

# **iT7 Sender**

# **User Manual**

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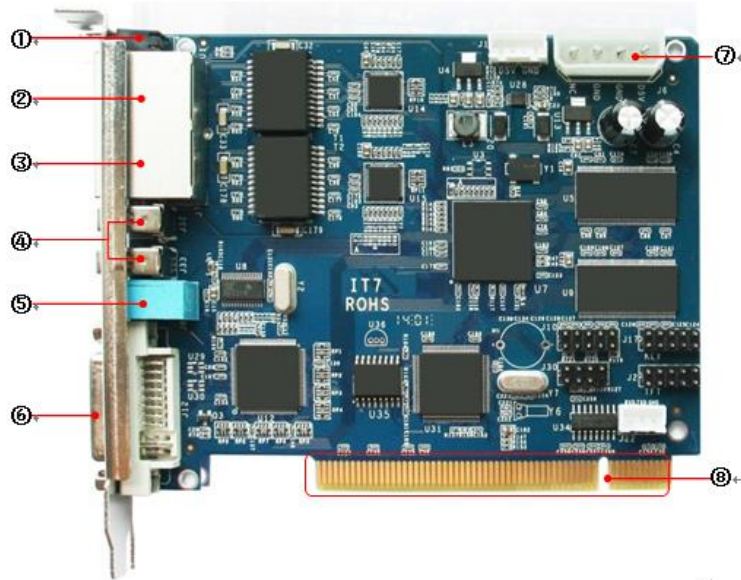
## I. Product introduction

iT7 sender pioneered to integrate the dual-USB interfaces to realize high-speed communication with PC and easy cascading between sender cards.

It supports wide working voltage with DC 3.8~12V and has good stability and compatibility with all Colorlight's control cards.



## II. Hardware



### 1、 Interface functions

NO.	Interface	functions	Noted
1	indicator light	Indicates the power supply and signal transmission state	Red for power, green for signal
2	Output port A	RJ45, connect to the receiver card	The control area of port A and B can be separately set
3	Output port B	RJ45, connect to the receiver card	
4	USB 2.0	For iT7 and PC communication or iT7 cascade	
5	Audio input	transmit the audio signal to the multifunction card	Multifunction card needed
6	DVI input	DVI signal input	
7	Power supply	DC power supply interface (DC 3.8-12V)	
8	PCI slots	Used for power supply	Only one be used

### 2、 Indicator Light functions

Red: ON for power available

Green: ON/OFF quick flash indicates that the data signal transmission is normal.

### III. Hardware Connection Diagram

iT7 hardware connection diagram is as below:

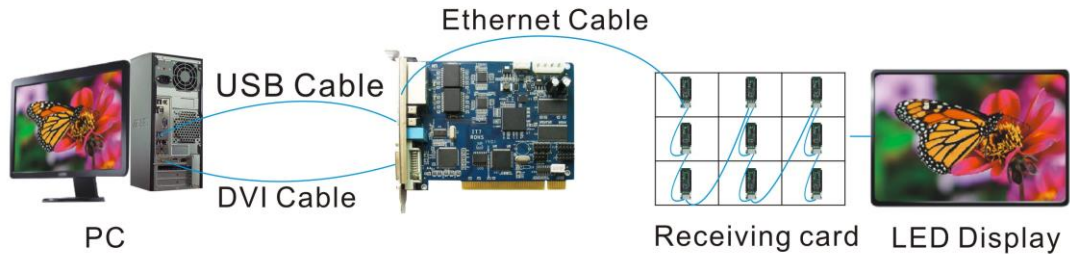


Fig.3-1

#### Illustrate

1. SupportDC 3.8-12V power supply
2. Signal connect

Connect the iT7 and the PC through DVI cable (DVI to DVI or HDMI to DVI)

3. Control signal connect

Connecting the computer and the iT7 with USB cable, the USB port of iT7 can be used in any one of the two. This will be used for configuration of iT7 by operating computer.

4. Ethernet Cable

Connect receiving cards and iT7 by using Ethernet cable (**Note:** The Ethernet cable must be CAT5E or CAT6)

## IV. Operating Environment

### 4.1 Computer configurations

- CPU Frequency  $\geq$  2.0GHZ
- Host Memory  $\geq$  1G
- Graphic card with DVI interface: Memory  $\geq$ 512MB

Computer configuration can be adjusted according to the actual situation. Adjustment mainly aims at total pixels of LED display, complex playing program and whether playing HD video or not. Please note that the PC's graphic resolution should be equal to or more than LED display's.

### 4.2 USB driver installation

There are two methods for installation USB driver.

1、 Check 'USB Drive For Sending Card' when install the LEDVISION, as you can see in following picture.

