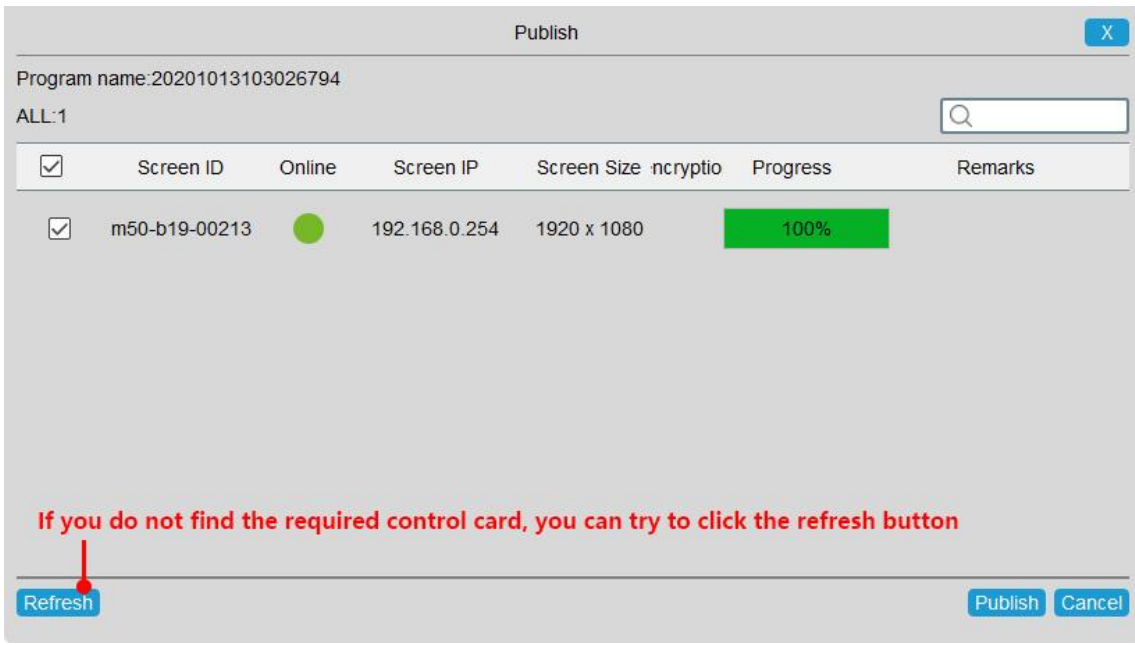
⑥ zoom in

⑦ zoom out

⑧ original size



Click publish button after done all setup, and select the controller id and click send, 100% means send success.



In multiple material window interface, can add more images in one window to realize more layers editing.

