

User's manual of LedGo

LEDSOLUTION Color series asynchronous full-color control card

V2.5.2

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1 Software Introduction

1.1 Preparation

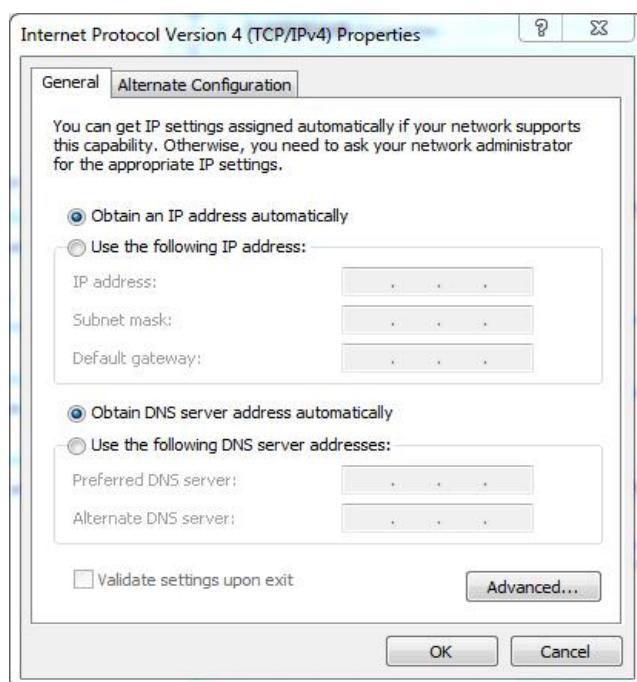
1) Download and install

Download from the CD or website www.ledsolution-cor.com and install.

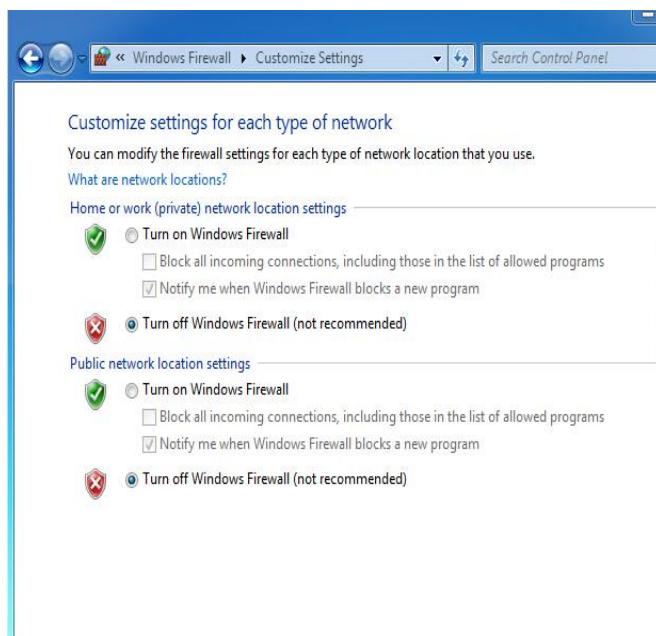
2) connecting the control card

Connecting the control card and led sign according to chapter one.

Using the cable to connect the control card and your computer.



By the way, please close the firewall



3) turn on the control card and led sign power

After dozens of seconds time waiting, the RUN lamp flicker, user could do configuration and operation to control card with software.

1.2 Configuration software: LedConfig

Before using the control card, user need to do some setting with LedConfig. Mainly setting for different types of led sign.

User can directly import the parameters file (display.cnf) into the control card if you had saved before. Or to generate a new configuration file via smart setting wizard. Generally it needs two steps to do setting:

Notes: Both tracing point and control card sorting while setting are subject to positive observe led sign.

1.2.1 for generating a single module

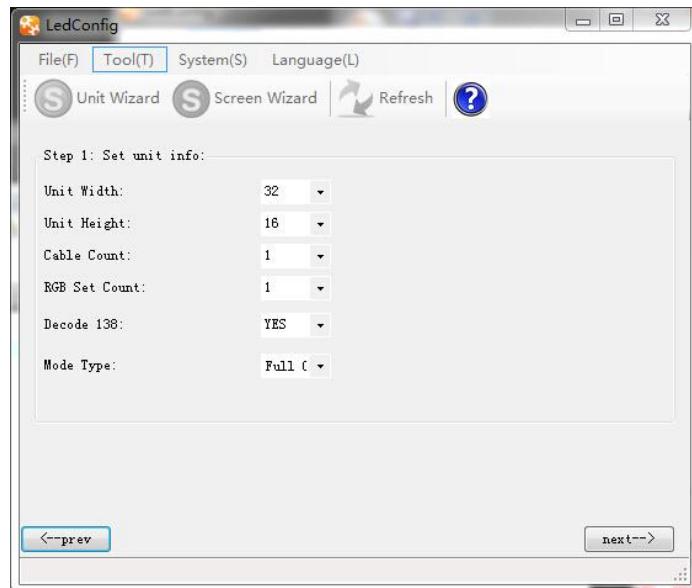
Firstly user may choose the control card which you want to be set, clicking the button



to start the smart setting.

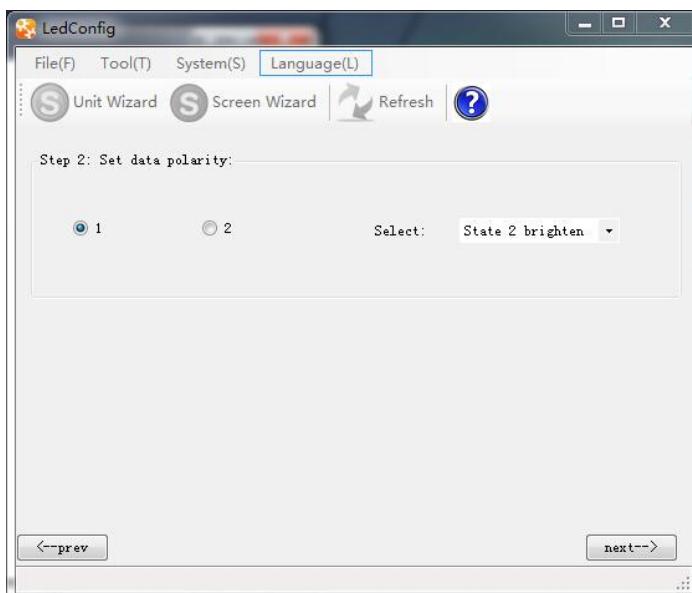
Notes: at the following setting, all are subject to the first unit board whatever connecting one or more.

Step 1: setting basic information of module



Parameter	Specification	Data range
Unit width	Unit board pixels in X-axis	4~64
Unit height	Unit board pixels in Y-axis	4~32
Cable count	the input cable count in one unit board	1~2
RGB set count	RGB the RGB set count in one cable	1~2
Decode 138	Use decode 138 or not. Generally more than 4 scans, should be used 138 decode. And static led sign and less than 4 scans are not.	0~1

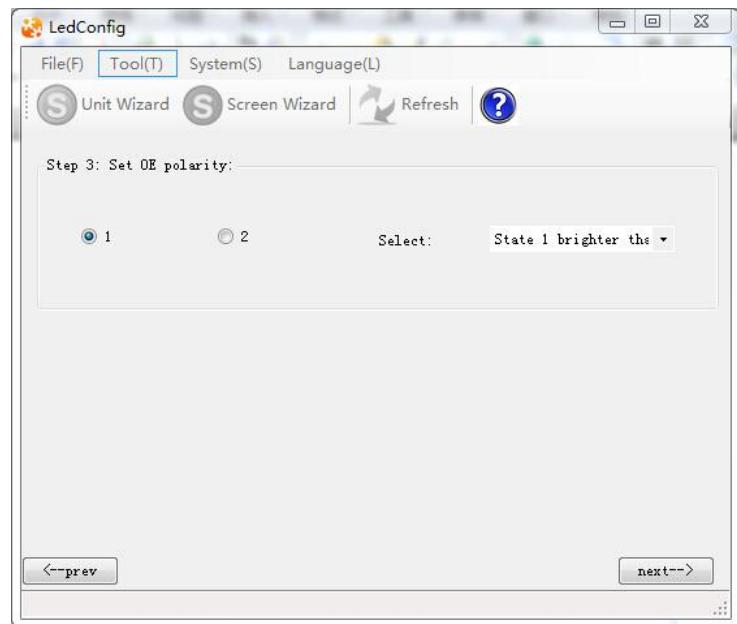
Step 2: set data polarity



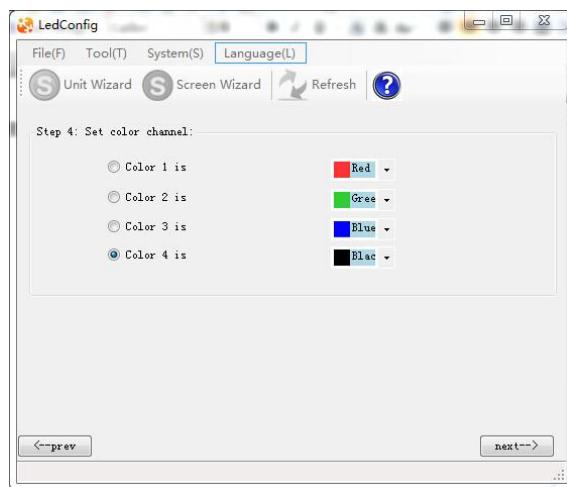
According to the display condition of currently led sign (the first unit board) choose the selection.

Step 3: Set OE polarity

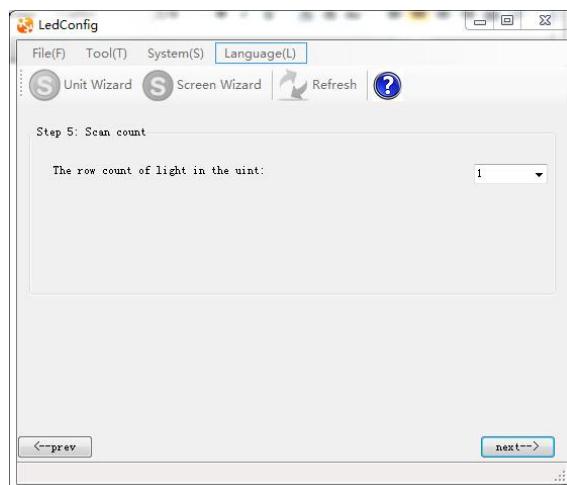
info@ledsolution-cor.com www.ledsolution-cor.com



Step 4: Color channel testing

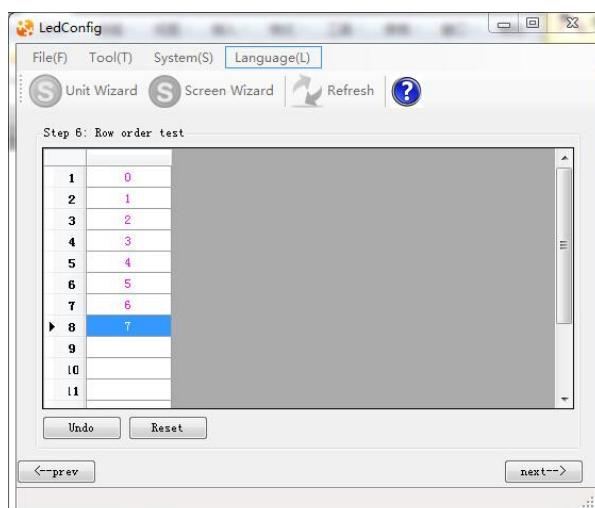


Step 5: Scan count



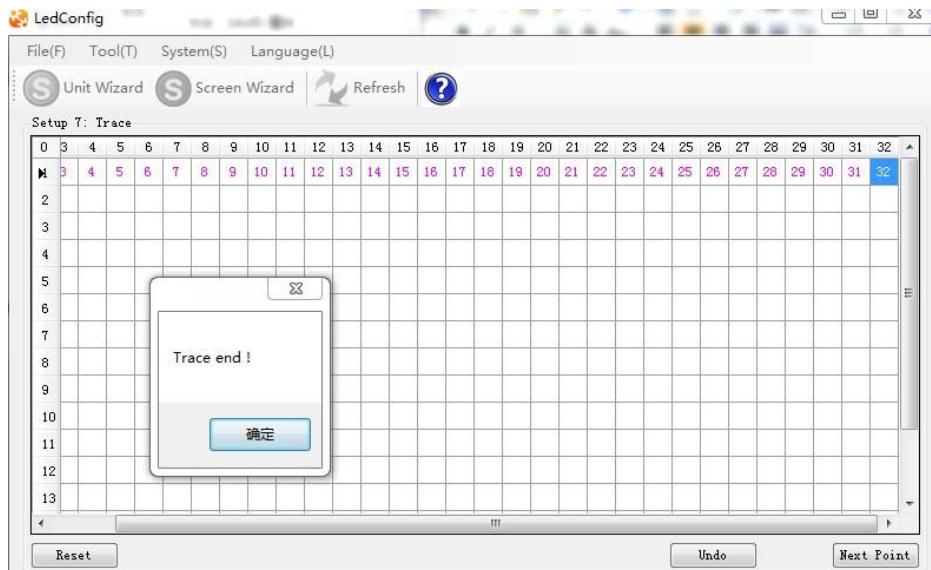
According to the display condition of currently led sign (the first unit board) choose the row count of light

Step 6: Row order testing



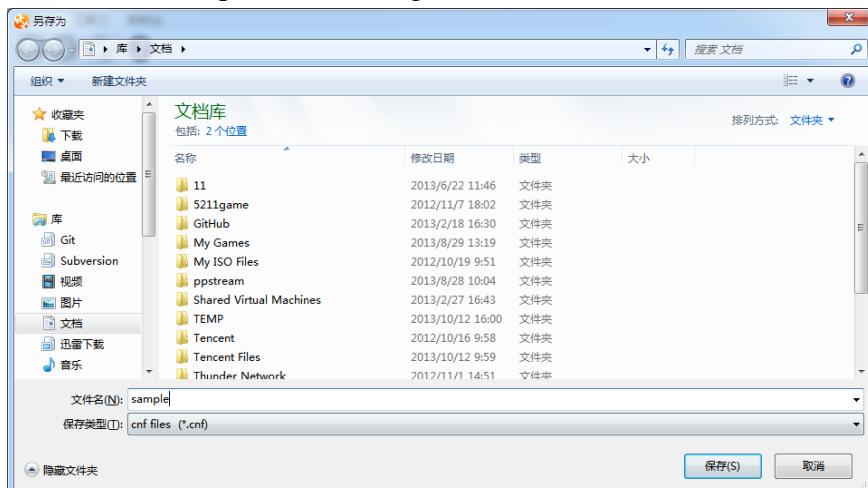
Scan the points in order according to order of lighting row in the first module

Step 7: Trace



According to the display condition of currently led sign (the first unit board), choosing the position of currently lighting points, point in point.

At last, save the file and update the configuration:



Clicking the button “next” the system will prompted to select save the path and file name, and then the software will send the configuration file to the control card and display the testing program.

1.2.2 for generating the entire screen

After finish the configuration of a single module, we need to configure the relative parameter including the parameter of cascading, multi-open and multi-cardof of the sign



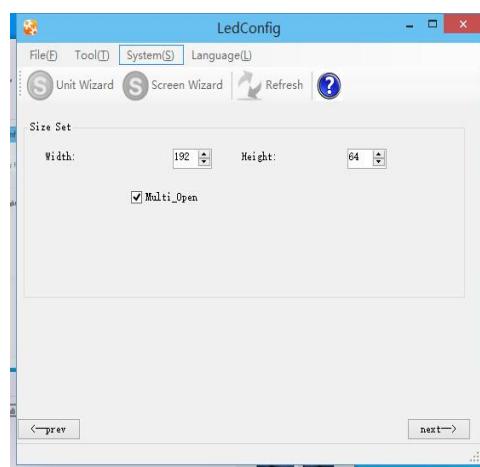
in further. Choosing the aimed control card and clicking the button  to do the setting. If you want both multi-open and cascading setting, please do multi-open setting first and then to do the cascading setting.

1)multi-open setting

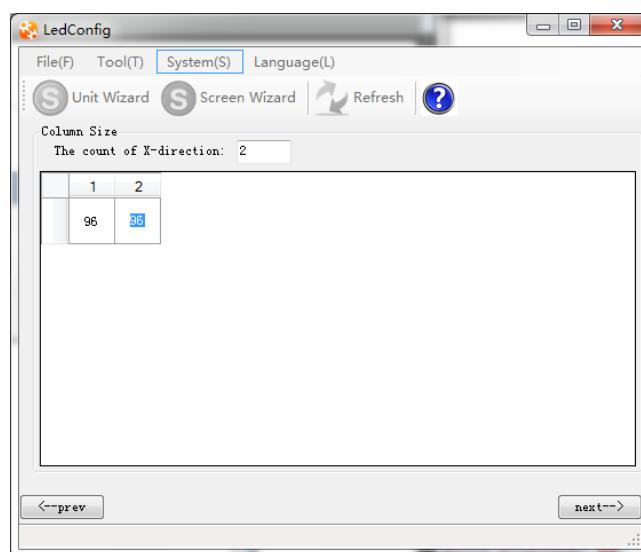
Here we are going to show you how to set the sign192*64. Which each HUB interface bring 96*32 in the sending card. When doing the multi-open setting, each HUB interface may bring the same dimension.

Step 1: Size Set.

The dimension only shows the specification of the screen which controlled by the sending card. Choose “multi-open” and then click “NEXT”.