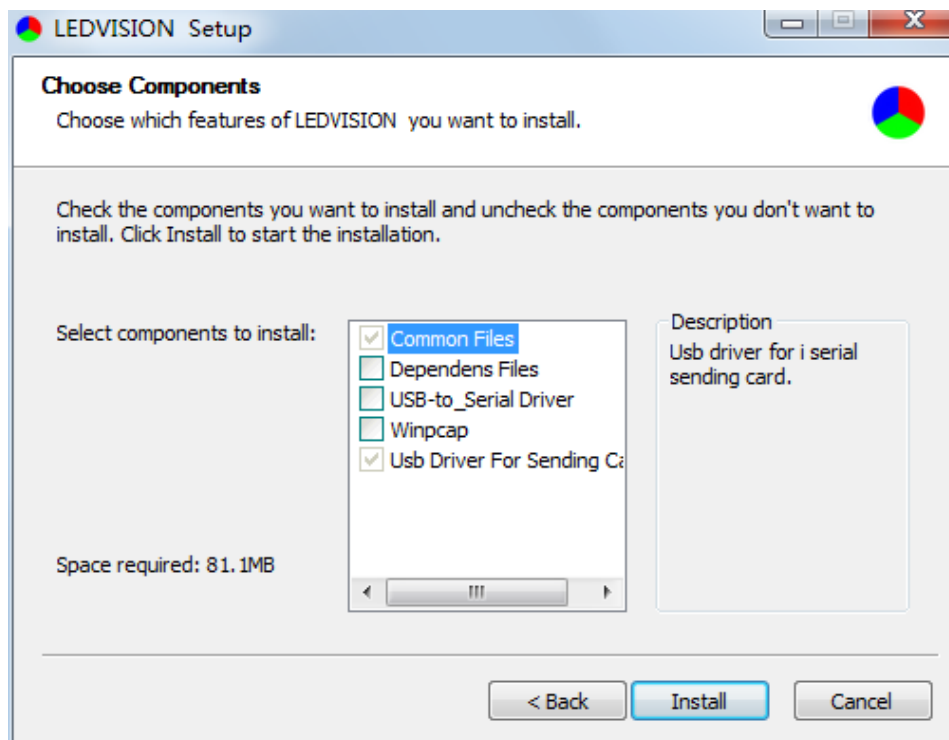


Fig.4-1

2、 Open the CD-ROM, find the file name of "USB driver for sending card" and double click it to install.

### 4.3 Graphics Card Settings

Select **duplicate** or **extend** in graphics card mode, and their difference is that led display show the contents consistent with computer in duplicate mode, while in extend mode show only the window you want to display. (As shown in Fig.4-2)

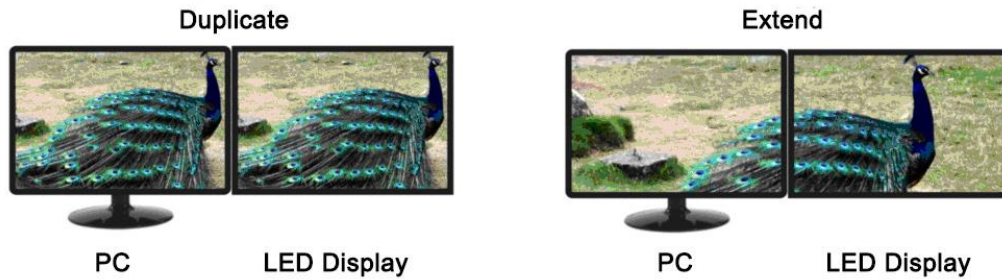


Fig.4-2

How to change the mode, there have different ways in different computer. For example, WIN 7/8 system and NVIDIA graphics cards, please read the following settings ways.

- The first way: Hold down the **WIN** and **P** keys at once, and select the mode as you want in the pop-up window

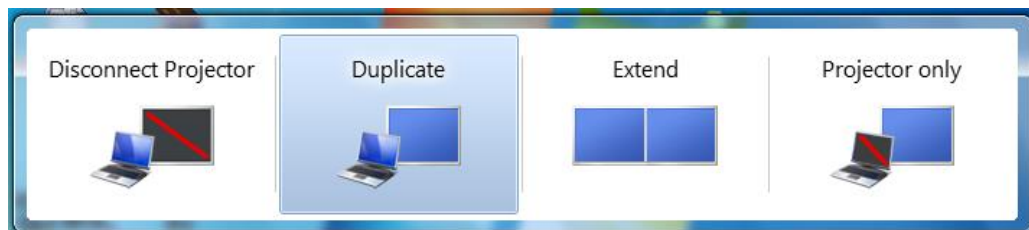


Fig.4-3

- The second way: Right-click and select “screen resolution” to enter the page of “modify the display appearance”; if your graphics card is not NVIDIA and cannot find the setting interface please refer to the description of the graphics card.

