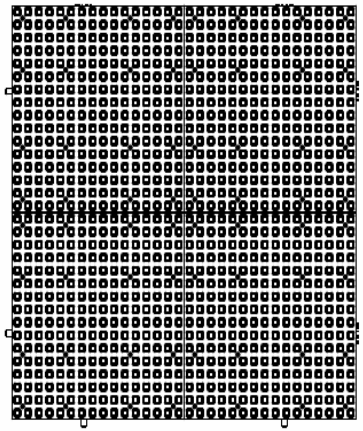
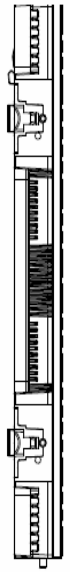
| | |
|---|---|
| Pixel Pitch | 10mm |
| Unit Size | 480x480x60mm |
| LED Type | 5050 3in1 LED |
| Brightness | 4500 nit |
| Viewing Angle | 140° x 140° |
| Contrast | 5000:1 |
| Gray Scale | 16bit / RGB |
| Refresh Frequency | 1000HZ |
| Video Input | DVI |
| Life Span | 100,000hours |
| Weight | 11.5KG |
| IP Rating | IP65 |
| Working Voltage | 90-260V 50-60HZ |
| Power Consumption | Max 180W / panel，<br>Average 60W / panel |
| Ambient Temperature | -10~40℃ |
| Relative Humidity | 10-99%RH |

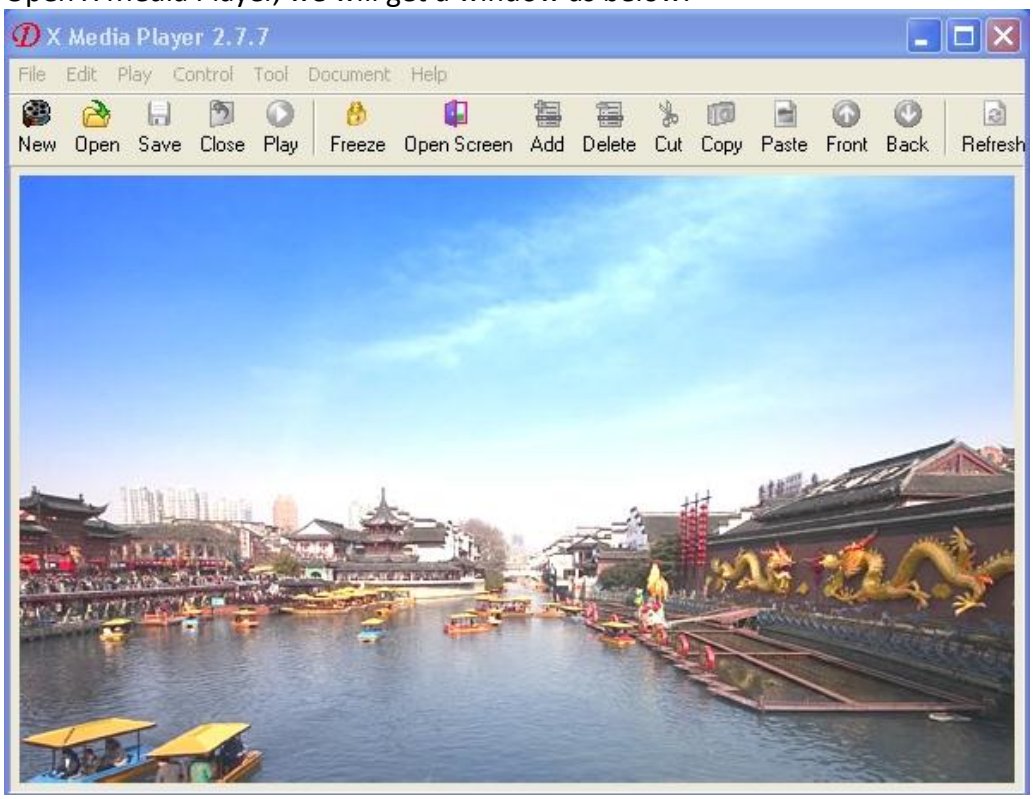




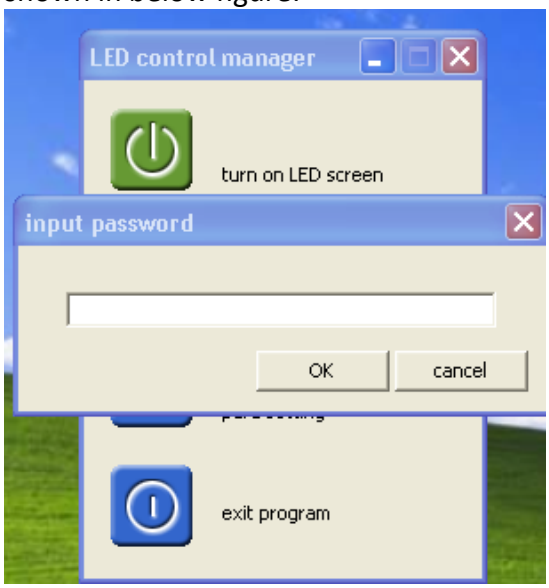
## System software setting

If you windows system is win7, right click your mouse on the software and choose the administrator mode to install.

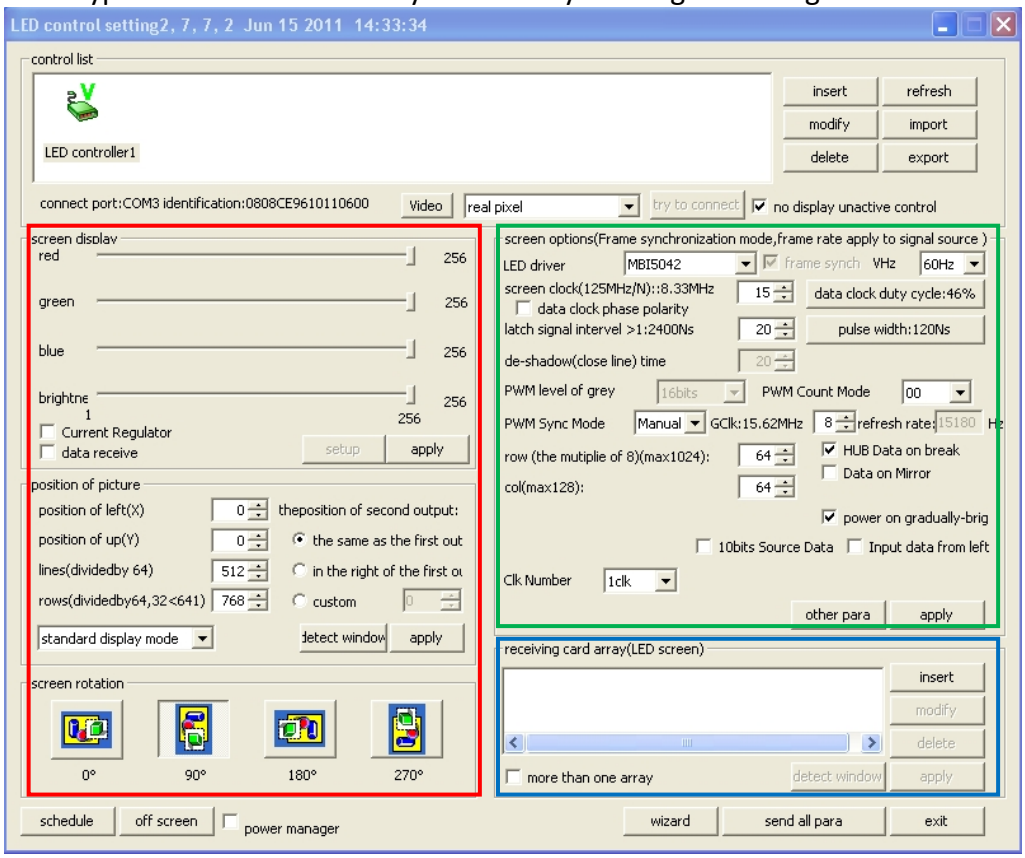
Open X Media Player, we will get a window as below:




Click “Control——>LED controller configure”, and then will appear a dialog box, click “para setting”, as shown in below figure:



Then type “dbstarled” in the keyboard and you can get a dialogue box as below.

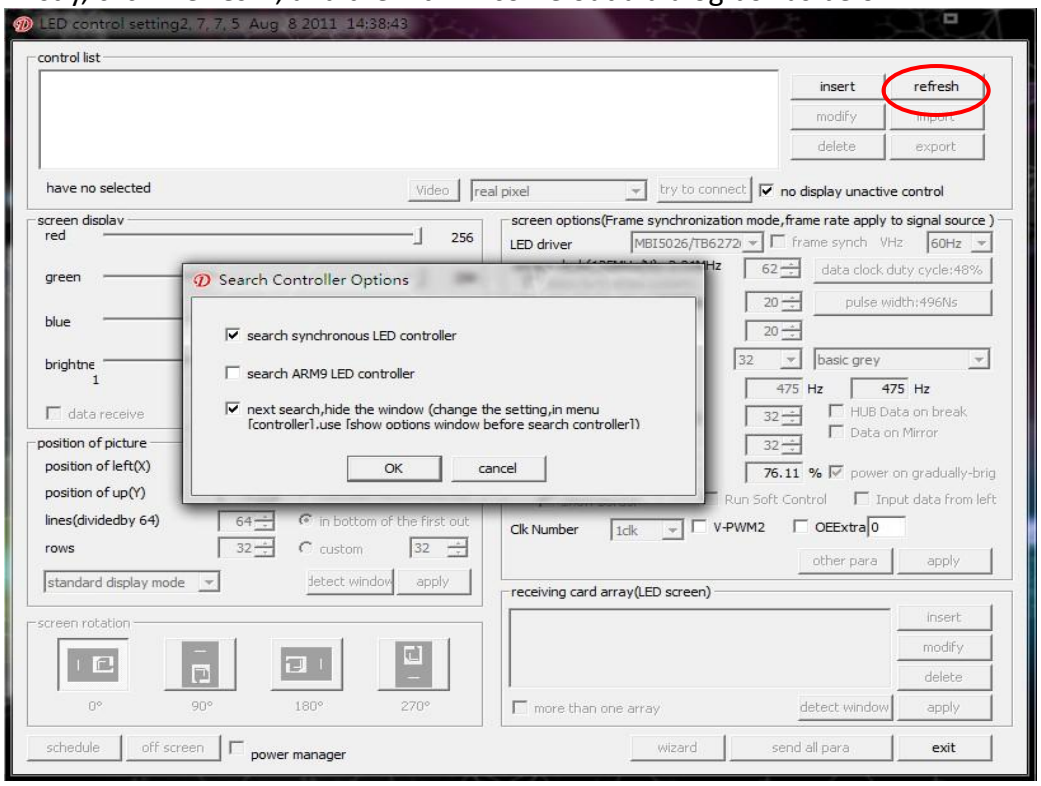



Red circle shows sending card setting

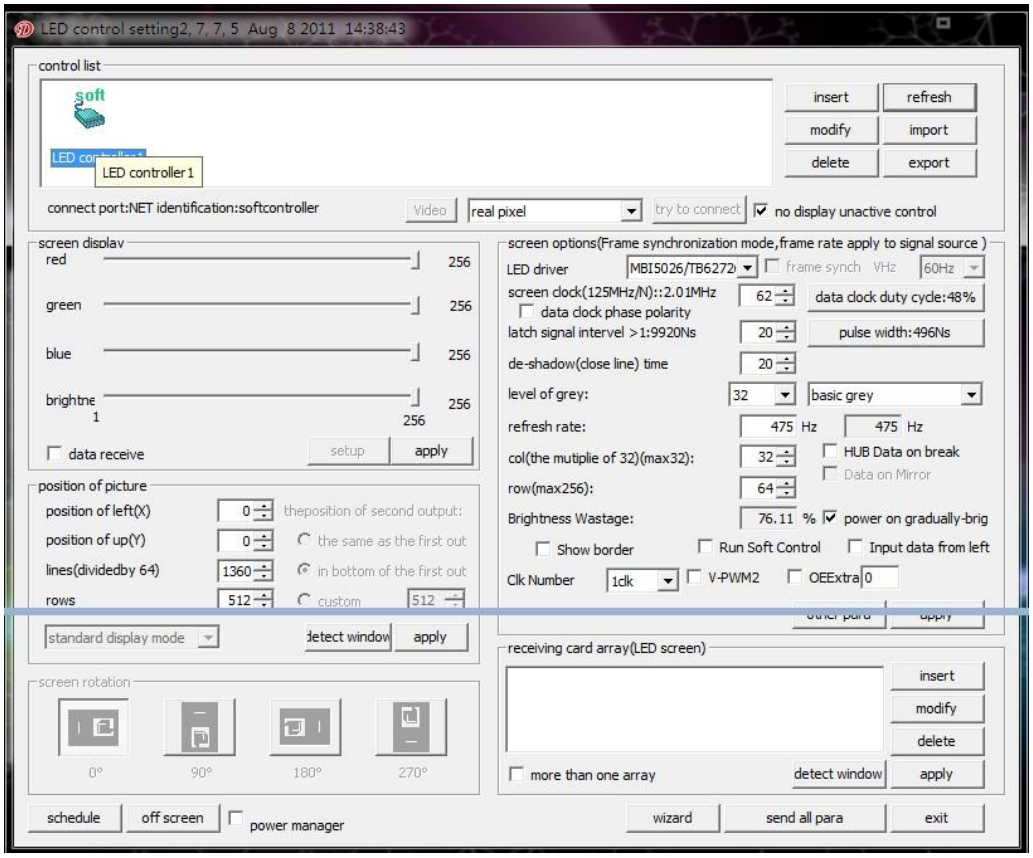
Green circle shows receiving card setting.

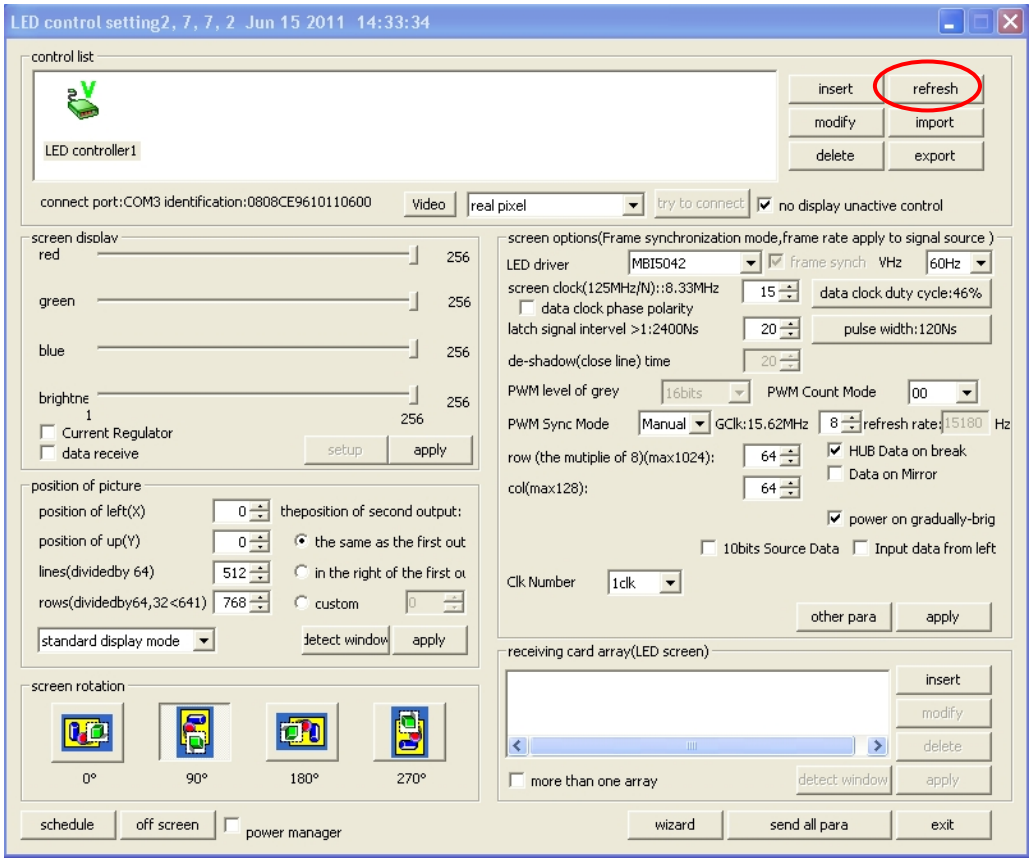
Blue circle shows the connection of cabinets of your LED display.

Firstly, click “refresh”, and then it will come out a dialog box as below.