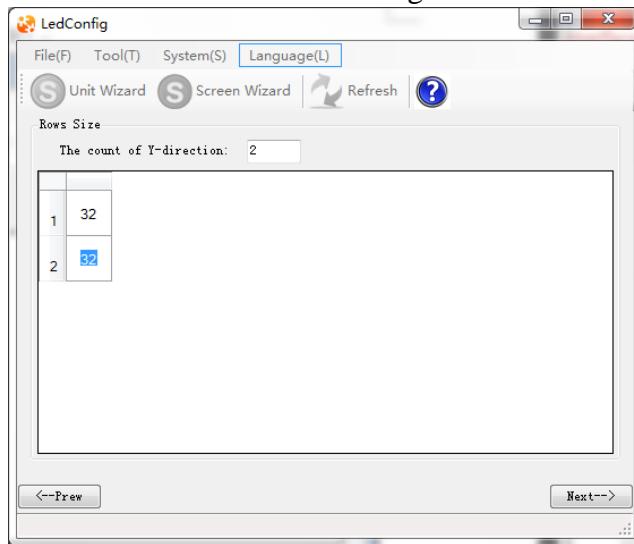


Step 2: X-direction HUB interface Numbers setting



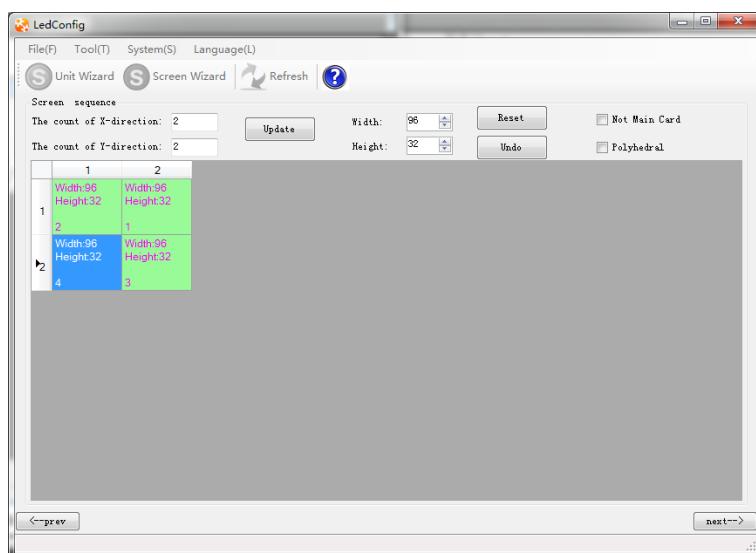
According to the different conditions of the HUB interface brings, to set the driven pixels of HUB interface in X-direction. Like showing as the pic, the total pixels in X-direction is 192, so the first HUB interface brings 96 pixels, and second is 96. **Each HUB interface may bring the same dimension.**

Step 3: Y-direction HUB interface Numbers setting

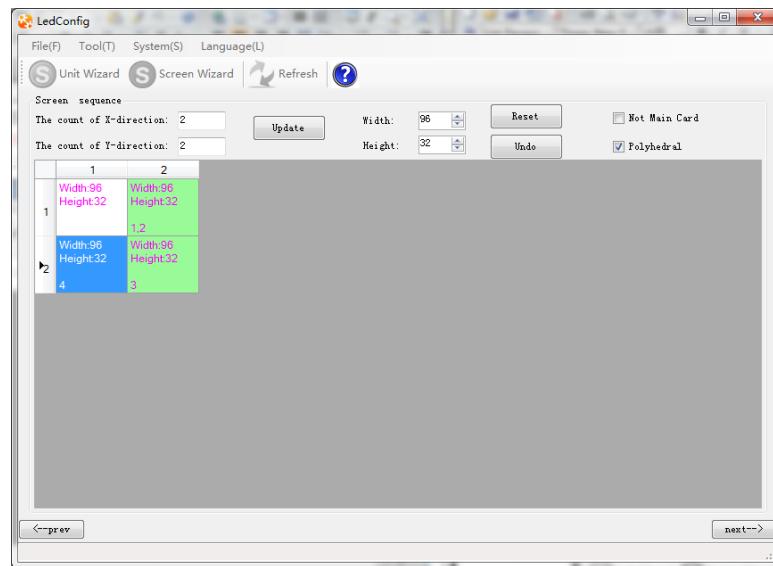


According to the different conditions of the HUB interface brings, to set the driven pixels of HUB interface in Y-direction. Like showing as the pic, the total pixels in Y-direction is 64, so the first HUB interface brings 32 pixels, and second is 32.

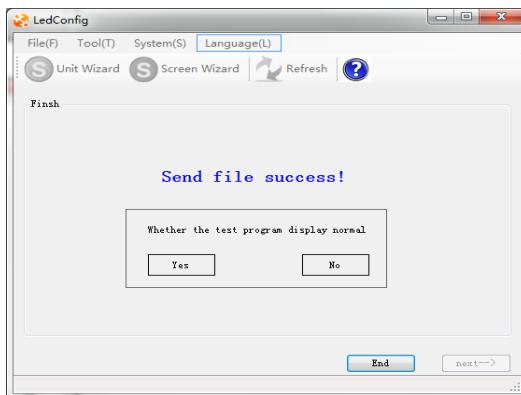
Step 4: Screen sequence setting



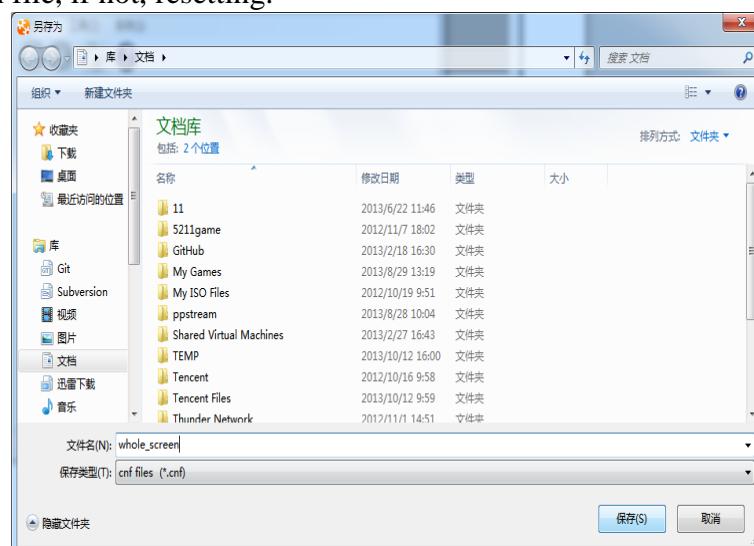
Clicking the icon in order to set the order of each part. If you need to copy the content on screen , please choose the selection “polyhedral”. As like the following picture, when you choose the function of polyhedral, the first screen and the second will play the same content.



Step 5: to save parameter and send



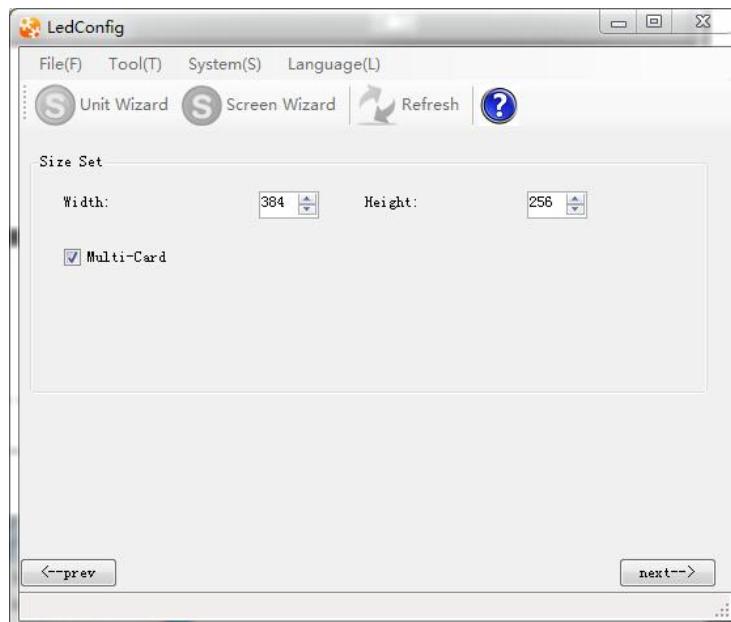
Watching whether the test program playing normal or not, if yes, save the configuration file, if not, resetting.



2) cascading setting

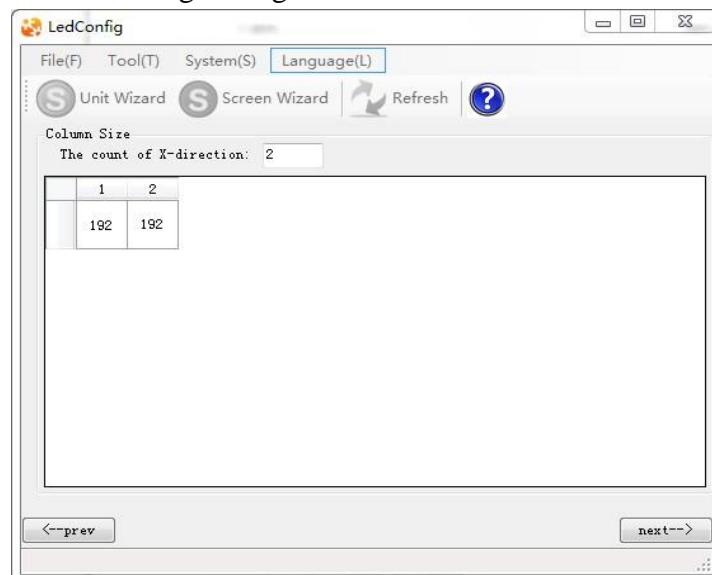
Here we are going to show you how to set four controllers in one big sign384*256.

Step 1: import the height and width of the whole sign and choose the selection “Multi-Card”. And then click “Next”.



Parameter	Specification	Data range
Width	Total pixels in X-axis	4~2560
Height	Total pixels in Y-axis	4~480

Step 2: X-direction cascading setting



According to the different conditions of the control card, to set the driven pixels of controllers in X-direction. Like showing as the picture, the total pixels in X-direction

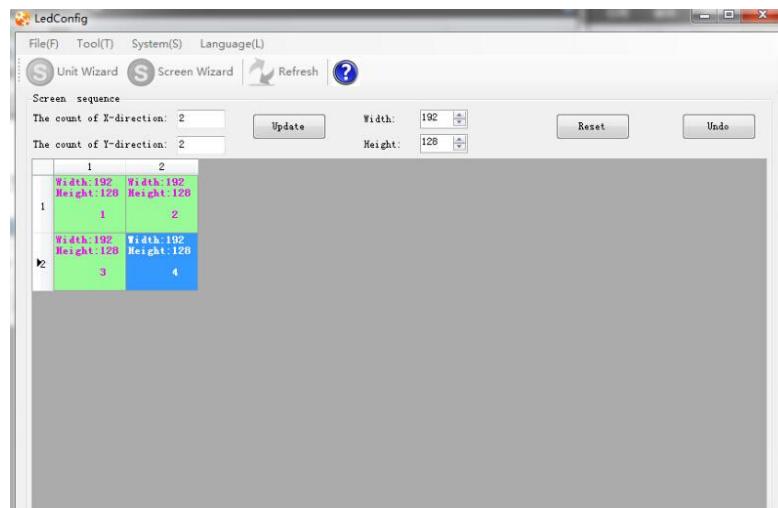
is 348, so the first controller brings 192 pixels, and second is 192.

Step 3: Y-direction cascading setting

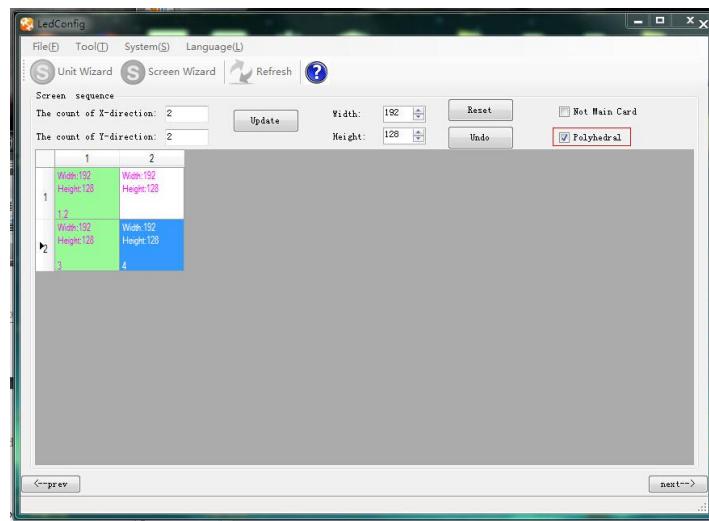


According to the different conditions of the control card, to set the driven pixels of controllers in Y-direction. Like showing as the pic, the total pixels in Y-direction is 256, so the first controller brings 128 pixels, and second is 128.

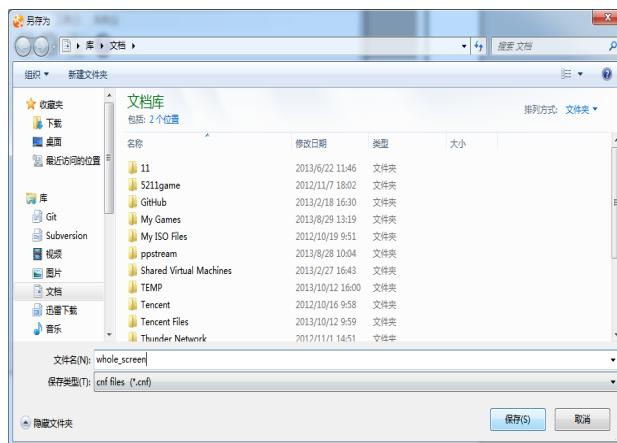
Step 4: Screen cascading sequence setting



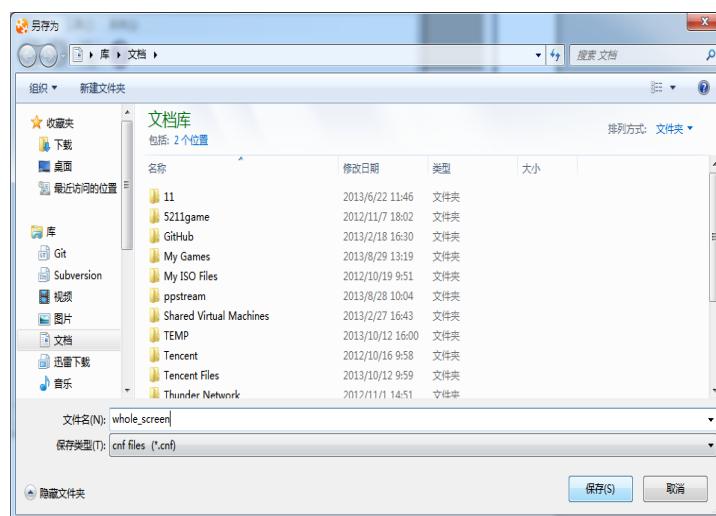
According to the cascading sequence of the actual controller, clicking in order. If you need to copy the content on screen , please choose the selection of polyhedral.Clicking according to the actual condition, as the following picture to make the two screens display at the same.



Step 5: Save parameters and sending



Choosing the path and file name according to system prompt to save then software sends parameter to controller.

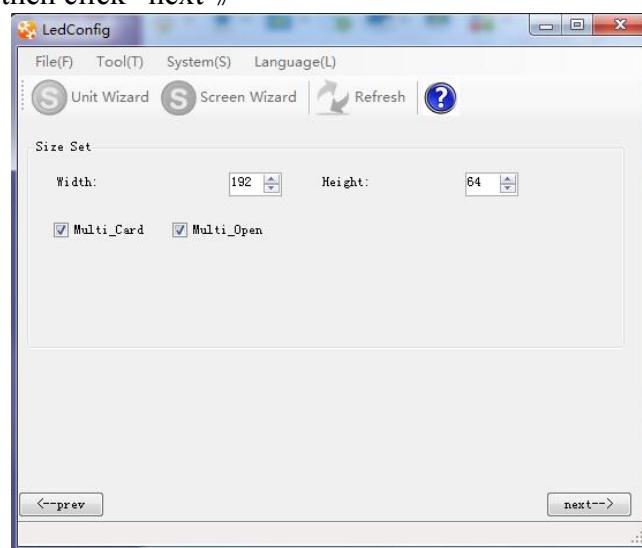


3) both multi-cards and multi-open setting

Here we are going to show you the setting of a 192*64 dimension sign which is controlling by a sending card (bring 192*32) and a receiving card(bring 192*32). Each HUB interface in the sending card bring 96*32 as well as in the receiving card. When doing the multi-open setting, each HUB interface may bring the same dimension.

Step 1: please reference the [multi-open](#) setting at above

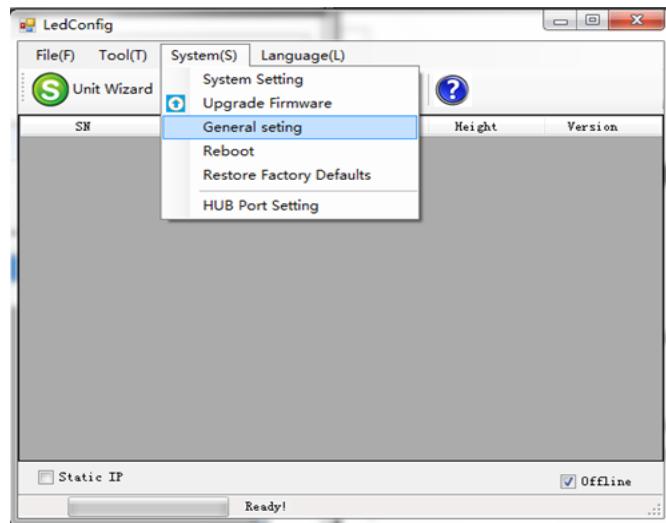
Step 2: open the LedConfig and click “Screen Wizard”, choose both “multi-open” and “multi-card” and then click “next-> ”



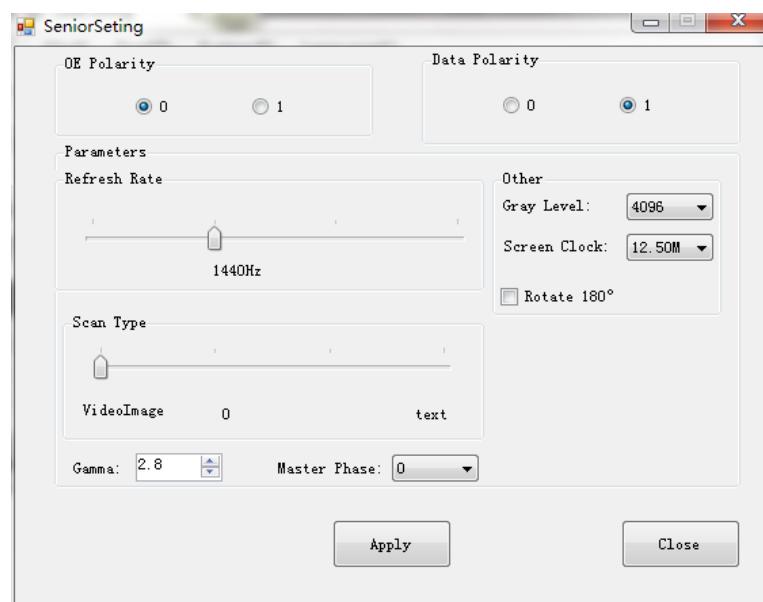
Step 3: the following steps are the same as the cascading setting. Please reference [cascading setting](#).