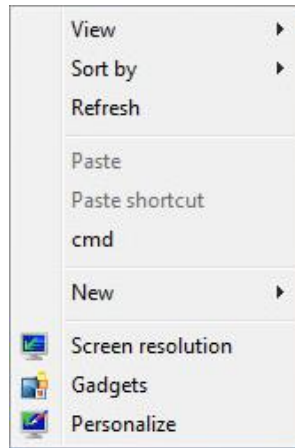


Fig.4-4

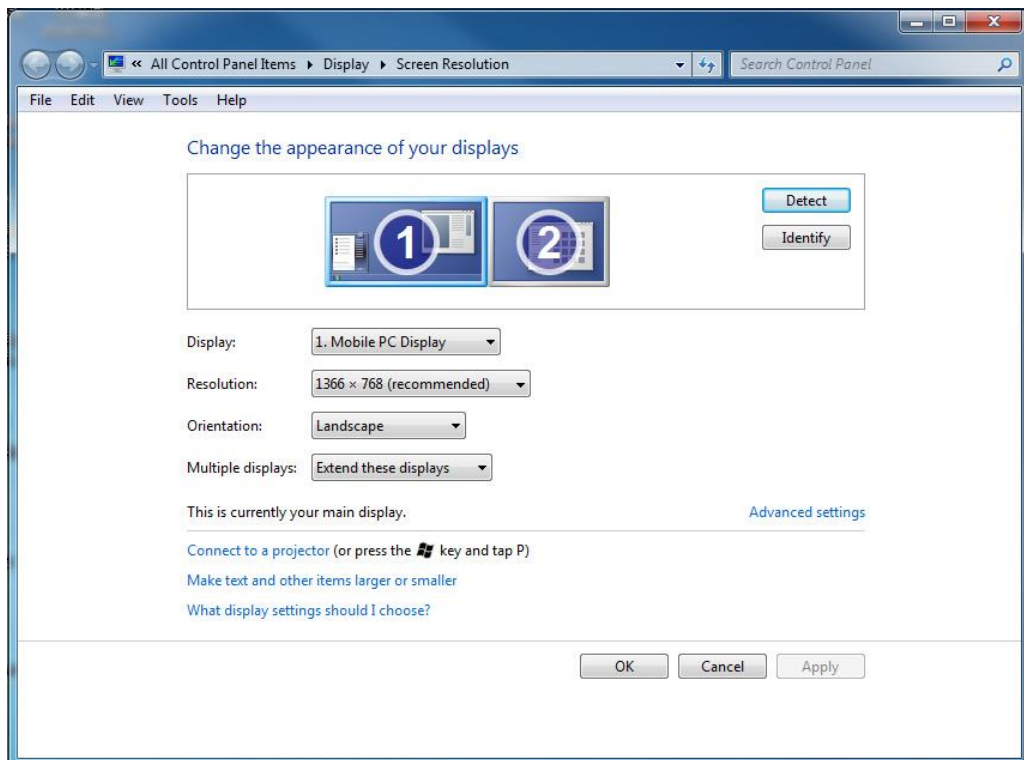


Fig.4-5



## V. Parameter Configuration

First of all, please make sure the software is in **Classic Mode** before setting.

Click the “Setting” > “Software Setting” to enter the Software Management window (As shown in Fig.5-1), and select “Classic Mode” then input password 168.