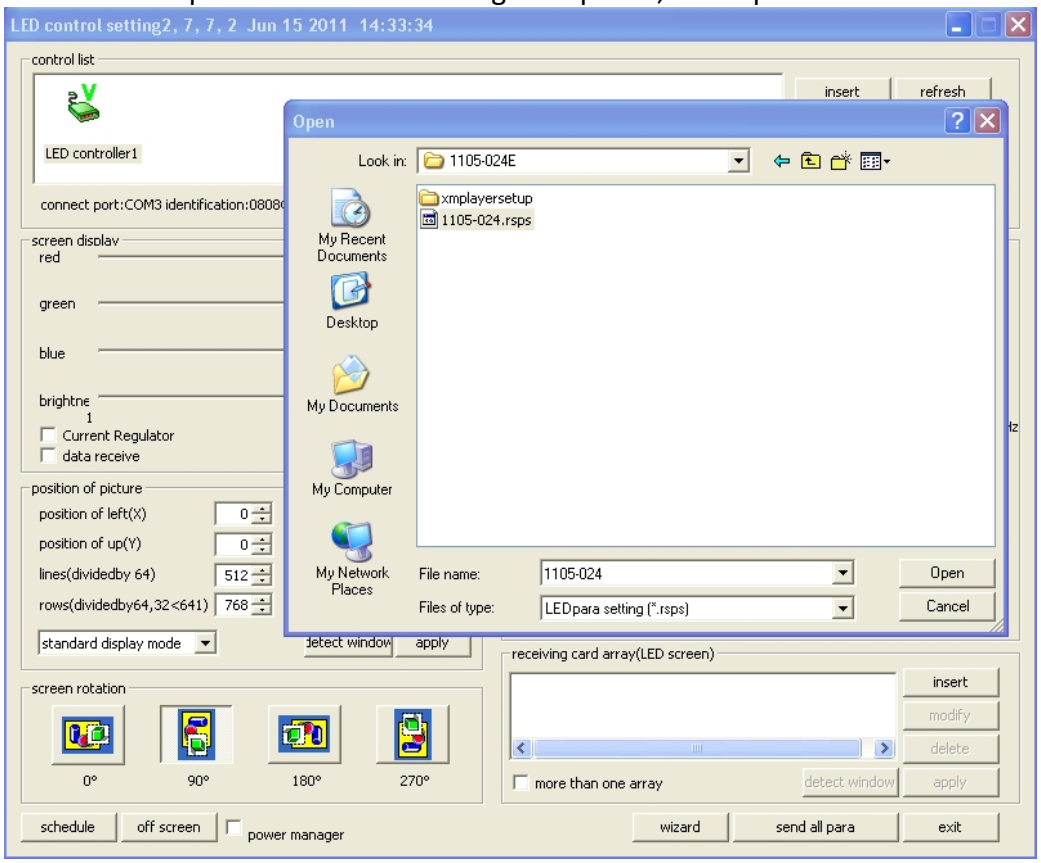



click “OK” and choose the “LED controller”.

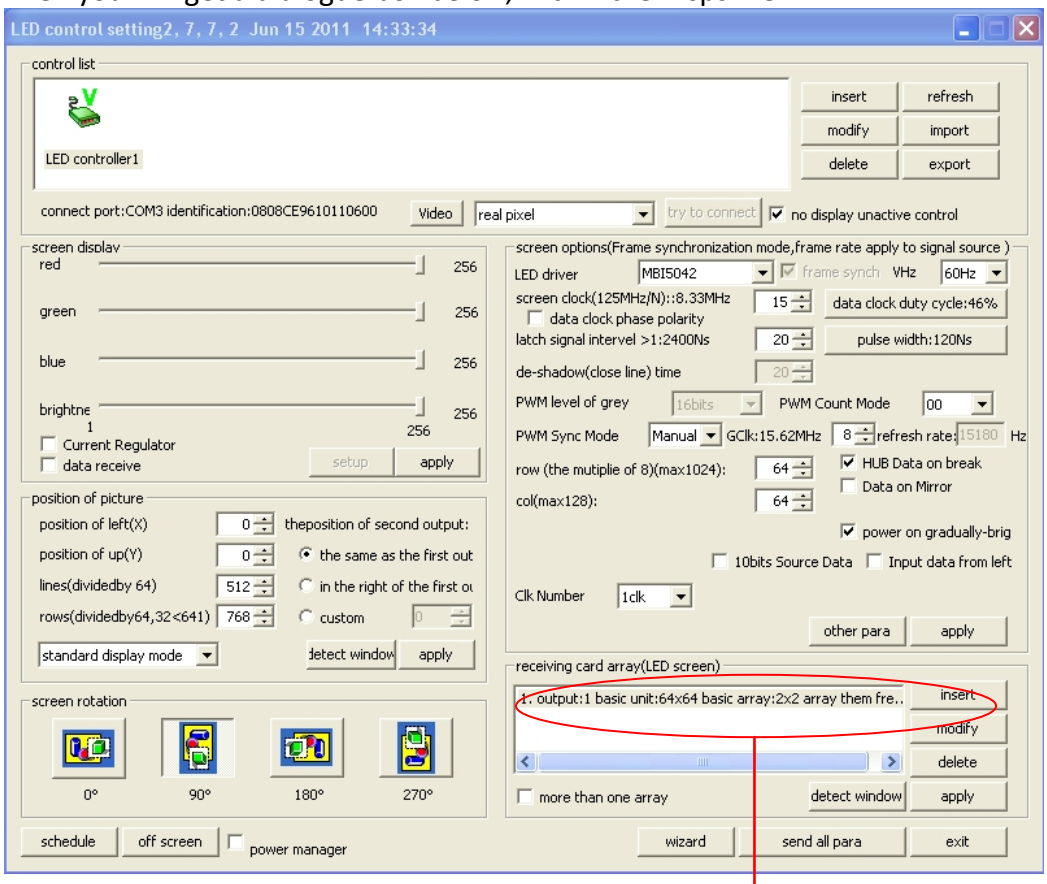

LED control setting2, 7, 7, 5 Aug 8 2011 14:38:43
control list
soft
LED controller 1
insert
refresh
modify
import
delete
export
connect port:NET identification:softcontroller
Video
real pixel
try to connect
no display unactive control
screen displav
red
green
blue
brightne
1
256
data receive
setup
apply
position of picture
position of left(X)
position of up(Y)
lines(dividedby 64)
rows
theposition of second output:
the same as the first out
in bottom of the first out
custom
standard display mode
detect window
screen rotation
0°
90°
180°
270°
screen options(Frame synchronization mode,frame rate apply to signal source )
LED driver
MBI5026/TB6272
frame synch
VHz
60Hz
screen clock(125MHz/N)::2.01MHz
data clock phase polarity
data clock duty cycle:48%
latch signal intervel >1:9920Ns
pulse width:496Ns
de-shadow(close line) time
level of grey:
basic grey
refresh rate:
475 Hz
col(the mutiplie of 32)(max32):
row(max256):
HUB Data on break
Data on Mirror
Brightness Wastage:
76.11 %
power on gradually-brig
Show border
Run Soft Control
Input data from left
Clk Number
1clk
V-PWM2
OEExtra
receiving card array(LED screen)
more than one array
schedule
off screen
power manager
wizard
send all para
exit


LED control setting2, 7, 7, 2 Jun 15 2011 14:33:34
control list
LED controller1
insert
refresh
modify
import
delete
export
connect port:COM3 identification:0808CE9610110600
Video
real pixel
try to connect
no display unactive control
screen displav
red
green
blue
brightne
1
256
Current Regulator
data receive
setup
apply
position of picture
position of left(X)
position of up(Y)
lines(dividedby 64)
rows(dividedby64,32<641)
theposition of second output:
the same as the first out
in the right of the first ou
custom
standard display mode
detect window
screen rotation
0°
90°
180°
270°
screen options(Frame synchronization mode,frame rate apply to signal source )
LED driver
MBI5042
frame synch
VHz
60Hz
screen clock(125MHz/N)::8.33MHz
data clock phase polarity
data clock duty cycle:46%
latch signal intervel >1:2400Ns
pulse width:120Ns
de-shadow(close line) time
PWM level of grey
16bits
PWM Count Mode
00
PWM Sync Mode
Manual
GClk:15.62MHz
refresh rate:
15180
Hz
row (the mutiplie of 8)(max1024):
col(max128):
HUB Data on break
Data on Mirror
power on gradually-brig
10bits Source Data
Input data from left
Clk Number
1clk
other para
receiving card array(LED screen)
more than one array
schedule
off screen
power manager
wizard
send all para
exit

Then click “import” and choose the right *rsps file, click open to add it. As show in below:

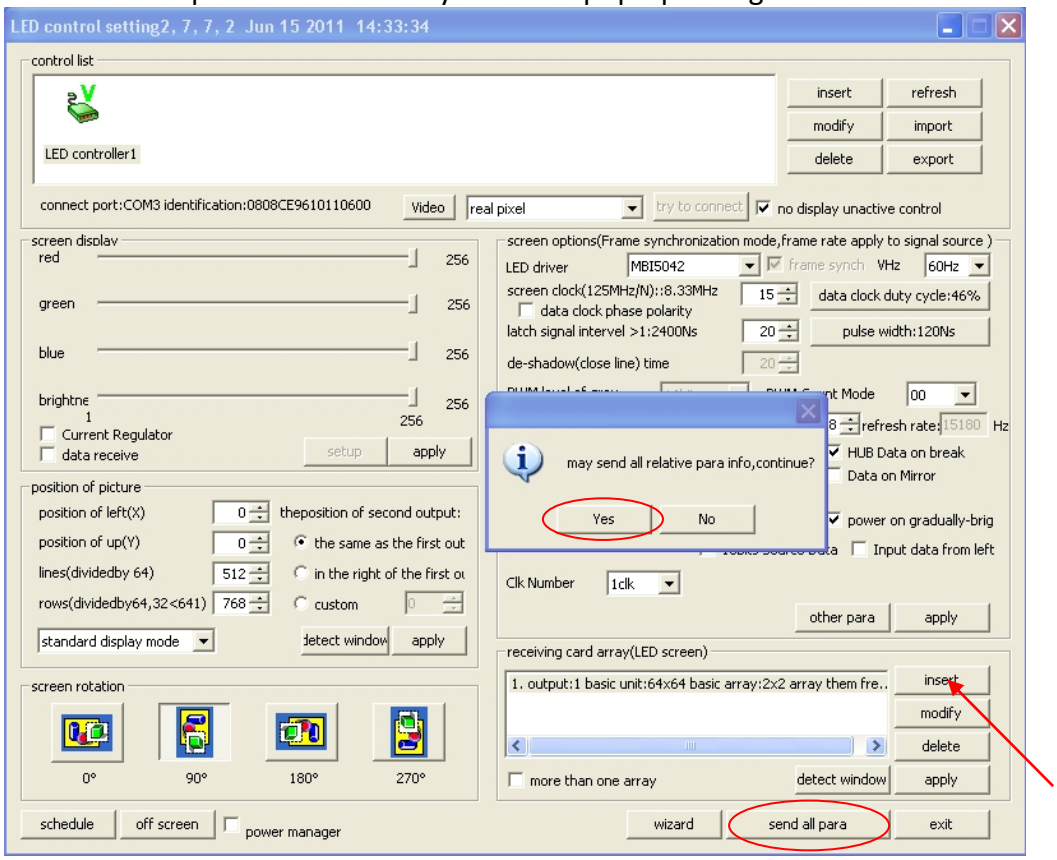



Then you will get a dialogue box below, within the *rsps file in.



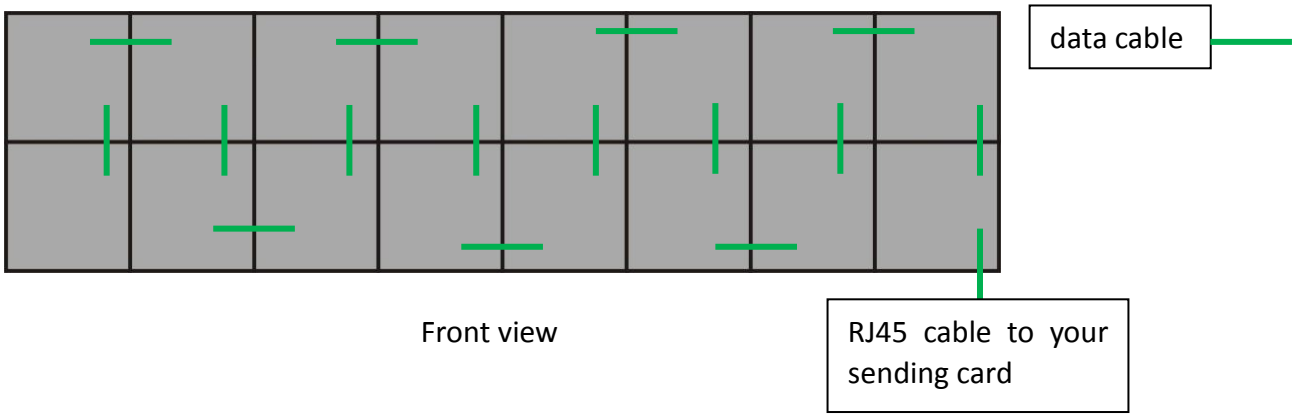

***The *rsps file shows here***

Click “send all para” and choose “yes” in the pop-up dialogue box. Then the software setup is done.

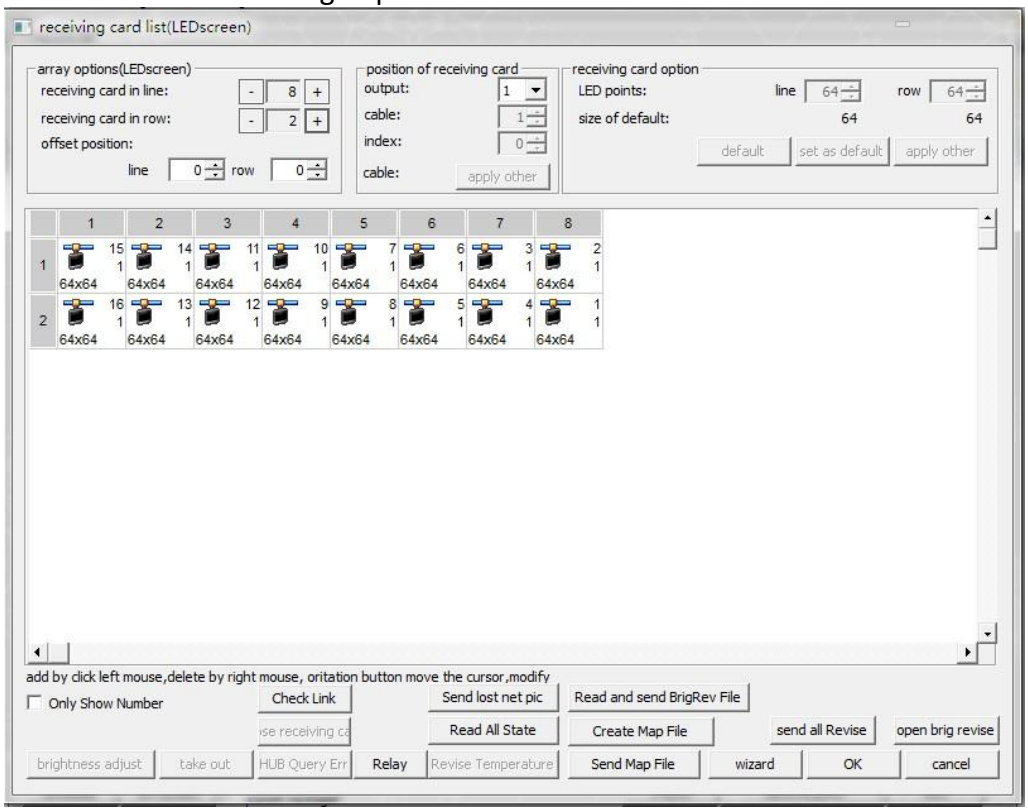



After everything is OK, you don’t need to change the receiving card setting in next use. The refresh rate, level of grey and other parameters of built-in receiving cards are constant. They are saved in the *.rsps file. So the file is important. You need keep it well. If you change the parameters, or there is anything wrong with your panels, just send this file for resetting.