1.2.3 General parameter setting

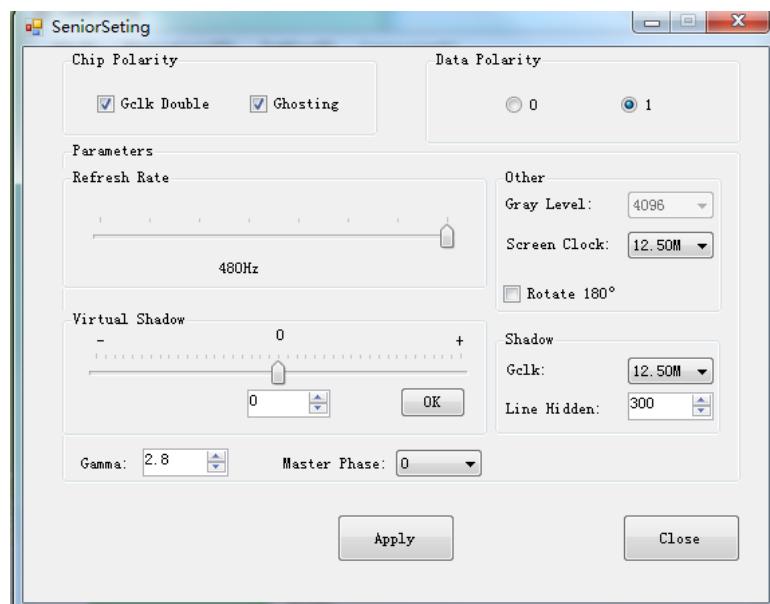
Open LedConfig, clicking “System(s)”



User can do any general setting If he wants



General setting face of non-5041/5042



The general setting face of 5041 and 5042

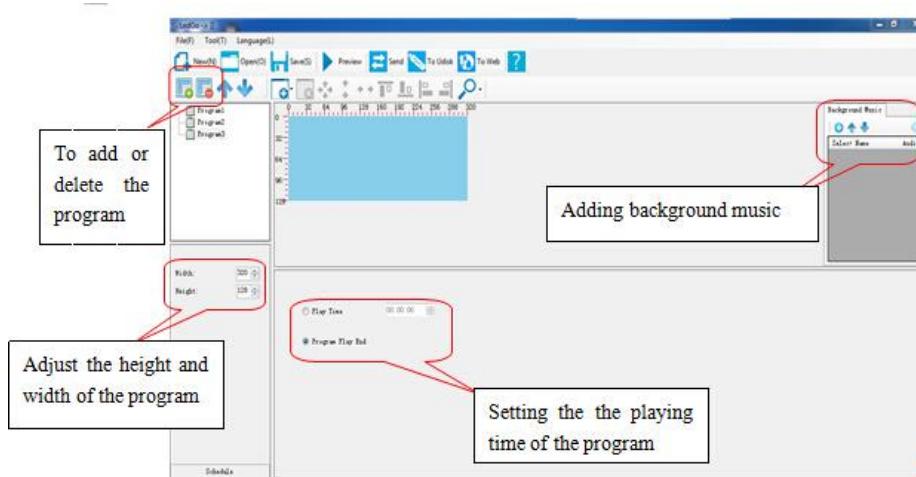
1.3 Editing and publishing program software: LedGo

Using LedGo software to do editing and management of the terminal controller.

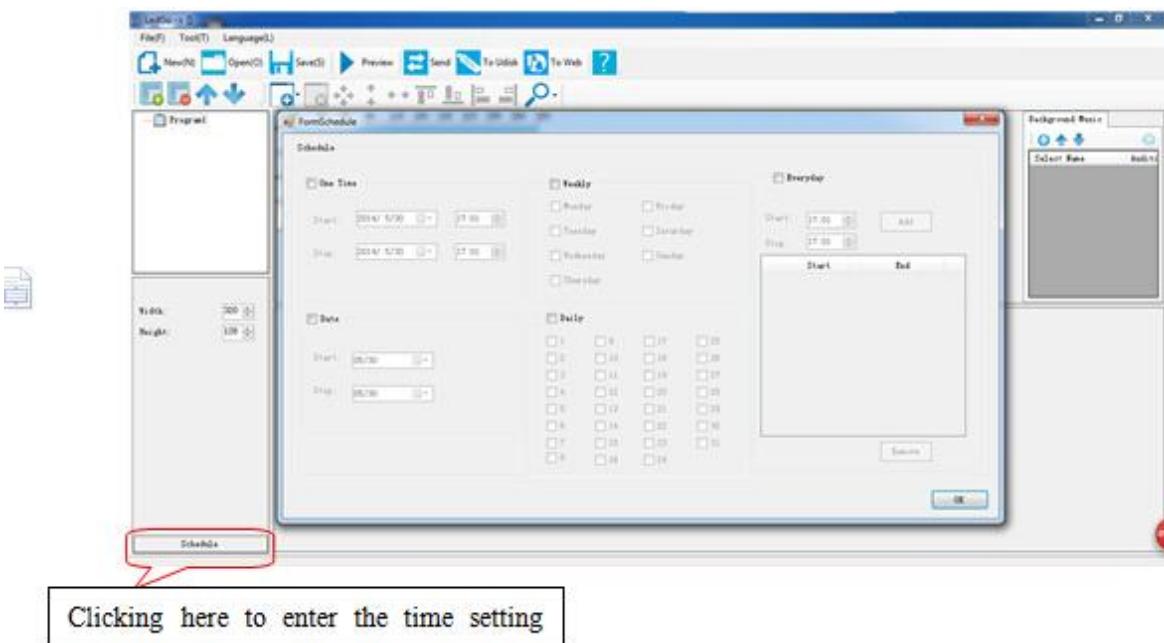
1.3.1 Editing program

Step 1: Adding program

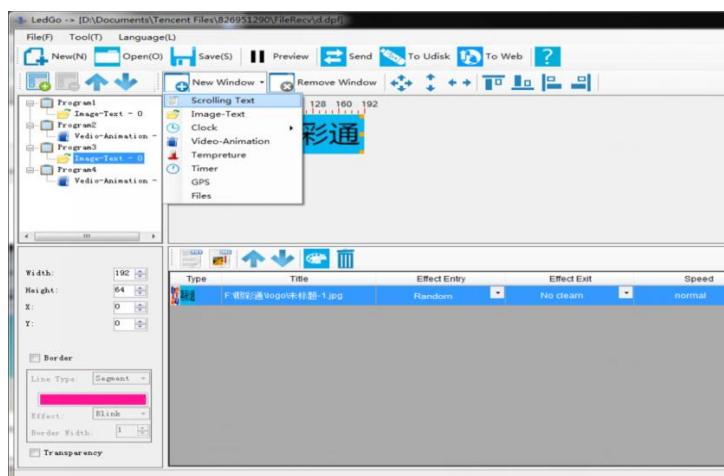
Clicking  in the tool bar, then the software will generate a default program automatically. Clicking the name of program in the list, and then you can set the size(wide and high), playing time and background music of program in the parameter bar.



Then, you can click the schedule button in the lower left adjust the playing time.



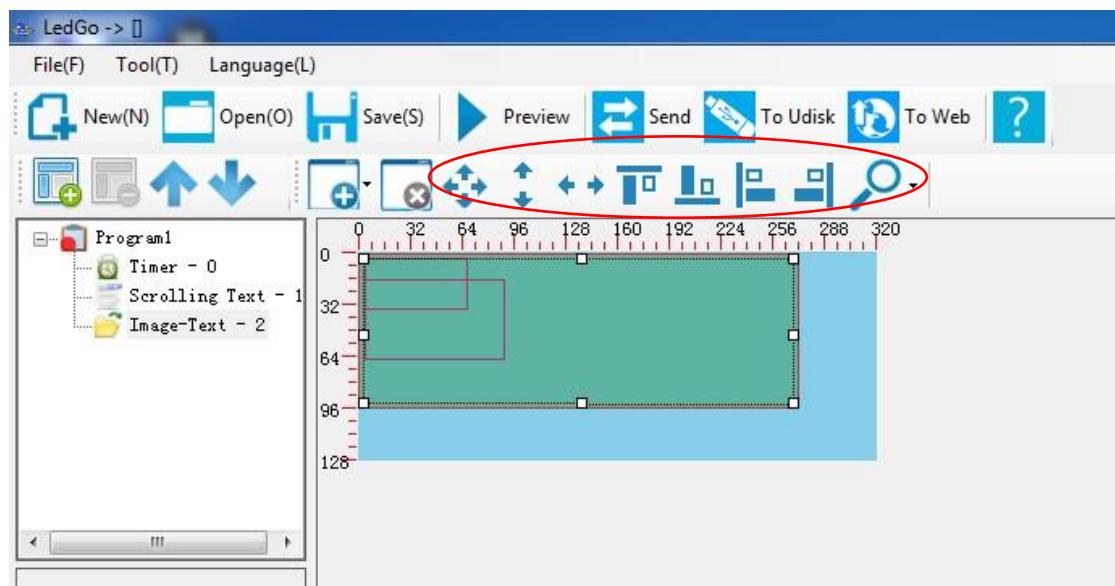
Steps 2: Adding playing content to program.



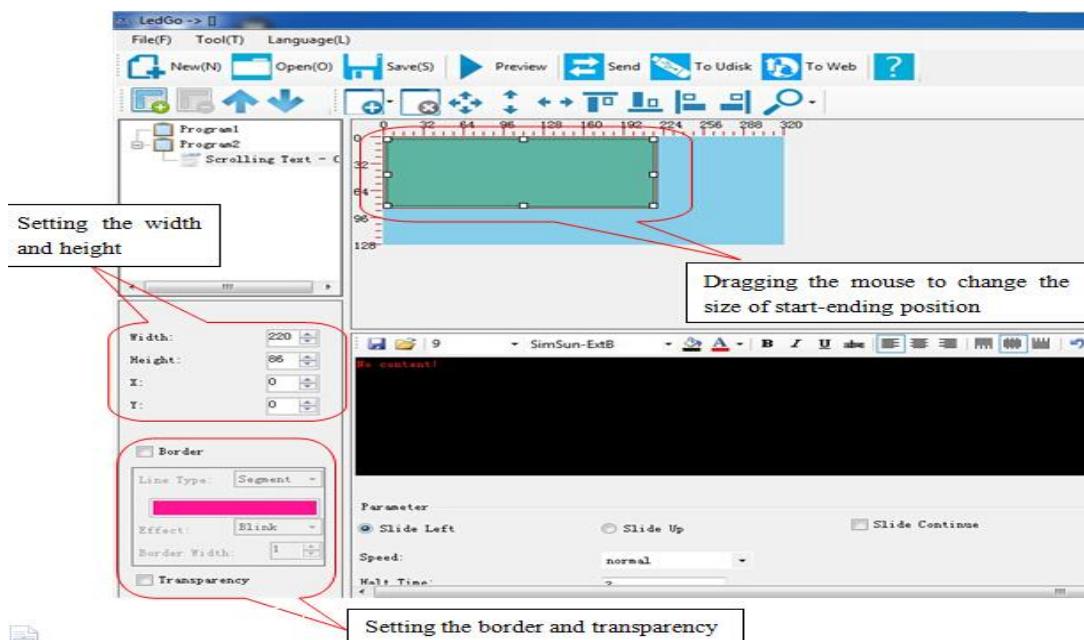
Clicking the button of adding, choose the type of playing content, which including:

1. Scrolling text: that's said the text content of rolling play including the continuous rolling to up or left.
2. Image-text: that's said the image file and the whole screen playing text.
3. Clock: including digital clock and analog clock
4. Video-animation file: video or animation file
5. Humiture: real-time display temperature and humidity after installation temperature and humidity sensor.
6. Timer: including positive and countdown timer.

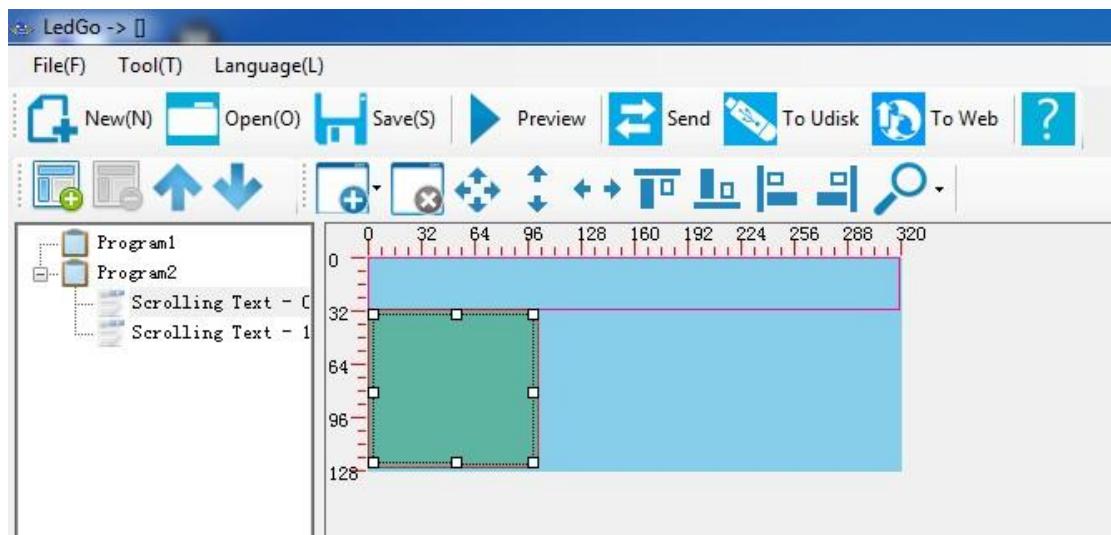
After successfully adding the window, user can set the size and the location in the program of the window via the layout button which is located in the tool bar.



Also, user can modify the parameter in the lower left to fine-tune the size of location and frame information of the window



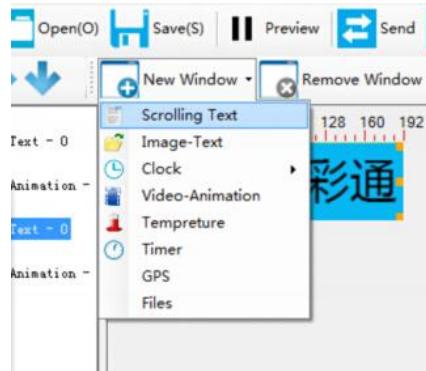
User can add more windows if in needed.



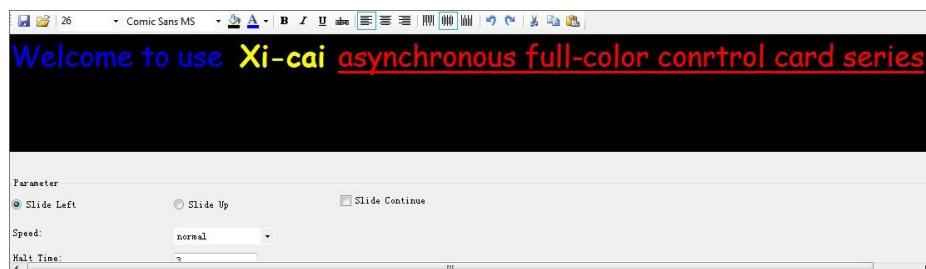
Attention: Setting the relative location of window to avoid the phenomenon of window overlap. The size and location of window should keep within the scope of the program. The frame which adding in the program cannot be seen at preview, but can be seen after sending.

1.3.2 Scrolling text

Clicking the button “+ New window” to choose type of scrolling text:



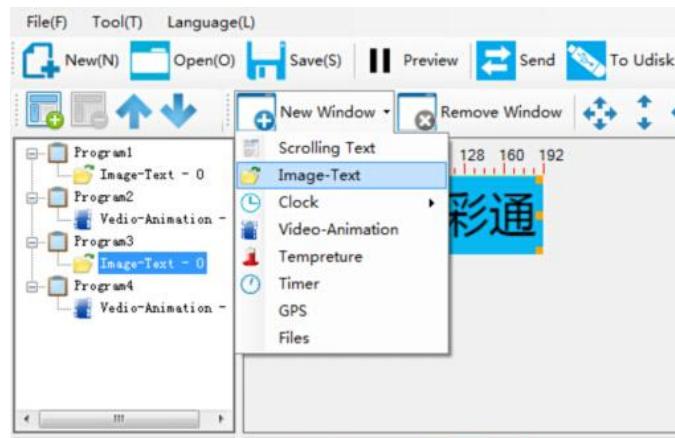
User can edit kinds of typefaces and color via the tool which supported by software.



At last, choose the way to slide left, slide up or slide continue which you are in need.