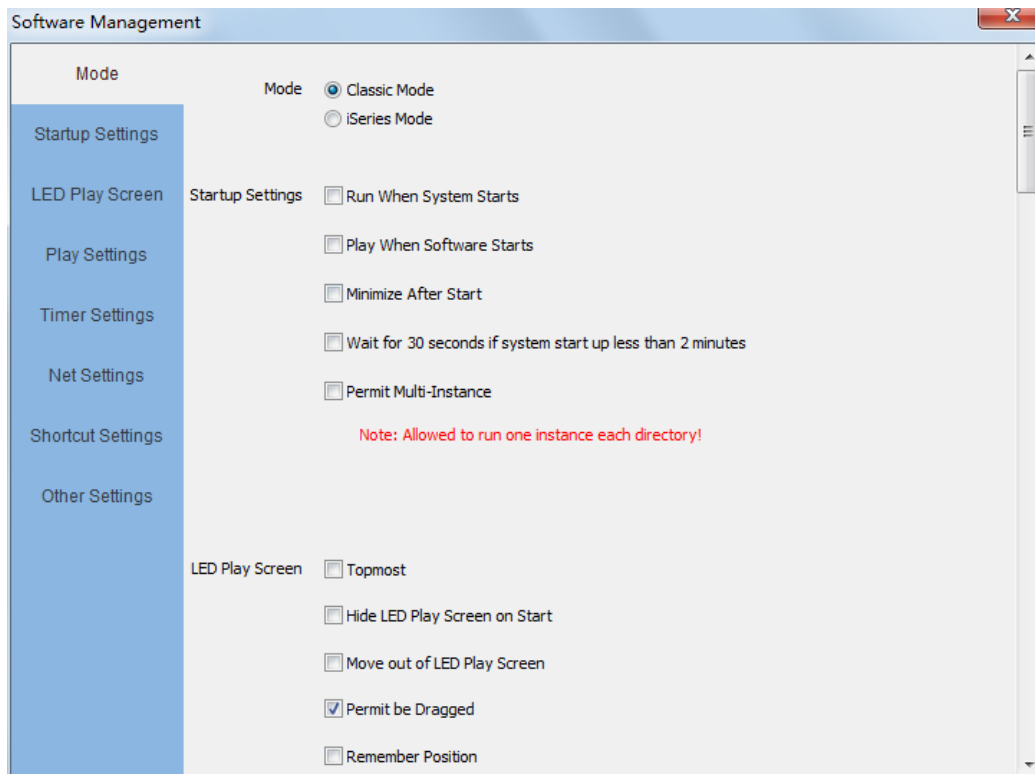


Fig.5-1

### 5.1 Hardware Connection Check

Please make sure that the hardware connection correct and software in **Classic Mode** before setting.

#### 5.1.1 Detect Sender Cards

Run software, click the “Control” > “Screen Management” to enter the Screen Management window, the Sender Mode select “By Sender Card”, Click “Detect Sender Cards”, the sender cards information will show in the interface, (as shown in Fig.5-2) Please check the hardware connection if cannot detect sender cards.

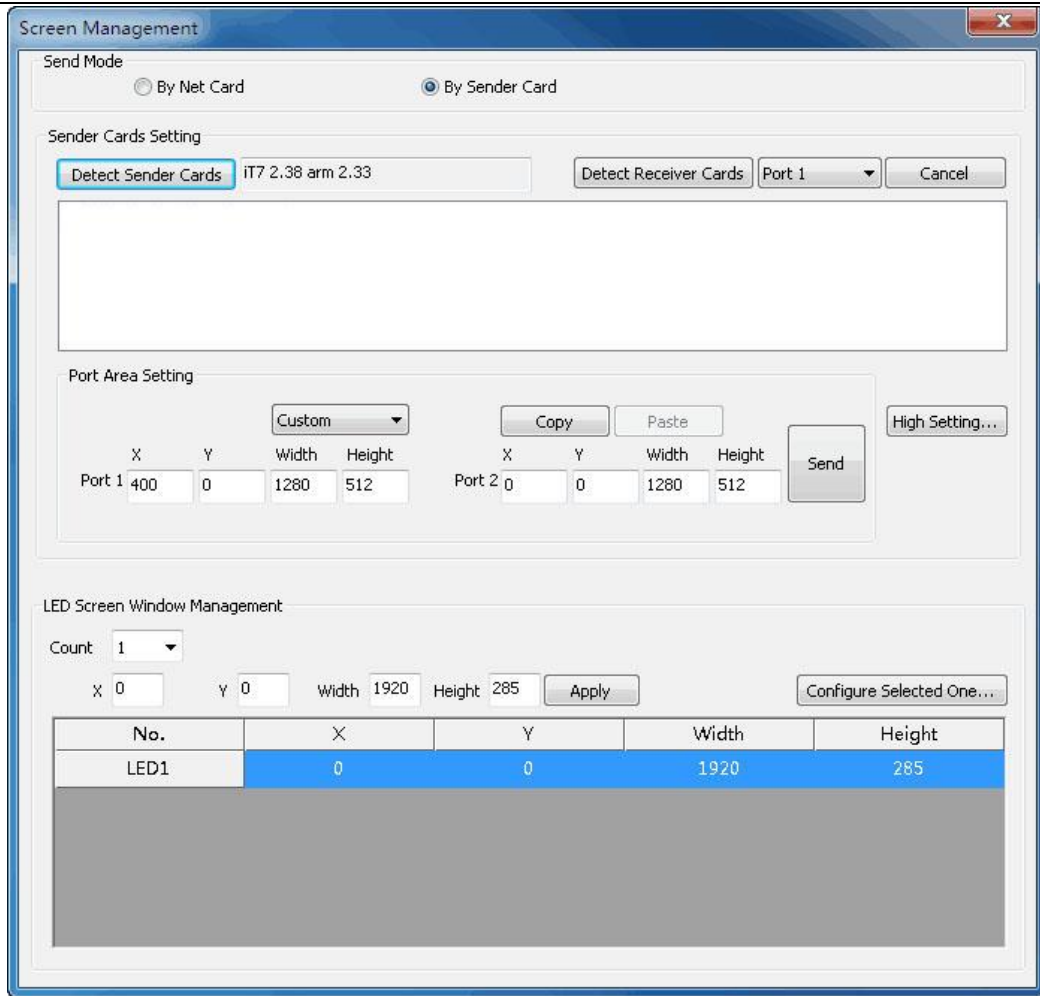


Fig.5-2

### 5.1.2 Detect Receiver Cards

Select network port and click “Detect Receiver Cards”, the software will automatic acquisition the Receiver (Receiving card)quantity for each network port of the sendingcard. Please check cable if the numbers of receiver card are inconsistent with actual.(As shown in Fig.5-3)

