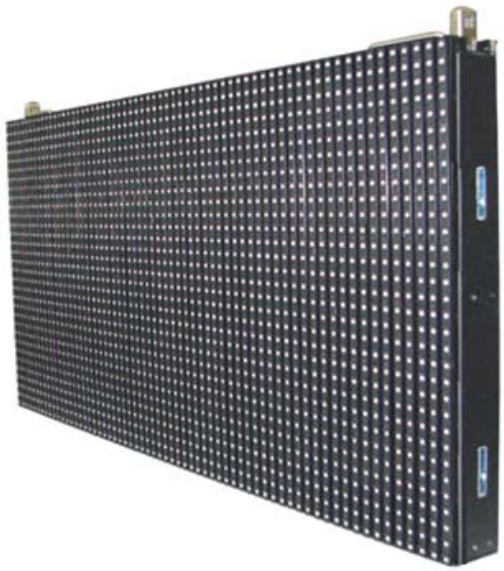
ROPIX®
visual systems

ROPIX P18

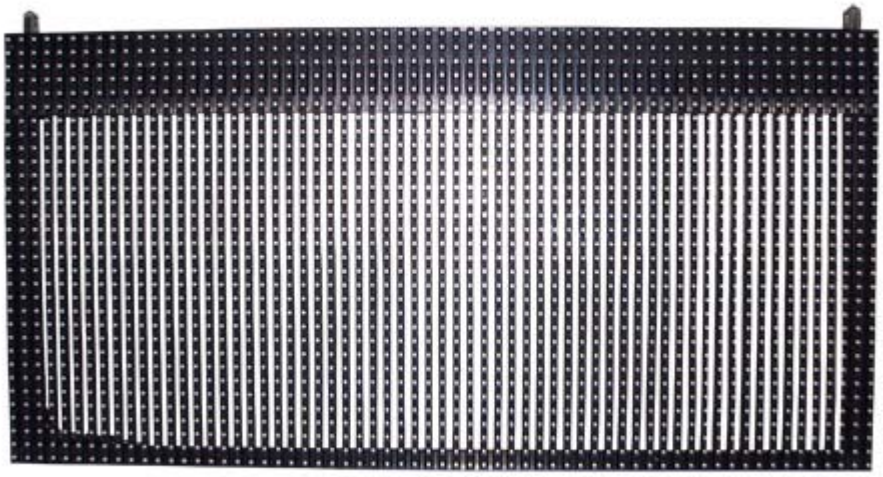


USER MANUAL

Index

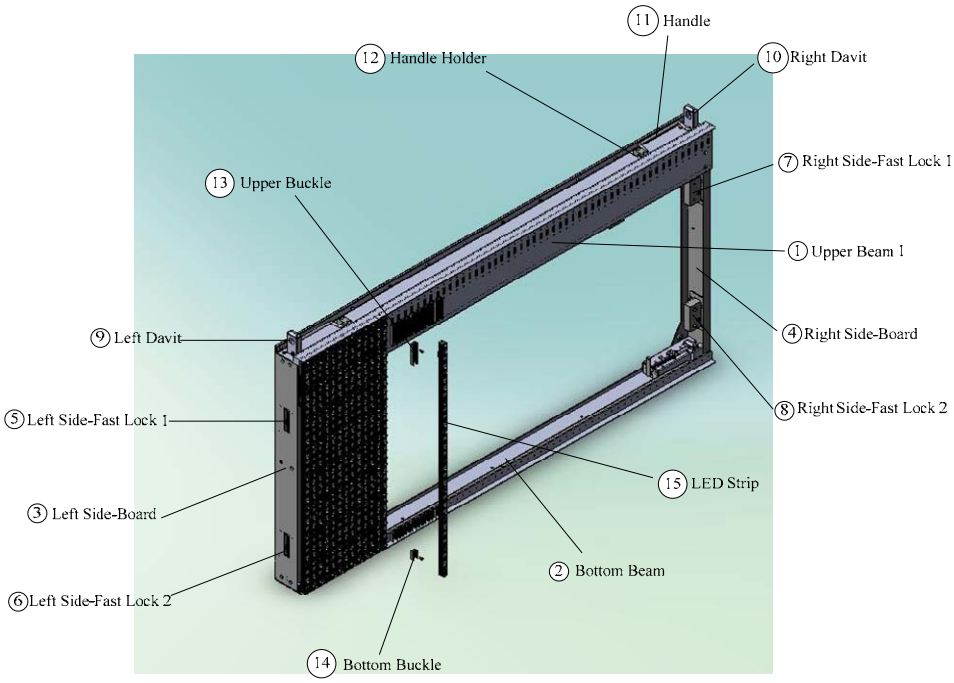
ROPIX P18 Hardware

I. ROPIX P18 Profile Overview

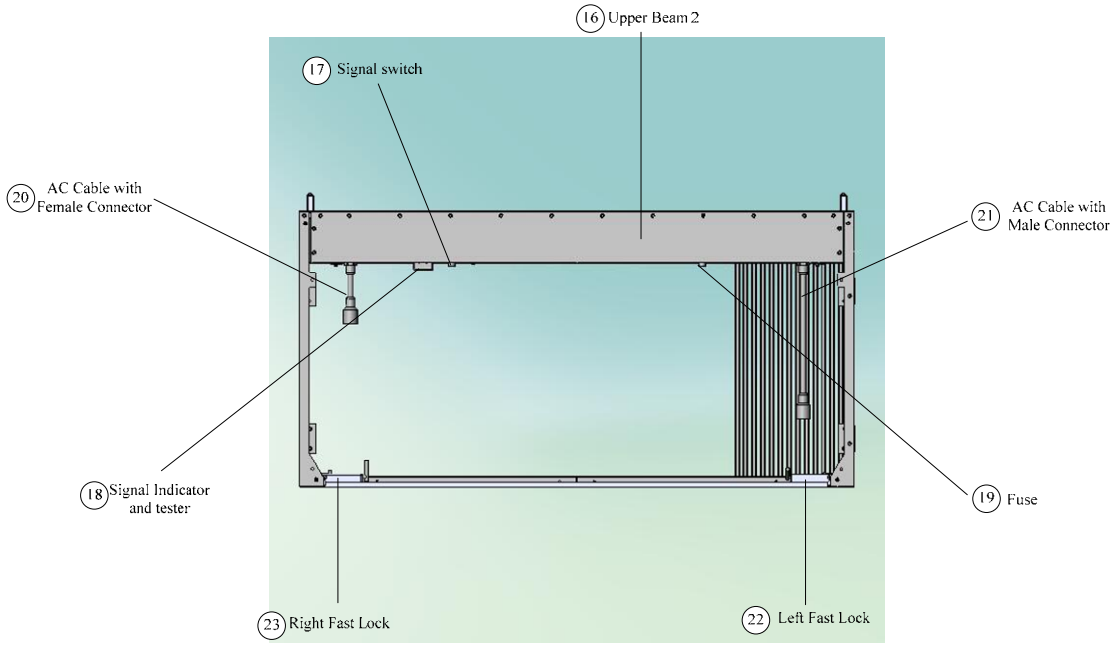


Pic 1. Overview

A cabinet is composed of 64 LED Strips, 64 pixels on horizontal, and 32 pixels on vertical; the dimension is 1152mm×576mm.



Pic 2. Front-side Overview



Pic 3. Back-side Overview

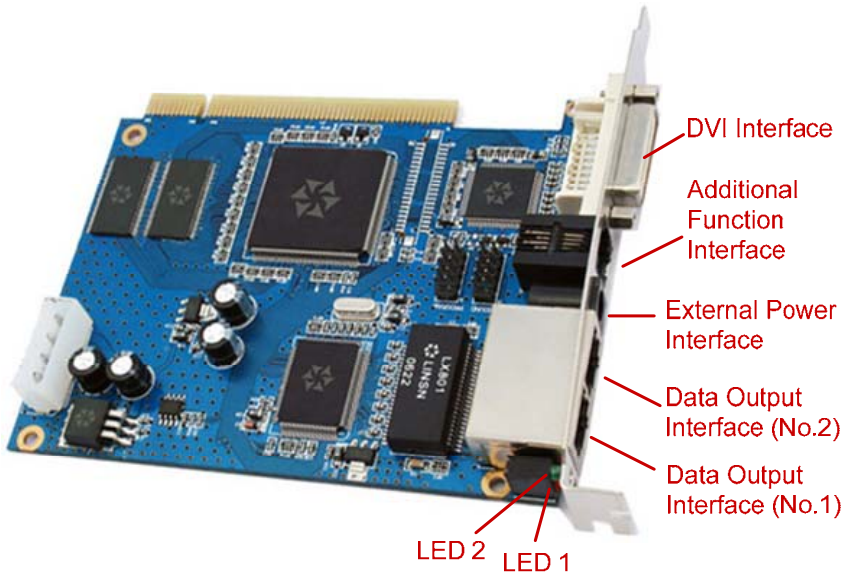
1- Upper Beam	2- Bottom Beam	3- Left Side-board
4- Right Side-board	5- Left Side-fast lock1	6 -Left Side-fast lock2
7-Right Side-fast lock1	8-Right Side-fast lock2	9-Left Davit
10-Right Davit	11-Handle	12-Handle Holder
13-Upper Buckle	14-Bottom Buckle	15-LED Strips
16-Upper Beam2	17-Signal Switch	18-Signal Indicator and Tester
19-Fuse	20-AC Cable with Female Connector	
21-AC Cable with Male Connector	22-Left Fast lock	23-Right Fast lock

II. Parameters

Characteristic	Value	Unit	Condition
Supply voltage	220	v	AC
Maximum power consumption	250	w/m^2	-
Operating power consumption	90	w/m^2	-
Pixel pitch	18	mm	-
Brightness	≥4000	cd/m^2	-
View angle	120	deg.	120(vertical)
Gray scale	4096	Level	
Refresh frequency	900	Hz	-
Frame frequency	60	Hz	
View distance	15~180	m	-
Operating temperature	-20~60	℃	-
Operating humidity	10~90	%	-
Maximum control distance	100	m	without relaying

II. Accessories introduction

Sending Card



Pic 4 Sending Card

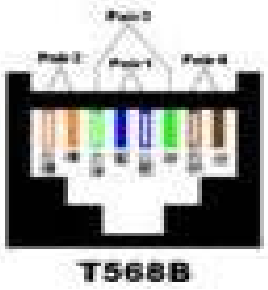
The *Sending Card* is to transmit data to receiving card on display. It has four kinds of interface, which are DVI interface, additional function interface, data output interface, and external power interface.

DVI interface: DVI interface is a data input port, which is exactly designed for Graphic card signal transferment.

Additional function interface: it is to control grey level, LED display power switch, locking display, and showing the area setup. To operate with LED Display, this interface is to connect with serial port for receiving card setup.

Data output interface: There are two output interface on each sending card. It is to connect with Receiving Card via pin-to-pin CAT5 UTP (4

unshielded twisted paired). The sequence of the twisted paired is: white-orange, orange, white-green, blue, white-blue, green, white-brown, and brown. It is shown as below. Both sides are the same sequence.