1.3.3 Image-text

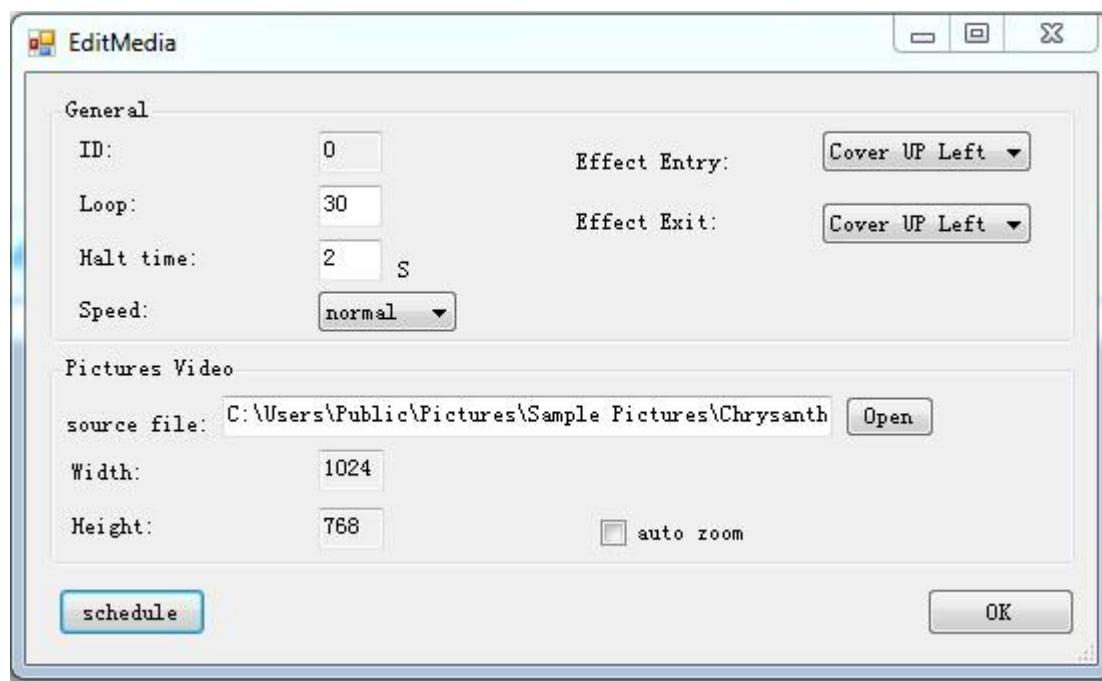
Clicking the button, new window which in the right tool bar, to choose image-text type:



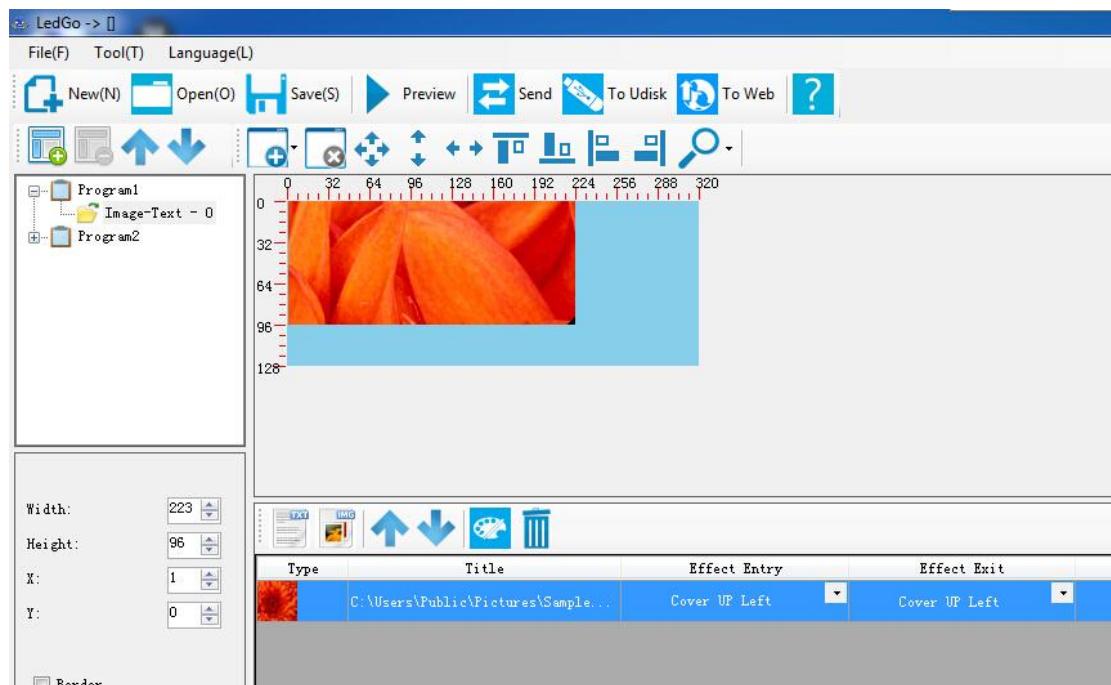
User can add text type program or choose image in the tool bar:



Choosing the aimed image file in the pop-up file selection box, then you can edit the image program via the pop-up EditMedia box. e.g. the picture scaling and the in-and-out special effects choice.

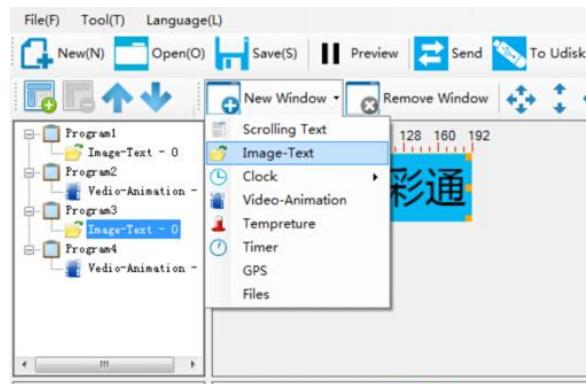


After successful adding, user can preview in the main interface:



1.3.4 Video-animation program

Clicking the button new window in the right tool bar to choose "video-animation" type:



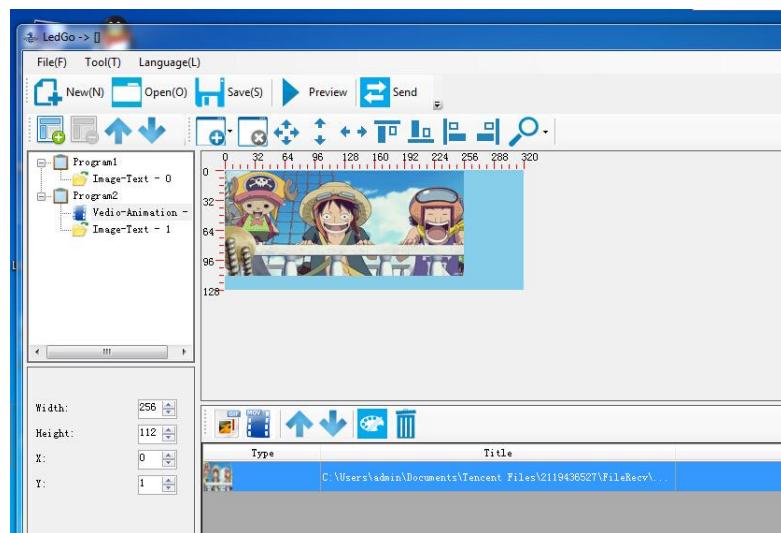
User can add the needed animation material program in the tool bar:



Choosing the aimed video animation file in the pop-up file selection box, then you can edit the animation program via the pop-up media edit box. e.g. the cartoon scaling.

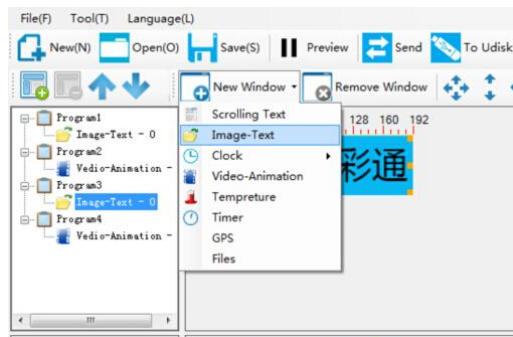


After successful adding, user can preview in the main interface:



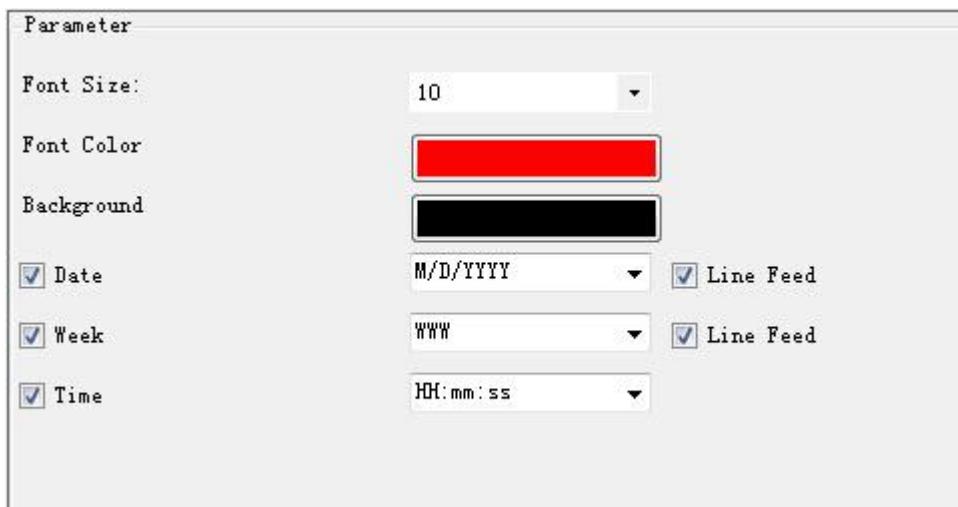
1.3.5 Clock

Clicking the button new window in the right tool bar to choose “clock” type:



User can select digital or analog clock:

Digital clock: it needed to set the height and color of the word and the needed displaying content and format:

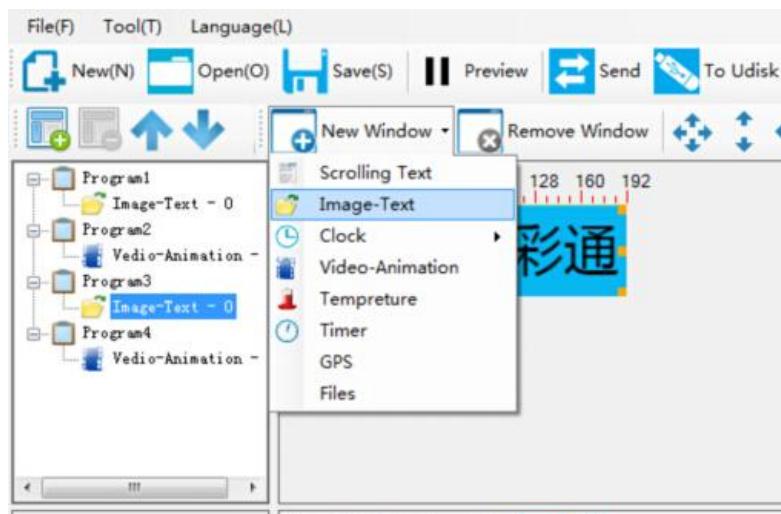


Analog clock: only needed to choose the background of the clock:

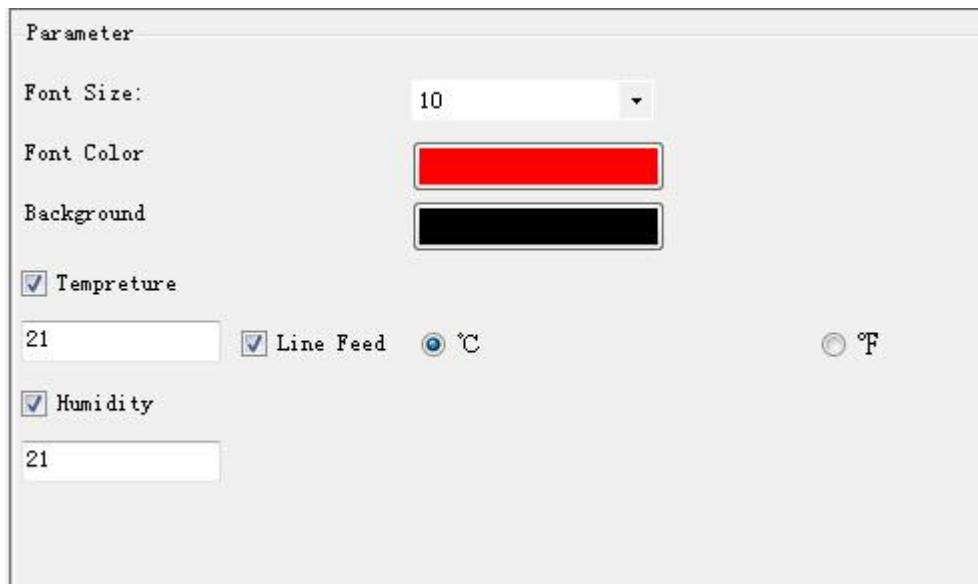


1.3.6 Temperature and Humidity

Clicking the button new window in the right toolbar to choose “Temperture” type:

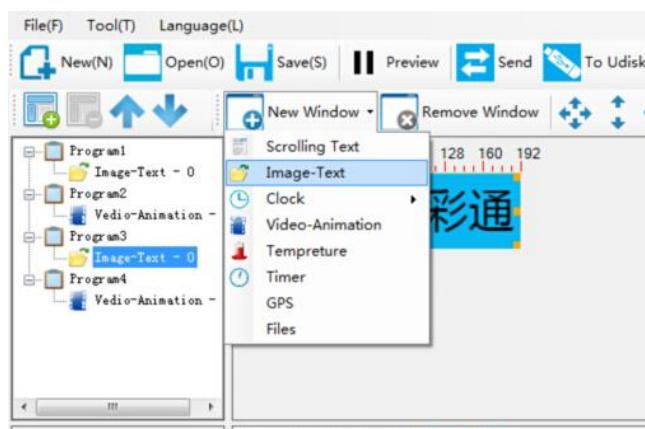


According to the parameters providing by the software, users can adjust the height and color of the words, and the needed displaying content and format:

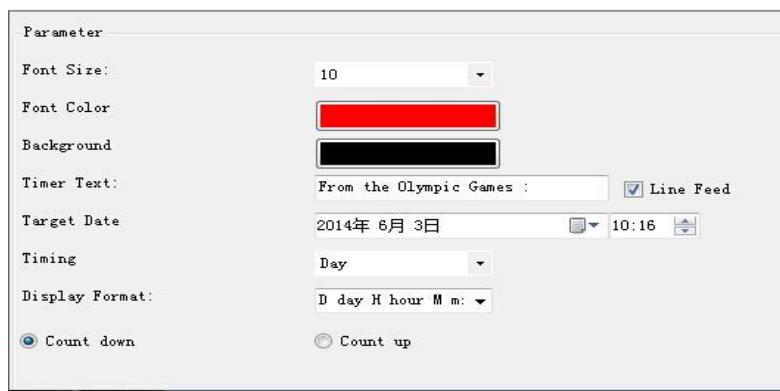


1.3.7 Timer

Clicking the button of new window in the right tool bar to choose timer type:

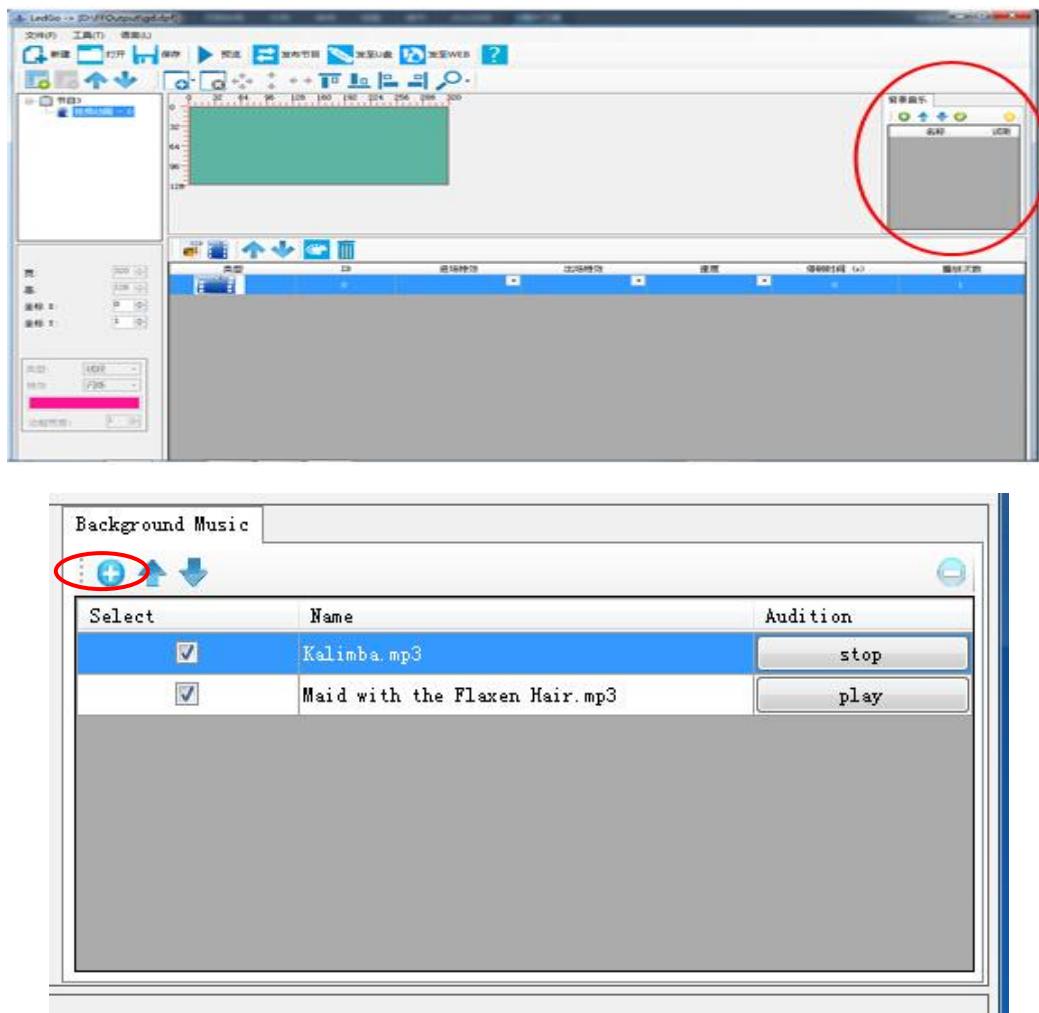


According to the parameters providing by the software, users can adjust the height and color of the words, and the needed displaying content and format:



1.3.8 Background music

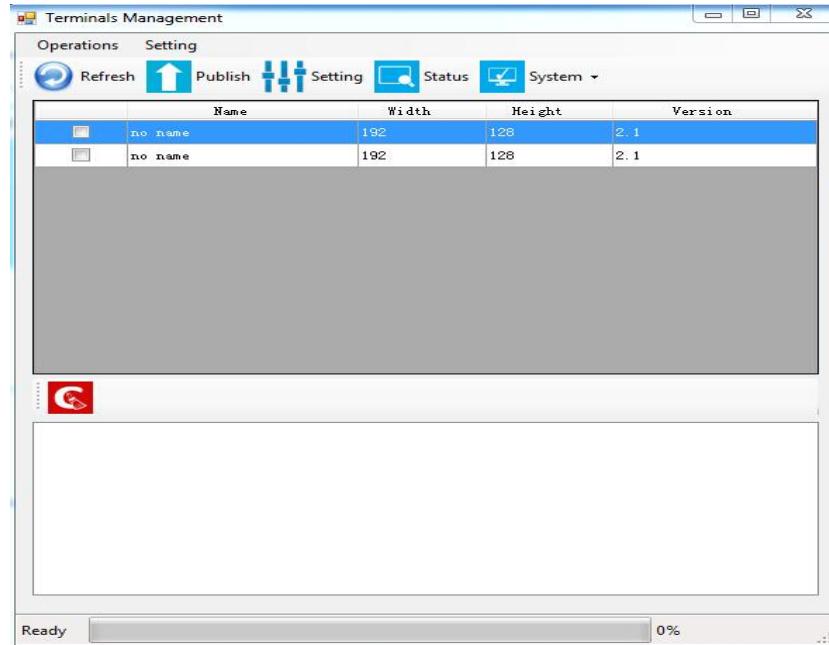
Clicking to add the background music and click to delete it.