Then click “insert” and set the connection of panels. This is the configuration of 8×2.
The number of the panels should correspond with the hardware signal connection.
For example, the connection of your 8×2 display shows as below:

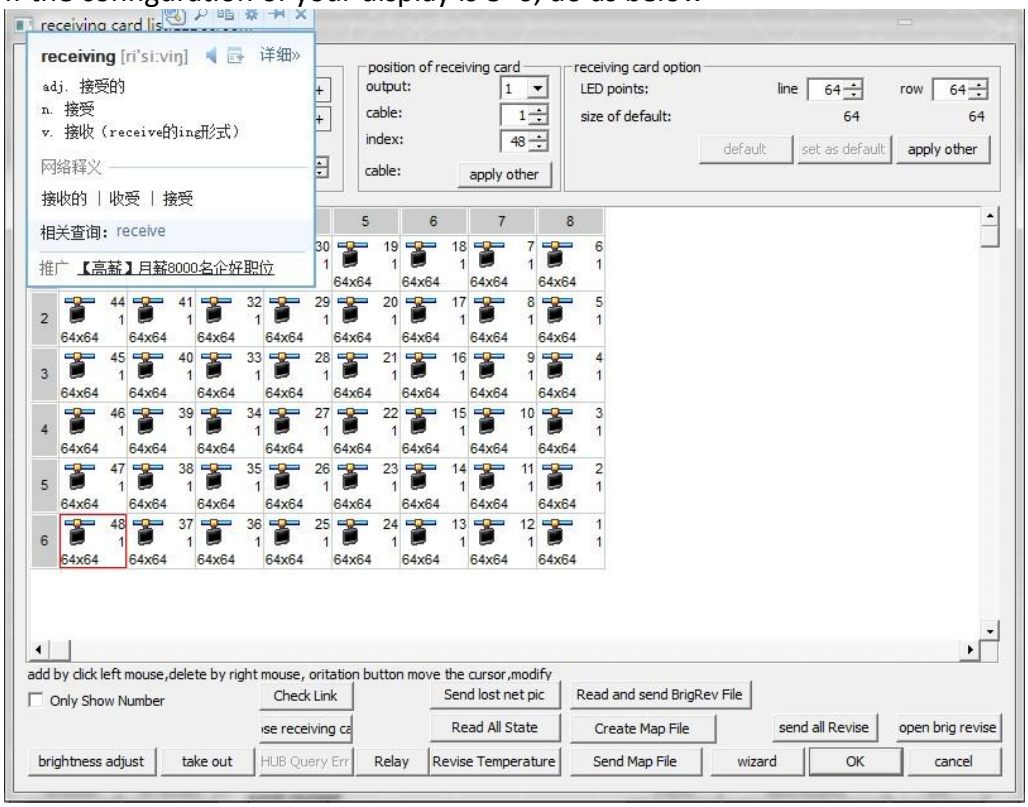


So the connection setting of panels should be set as below:




Then click “OK” and send to parameters to receiving cards.

If the configuration of your display is 8×6, do as below



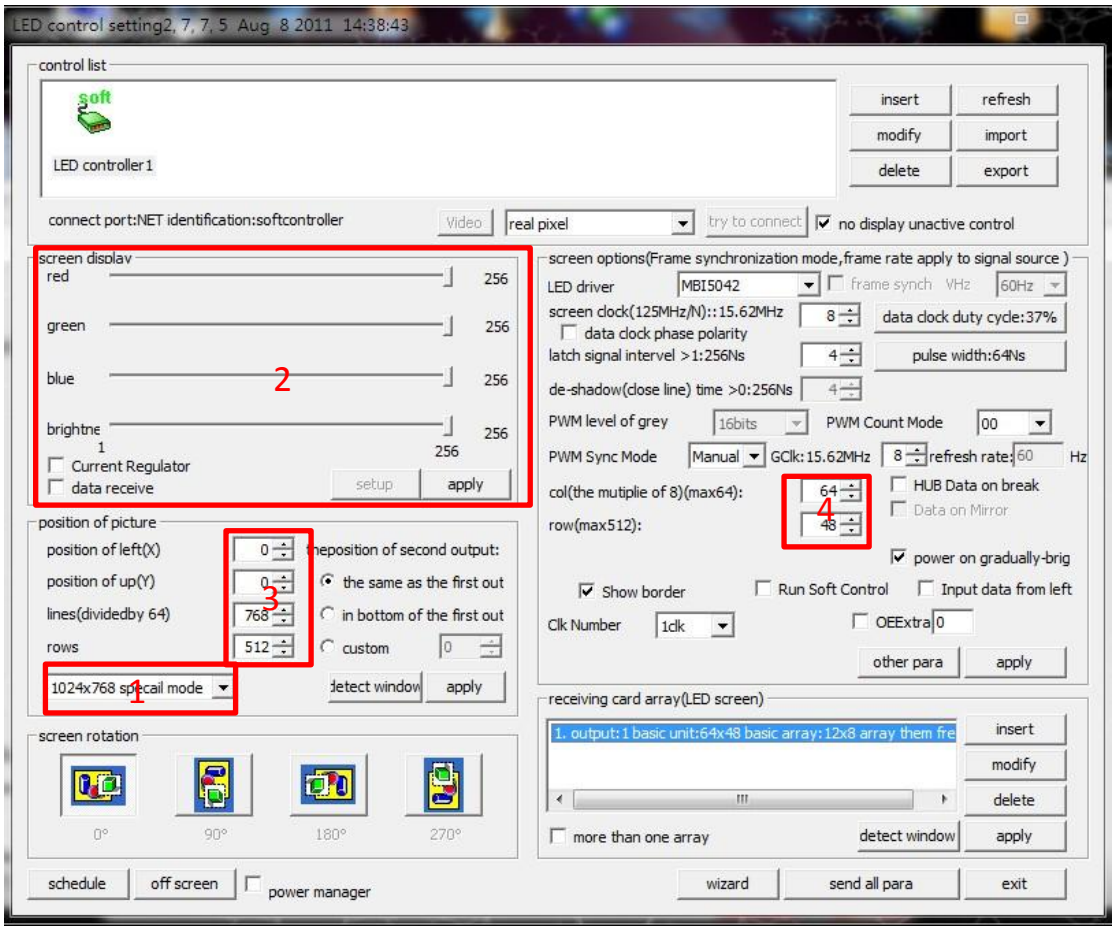

Over!

Then you can see your LED display as a big screen. The DVI input port on the sending card is the video signal input of your display. So different video input must be changed to DVI signal by your VSP618, and be sent to the sending card for display.

Dear Jason

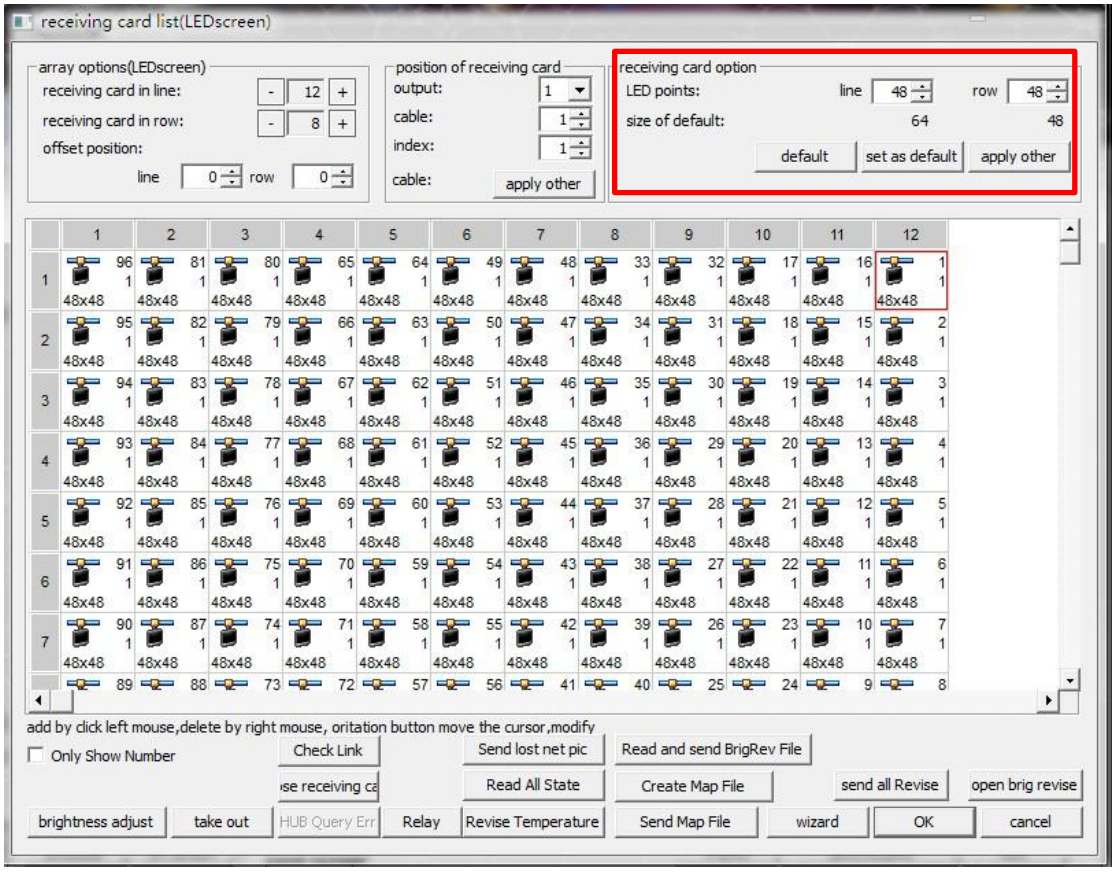
I'm Daniel. I have changed my e-mail to obu25@szlamp.net . Please reply to my new e-mail.

Here is the dialog box of parameter setting.




1. The red circle 1 shows the output resolution of video signal of DVI input, or the resolution of your sending card, not the physical resolution of your LED display. Often we set it to 1024×768. It means that your display will show images as resolution of 1024×768. Your VSP618 output and other video signal output resolution must be set to 1024×768×60HZ, too. They are must be the same with the resolution of your sending card. You display whose configuration is 8×3 will show part of the whole image. You need to change the size of image to match your display.
2. The red circle 2 shows the brightness setting area. You can adjust the brightness of your display to meet your need, then apply.
3. The red circle 3 shows the position and size of display area of the whole output resolution of 1024×768 video signal. Often we set "X" to "0", "Y" to "0", "lines" to "768", "rows" to "512". The max size is 1280×512 for one RJ45 cable's load capacity.
4. The resolution of sharpe 10 is 48×48. But we must set it to 64×64 or 64×48 because of our special circuit design. Just send rsps to receiving card and don't care about this parameter.

If you use your laptop as output, you must change the multi-screen mode to clone mode. Your display will show the same image with your laptop's monitor. Often show the left-top part of the monitor, because the physical resolution of your display is not 1024×768. Here, you have to change the resolution of you laptop to 1024×768 to match the sending card setting mentioned above.




Here we choose one panel, and set LED points to 64 in line and 48 in row, or 64 in line and 64 in row. And then apply other. After this setting, just connect panels with number corresponding to physical connection. Then Ok and send to all.

For the VSP618, please try installing the software first, and then connect the USB cable, maybe have a COM6 checking on the left bottom of the operation windows. Then click a red button in communication area which on the top of operation windows, it will change to green. Please try again. If it doesn't work, contact me.

# Sharpe 10mm floor display

## Installation & Operation Mannual

June 15,2011

Document Version: LP-Smart-P7.62-1.1.doc
Shenzhen LAMP Technology Co.,ltd.
T: +86 755 2981 0402 F: +86 755 2765 3206 E: obu@szlamp.net www.szlamp.net

# Sharpe 10mm Floor Display
# Installation & Operation Manual

June 15th, 2011
Version #: LP-Sharpe-P10 floor-1.1.doc

**Changes**

Shenzhen LAMP Technology Co., ltd. may make improvements or changes to the products described in this document at any time without notice.
This document could contain technical inaccuracies or typographical errors. Changes are periodically made to the information in this document. Shenzhen LAMP Technology Co.,ltd assumes no responsibility or liability for any errors or inaccuracies that may appears in this document.



**Contact Info**

Shenzhen LAMP Technology Co.,ltd.
Building 3, Nangang No.1 Industrial Park
Xili, Nanshan District
Shenzhen, China 518055
Tel: +86 755 2765 3939
Fax: +86 755 2765 3206
Email: obu@szlamp.net
Website: www.szlamp.net

# Content

# 1. Safety

## About this Chapter

This chapter contains important information to prevent personal injury while install your Sharpe 10mm LED floor display. Furthermore, it includes several precautions to prevent damage to the display. Ensure that you understand and follow all safety guidelines, safety instructions and warning mentioned in this chapter before installing the LED display.

**Overview**

- Safety guidelines
- Important safety instructions
- Important warnings

## 1.1 Safety guideline

**Personal protection**

**WARNING**: Ensure you understand and follow all the safety guidelines, safety instructions, warnings, and cautions mentioned in this manual.

**WARNING:** Be careful while working with heavy loads.

**WARNING:** Mind your fingers while working with heavy loads.

***Installation personnel***

This installation must be performed by authorized and qualified technical personnel only. Accredited safety officers must ensure the safety of site, construction, assembly, connection, use, dismantling, transport etc. of such safety critical system.

***Caution***

Installation should be performed only after you have familiar with all of the proper safety checks and installation instructions. To do otherwise increases the risk of hazards and injury to the user. Do not modify and replicated any component. We use specific materials and manufacturing processes in order to achieve part strength.
The manufacturer assumes no liability for incorrect, inadequate, irresponsible or unsafe assembly of system.

***Product Care***

Structure & mounting components should be kept dry, clean, coated properly, and otherwise maintained in a manner consistent with part design. We recommends inspections at regular intervals for all installations and increasing in frequency for more critical installations. If a part is found to have damaged, which may cause a decrease in load capability, the part must be removed for service or replaced immediately.

## 1.2 Important safety instructions

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions
- Clean only with materials or chemicals that are inert, nonabrasive, non-marking. Consult the manufacturer for further advice should any doubts exist regarding any cleaning procedure.
- Do not block ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
- Do not defeat the safety purpose of the polarized or grounding type plugs/sockets. If the provided sockets/plugs are damaged then replacement of the defective parts must be undertaken immediately.
- Protect the power/data cords from being walked or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. Replace damaged power/data cords immediately.
- Only use attachments/accessories specified by the manufacturer.
- Disconnect the power to this apparatus during lightning storms or provide suitable additional lighting protection. Unplug this apparatus when unused for long period of time.
- Use caution during lifting/moving or transporting to avoid damaged by possible tipping.

# 2. Installation Requirements

## 2.1 System requirements for Control software

---

***Before you begin***

Is assumed you are familiar with the Windows operating system at your site.

The CD-ROM in your package contains a Windows-based installation program. You can install the software from the CD-ROM.

***System requirements***

Minimum specifications:

- Hardware
  - PC Pentium Ⅲ or equivalent, 1GHz
  - 512 Mb RAM
  - Free hard disk space:300Mb
  - XGA resolution (1024 * 768)
  - USB port

- Software
  - Windows XP Home or Window XP Professional, Window 7

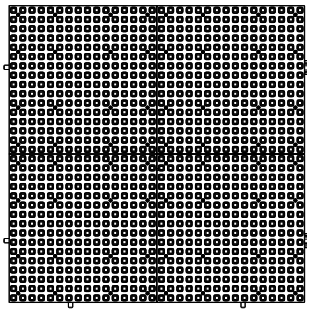
Recommended specifications:

- Hardware
  - PC Pentium Ⅳ or equivalent, 2.4GHz
  - 512 Mb RAM
  - Free hard disk space:300Mb
  - SXGA resolution (1280 * 1024) with 32 Mb video memory
  - USB port

- Software
  - Window 7

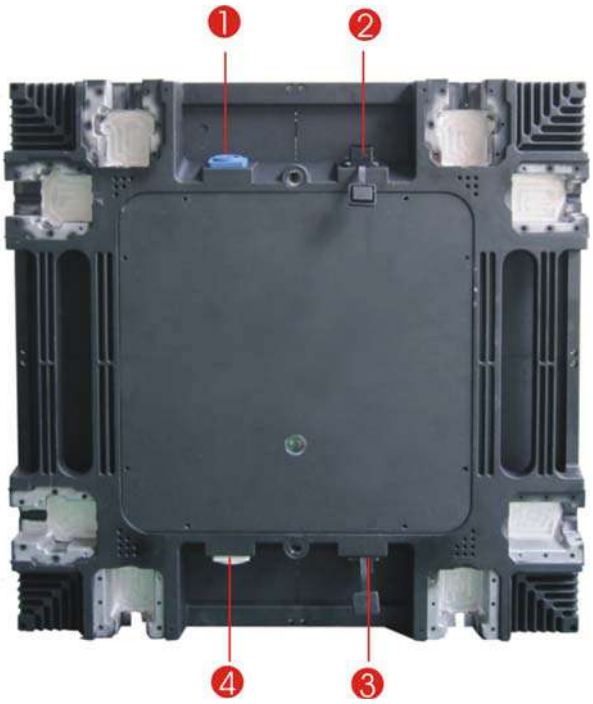
# 3 Product Specifications

| | |
|---|---|
| Pixel Pitch | 10mm |
| Unit Size | 480x480x60mm |
| LED Type | 5050 3in1 LED |
| Brightness | 4500 nit |
| Viewing Angle | 140° x 140° |
| Contrast | 5000:1 |
| Gray Scale | 16bit / RGB |
| Refresh Frequency | 1000HZ |
| Video Input | DVI |
| Life Span | 100,000hours |
| Weight | 11.5KG |
| IP Rating | IP65 |
| Working Voltage | 90-260V 50-60HZ |
| Power Consumption | Max 180W / panel，<br>Average 60W / panel |
| Ambient Temperature | -10~40℃ |
| Relative Humidity | 10-99%RH |



# 4 Hardware Installations

## 4.1 Panel hardware overview




**1.power input**
AC power input via power cable

**2. data input & output**
data input and output via data cable

**3. Data input & output**
data input and output via data cable

**4. power output**
AC power output via power cable

## 4.2 Bottom block overview

1. you can change the height of the block to adapt the application environment.
2. concave-convex surface is for fasten the cabinet.