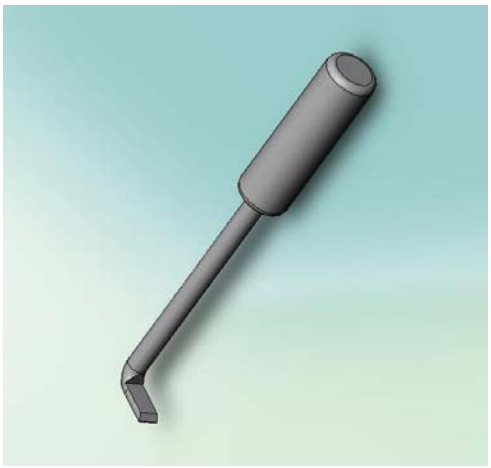
Data cable RJ45 connection sequence

External power interface: The power comsumption for sending card is 5V. If sending card is working without support from computer, external 5V power supply is needed to link to this interface. Besides, there are two indecators (one red, one green) next to this interface. Red indecator represents power supply, and green indecator represents data transferment. If the card is working properly, red indecator is on and green indicator is supposed to be flashing.

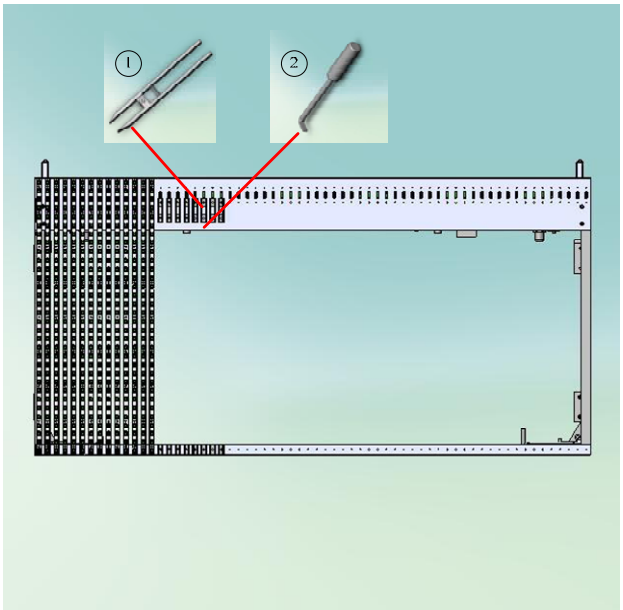
Receiving Card

Receiving card is building-in inside of each cabinet. The function is to receive data from sending card via Cat5 cable, then transfer data to led display signal. 5V power supply is required as well. The necessary setup is needed when a new receiving card is placed.

Maintenance Tools



Pry bar



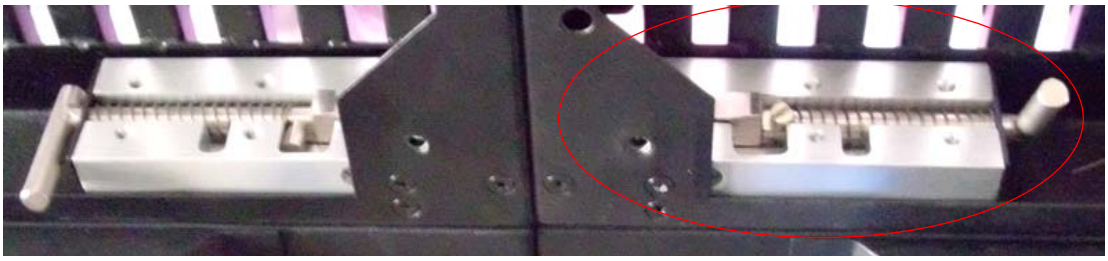
The tools are shown as above. Each ROPIX P18 cabinet is composed of 32 LED Strips. All LED strips are fixed on cabinet by two buckles. When LED strips replacement is needed, before removing LED strips, pry bar is needed to pry strips out smoothly without any damage.

III. ROPIX P18 Installation

Cabinet Assembly

The design of ROPIX P18l is focused on fast and easy assembly. Two sets of bottom fast locks and two sets of side fast locks are adopted.

Bottom fast lock



As shown before, P18 LED curtain contains two fast locks on each side of the bottom. The ROPIX P18 needs to use these two fast locks to fix all panels on vertical.

Controlling System Installation

a) Cable connection method

Graphic Card —*Via DVI*→ Sending Card —*Via Cat5 UTP*→ LED curtain wall

b) Install Sending Card

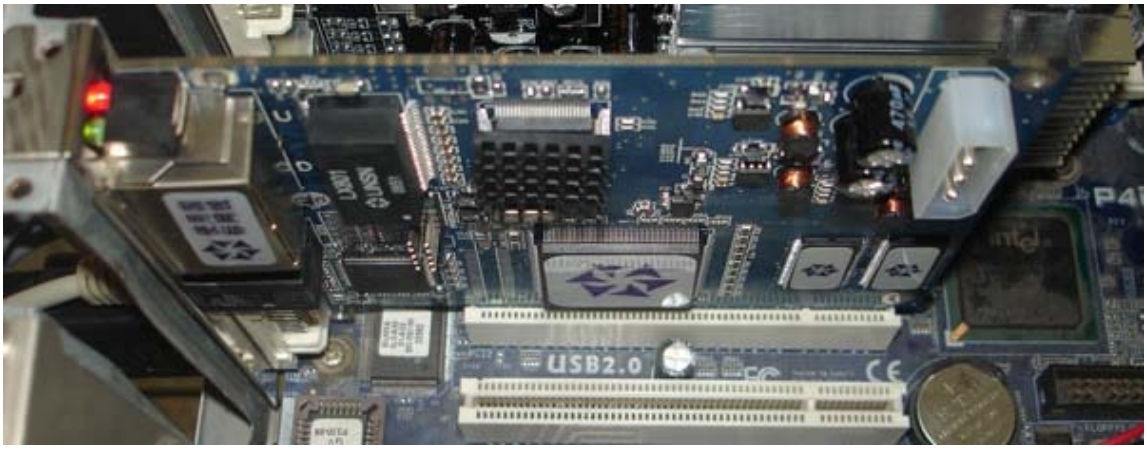
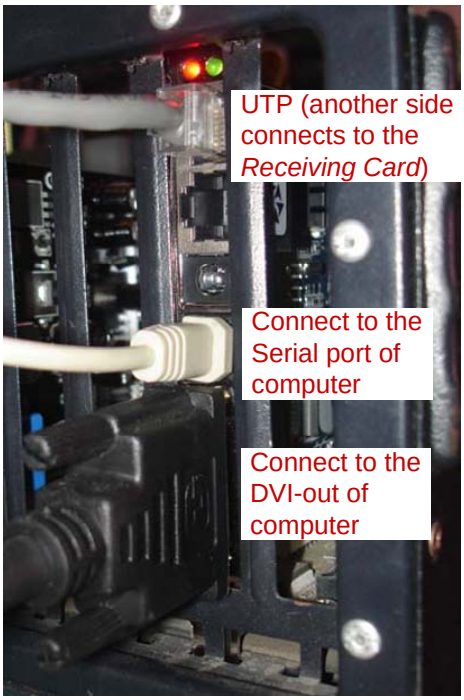