Clicking to select the playing order.

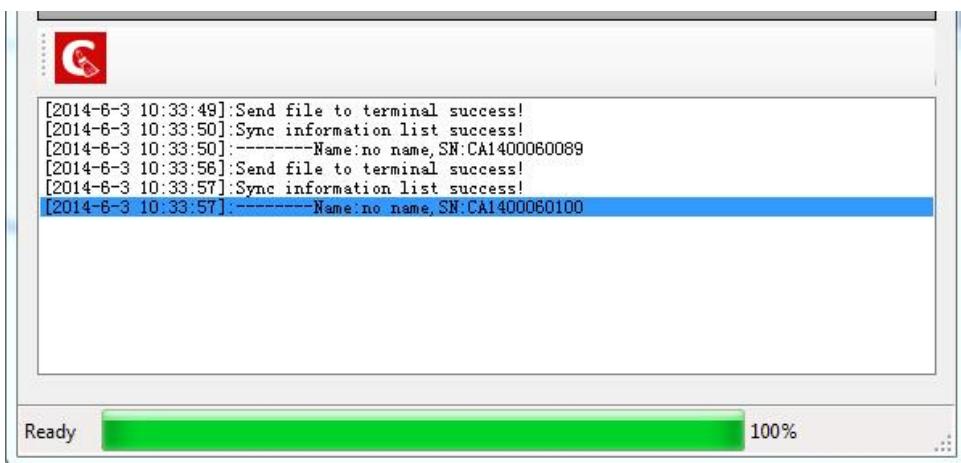
1.3.9 Releasing program

After successful editing, user can click the button of releasing program in the main tool bar to open the terminal management interface:



The software will automatically detect the terminal control card which connected to

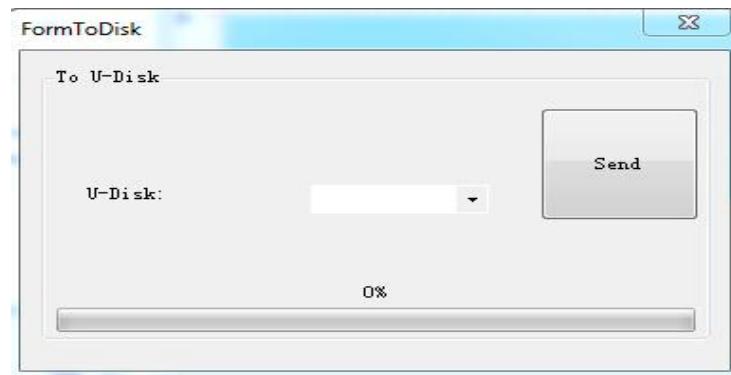
the Local Area Network. Also user can use the refresh button to have a manually test. To choose the program which in need, user can click the button in the toolbar to release.



After successful releasing, the information bar will display the information synchronous. It said that the program has synchronous to the terminal control card.

1.3.10 U-disk sending

Clicking the button to open the interface to release program:



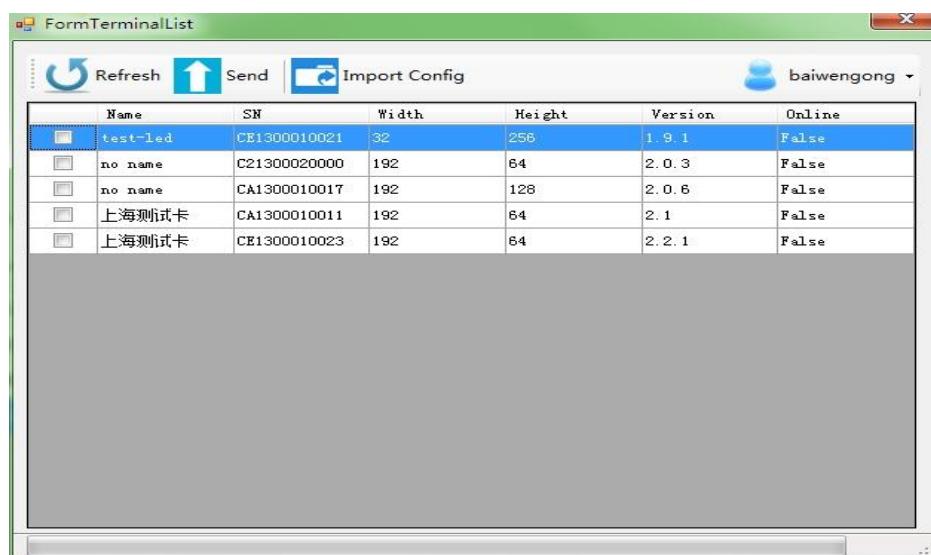
To choose the selection of U-disk sending and to insert it into the U-disk socket in the control card, then achieve the update operation.

1.3.11 WEB sending

Clicking the button in the tool bar to open the interface:



Inputting the account and password to login in.



The software will automatically detect the connected to the terminal control card in

this account. Also user can click the refresh button  to have a manual testing. Selecting the terminal program which needed releasing and clicking the release button

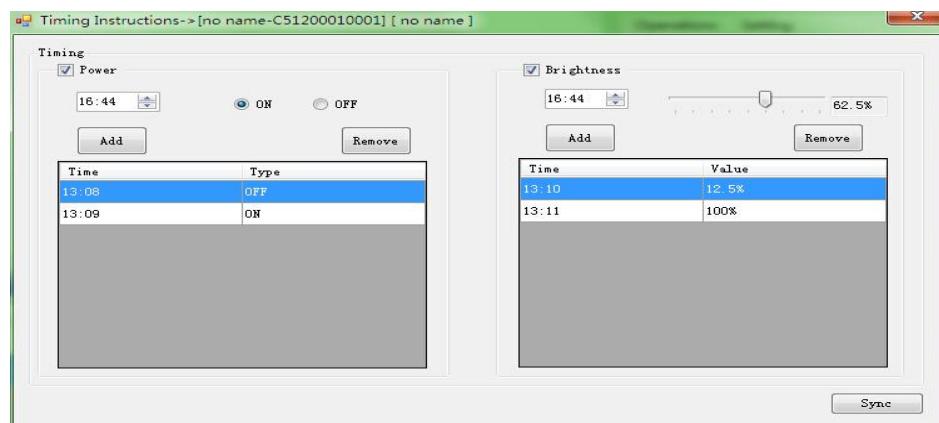
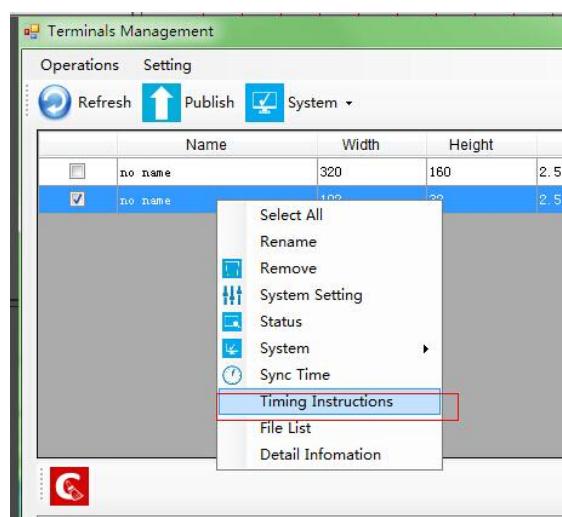


in the toolbar.

(Please read the 3G control scheme specification to get more detail.)

1.3.12 System parameter setting:

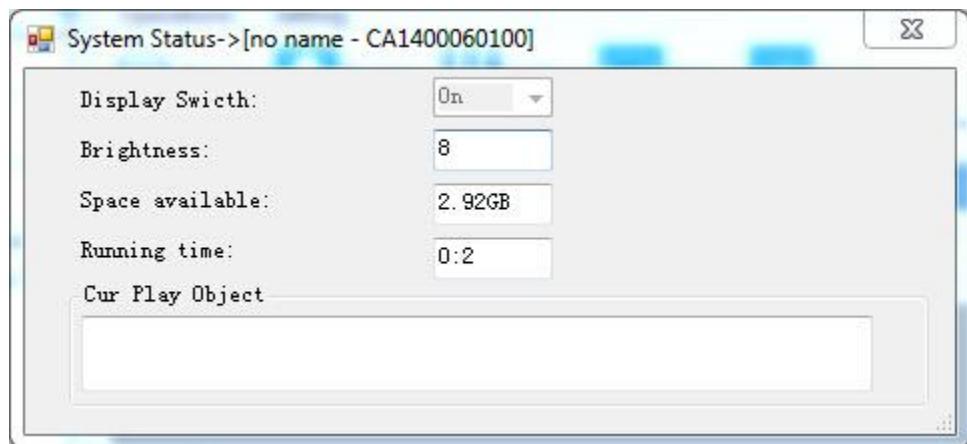
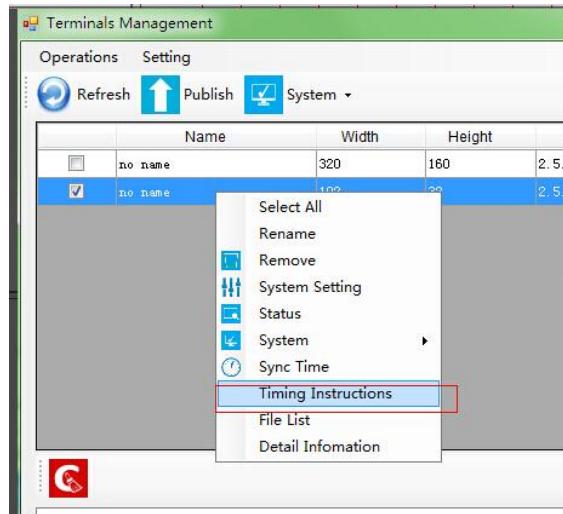
LedGo-Send-terminal management



Then user can set the display brightness, and open or close the screen.

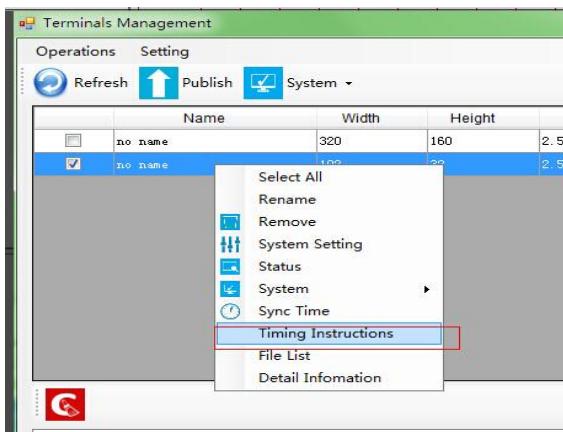
1.3.13 System status querying

The same as the former step. And then to click the selection “Status”.



1.3.14 Synchronization time

The same as the above step. And then to click the selection “Sync time”.

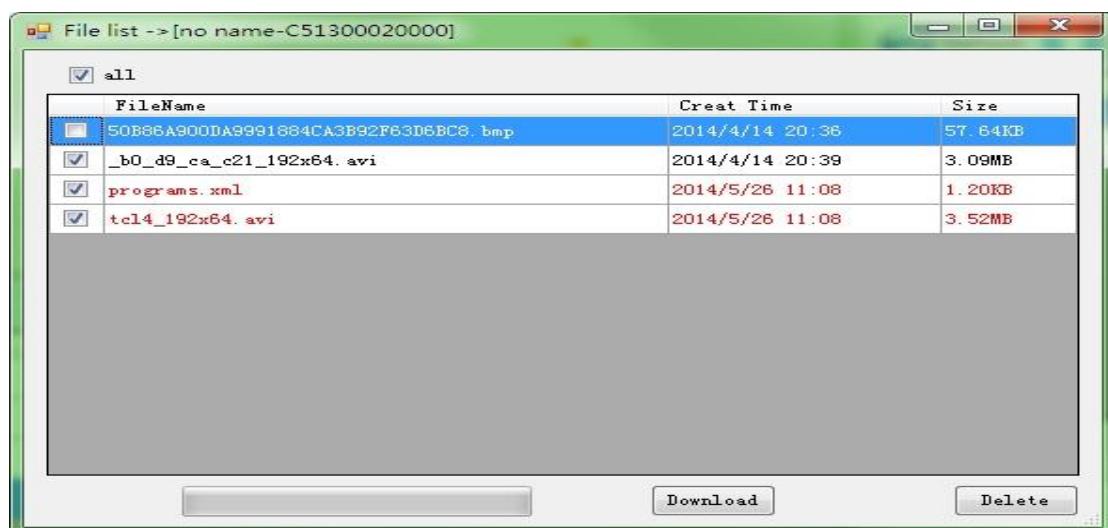


1.3.15 User document management

clicking the selection “File List” ,which in the operations menu



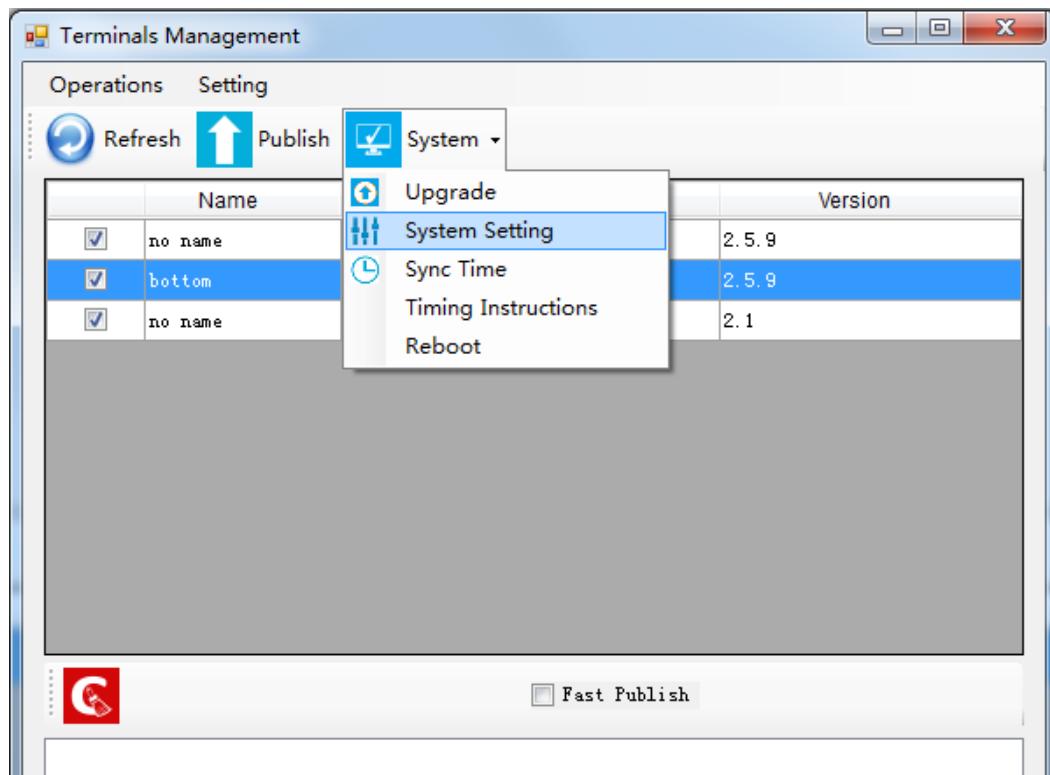
Then the software will list the saving user files in the currently storage of control card.