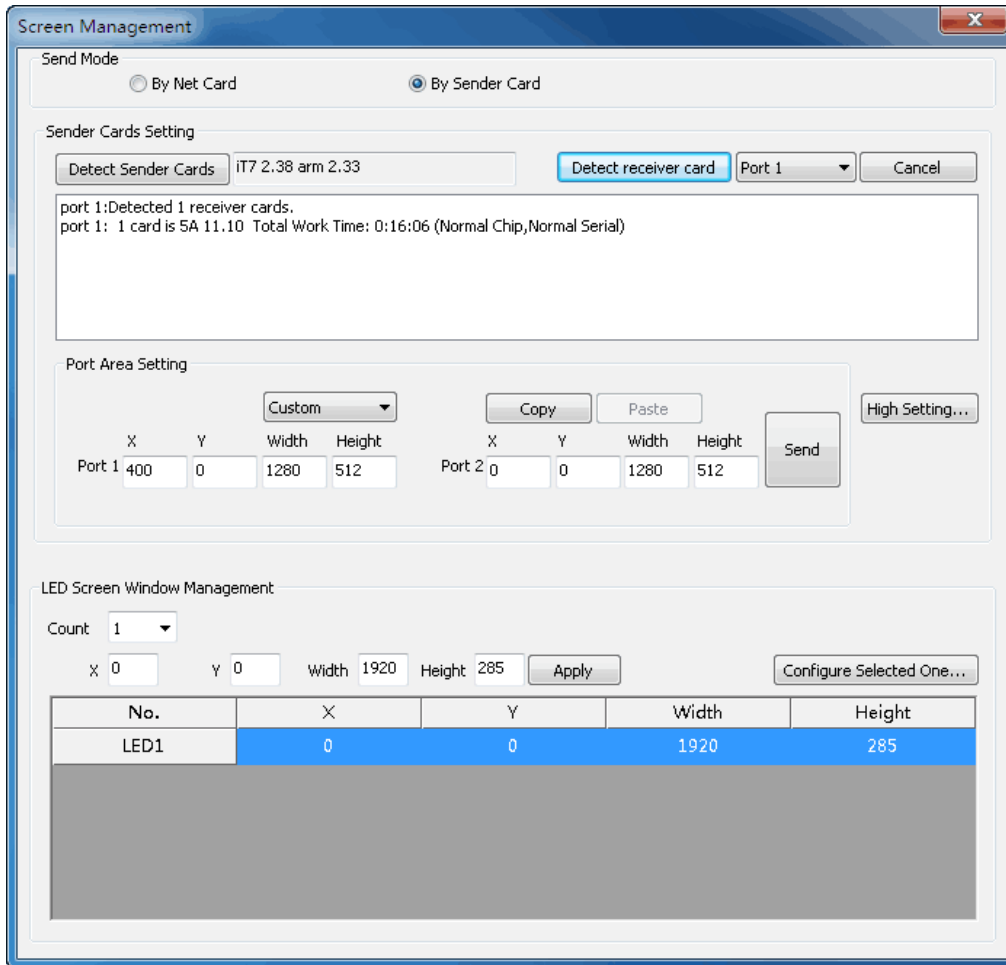


Fig.5-3

## 5.2 Setting Parameter

Software offers a variety of common resolution to choose and it also can be set up custom. It should be note that the port maximum load capacity is 655360 pixels and the starting position consistent with the actual.

Click “Send” to save the parameter in receiving cards.