Fig 0-1

The *Sending Card* is installed in an unused PCI socket of control computer. Additional function interface is connected to Serial port. And

two signal output ports, U port and D port will connect ROPIX P18 via cat5 cable.

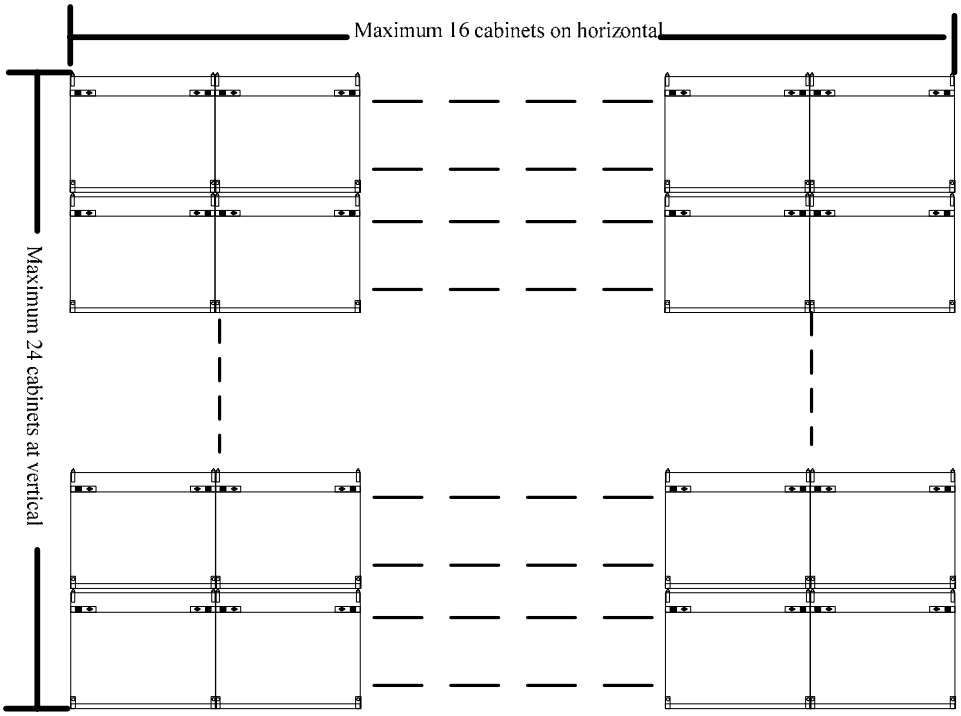


Digital Visual Interface（DVI）

Serial port

Sending card cable connection method

Three cables will be linked to sending card while the certain wall is working, which are DVI cable, Serial port cable, and Cat5E cable. DVI cable will be plugged to DVI port for data input to sending card; Cat5E cable will output signal data to receiving card; and proper Serial port connection is necessarily required when ROPIX P18 setup is needed.



One sending card can only support 1024 ×768 pixel dots, when you combine the cabinets, you have to make sure you does not exceed the maximum.

ROPIX P18 Software

I. Software Installation

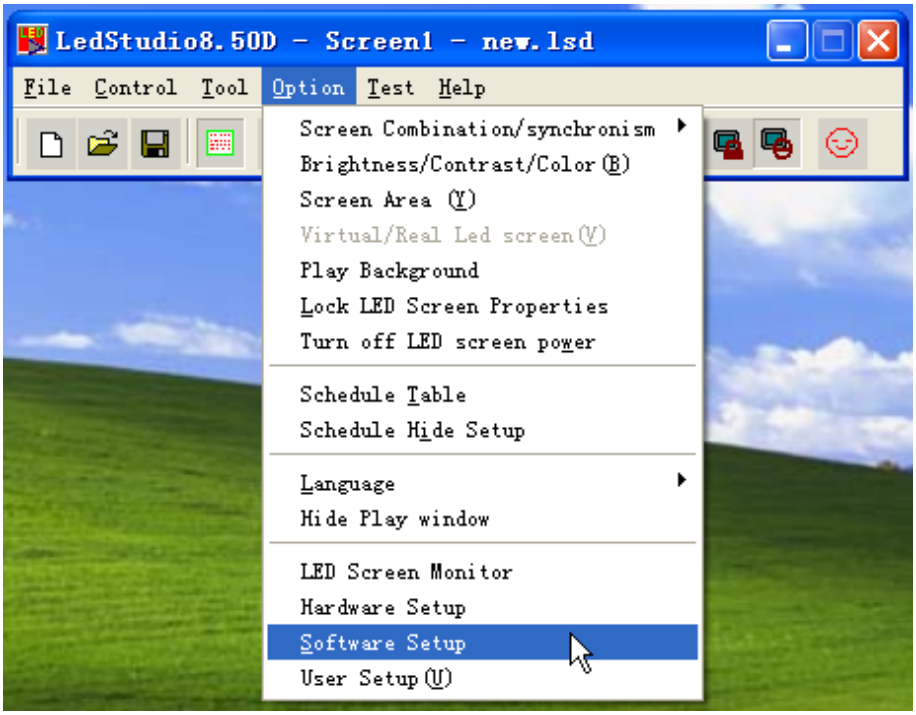
Insert disc of LEDStudio into CDROM, click setup file to install LEDStudio to computer harddisk. The serial number and password are asked during installation. The Serial number is 888888, and password is: 168. Please refer to LINSN user's manual for software operation detaill