Now the file in red says the problem that using currently, while the others are the file system caching for the program. User can delete all the selected files except the red by clicking the delete button.

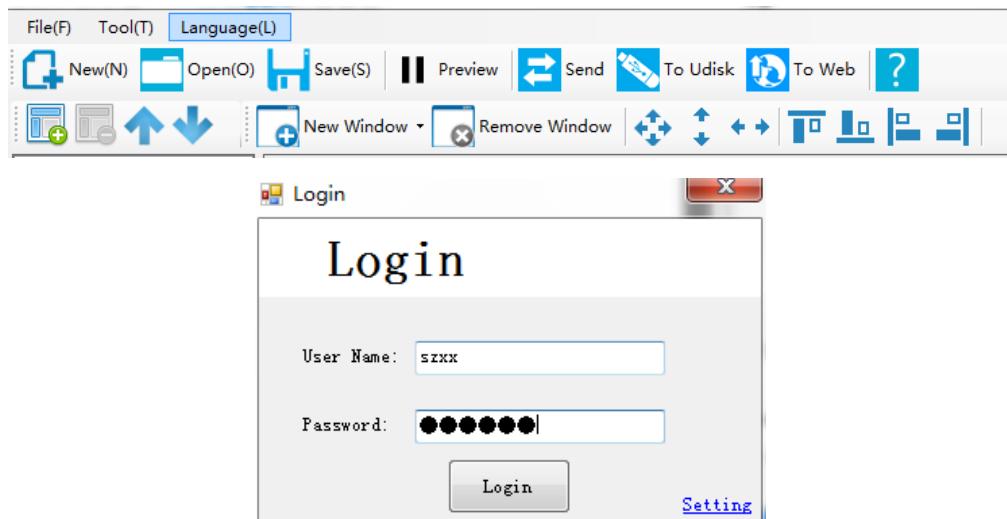
1.3.16 Bulk operation of controller

Check the needed terminal in the terminal management list. Right-clicking the selection “System” in the tool bar and choose function to do update, system setting, sync time, timing and restart and etc.



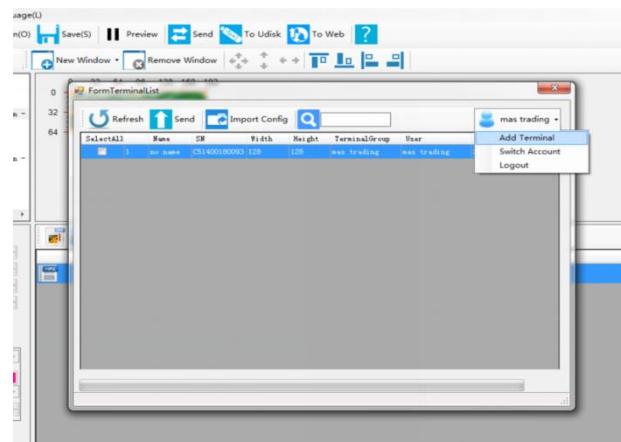
1.3.17 WEB adding terminal

Clicking the button “To Web” to open the operation interface

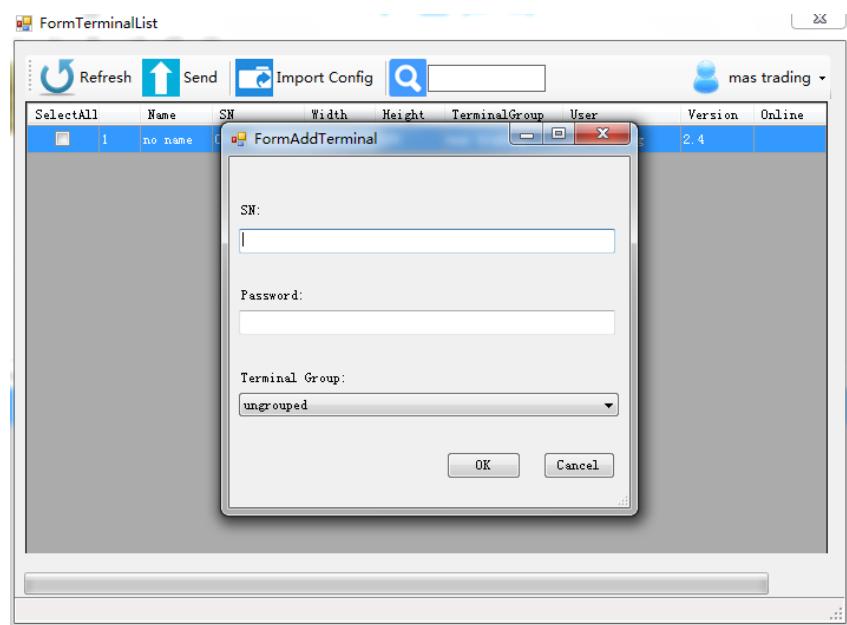


Inputting the account and password to login in

And user can add terminals in the account list.



Clicking the selection “Add Terminal” to open the operation interface to input the SN No. and password.

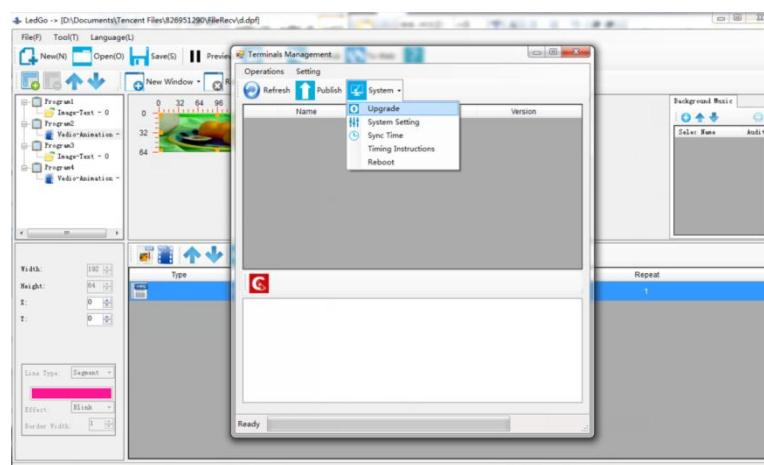


2 Firmware update

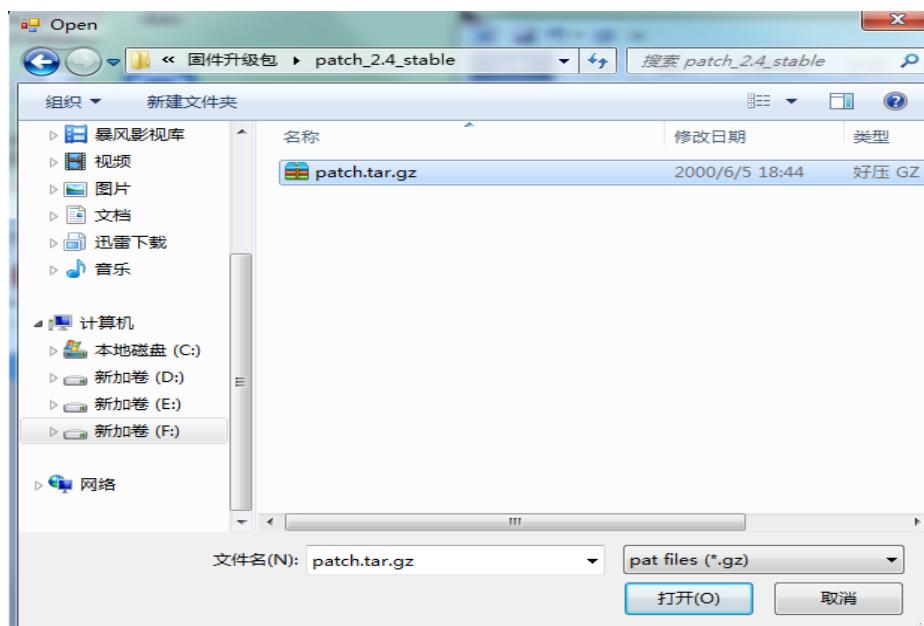
In order to get a better user experience, sometimes user can update the firmware during using it. Thus there are two ways to update the firmware: software update and U-disk update.

2.1 Software methor

Opening LEDGO software, enter the interface of “terminal management”, in the selection of “Operations” choose the selection of “Upgrade Firmware”:



Within the dialog box of file selection, user choose the update file patch.tar.gz to update.



2.2 U-disk methor

Copying the file patch.tar.gz in the update patch to the base directory in U-disk:



Then input that U-disk into any one of the USB interface in the control card. After successful update, the control card will auto reboot and then you can take out the U-disk. After having the reboot process finish, user should check whether the versions of control card is correct or not through the LedConfig or LedGo software.

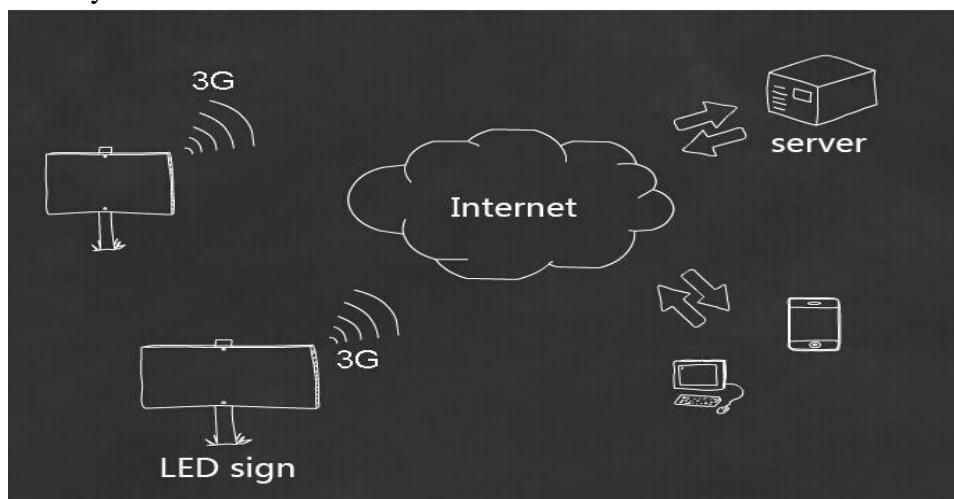
3 3G Control Scheme

3.1 Feature

- 1.1 Provide free server, each user 500MB free space
- 1.2 Provide free WEB management platform (based browser without installation)
- 1.3 You can access to the platform by Mobile, Pad or computer to control and manage your display terminal anytime, anywhere (no need to install any software, support windows, Android and Apple operating systems)
- 1.4 Simple operation. Do not need to do any settings, plug and play;
- 1.5 The real multi-send function, it will spent the same time to send your programs to a single display terminal or multiple terminals
- 1.6 Hardware integrated design. Reliable and cost reduction
- 1.7 Stable 3G download speeds. the download speed 100KB/s + when the signal intensity of 10 or more ; the download speed will reach more than 200KB/s when the signal intensity of 20 or more
- 1.8 The software is simple to operate. to operate remote 3G terminals as easy as operate the local terminal
- 1.9 Compatibility. Platform is compatible with a variety of Internet access, including cable, WIFI, 3G, 4G, etc., as long as you can access to the Internet
- 1.10 Editing program including image, animation, timer, sensor and etc. online.

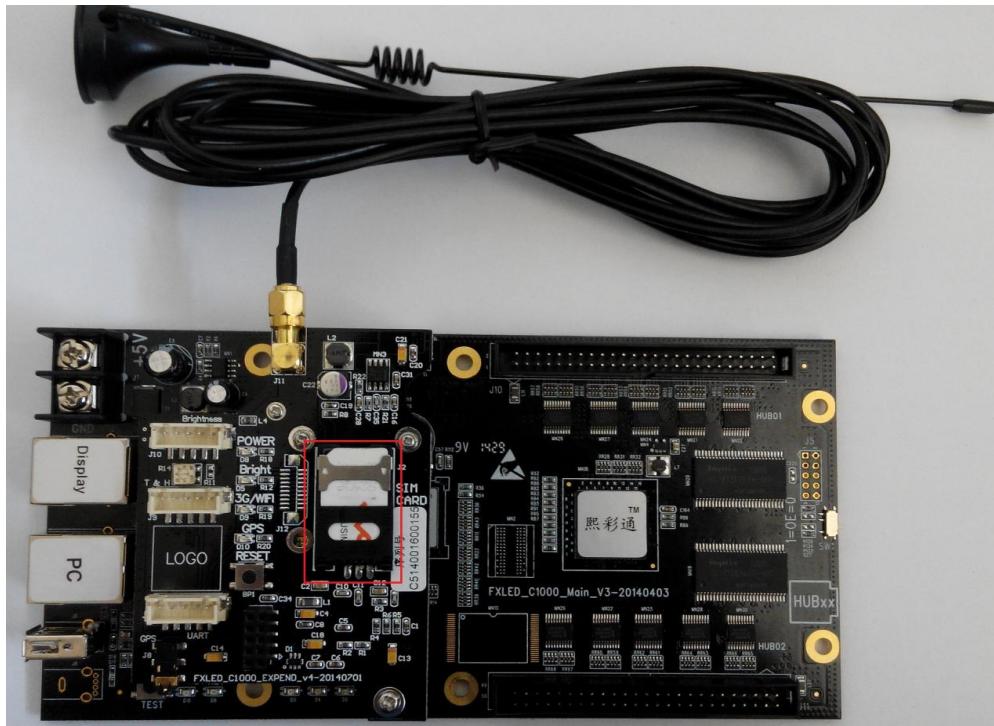
3.2 Overview

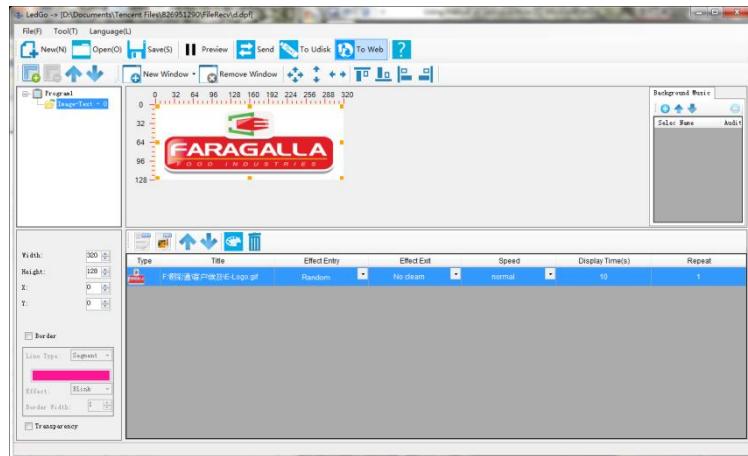
As shown, the display terminal establish communications with the server via the 3G wireless network; users to use the mobile, pad or computer access server web platform by the Internet



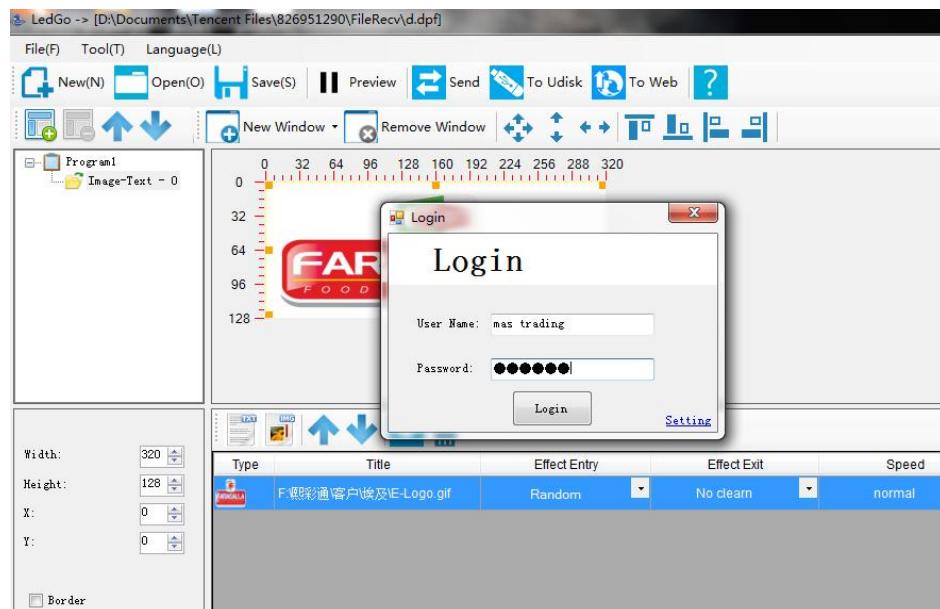
3.3 Hardware Installation

- 1) Plug the SIM card into a 3G module and the antenna

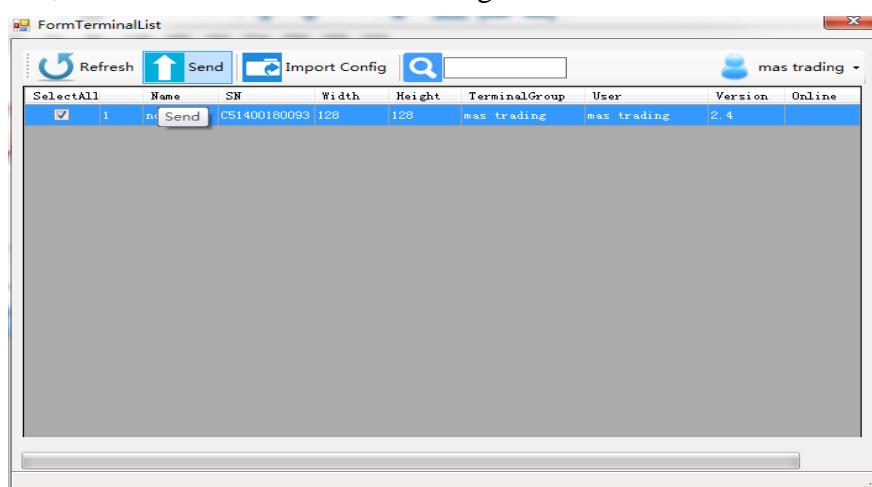




Firstly, user authentication



If successful, there will come out the list of registered terminals



Clicking the button of “Send” to send program to the terminal (or multi-terminals). That’s say to add a task to send program to the web platform.