① delete media

② clear all media

③ cut media

④ move layer up

⑤ send backwards

⑥ bring to front

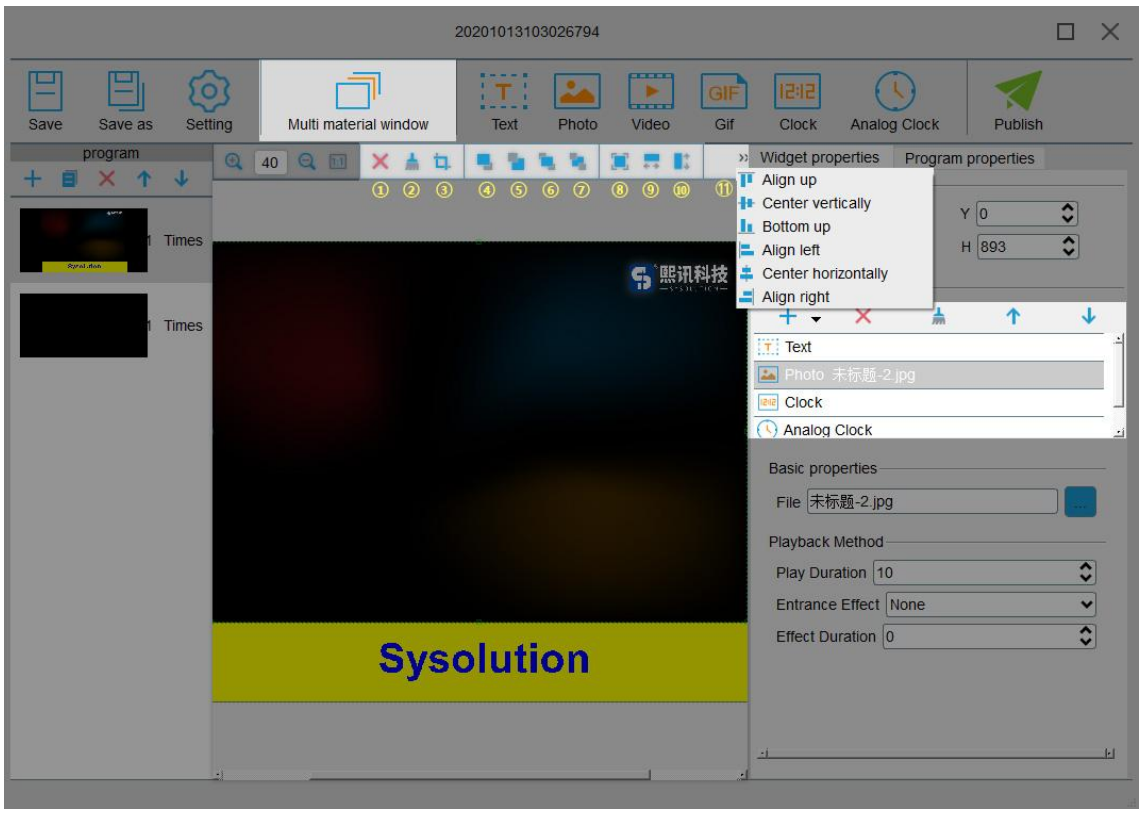
⑦ move to bottom layer

⑧ fill the entire screen

⑨ fill the screen horizontally

⑩ fill the screen vertically

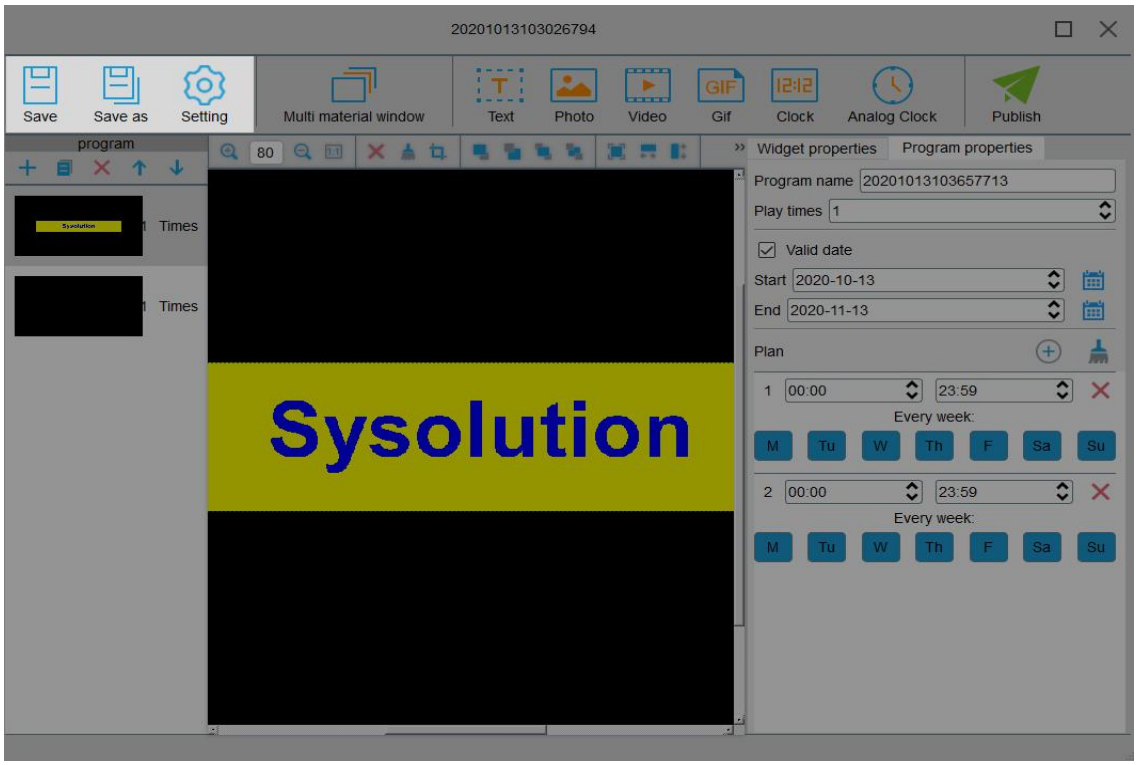
⑪ align up



Save: Save the program to the list.

Save as: Can save the program as another name.

Settings: Can setup program name, size and other notes information.



Can also edit/import/export or send program under solutions.