II. Software setup

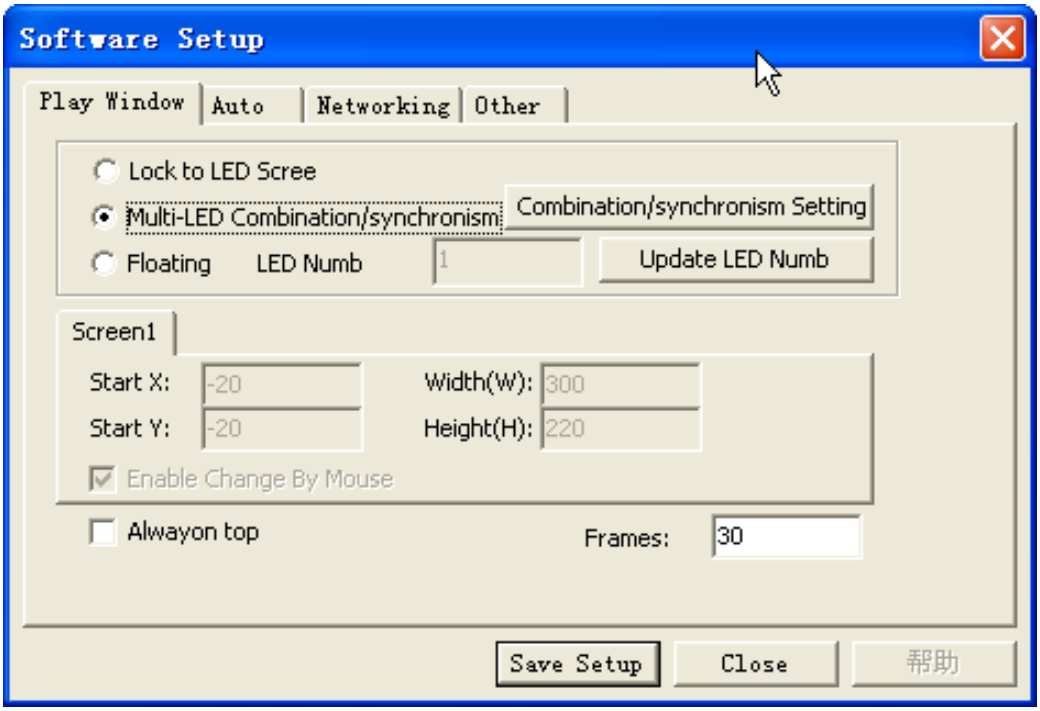
After software installation completed, ROPIX P18 setup is needed to be launched by software. Two parts of setup are required, 'Receiver Setup', and 'Display Connection Setup'.

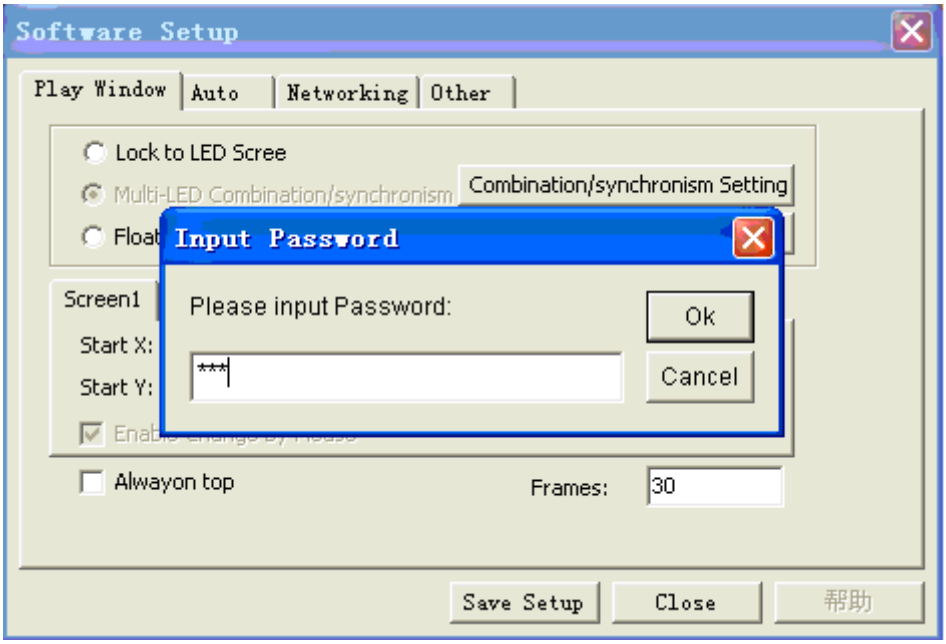
a. Receiver Setup

1. click 'option' menu, then click 'software setup' in the following picture.