After sending, user can check the task at the web platform.

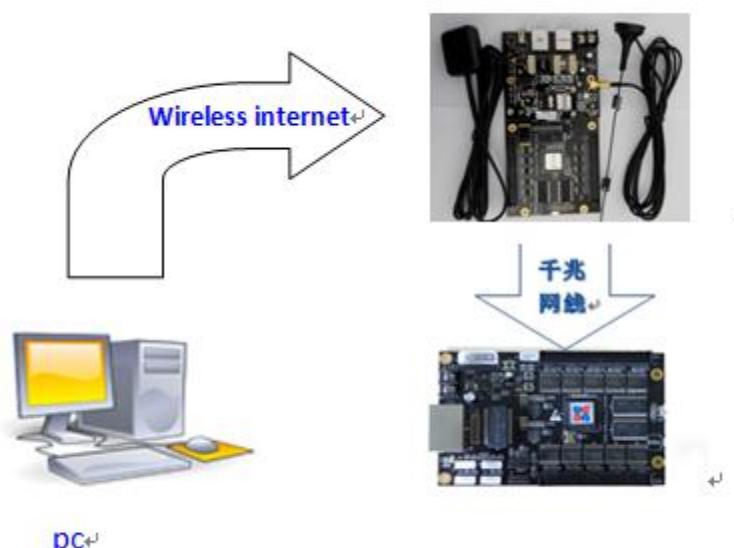
4. WIFI Control Scheme

4.1 Feature

- 1 Simple operation.
- 2 The hardware integration design. Reliability and cost down.
- 3 Stable WIFI signal strength. Signal strength is equal to the wireless router.

4.2 Overview

The display screen terminal sets up the wireless hotspot through WIFI. And the user connects the hotspot by using a computer to control the terminal.



Connection diagram

4.3 Operation instruction

4.3.1 Input the expansion board with WIFI module on the controller.



Expansion board with WIFI module



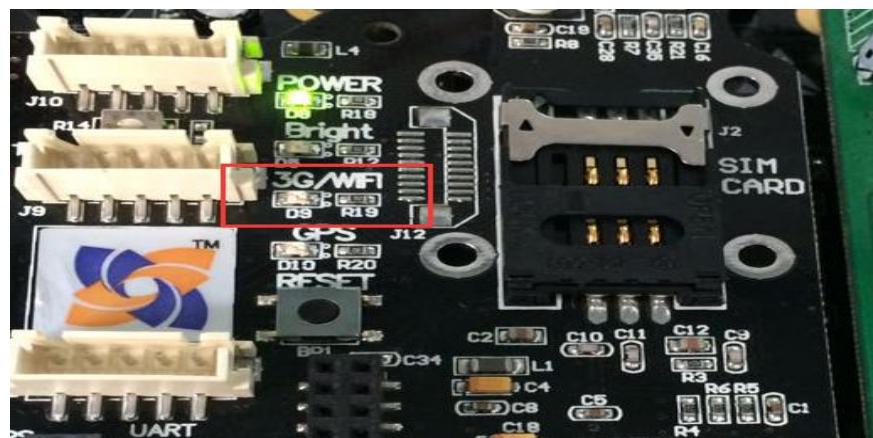
Controller

4.3.2 Connecting the antenna and controller



Controller

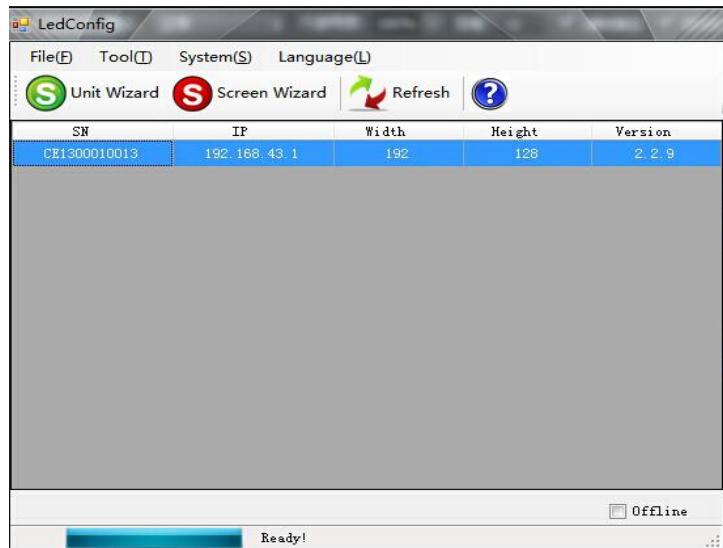
4.3.3 Power on, pay attention on the WIFI signal light. If it light on, that shows controller and WIFI connecting well.



4.3.4 Open the pc network, to choose to connect the hotspot RT2860AP in the wireless network.(WIFI hotspot do not have password while firstly use)

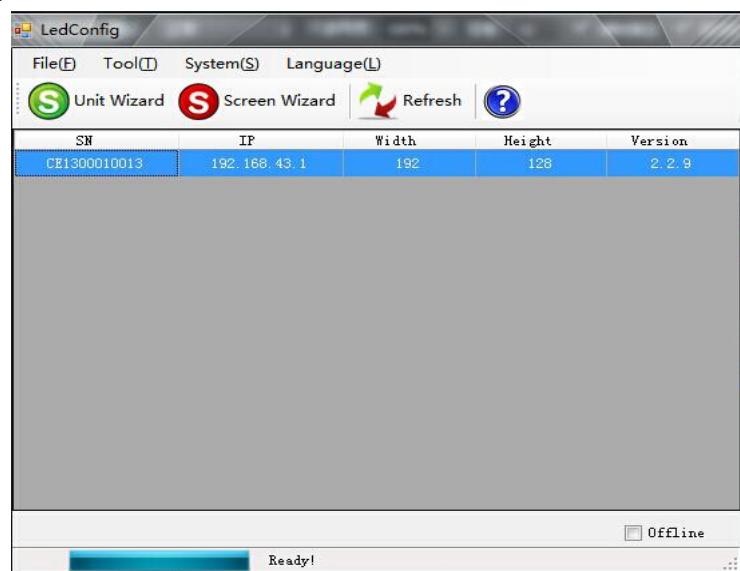


4.3.5 Open the software of LedGo or LedConfig to do operation for the controller after successful connection.

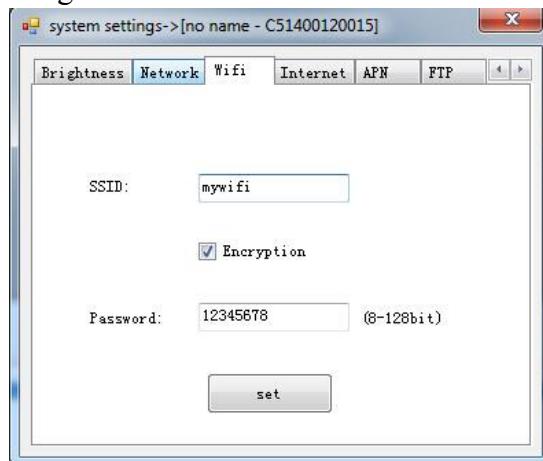


4.4 Modify the name of the hotspot and the password

1) Open LedConfig, select the controller and then choose the selection of “system setting” in the system list.



2) Clicking “system setting” and choose “WIFI” to do modification



After clicking and setting, the control card will restart, and then the name of the hotspot will be changed.

Now the hotspot connection system will be prompted for a password.

4.5 Caution:

The name of the WIFI hotspot should not be Chinese

Please close system firewall before using the software

Please remember the setting password, or you may to restore factory settings to empty the password, or not choose the selection of “Encryption” marked at blue.

5 Introduction for building your own server

5.1 Statement

1.1 LEDSOLUTION Color can support the free server of Asia, America and Europe for customer using. In principle, we do not recommend that customer built own server, unless special reason and requirements. If customer just worried about the speed and stable of the network, we can recommend the nearer free server.

1.2 The customer need to sign a led server installation protocol and follow the relevant confidentiality agreements.

1.3 Free installation services must meet the following conditions:

- 1) To purchase more than 50 sets of H1 or T3 in one time
- 2) Providing the relevant information and an application for free installation server. Application form, “Application form for free installation services of Led Cloud”

1.4 Charging standards

Pending

5.2 Scheme for setting up servers

User can buy a cloud server (such as the Amazon EC2 cloud server), or a real server. The recommended configuration showing as follows:

CPU	1G HZO or more	
RAM	2G Byte or more	
HDD	256G Byte or more	
bandwidth	5Mbps or more	
Operating system	Mainstream Linux distributions	Recommend ubuntu server version
System / basic software	SSH server	For installation, consult the following: https://help.ubuntu.com/10.04/serverguide/openssh-server.html

User may support the account and password of SSH of server, then our engineer will support the installation.

6 Note one

世界各国运营商的 WCDMA UMTS 频段

Africa/非洲

Operator	Country	Launch Date	Frequency (MHz)
Emtel	Mauritius /毛里求斯	November 2004	2100
Cellplus	Mauritius /毛里求斯	March 2006	2100
Vodacom	South Africa /南非	December 2004	2100
MTN	South Africa /南非	June 2005	2100
MTC	Namibia /纳米比亚	December 2006	2100
Powercom	Namibia /纳米比亚	March 2007	2100
Unitel	Angola /安哥拉	June 2007	2100
Globacom	Nigeria /尼日利亚	December 2007	2100
Etisalat	Egypt /埃及	May 2007	2100
Vodafone	Egypt /埃及	May 2007	2100
Safaricom	Kenya /肯尼亚	December 2007	2100
Libyana	Libya /利比亚	September 2006	2100
Meditel	Morocco /摩洛哥	April 2007	2100
Maroc Telecom	Morocco /摩洛哥	December 2007	2100
Airtel	Seychelles /塞舌尔	December 2006	2100
Areeba	Sudan /苏丹	2006	2100
Vodacom	Tanzania /坦桑尼亚	February 2007	2100
Uganda Telecom	Uganda /乌干达	November 2007	2100
Econet Wireless	Zimbabwe /津巴布韦	December 2007	2100
Mobinil	Egypt /埃及	September 2008	2100

Asia/亚洲

Operator	Country	Launch Date	Frequency (MHz)
BSNL Mobile	India /印度	2009	2100
MTNL DOLPHIN	India /印度	2008	2100
Mobitel	Iraq /伊拉克	2007	2100
Etisalat	United Arab Emirates /阿拉伯联	January 2004	2100

	合酋长国		
Du	United Arab Emirates/阿拉伯联合酋长国	February 2007	2100
Nepal Telecom	Nepal/尼泊尔	May 2007	2100
Mobilink	Pakistan/巴基斯坦	2009	2100
Ufone	Pakistan/巴基斯坦	2009	2100
Warid	Pakistan/巴基斯坦	2009	2100
Telenor (Pakistan)	Pakistan/巴基斯坦	2009	2100
Paktel	Pakistan/巴基斯坦	2009	2100
GrameenPhone	Bangladesh/孟加拉共和国	2009	2100
Warid	Bangladesh/孟加拉共和国	2009	2100
3	Hong Kong/香港	January 2004	2100
CSL	Hong Kong/香港	December 2004	2100
PCCW Mobile	Hong Kong/香港	July 2006	2100
Smartone-Vodafone	Hong Kong/香港	December 2004	2100
Singapore Telecommunications	Singapore/新加坡	February 2005	2100
StarHub	Singapore/新加坡	April 2005	2100
MobileOne	Singapore/新加坡	February 2005	2100
Maxis Communications	Malaysia/马来西亚	July 2005	2100
Celcom	Malaysia/马来西亚	May 2005	2100
DiGi	Malaysia/马来西亚	June 2008	2100
SMART	Philippines/菲律宾	May 2006	850/2100
Globe	Philippines/菲律宾	May 2006	2100
Digitel	Philippines/菲律宾	July 2006	2100
Telkomsel	Indonesia/印尼	September 14, 2006	2100
Excelcomindo	Indonesia/印尼	September 21, 2006	2100
Indosat	Indonesia/印尼	November 2006	2100
3	Indonesia/印尼	December 2006	2100
Dialog Telekom	Sri Lanka/斯里兰卡	August 2006	2100
FarEasTone	Taiwan/台湾	July 13, 2005	2100
Chunghwa Telecom	Taiwan/台湾	July 26, 2005	2100
Taiwan Cellular	Taiwan/台湾	October 2005	2100

<u>Corporation</u>			
<u>VIBO Telecom</u>	<u>Taiwan</u> /台湾	December 2005	2100
<u>SK Telecom</u>	<u>South Korea</u> /韩国	December 2003	2100
<u>KTF</u>	<u>South Korea</u> /韩国	December 2003	2100
<u>Geocell</u>	<u>Georgia</u>	December 2006	2100
<u>Magicom</u>	<u>Georgia</u>	July 2006	2100
<u>NTT DoCoMo</u>	<u>Japan</u> /日本	October 2001	800/1700/2100
<u>Softbank</u>	<u>Japan</u> /日本	December 2002	2100
<u>eMobile</u>	<u>Japan</u> /日本	March 2007	1700
<u>Zain</u>	<u>Kuwait</u> /科威特	March 2006	2100
<u>Wataniya Telecom</u>	<u>Kuwait</u> /科威特	March 2006	2100
<u>Q-TEL</u>	<u>Qatar</u> /卡塔尔	July 2006	2100
<u>Mobily</u>	<u>Saudi Arabia</u> /沙特阿拉伯	June 2006	2100
<u>Al Jawwal</u>	<u>Saudi Arabia</u> /沙特阿拉伯	June 2006	2100
<u>Zain</u>	<u>Saudi Arabia</u> /沙特阿拉伯	February 2008	2100
<u>Josa Babilon Mobile</u>	<u>Tajikistan</u> /塔吉克斯坦	June 2005	2100
<u>Indigo Tajikistan</u>	<u>Tajikistan</u> /塔吉克斯坦	September 2006	2100
<u>Tacom</u>	<u>Tajikistan</u> /塔吉克斯坦	September 2006	2100
<u>TT Mobile</u>	<u>Tajikistan</u> /塔吉克斯坦	June 2005	2100
<u>Batelco</u>	<u>Bahrain</u> /巴林	2006	2100
<u>Zain</u>	<u>Bahrain</u> /巴林	December 2003	2100
<u>B-Mobile</u>	<u>Brunei</u> /文莱	September 2005	2100
<u>Shinawatra</u>	<u>Cambodia</u> /柬埔寨	October 2007	2100
<u>Mobitel</u>	<u>Cambodia</u> /柬埔寨	October 2006	2100
<u>Cellcom</u>	<u>Israel</u> /以色列	June 2004	2100
<u>Orange</u>	<u>Israel</u> /以色列	November 2004	2100
<u>CTM</u>	<u>Macau</u> /澳门	June 2007	2100
<u>3</u>	<u>Macau</u> /澳门	October 2007	2100
<u>Mobitel</u>	<u>Sri Lanka</u> /斯里兰卡	December	2100

		2007	
Spacetel	Syria /叙利亚	2008	2100
Syriatel	Syria /叙利亚	2008	2100
Advanced Info Service	Thailand /泰国	May 2008	900
True Move	Thailand /泰国	January 2009	850
China Unicom	China /中国	May 2009	2100
Pelephone	Israel	February 2009	850/2100

Oceania/大洋洲

Operator	Country	Launch Date	Frequency (MHz)
Telstra	Australia /澳大利亚	October 2006	850/2100
3	Australia /澳大利亚	May 2003	2100
Optus	Australia /澳大利亚	November 2005	900/2100
Vodafone	Australia /澳大利亚	October 2005	900/2100
Vodafone	New Zealand /新西兰	August 2005	900/2100
Telecom	New Zealand /新西兰	May 2009	850/2100
2degrees	New Zealand /新西兰	August 2009	2100

Europe/欧洲

Operator	Country	Launch Date	Frequency (MHz)
Turkcell	Turkey /土耳其	July 2009	2100
Avea	Turkey /土耳其	July 2009	2100
Vodafone Turkey	Turkey /土耳其	July 2009	2100
Telefónica O2	United Kingdom	March 2005	2100
3	United Kingdom	March 2003	2100
T-Mobile	United Kingdom	May 2004	2100
Vodafone	United Kingdom	November 2004	2100
Orange	United Kingdom	December 2004	2100
Mobitel	Slovenia /斯洛文尼亞	December 2003	2100
Si.mobil	Slovenia /斯洛文尼亞	September 2007	2100
Tušmobil	Slovenia /斯洛文尼亞	September 2008	900/2100
T-2	Slovenia /斯洛文尼亞	June 2008	2100

	亚		
VIPnet	Croatia /克罗地亚	October 2005	2100
T-Mobile	Croatia /克罗地亚	June 2006	2100
Tele2	Croatia /克罗地亚	2007	2100
CYTA Mobile	Cyprus /塞浦路斯	March 2006	2100
Orange	Spain /西班牙	November 2004	2100
Movistar	Spain /西班牙	May 2004	2100
Vodafone	Spain /西班牙	May 2004	2100
Yoigo	Spain /西班牙	December 2006	2100
Era GSM	Poland /波兰	April 2006	2100
Plus GSM	Poland /波兰	September 2004	2100
Orange	Poland /波兰	June 2006	2100
Play	Poland /波兰	March 2007	2100
Elisa	Finland /芬兰	November 2004	900/2100
TeliaSonera	Finland /芬兰	October 2004	2100
DNA	Finland /芬兰	December 2005	900/2100
Alands Mobiltelefon	Finland /芬兰	June 2006	2100
Mobile telephony of Serbia	Serbia /塞尔维亚	December 27, 2006	2100
Telenor	Serbia /塞尔维亚	March 2007	2100
VIP Mobile	Serbia /塞尔维亚	July 2007	2100
TDC Mobil	Denmark /丹麦	November 2005	2100
Telenor	Denmark /丹麦	September 2006	2100
3	Denmark /丹麦	October 2003	2100
STA	Andorra /安道尔	December 2006	2100
TeliaSonera	Denmark /丹麦	December 2007	2100
TeliaSonera	Sweden /瑞典	March	2100