Caution

When mounting sharpes together, first please put four bottom blocks on one cabinet and fix them, then you put it on the floor, this will help you install your floor dispplay better.

## 4.3 Install floor display

**1.using four blocks to fix one cabinet, each corner latch one block just as show.**

**2. connect data cable and power cable between two neighbour cabinets by hand via the gap.**

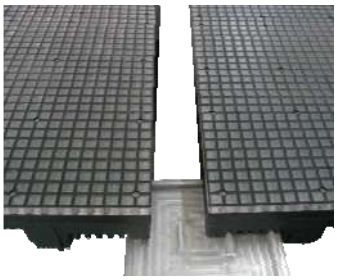
**3. put these two connected cabinets together and fix them with the block.**

Caution

When mounting sharps together, first you show stay the gap between two cabinets and connect the power cable and data cable by hand via the gap, then you can put them together.

## 4.4 Dismantle floor display

**1. stretch your hand to the bottom of one cabinet, then push the cabinet on.**



**2. after you pushed the cabinet, you get a gap between these two cabinets, then you can cut power and data cable off.**

**3. you do the same operation as step 2, then you can dismantle all cabinets around one bottom block.**

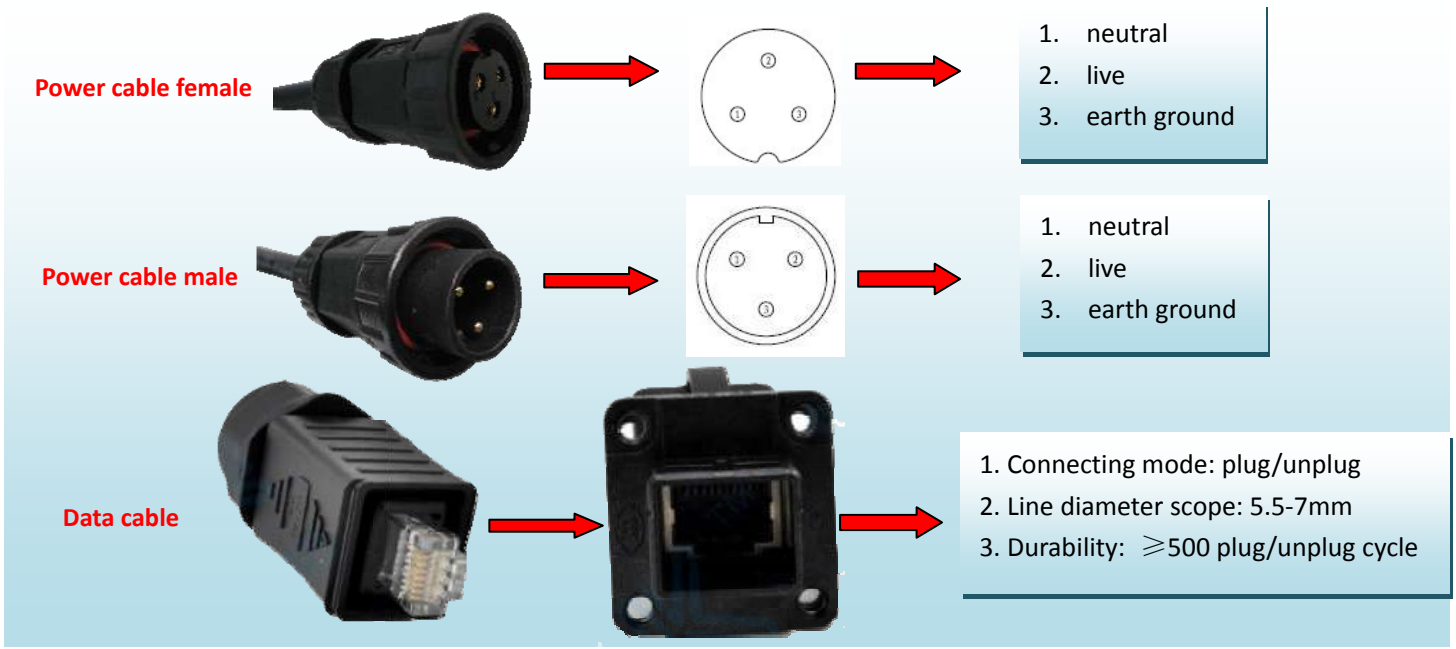
Caution

When dismantling the sharpes, do not stay your hands under the cabinets, after you push one cabinet up and make the gap, you pull out you hands and then cut the cables off.

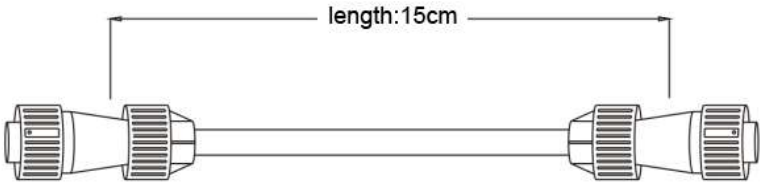
## 4.5 Cables and Connectors

### Cable Pin outs

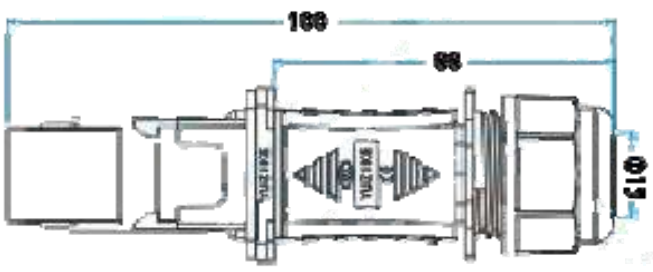
The following is the information for the power and data cable used in the super slim cabinets system.



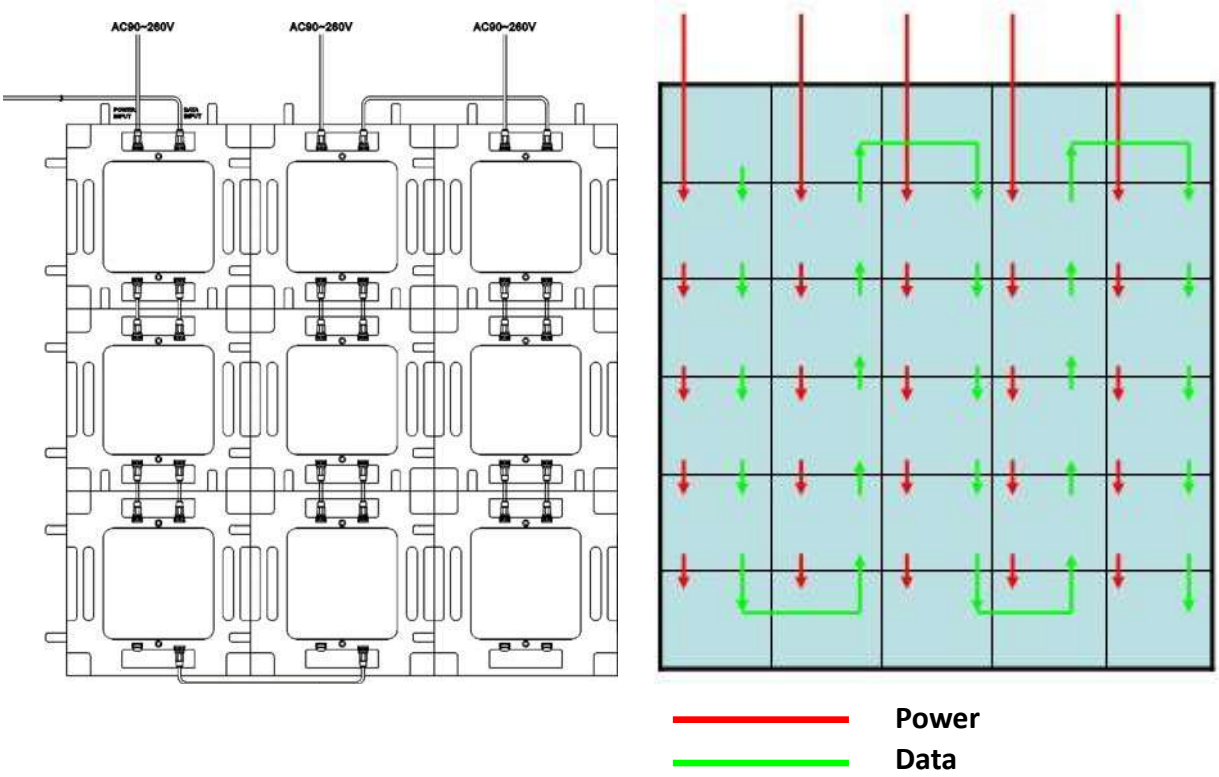

Break-in power cable: 3x2.5mm²---1. Neutral
2. Live
3. Earth ground




Break-in data cable:
Material: 1. Connector body: flame proofing ABS, flame retardant grade V-0
2. Sealing: Silica gel
Protection Level: IP67



## 4.6 Power/data cable connection diagram




**Load capacity of power system :**

Max power of single cabinet : 180W(8000NITS)
Load capacity of power cable：220V : 18 cabinets, 110V : 9 cabinets
Load capacity of control system:
Resolution：48*48
Resolution of Load capacity control system：1280*1024
Load capacity of screen area：26×21 cabinets

# 5 System Installations

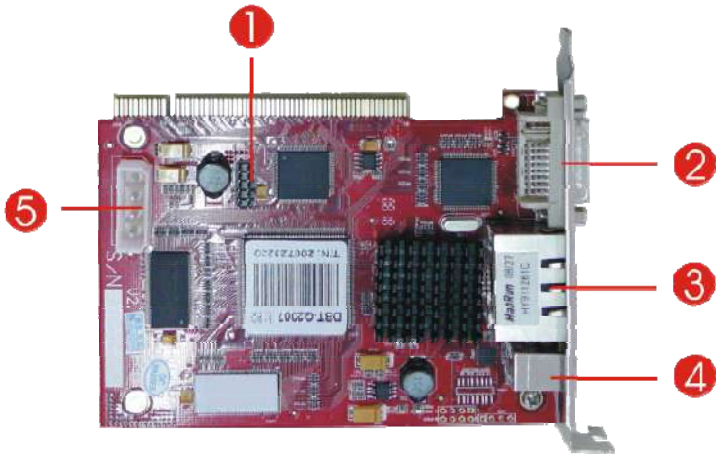
## 5.1 System hardware

---

The main controller for this controlling system includes sending card, receiving card, and switch board.

Details are as following:

### *5.1.1 Sending card*




Front view

1. **PCI Connector.**
   The sending card could insert into computer PCI slot by this connector. PCI slot only provide 5V DC to sending card.

2. **DVI connector**.
   Connect to the computer graphic card DVI output with the DVI cable.

3. **Two RJ45 ports**.

   Main data output ports. The one close to the USB port is 1st PORT. The other one is 2nd PORT. These ports are connected to receiving card by cat-5 cable. Each port can drive 640 rows of pixels.

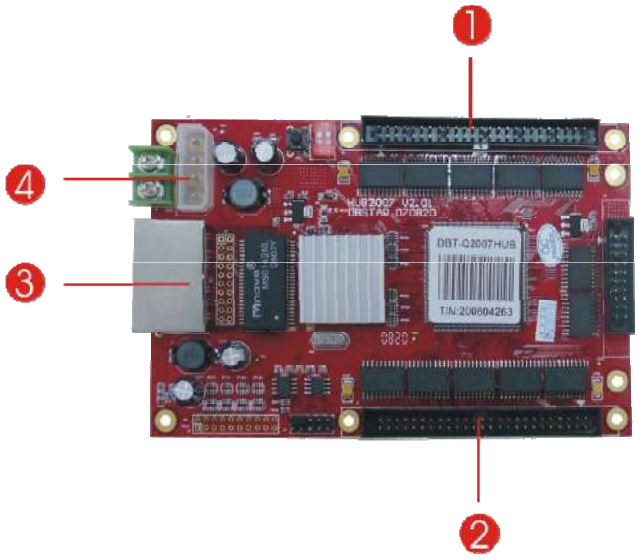
4. **Standard USB connection**.

   Connect to computer USB port.

5. **5V power cord**

   Sending card can be powered by this cord using 5V power supply instead of installing in computer sometimes.

### *5.1.2 Receiving cards*




**1 & 2 50 pin data connector (J8)**

They are connected to HUB board by ribbon cable.

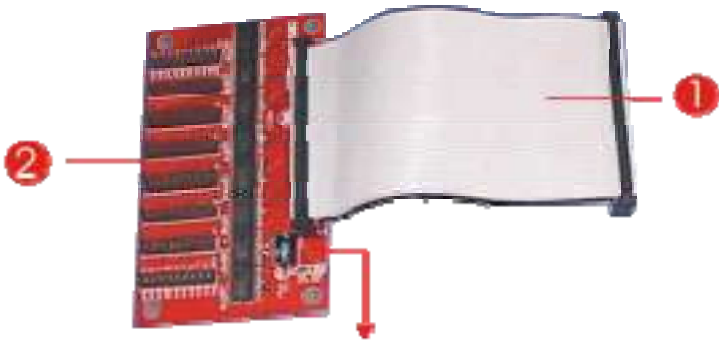
**3 Data cable port**

One is for data input, the other is for data output.

**4 Power cord**

Connect to 5V DC power supply.

### *5.1.3 Hub board*




Data signal indicator

1. **50pin cable**

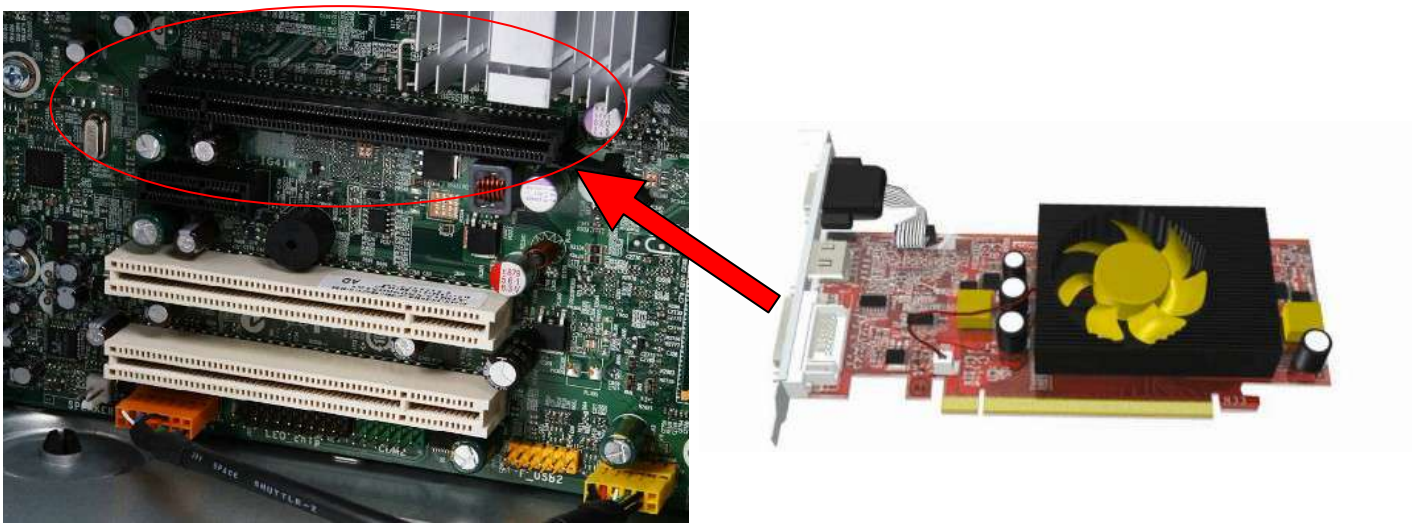
   Connect from receiving card to HUB board.

2. **20pin connector**

   Connect from hub board to led module by ribbon cable.