### 5.2.1 Sender Card Setting

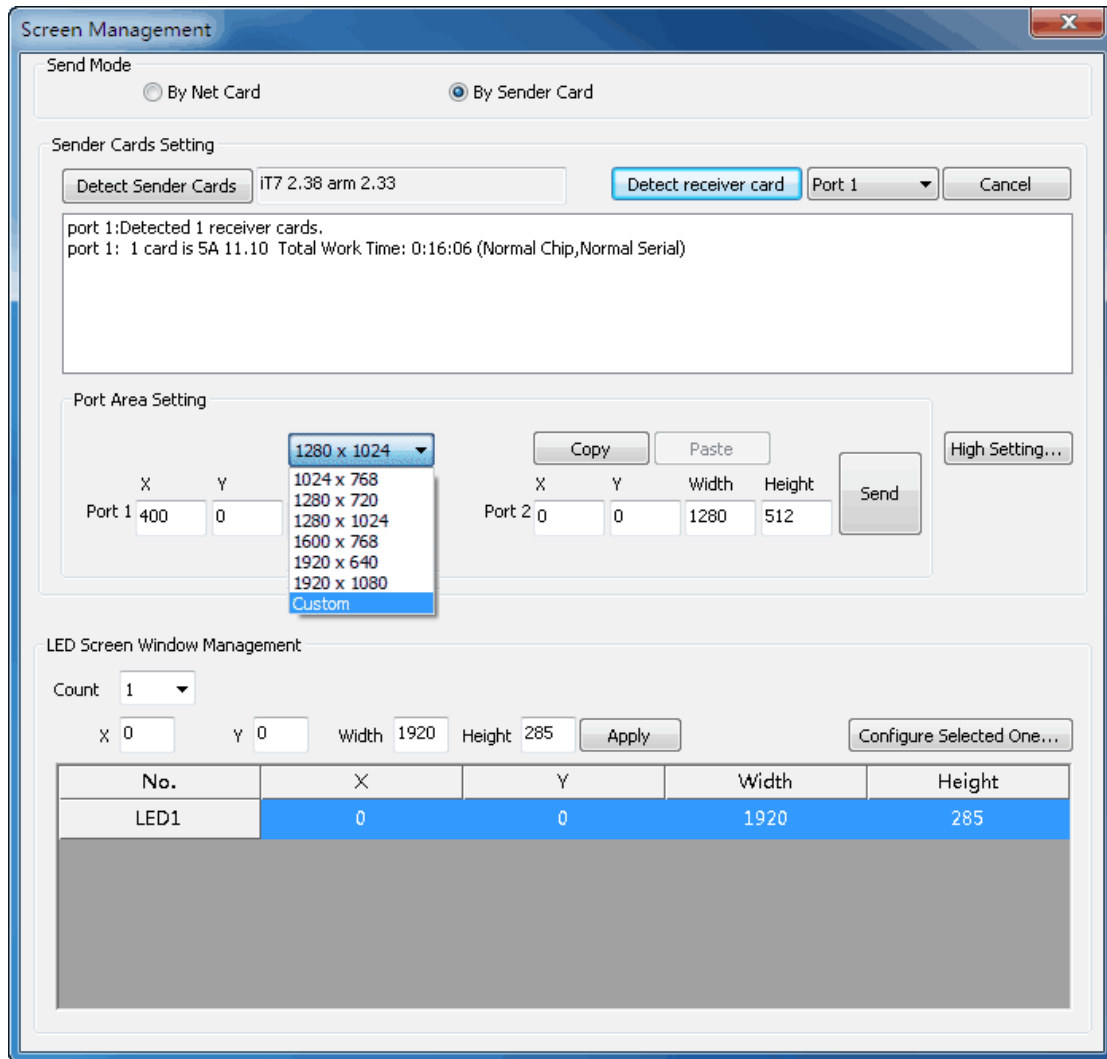


Fig.5-4

### 5.2.2 High Setting

In Screen Management interface, click “High Setting” to enter the High Setting-Send Card interface, the parameter can be set up according to your demand.

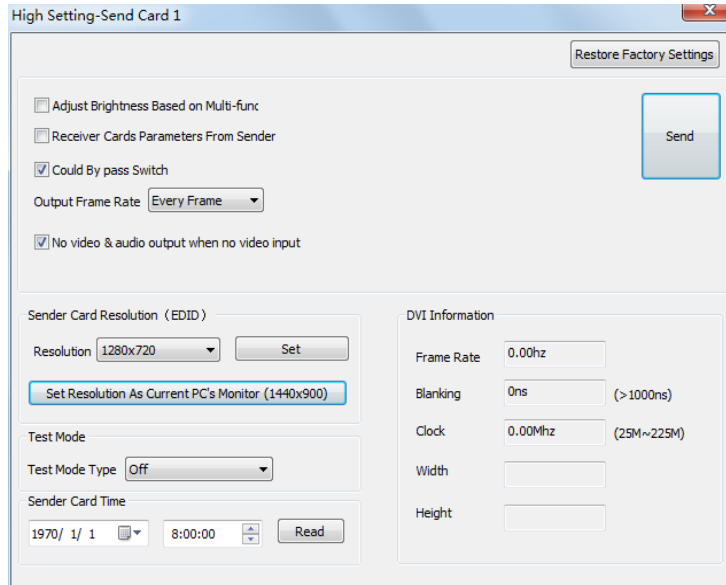


Fig.5-5

In general, users only need to set up the sender card resolution and network port control area in so many parameters

- ◆ **Sender Card Resolution:** Send card resolution must be consistent with the graphics card or video processor output.
- ◆ **Network Date Types:** The software default is “Standard Frame”; please consult professional and technical personnel if you want changing.
- ◆ **Adjust Brightness Based on Multi-function:** Check it if you need multifunction’s light sensor automatically adjusts the LED screen’s brightness.
- ◆ **DVI Information:** The parameters automatically collect by the software from the sender card.
- ◆ **Could By Pass Switch:** When the gigabit switches as transfer equipment, then required checking this
- ◆ **Output Frame Rate:** the software default is “Every Frame”, please consult professional and technical personnel if you want change to “Every Other Frame”

### 5.2.3 Screen Parameters

Observe the display screen with single cabinet as unit, if all cabinets display normally (the picture between cabinets is not continuous but also as normal), please ignore this step directly into next step.