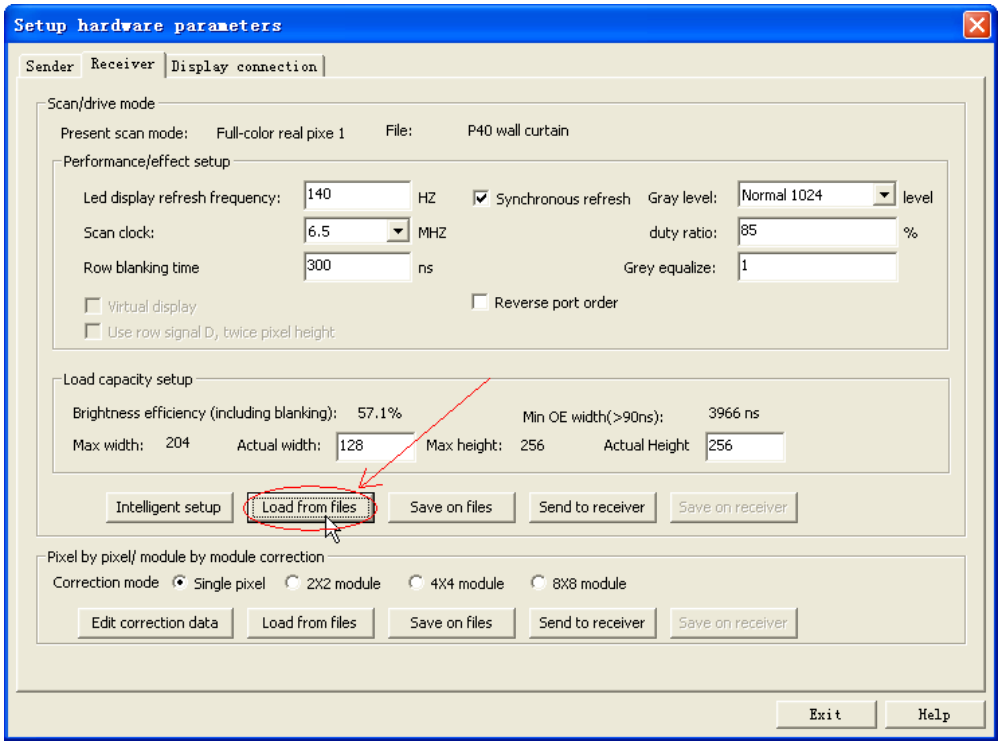


2. After active 'software setup', type 'linsn' on keyboard, pop-up menu will come out for requiring password, which is '168'.

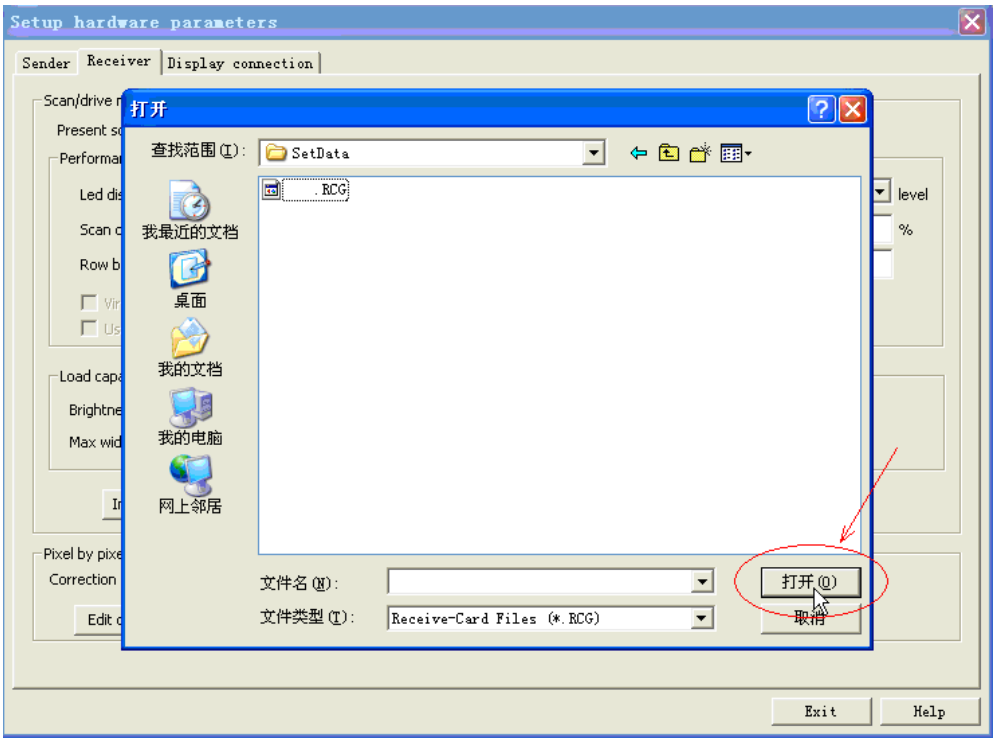

Software Setup
Play Window
Auto
Networking
Other
Lock to LED Scree
Multi-LED Combination/synchronism
Combination/synchronism Setting
Floating
LED Numb
1
Update LED Numb
Screen1
Start X:
-20
Width(W):
300
Start Y:
-20
Height(H):
220
Enable Change By Mouse
Alwayon top
Frames:
30
Save Setup
Close
帮助


Software Setup
Play Window
Auto
Networking
Other
Lock to LED Scree
Multi-LED Combination/synchronism
Combination/synchronism Setting
Input Password
Please input Password:
***
Ok
Cancel
Screen1
Start X:
Start Y:
Alwayon top
Frames:
30
Save Setup
Close
帮助