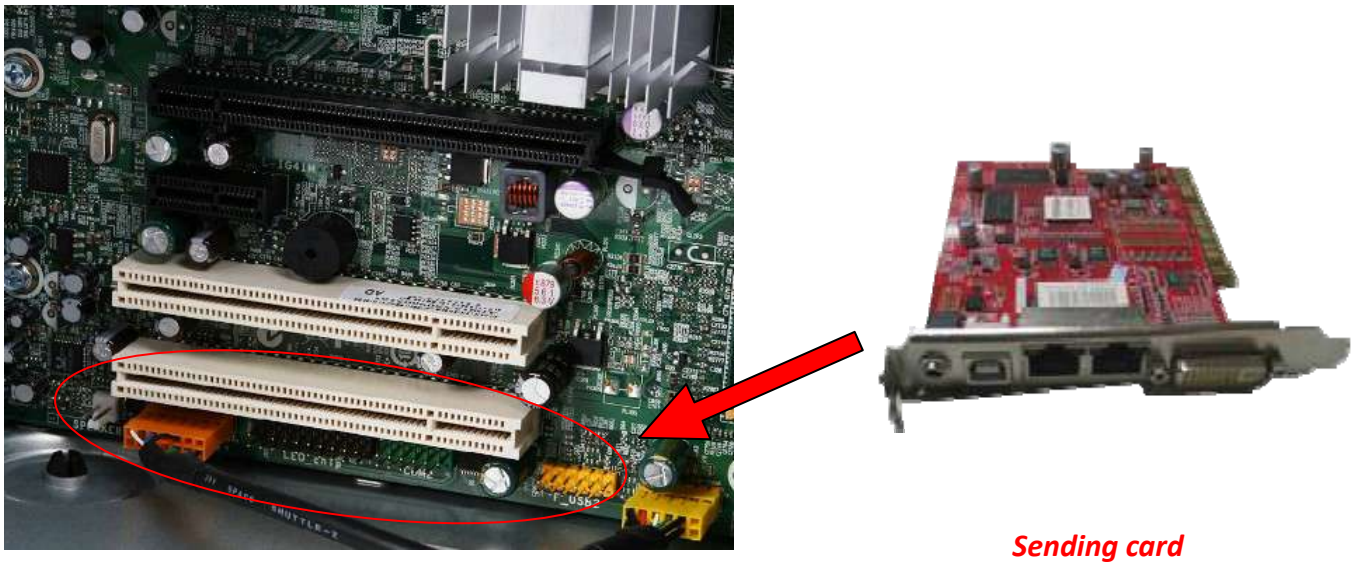
## 5.2 System hardware installation

5.2.1 Install the DVI graphic card in the computer. And then install the driver for the graphic card.



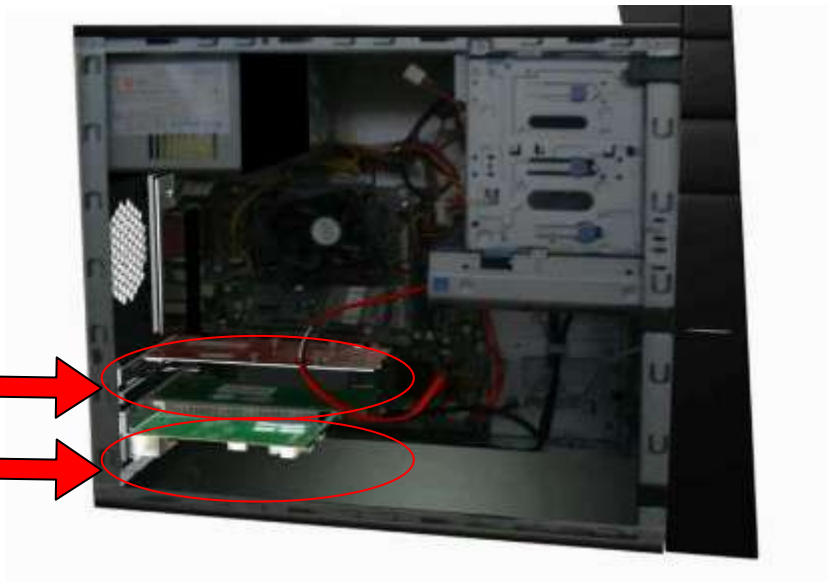
***Graphic card***

5.2.2 Install the sending card in the computer.

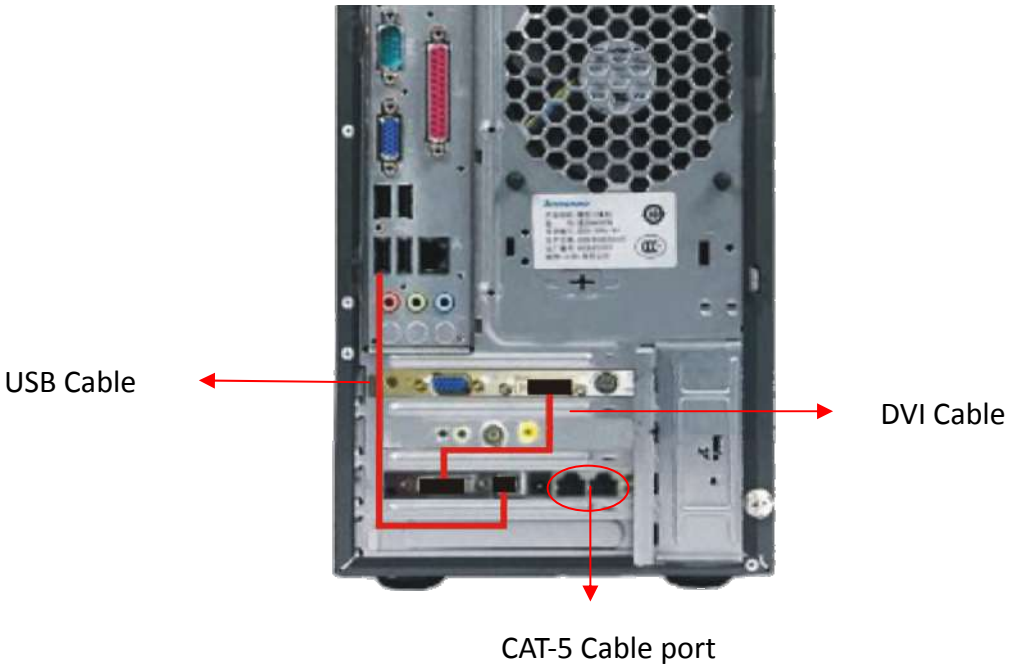


***Sending card***

5.2.3 After installing these two cards, the computer shows like this:

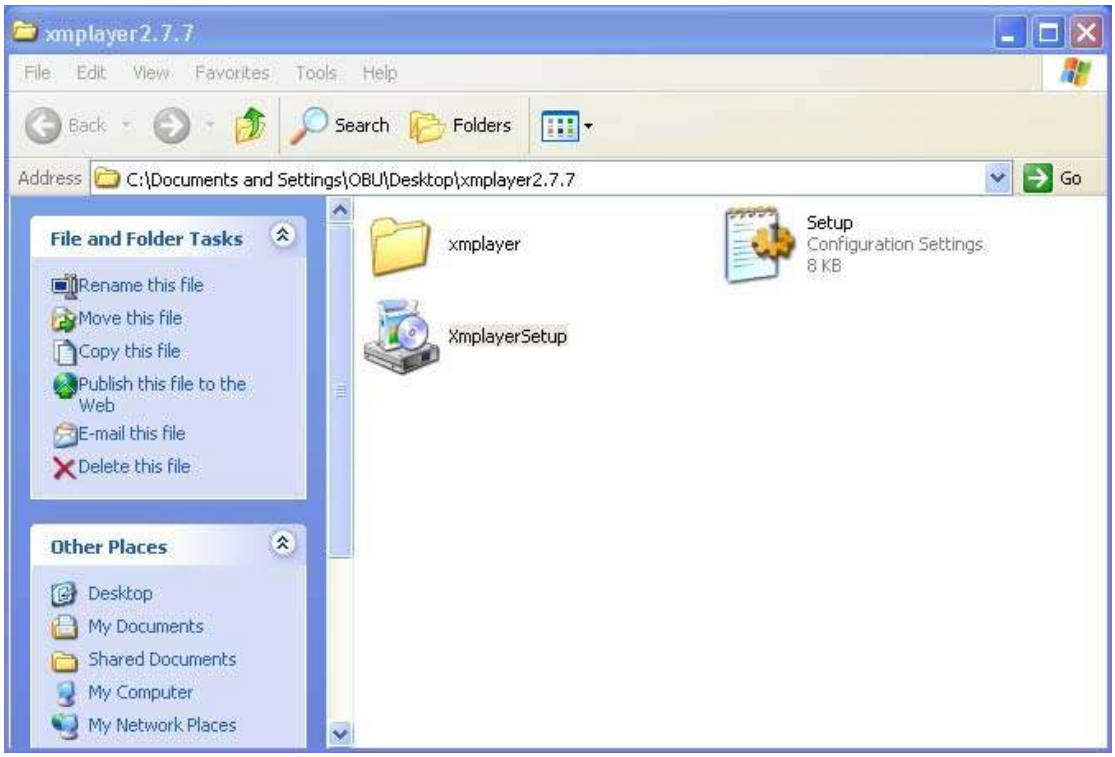



5.2.4 Then we can connect the cables within computer and cards. First connect USB cable from computer USB port to sending card USB port. Then connect DVI cable from graphic card to sending card DVI port. Then connect CAT-5 cable from sending card 1st port to first cabinet.

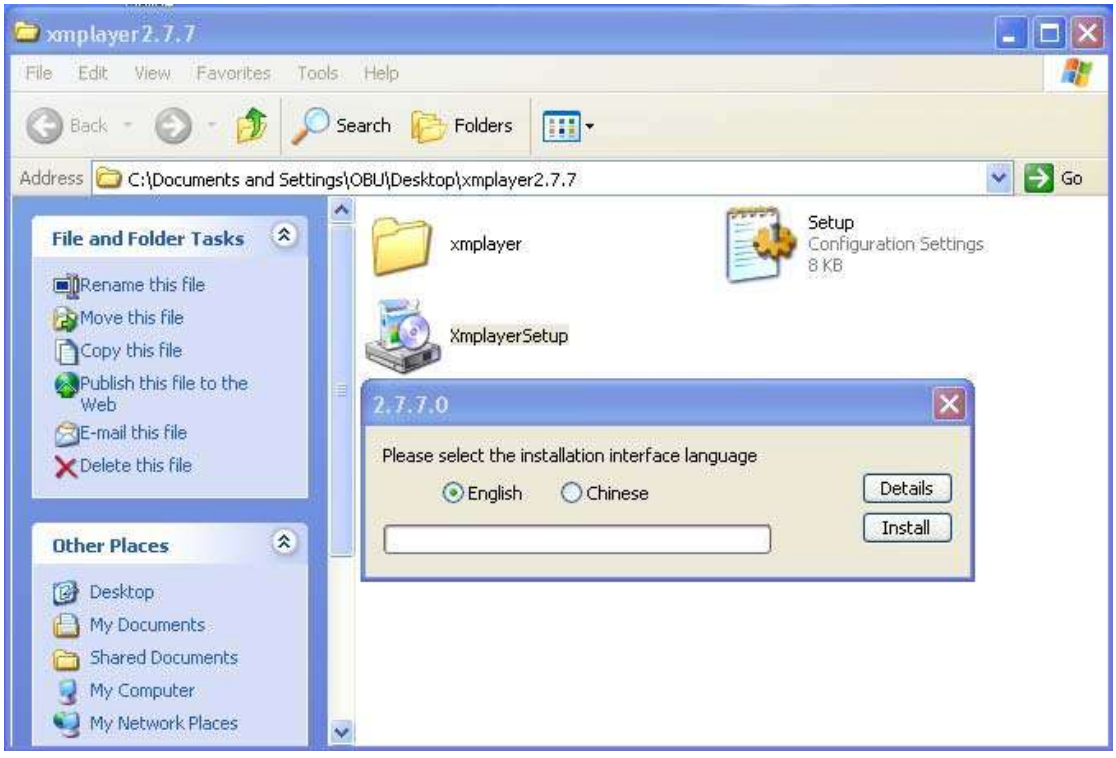


## 5.3 Software installation

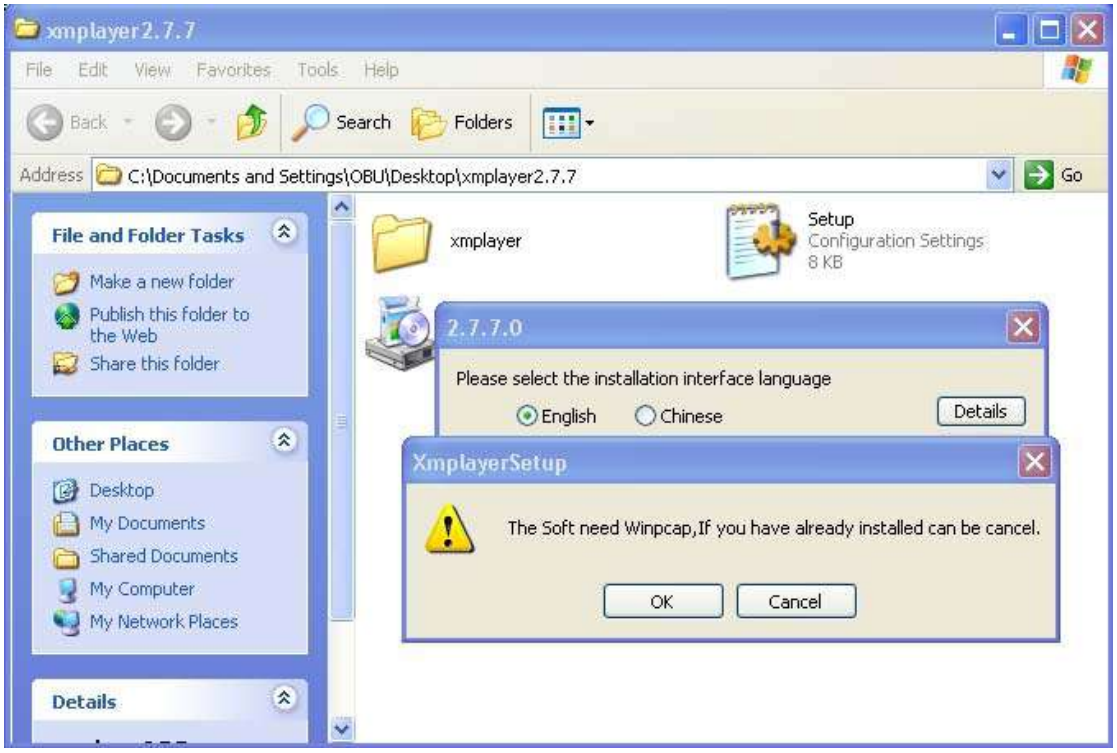
5.3.1 Put the software CD in the PC and then double click the setup file.