**Otherwise, enter the following configuration:**

The first step: Click “Configure Select One...” to enter LED setting interface, then click “Load” to select the correct parameter file for your led display

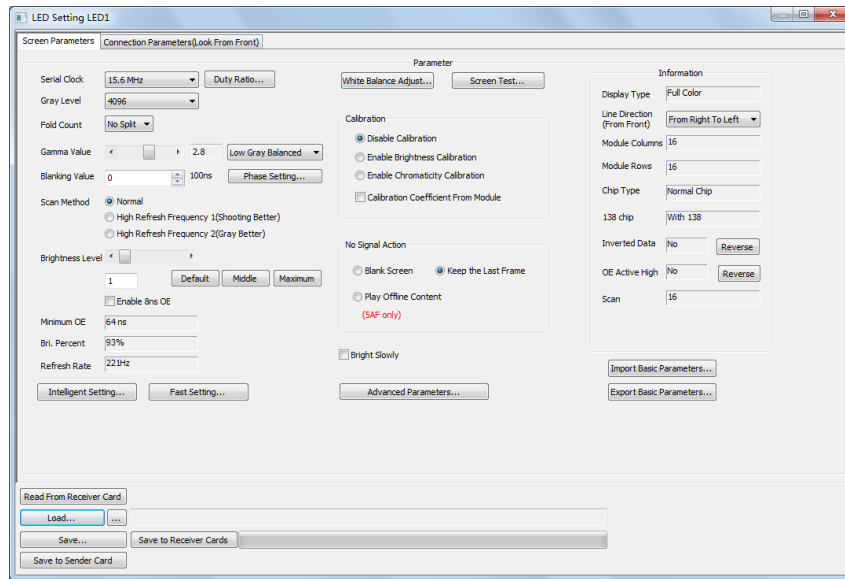


Fig.6-6

### 5.2.4 Connection Parameters (Look From Front)

In Classic Mode, LED screen need set up the Receiver (Receiving card) connection relationship for each network port of the sending card

#### 1) Receiver Lay out Setting

Set how many Receiver (Receiving card)one port manages in Row Count and Col Count(3\*3 as an example), how many pixels one Receiver (Receiving card)manages in Width and Height (64\*64 as an example), in the software interface right you will see led display mapping area (Viewing from the front of led display).(As shown in Fig.5-7)

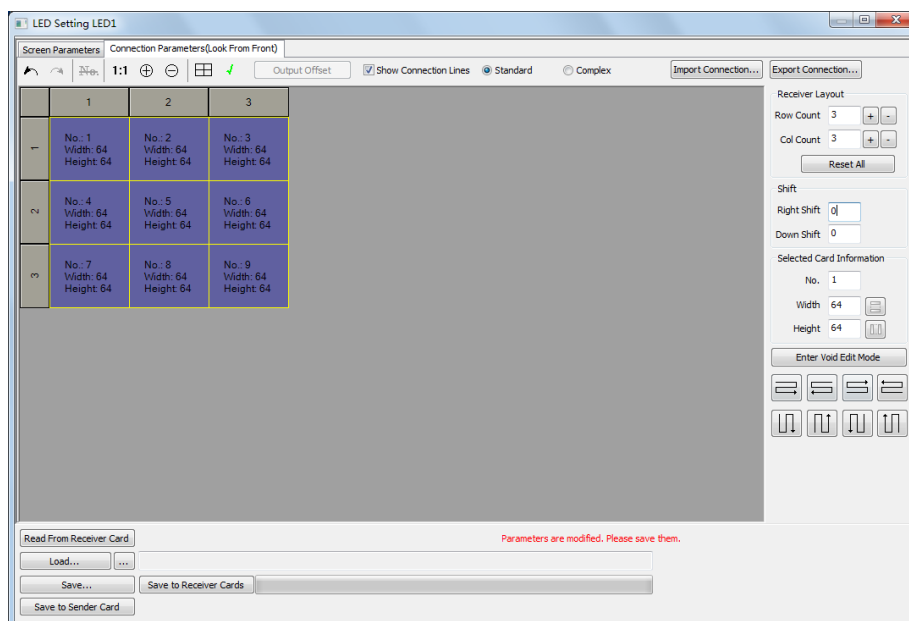


Fig.5-7

## 2) Receiver Card Parameters Setting

Configuration Receiver (Receiving Card) connection pattern for each port individually if more than one port are used. There are two methods to set up.