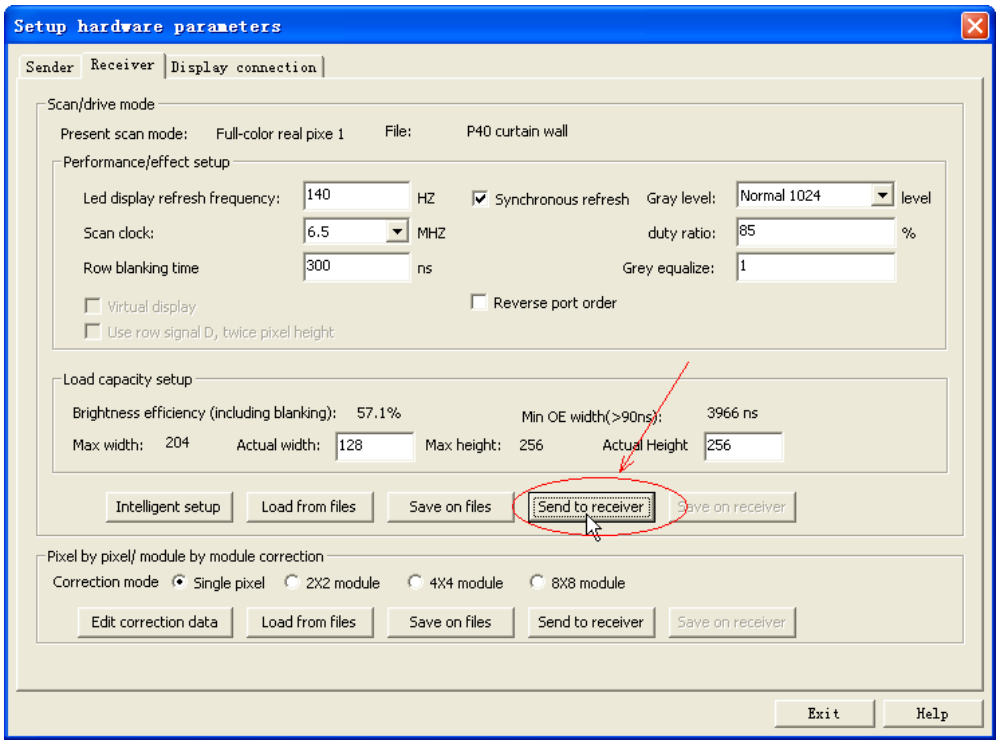
3. Setup hardware parameters menu will appear after key in password. Select ‘receiver’, click ‘load from files’ in the window.



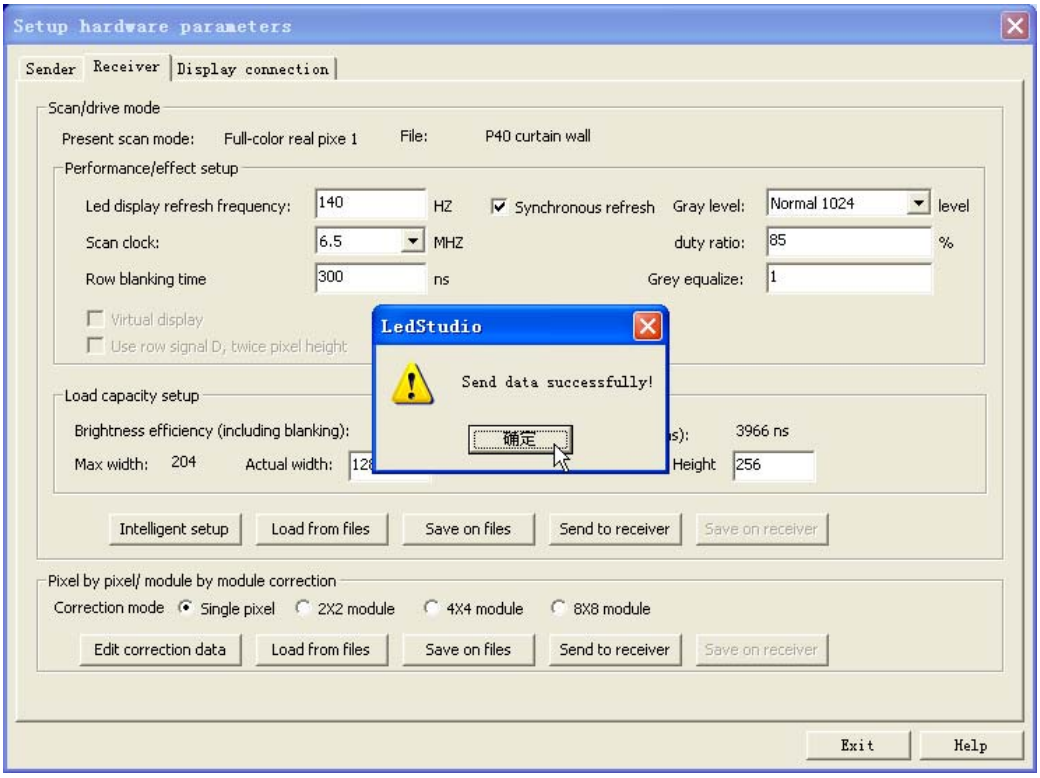
4. Choose ready upload control system files which is provided.



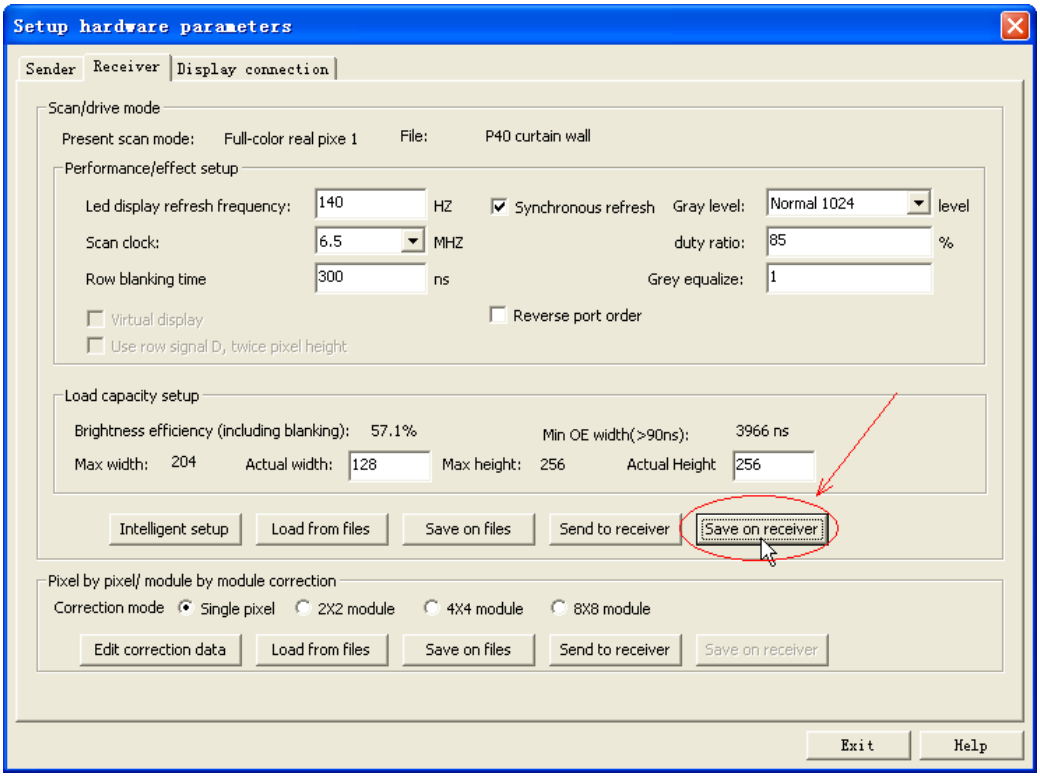
5. Click ‘send to receive’ in picture to see mention window, then click ‘yes’.