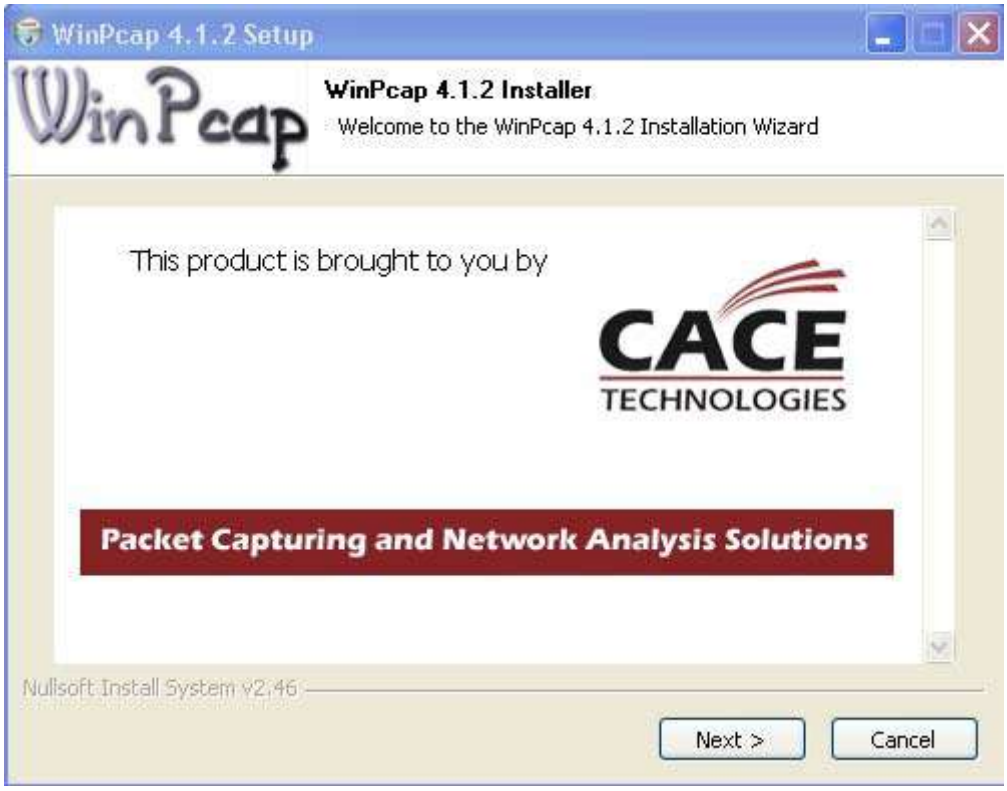

5.2.5 Select the English language:



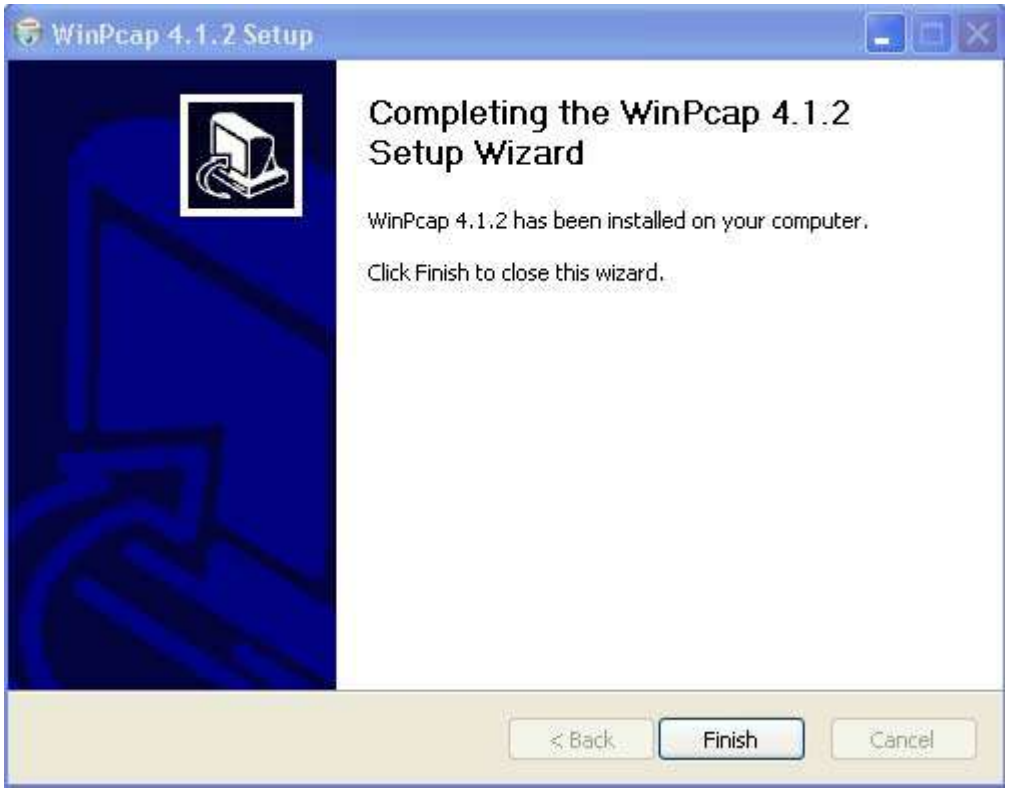
Then click “install”.




You need install the Winpcap before finish the installation, so click “ok” to install it.



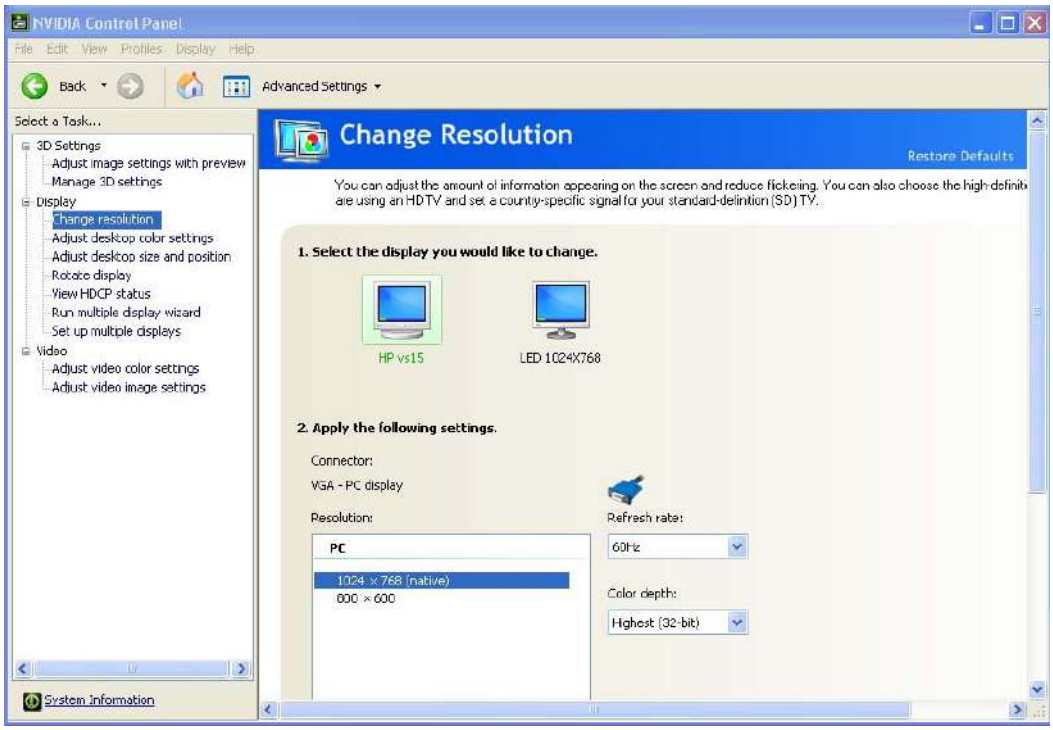

Follow the steps and finish the installation of the Winpcap.



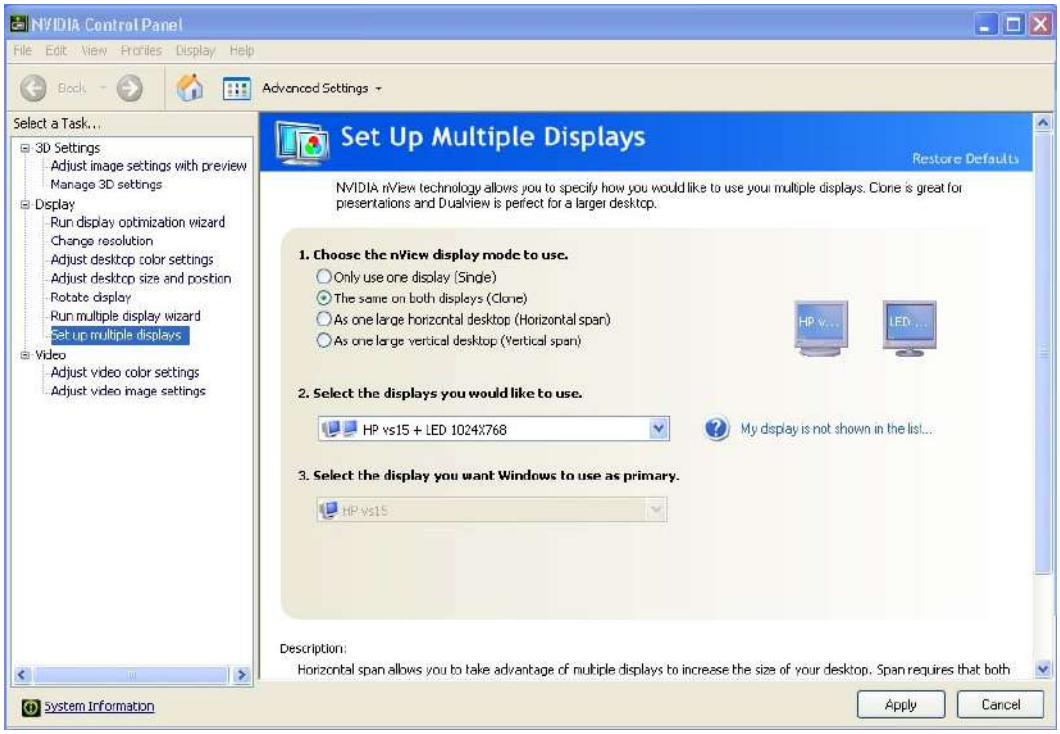

Click finish and then the XMplayer will be installed.

## 5.4 Graphic Card Setup

5.4.1 Right click your mouse, go to NVIDIA Control panel, and set the screen resolution to 1024 x 768 pixels and the refresh rate of the monitor to 60HZ:

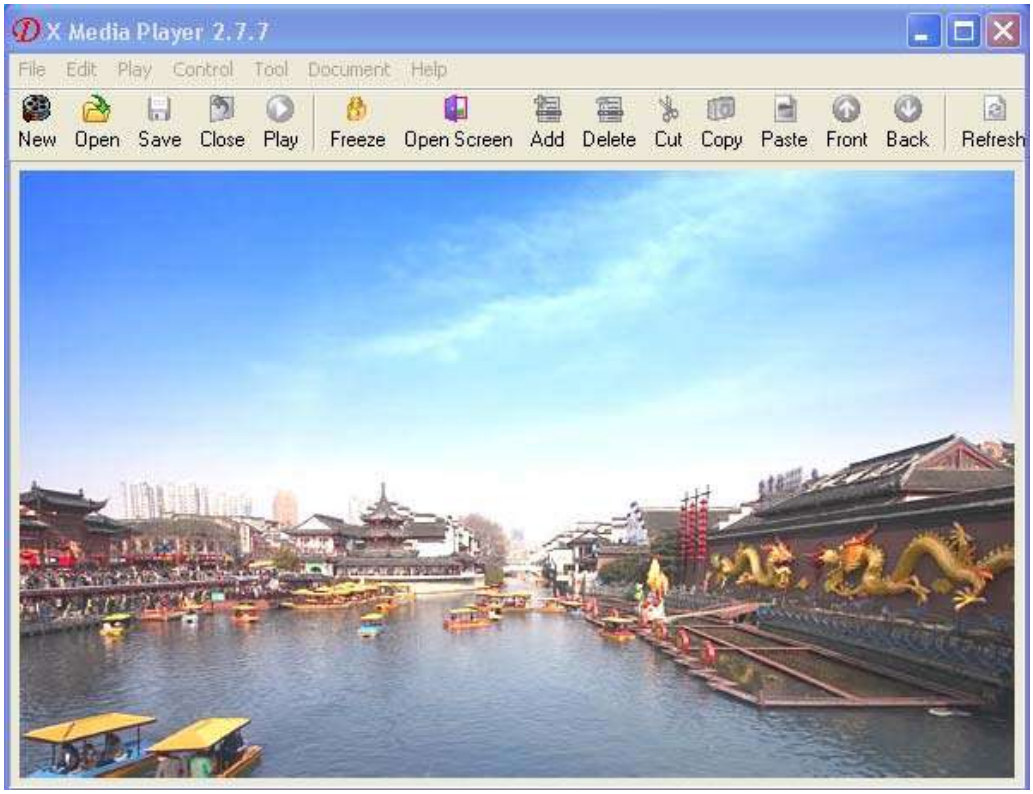



5.4.2 Choose set up multiple displays and choose “clone” mode. Then save an exit.



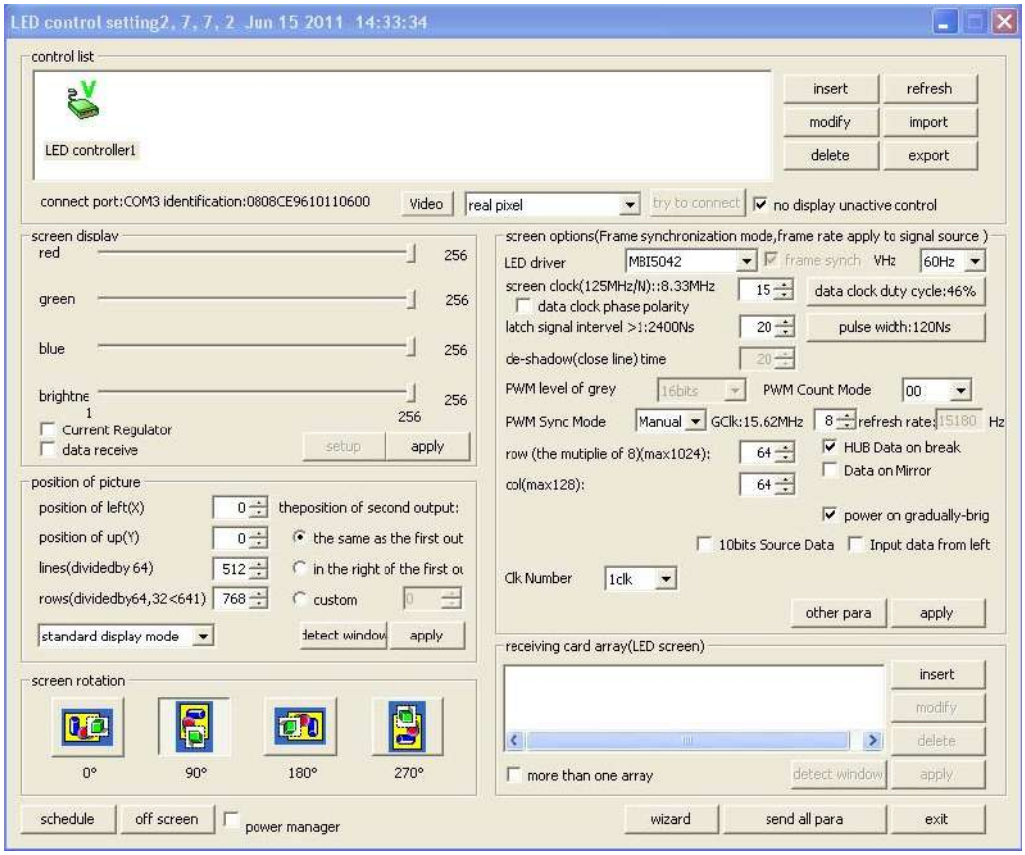
## 5.5 System software configuration

Connect the data cable from sending card to the first sharper panel, clone the graphic card, power on the panel, then every cabinets should be working and showing the same image—or showing one part of the desktop in disorder. If the cabinet is not working, first pls check if power is turn on and power cable are connect well. Then check if the yellow LED on receiving card is flashing or not. If not, pls check the data cable connection till the yellow lights is flashing. Once it's done, open X Media Player, we will get a window as below:

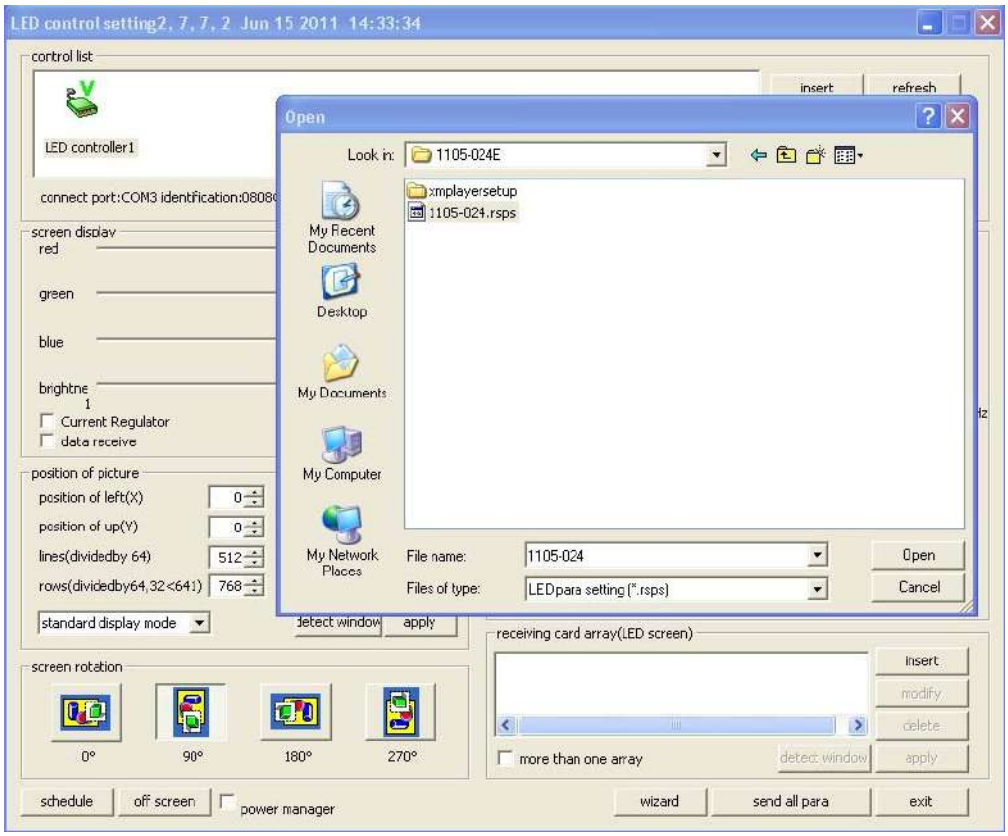



Click "Control——>LED controller configure", and then will appear a dialog box, click "para setting", as shown in below figure:

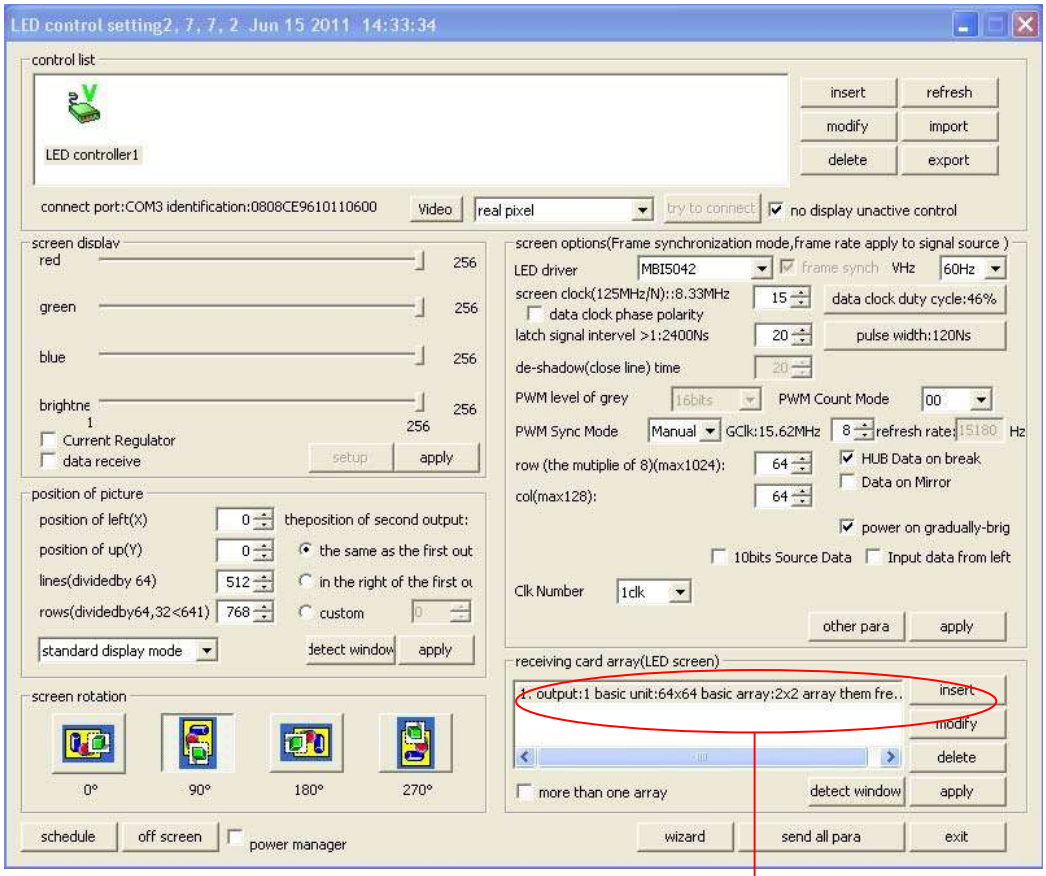
Then type “dbstarled” in the keyboard and you can get a dialogue box as below.




Then click “import” and choose the right *rsps file, click open to add it. As show in below:

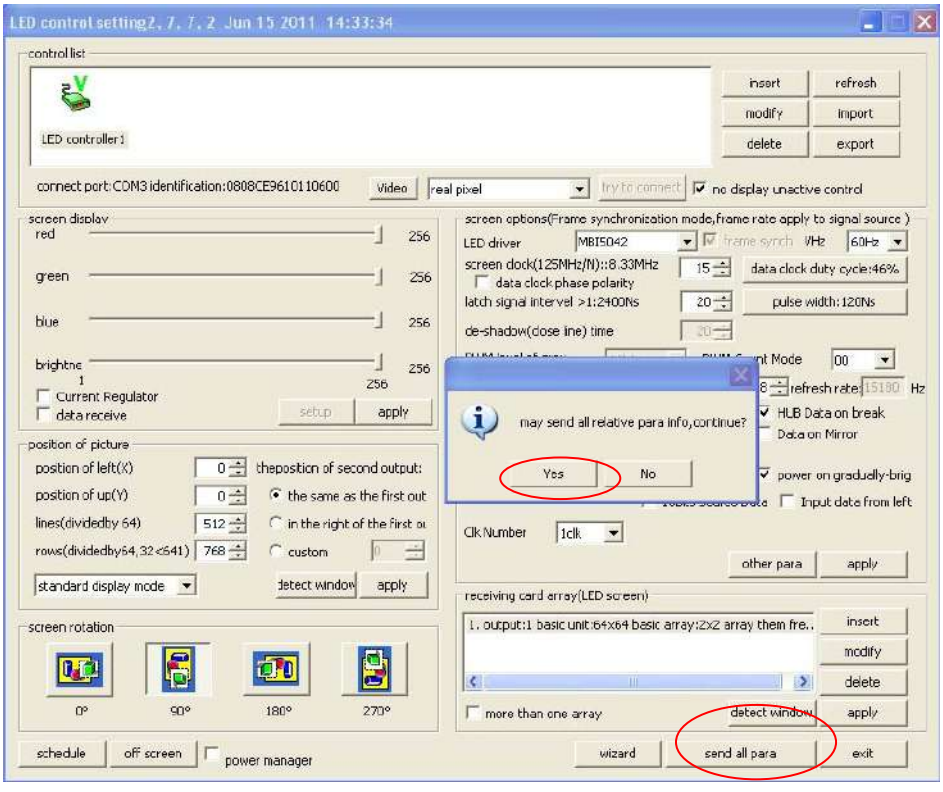


Then you will get a dialogue box below, within the *rsps file in.

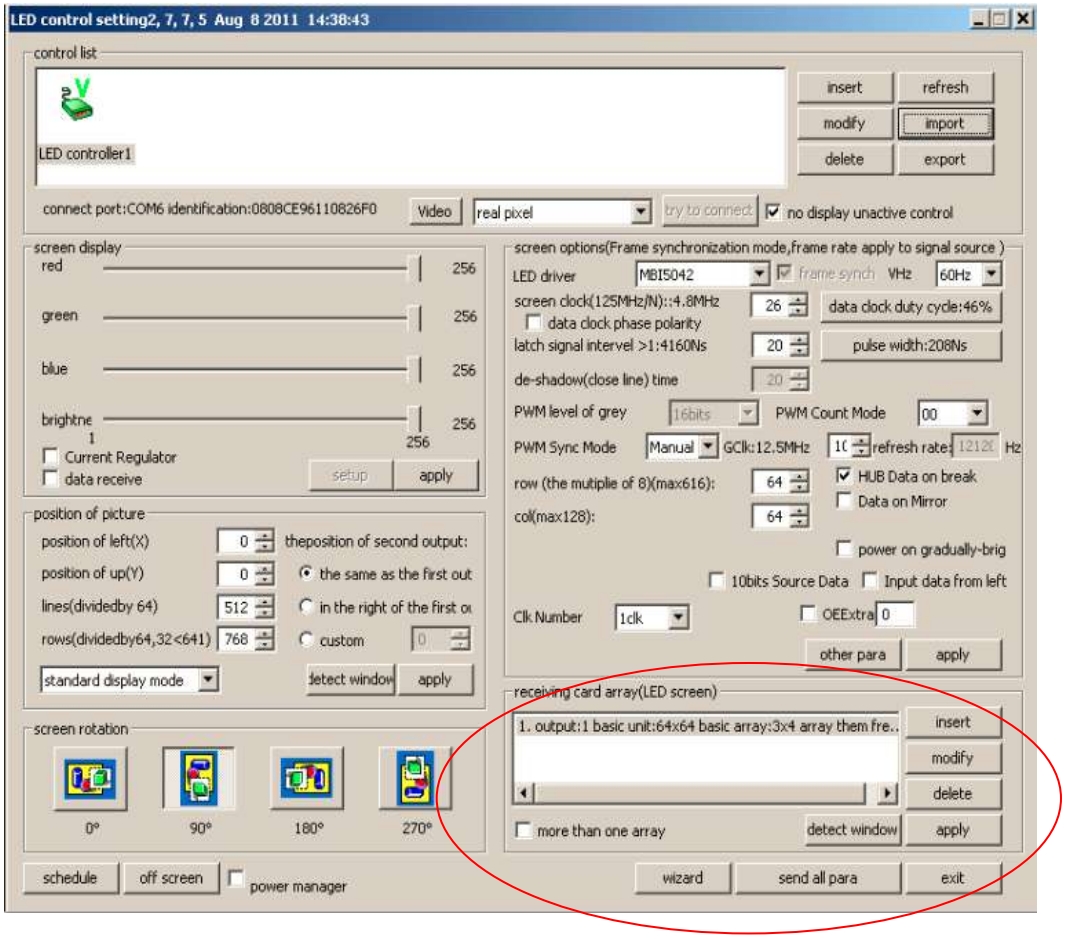



***The *rsps file shows here***

Click “send all para” and choose “yes” in the pop-up dialogue box. Then the software setup is done.

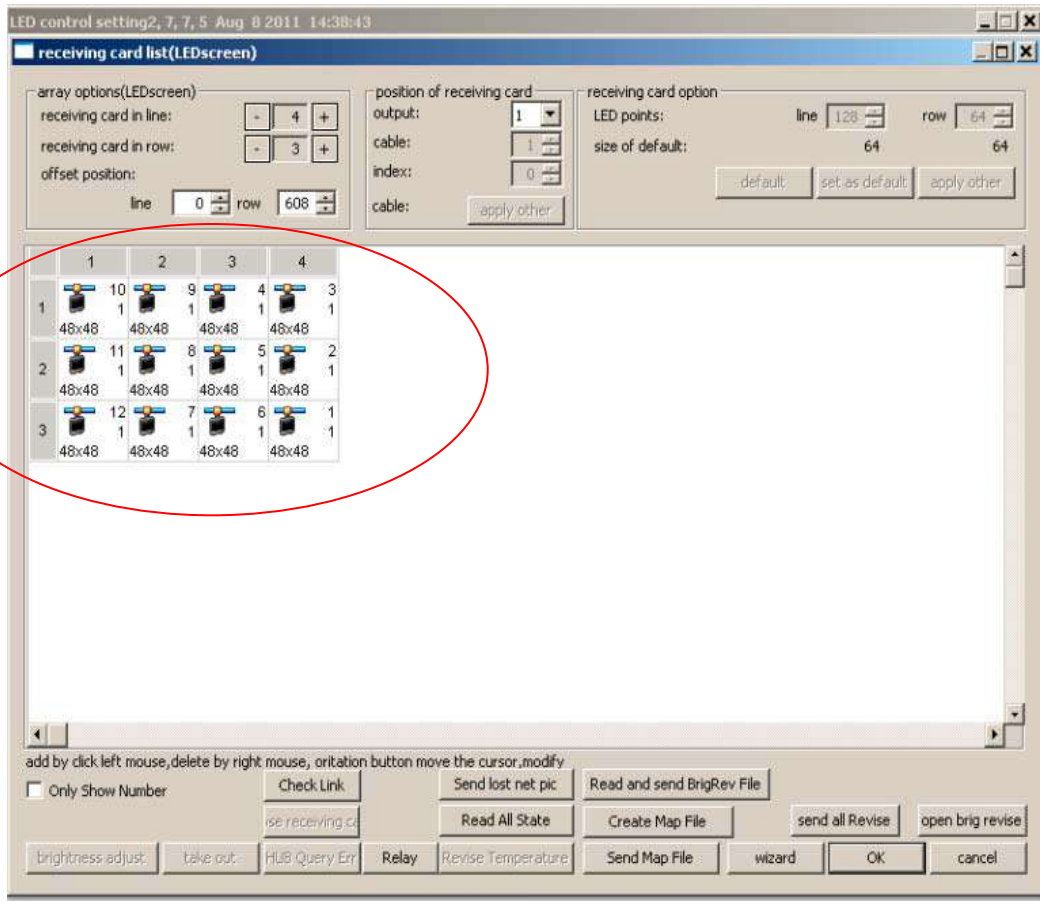


Important information here:




For the area circled, after you have imported the *rsps file, you can see “1.output: basic unit…..” in the blank, which includes the connection our engineer do for you, but usually not suitable for your on-site situation because you always have different installation.

So you can choose modify and enter the window show as:




First you choose one of the cabinet, click the right key of your mouse on the choosen cabinet, then you can see the sequence number on it will disappear. Do the same operation on all cabinets.

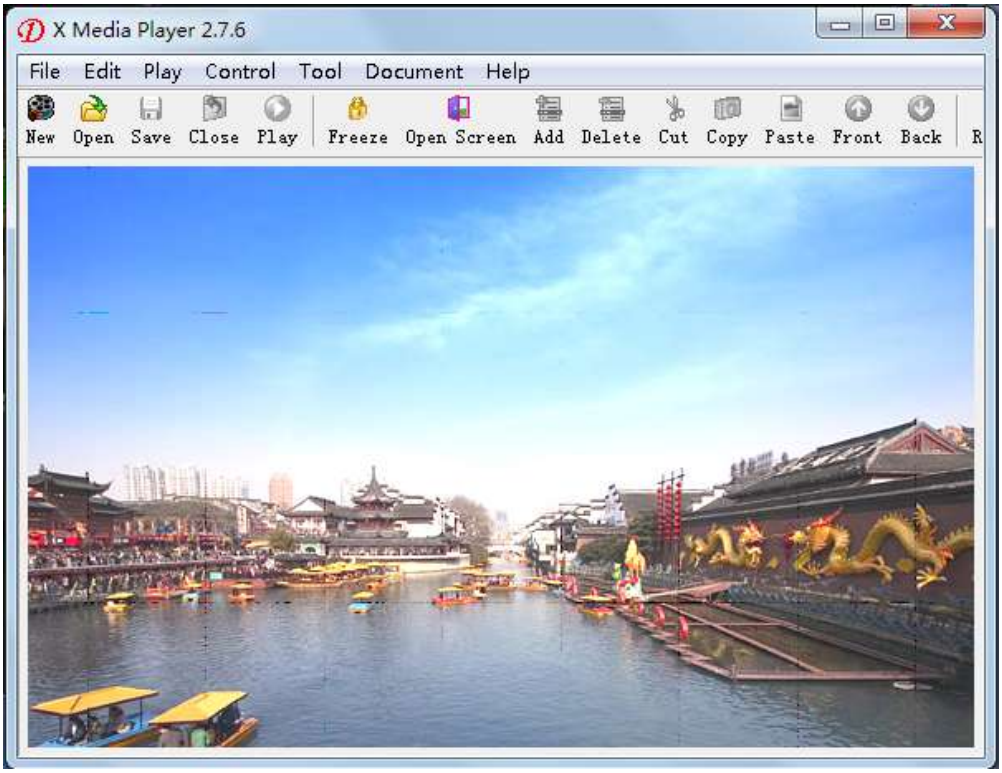
Then all cabinets have no numbers. You can set up in the sequence below. Just click the cabinet one by one by using the left key of your mouse.

After this, you can see the right corner of this window shows the LED point, you choose one cabinet and change the line and the row both to 48, and then you click apply other, then all of the cabinet will show the size 48x48.

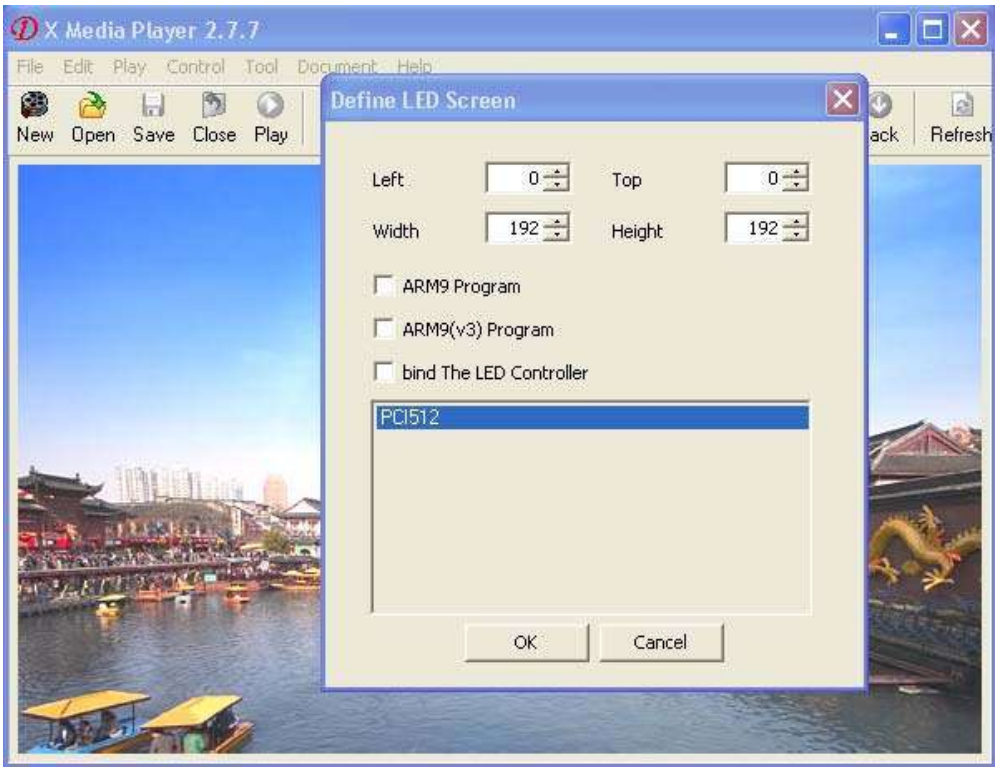
Then you click “ok” and back to the main control window, click “send all para” and then you can get a whole screen.