**Note: Set up connection Receiver (Receiving Card) must be based on fact.**

- **Use Mouse Select One By One**

Based on the actual connection of the Ethernet cable, click the Receiver (Receiving card) one by one until the last one for this network port loads, connection lines will show in the display mapping area (Viewing from the front of led display)(As shown in 5-8)

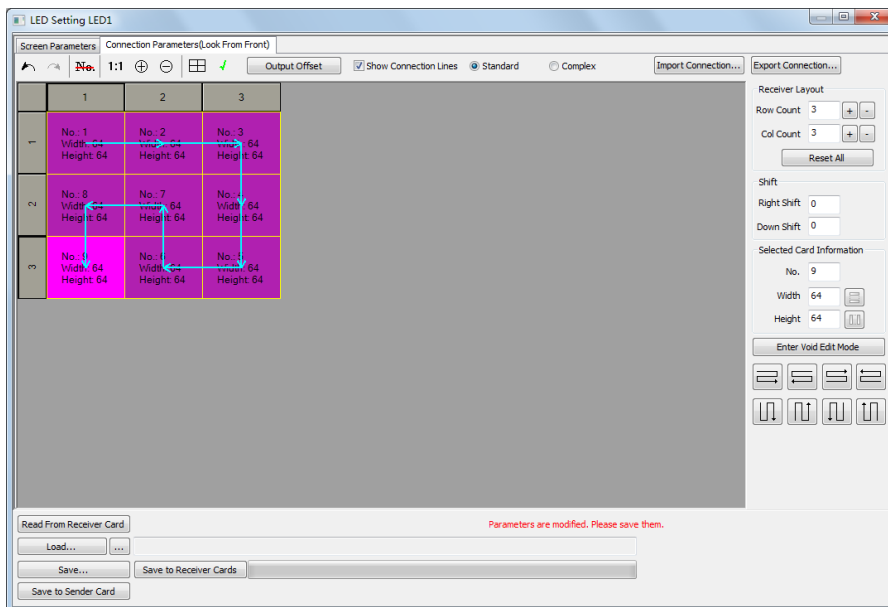


Fig.5-8

- **Connection Pattern**

Select the connection pattern based on fact, and then the connection line will show Receiver (Receiving card) in the display mapping area. (As shown in 5-9)

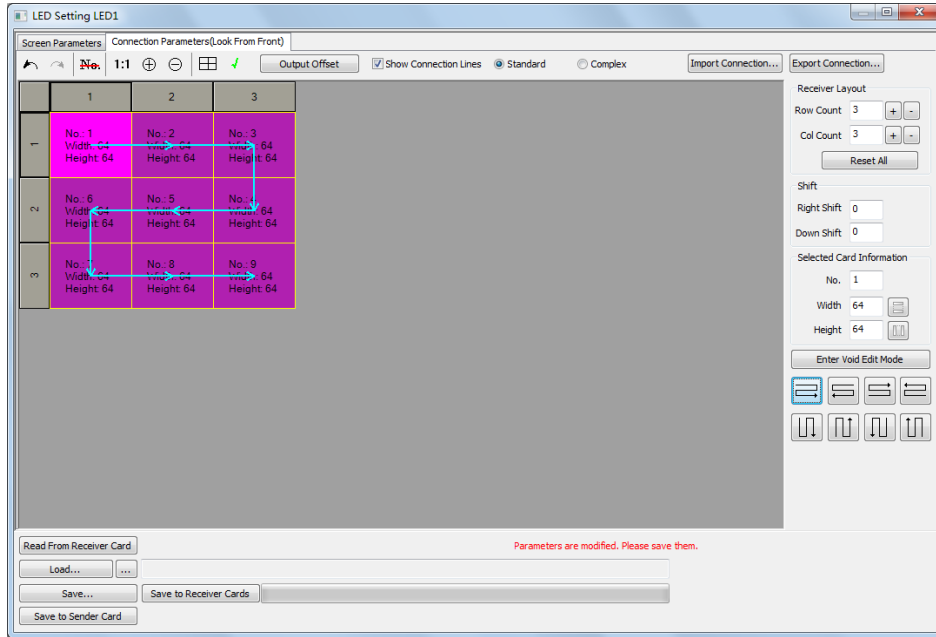


Fig.5-9

If some Receiver (Receiving card) manage different quantity of pixels from others, specific Receiver (Receiving card) Size in Width and Height can be set individually.

### 3) Save to Receiver Cards & Save to Sender Cards

The first step: Click “Save to Sender Cards” > **select port**, then send the parameter to sender card

The second step: Click “Save to Receiver Cards” > **select port**, to send the parameter to receiver cards of this port load, at this moment, this port load all cabinets should display normally (the picture between cabinets is not continuous but also as normal)

The third step: Set up the next port load receiving cards parameter and connection type.

Please contact display manufacturer of engineering and technical personnel if display abnormally.