6. Click ‘yes’ in the mentioned ‘send data successfully’ window. For example:

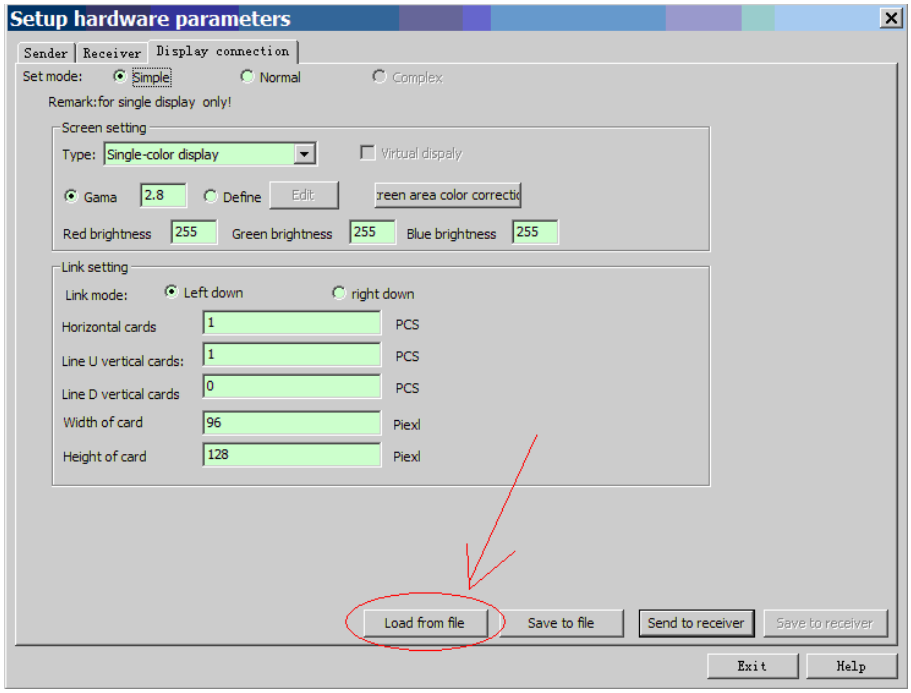


7. Click ‘save on receiver’ to show ‘data save successfully’ window. Then operation is over.

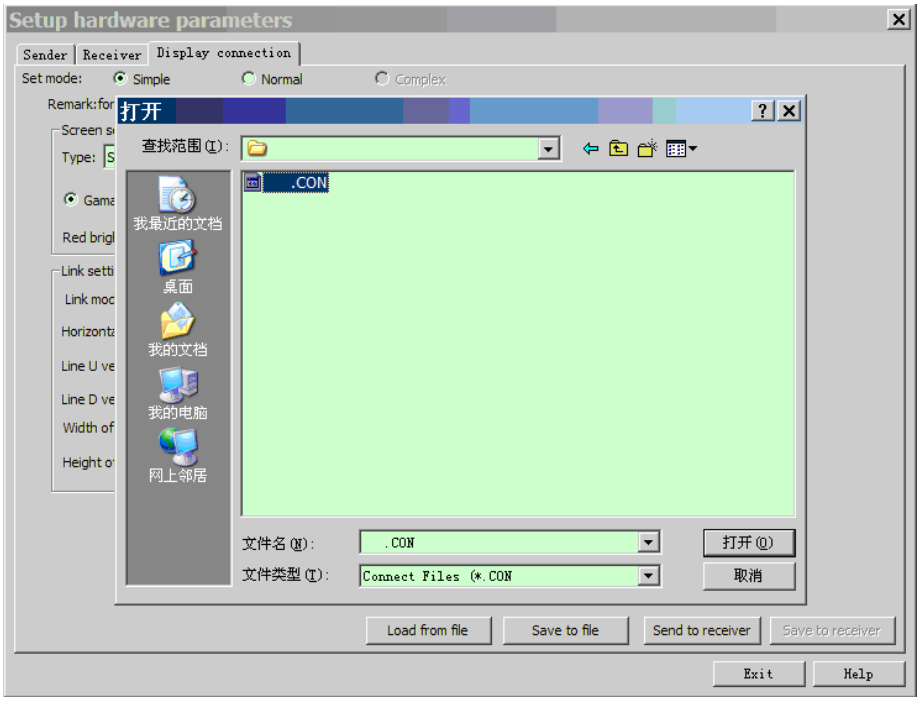


b. Display Connection Setup

1. Click ‘Display connection’ and clicks ‘load from files’ in the window.



2. Choose ready files (*.CON) in the pop-up window.



3. After loading the file, click ‘Send to receiver’ to update the setting, and the click ‘Save on receiver’ to save all setting. Then the operation is over.