# 6 Quick Operation with X Media Player

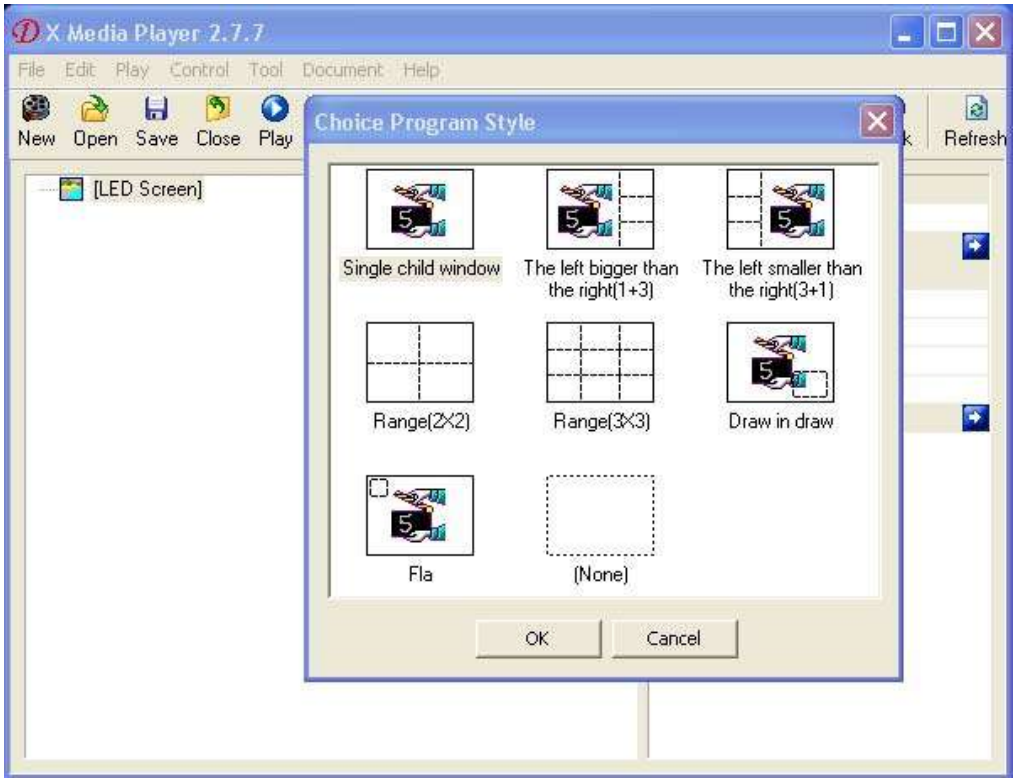
6.1 Open xmplayer by clicking on the icon.



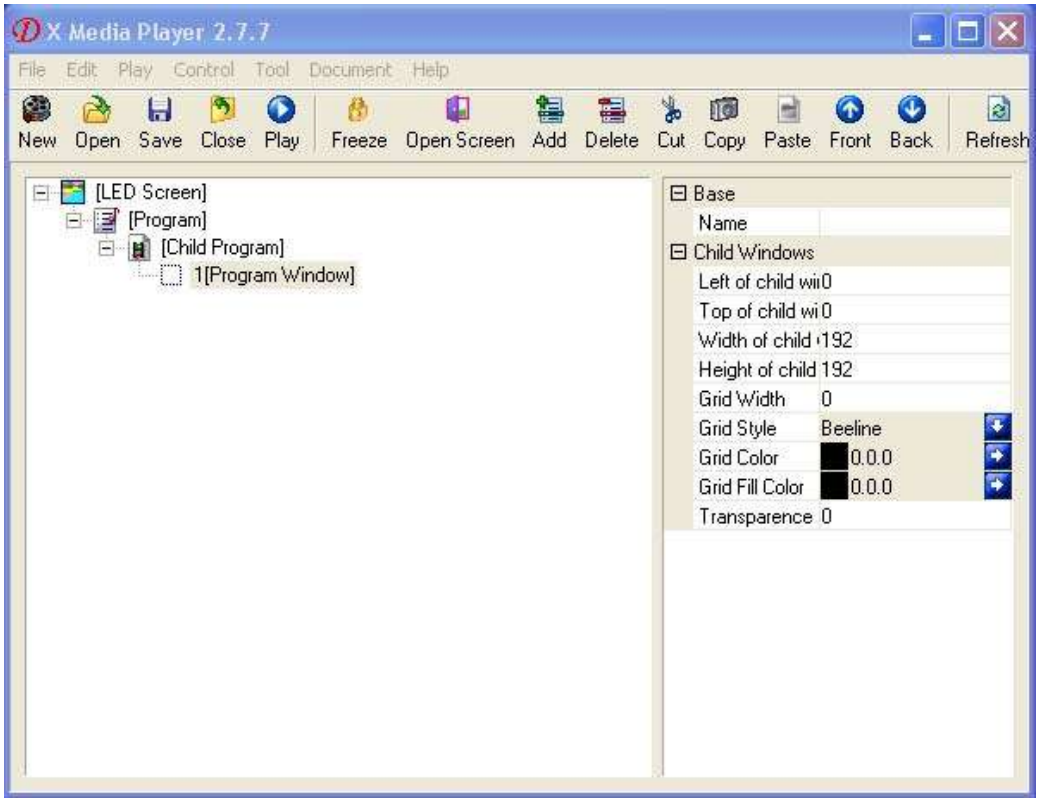

6.2 click “new” to open a new file. And it will show below, you can setup your screen size here.



6.3 click “OK” and choose a style of the screen, usually we use “single child window”.

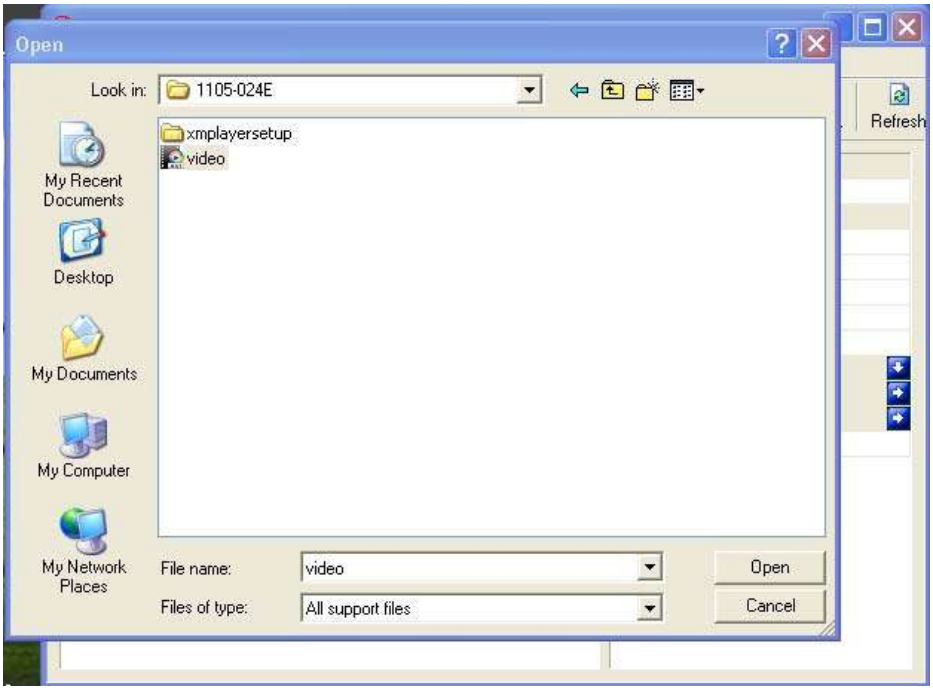



6.4 Choose “single child window” and then you will get a dialogue box below.

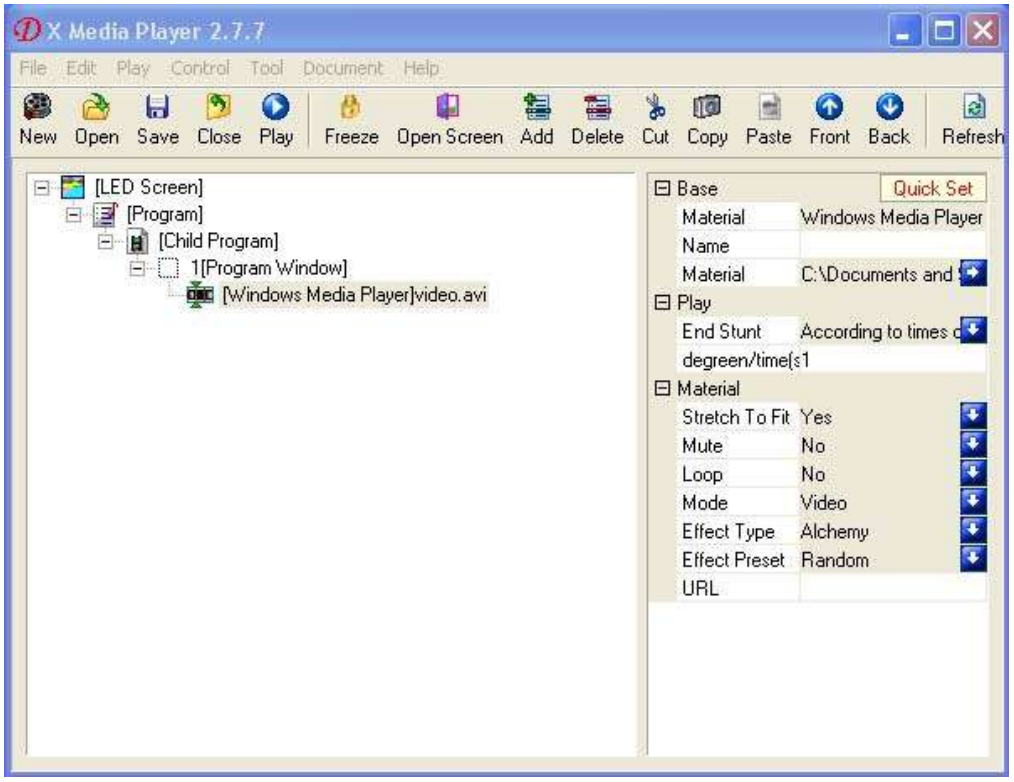


6.5 Each program window can play different words, pictures, tables, cartoons, and videos, etc. in total, there are seventeen kinds of program windows available.(Often we choose file window for program)

Choose “add→insert file(s)..”and you will be required to add a file, for example, a video program as below.

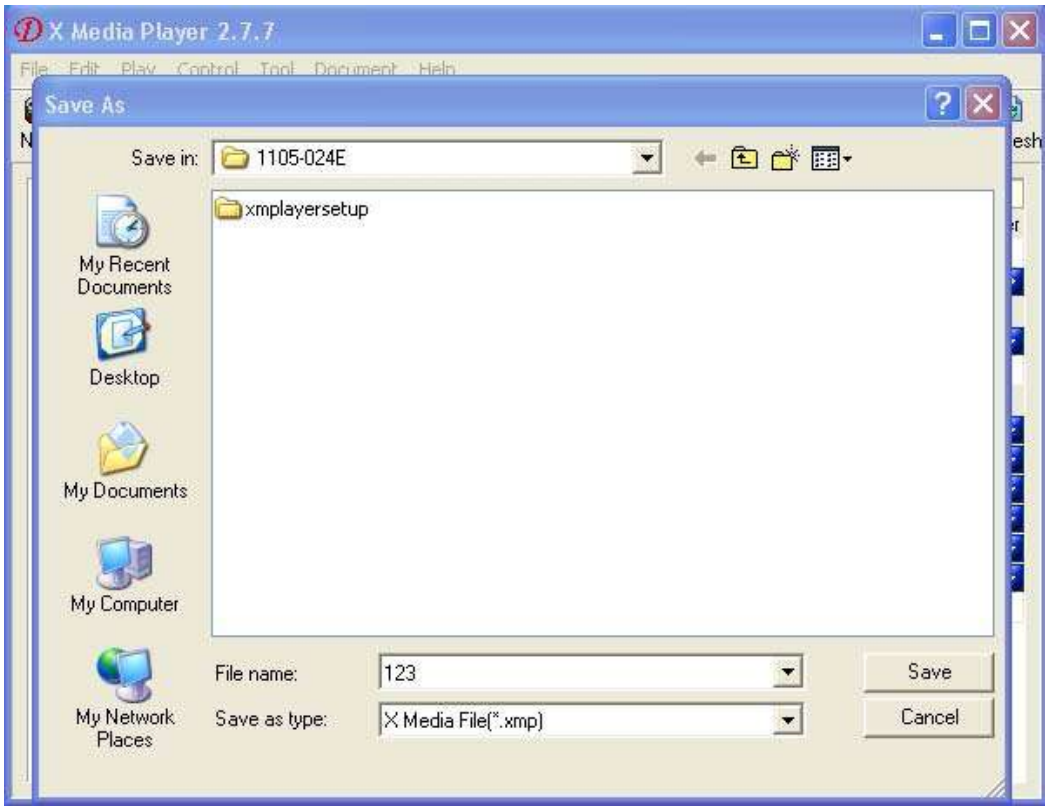



6.6 Choose the video and click “open”.



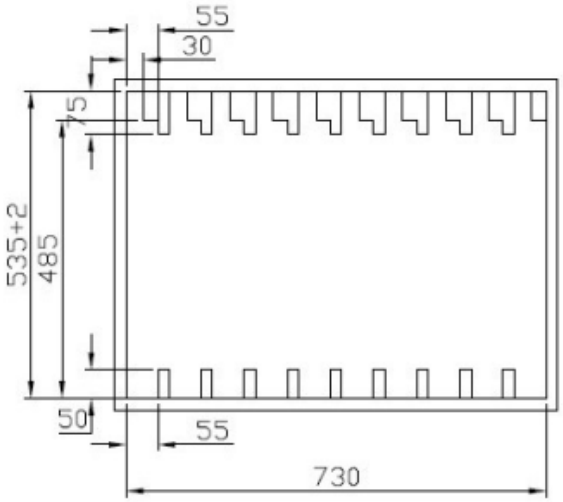
6.7 Then click “play” and you can see the video on the LED display.

6.8 After you finish the setting, you can save the program for next operation. Then next time, you can reload this xmp file directly.

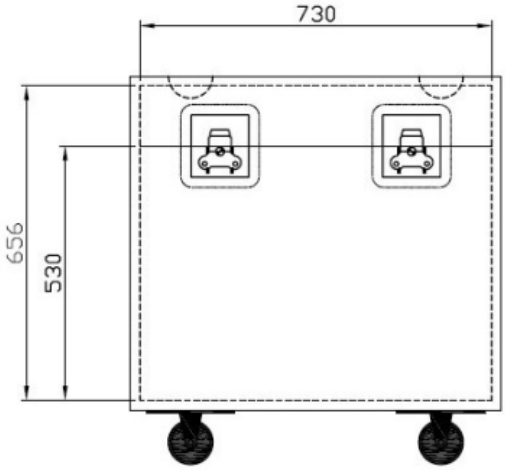


# 7 Packing

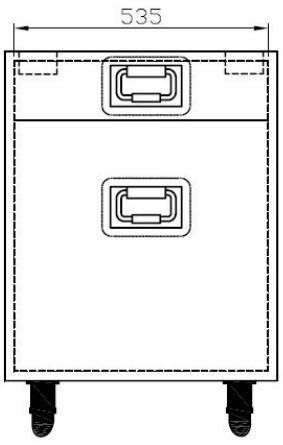
There are interlayer in the freight case in order to keep the cabinets in the right place steady. Each freight case carries 10 cabinets.




***TOP VIEW***




***Side View***




***Rear View***

Accessories freight case which can be customized.

For accessories use