		2004	
<u>3</u>	<u>Sweden</u> /瑞典	May 2003	2100
<u>Tele2</u>	<u>Sweden</u> /瑞典	March 2004	2100
<u>Telenor</u>	<u>Sweden</u> /瑞典	July 2004	2100
<u>ONE</u>	<u>Austria</u> /奥地利	December 2003	2100
<u>3</u>	<u>Austria</u> /奥地利	May 2003	2100
<u>Mobilkom Austria</u>	<u>Austria</u> /奥地利	April 2003	2100
<u>T-Mobile</u>	<u>Austria</u> /奥地利	December 2003	2100
<u>Orange</u>	<u>Belgium</u> /比利时	June 2008	2100
<u>Proximus</u>	<u>Belgium</u> /比利时	September 2005	2100
<u>Mobistar</u>	<u>Belgium</u> /比利时	December 2006	2100
<u>Vivatel</u>	<u>Bulgaria</u> /保加利亚	April 2007	2100
<u>Globul</u>	<u>Bulgaria</u> /保加利亚	June 2006	2100
<u>M-TEL</u>	<u>Bulgaria</u> /保加利亚	March 2006	2100
<u>Telefónica O2</u>	<u>Czech Republic</u> /捷克共和国	December 2005	2100
<u>T-Mobile</u>	<u>Czech Republic</u> /捷克共和国	December 2006	2100
<u>Elisa</u>	<u>Estonia</u> /爱沙尼亚	June 2006	2100
<u>Bravocom</u>	<u>Estonia</u> /爱沙尼亚	July 2006	2100
<u>EMT</u>	<u>Estonia</u> /爱沙尼亚	October 2005	2100
<u>Tele2</u>	<u>Estonia</u> /爱沙尼亚	November 2006	2100
<u>Orange</u>	<u>France</u> /法国	December 2004	2100
<u>SFR</u>	<u>France</u> /法国	November 2004	2100
<u>Bouygues Télécom</u>	<u>France</u> /法国	April 2007	2100
<u>E-Plus</u>	<u>Germany</u> /德国	August 2004	2100
<u>Telefónica O2</u>	<u>Germany</u> /德国	July 2004	2100
<u>T-Mobile</u>	<u>Germany</u> /德国	May 2004	2100
<u>Vodafone</u>	<u>Germany</u> /德国	May 2004	2100
<u>Cosmote</u>	<u>Greece</u> /希腊	May 2004	2100
<u>Vodafone</u>	<u>Greece</u> /希腊	August	2100

		2004	
TIM	Greece /希腊	January 2004	2100
Wave Telecom	Guernsey	July 2004	2100
Pannon GSM	Hungary /匈牙利	October 2005	2100
T-Mobile	Hungary /匈牙利	August 2005	2100
Vodafone	Hungary /匈牙利	June 2006	2100
Siminn	Iceland /冰岛	September 2007	2100
3	Ireland /冰岛	July 2005	2100
Meteor	Ireland /冰岛	September 2008	2100
Telefónica O2	Ireland /冰岛	March 2005	2100
Vodafone	Ireland /冰岛	November 2004	2100
Manx Telecom	Isle of Man	November 2005	2100
3	Italy /意大利	March 2003	2100
TIM	Italy /意大利	May 2004	2100
Vodafone	Italy /意大利	May 2004	2100
Wind	Italy /意大利	October 2004	2100
sure.Mobile	Jersey	September 2006	2100
Jersey Telecom	Jersey	June 2006	2100
Vodafone	Jersey	June 2007	2100
Bité	Latvia /拉脱维亚	June 2006	2100
LMT	Latvia /拉脱维亚	December 2004	2100
Tele2	Latvia /拉脱维亚	December 2005	2100
Orange	Liechtenstein /列支敦斯顿	February 2007	2100
mobilkom	Liechtenstein /列支敦斯顿	March 2007	2100
Telekom FL	Liechtenstein /列支敦斯顿	February 2007	2100
Bité	Lithuania /立陶宛	April 2006	2100

Omnitel	Lithuania /立陶宛	February 2006	2100
Tele2	Lithuania /立陶宛	2007	2100
VOX	Luxembourg /卢森堡	May 2005	2100
LuxGSM	Luxembourg /卢森堡	June 2003	2100
Tango	Luxembourg /卢森堡	July 2004	2100
Cosmofon	Macedonia /马其顿	November 2008	2100
T-Mobile MK	Macedonia /马其顿	June 2009	2100
go mobile	Malta /马耳他	April 2007	2100
Vodafone	Malta /马耳他	August 2006	2100
Moldcell	Moldova /摩尔多瓦	1 October 2008	2100
Orange	Moldova /摩尔多瓦	1 November 2008	2100
Monaco Telecom	Monaco /摩纳哥	June 2006	2100
T-Mobile	Montenegro	June 2007	2100
ProMonte	Montenegro	June 2007	2100
Telekom Srbija	Montenegro	July 2007	2100
Telfort	Netherlands /荷兰	October 2004	2100
Orange	Netherlands /荷兰	November 2006	2100
T-Mobile	Netherlands /荷兰	January 2006	2100
Vodafone	Netherlands /荷兰	June 2004	2100
TeliaSonera	Norway /挪威	June 2005	2100
Telenor Mobil	Norway /挪威	December 2004	2100
Optimus	Portugal /葡萄牙	June 2004	2100
TMN	Portugal /葡萄牙	April 2004	2100
Vodafone	Portugal /葡萄牙	May 2004	2100
Vodafone	Romania /罗马尼亚	April 2005	2100
MTN	Cyprus /塞浦路斯	October 2005	2100

Orange	Romania /罗马尼亚	June 2006	2100
RCS&RDS (Digi.Mobil)	Romania /罗马尼亚	February 2007	2100
T-Mobile	Slovak Republic /斯洛伐克共和国	March 2006	2100
Orange	Slovak Republic /斯洛伐克共和国	January 2006	2100
Orange	Switzerland /瑞士	September 2005	2100
Swisscom	Switzerland /瑞士	December 2004	2100
TDC	Switzerland /瑞士	December 2005	2100
Utel/UkrTelecom	Ukraine /乌克兰	November 2007	2100

America 美洲

Operator	Country	Launch Date	Frequency (MHz)
AT&T Mobility	United States /美国	2004 July	850/1900
AT&T Mobility	Puerto Rico /波多黎各	2006 November	850/1900
Rogers	Canada /加拿大	2006 November	850/1900
Fido	Canada /加拿大	2007 November	850/1900
Telus	Canada /加拿大	2010 January	850/1900
Bell Mobility	Canada /加拿大	2010 January	850/1900
T-Mobile	United States /美国	2008 May	AWS 1700
Telcel	Mexico /墨西哥	2008 February	850/1900
Movistar	Mexico /墨西哥	2008 March	850/1900
Setar	Aruba	2007 December	2100
Claro	Guatemala /危地马拉	2008 April	1900
TIGO	Guatemala /危地马拉	2008 September	850

Claro	El Salvador /萨尔瓦多	2008 January	1900
TIGO	El Salvador /萨尔瓦多	2008 September	850
Claro	Honduras /洪都拉斯	2008 February	1900
TIGO	Honduras /洪都拉斯	2008 September	850
Movistar	Argentina /阿根廷	2007 July	1900
Telecom Personal	Argentina /阿根廷	2007 May	1900
Claro	Argentina /阿根廷	2007 November	850/1900
Entel PCS	Chile /智利	2006 December	1900
Movistar	Chile /智利	2007 December	850/1900
Claro	Chile /智利	2008 January	1900
TIM Brasil	Brazil /巴西	2008 April	850/2100
Vivo	Brazil /巴西	2007 November	850/2100
Oi	Brazil /巴西	2008 May	2100
Brasil Telecom	Brazil /巴西	2008 April	2100
Claro	Brazil /巴西	2007 December	850/2100
Comcel	Colombia /哥伦比亚	2008 January	850/1900
Tigo	Colombia /哥伦比亚	2008 November	1900
Movistar	Colombia /哥伦比亚	2008 November	850/1900
Claro	Paraguay /巴拉圭	2007 November	1900
Claro	Peru /秘鲁	2007 December	1900
Ancel	Uruguay /乌拉圭	2007 July	2100
Movistar	Uruguay /乌拉圭	2007 July	850/1900
Claro	Uruguay /乌拉圭	2007 November	1900
Movistar	Panamá	2008 November	850/1900
Movistar	Nicaragua /尼加	2008	850/1900

	拉瓜	January	
Movistar	El Salvador/萨尔瓦多	2009 June	850/1900
Movistar	Guatemala/危地马拉	2009 June	1900

7. Note two

世界各国运营商 APN 接入点名称一览表

温馨提示:本资料仅供参考,详情请咨询当地电信运营商.

国家	运营商	APN	用户名	密码	DNS
阿 根 廷 (Argentina)	CTI	internet.ctimovil.com.ar	无	无	动态
	Personal	gprs.personal.com	【 手机号码】	adgj	动态
澳 大 利 亚 (Australia)	Optus	internet	无	无	202.139.83.3, 192.65.91.129
	澳洲电信 (Telstra)	telstra.internet	无	无	139.130.4.4, 203.50.170.2
	Three	3netaccess	a	a	202.124.68.130, 202.124.76.66
	沃达丰 (Vodafone)	vfinternet.au	无	无	192.189.54.33, 210.80.58.3
奥 地 利 (Austria)	Drei	drei.at	无	无	动态
	Max Online Metro	gprsmetro	GPRS	无	213.162.64.1, 213.162.64.2
	T-Mobile A (Max Online)	gprsinternet	GPRS	无	213.162.64.1, 213.162.64.2
	T-Mobile A (Max Online Business)	business.gprsinternet	GPRS	无	213.162.64.1, 213.162.64.2
	Mobilkom A1	A1.net	gprs@a1plus.at	无	194.48.124.200, 194.48.139.254
	OneNet	web.one.at	【 因 客 户 而 异】	【 因 客 户 而 异】	194.24.128.100, 194.24.128.102

	tele.ring	web	web@tel ering.at	web	212.95.31.11, 212.95.31.35
阿塞拜疆 (Azerbaijan)	Azercell	internet	无	无	动态
白俄罗斯 (Belarus)	Velcom	web.velcom.by	web	web	动态
比利时 (Belgium)	BASE (Orange)	orangeinternet	无	无	
	Mobistar	web.pro.be	mobistar	mobistar	212.65.63.10, 212.65.63.145
	Proximus	internet.proximus.be	无	无	195.238.2.21, 195.238.2.22
巴西 (Brasil)	Claro	claro.com.br	claro	claro	
	Oi	gprs.oi.com.br	无	无	动态
	TIM	tim.br	tim	tim	
保加利亚 (Bulgaria)	GloBul	internet.globul.gl	globul	无	动态
加拿大 (Canada)	Microcell	internet.fido.ca	fido	fido	204.92.15.211
智利 (Chile)	Entel PCS	imovil.entelpcs.cl	entelpcs	entelpcs	动态
	TelefonicaMovil	web.tmovil.cl	web	web	200.68.32.180, 200.68.32.181
中国 (China)	中国移动	cmnet	无	无	动态
	中国联通	uninet	无	无	动态
哥斯达黎加 (Costa Rica)	IceRegular	iceregular	无	无	
克罗地亚 (Croatia)	T-Mobile	web.htgpr	38591	38591	
	VIPNET Start	gprs0.vipnet.hr	38591	38591	
	VIPNET Pro	gprs5.vipnet.hr	38591	38591	
	VIPNET 3G	3g.vip.hr	38591	38591	
捷克共和国 (Czech Republic)	Cesky Mobil (contract)	internet	无	无	212.67.64.
	Cesky Mobil (prepaid)	cinternet	无	无	212.67.64.2
	Eurotel (contract)	internet	无	无	160.218.10.200, 160.218.43.200
	Eurotel Go	gointernet	无	无	160.218.10.201, 194.228.2.1

	Paegas Internet	internet.click.cz	无	无	62.141.0.1, 62.141.0.2
	Telefonica (contract)	internet	无	无	160.218.10.200, 160.218.43.200
	Telefonica (Go)	gointernet	无	无	160.218.10.201, 194.228.2.1
	T-Mobile	internet.t-mobile.cz	无	无	62.141.0.1, 62.141.0.2
	Vodafone (contract)	internet	无	无	217.77.161.130 , 217.77.161.131
	Vodafore (pre-pay)	ointernet	无	无	217.77.161.130, 217.77.161.131
丹 麦 (Denmark)	Orange DK	web.orange.dk	无	无	212.97.206.131, 212.97.206.161
	TDC	internet	无	无	193.162.146.9, 193.162.153.31
多米尼加共 和 国 (Dominican Republic)	Orange	orangenet.com.do	无	无	
埃及 (Egypt)	Click Vodafone	internet.vodafone.net	internet	internet	
	MobiNil	mobilnilweb	无	无	
爱 沙 尼 亚 (Estonia)	EMT	internet.emt.ee	无	无	217.71.33.200, 217.71.32.20
	RLE	internet	无	无	
芬 兰 (Finland)	Dna	internet	无	无	217.78.192.78, 217.78.192.22
	Elisa	internet	rlnet	internet	193.229.0.40, 193.229.0.42
	Radiolinja	internet	rlnet	internet	213.161.33.200, 193.185.210.10
	Sonera	internet	无	无	192.89.123.230, 192.89.123.231
	Song	internet.song.fi	song@in ternet	songnet	
法 国 (France)	Bouygues	ebouygtel.com	无	无	62.201.129.99, 62.201.159.99
	Bouygues (B2Bouygtel)	b2bouygtel.com	无	无	62.201.129.99
	Orange	orange.fr	orange	orange	194.051.003.056, 194.051.003.076

	Orange MIB	orange-mib	mportail	mib	(代理服务器 172.16.2.8:8000)
	SFR	websfr	无	无	172.20.2.10, 194.6.128.4
德 国 (Germany)	E-Plus	internet.eplus.de	eplus	gprs	212.023.97.2, 212.23.97.3
	O2 (GPRS)	internet	无	无	195.182.096.28, 195.182.96.61
	O2 (3G)	surfo2	无	无	62.134.11.4, 195.182.110.132
	T-Mobile	internet.t-d1.de	td1	gprs	193.254.160.1
	沃达丰 (Vodafone)	web.vodafone.de			139.7.30.125, 139.7.30.126
加纳 (Ghana)	Areeba	internet.spacefon.com	无	无	196.201.34.5, 213.137.131.3
希 口 (Greece)	Cosmote	internet	无	无	195.167.065.194
	Telestet	gnet.b-online.gr	本机电话号吗	24680	212.152.79.19, 212.152.79.20
	TIM	gint.b-online.gr	web	web	
	Vodafone GR	internet.vodafone.gr	无	无	213.249.17.10, 213.249.17.11
香港 (Hong Kong)	CSL	hkcs1 or internet	无	无	202.84.255.1, 203.116.254.150
	New World	internet	无	无	
	Orange	web.orangehk.com	无	无	
	People	internet	无	无	
	SmarTone	internet	无	无	202.140.96.51, 202.140.96.52
	Sunday	internet	无	无	
	Three	web-g.three.com.hk	无	无	
匈牙利 (Hungary)	Pannon (contract)	net	无	无	193.225.155.254, 194.149.0.157
	Pannon (flat rate)	netx	无	无	193.225.155.254, 194.149.0.157
	Pannon (compressed)	snet	无	无	193.225.155.254, 194.149.0.157
	Vodafone (contract, compressed)	internet.vodafone.net	无	无	80.244.97.30, 80.244.96.1
	Vodafone (contract, uncompressed)	standardnet.vodafone.net	无	无	80.244.97.30, 80.244.96.1

	Vodafone (pre-pay, compressed)	vitamax.internet.vodafone.net	无	无	80.244.97.30, 80.244.96.1
	Vodafone (pre-pay, uncompressed)	vitamax.snet.vodafone.net	无	无	80.244.97.30, 80.244.96.1
	Westel (contract)	internet	【因客户而异】	【因客户而异】	194.176.224.3, 194.176.224.1
印度 (India)	AirTel	airtelgprs.com	无	无	
	BPL	bplgprs.com	bplmobi le		202.169.145.34, 202.169.129.40
	Idea Cellular	internet	无	无	
	MTNL Mumbai	gprsmtnlmmum	mtnl	mtnl123	10.4.42.15
	Orange	portalnmms	无	无	10.11.206.51, 10.11.206.50
印尼 (Indonesia)	Excelcomindo	www.xlgprs.net	xlgprs	proxy	202.152.254.245, 202.152.254.246
	IM3	www.indosat-m3.net	gprs	im3	
	Indosat	satelindogprs.com	无	无	202.152.162.66, 202.152.162.67
爱尔兰 (Ireland)	O2 (contract)	open.internet	gprs	gprs	62.40.32.33, 62.40.32.34
	O2 (prepaid)	pp.internet	gprs	gprs	62.40.32.33, 62.40.32.34
	Vodafone (contract)	isp.vodafone.ie	vodafon e	vodafon e	
	Vodafone (pre-pay)	live.codafone.com	vodafon e	vodafon e	10.24.59.100
冰岛 (Iceland)	Orange	internet	无	无	动态
以色列 (Israel)	Cellcom	internetg	无	无	-
	MTC-Vodafone	apn01	无	无	10.10.10.30
	Orange	internet	无	无	-
意大利 (Italy)	Blu (Contratto)	INTERNET	无	无	212.17.192.49, 212.17.192.209
	Blu (Prepagata)	PINTERNET	无	无	212.17.192.49, 212.17.192.49
	H3G	tre.it	无	无	-
	Vodafone (Omnitel)	web.omnitel.it	无	无	83.224.65.134
	TIM	ibox.tim.it	无	无	213.230.155.94, 213.230.130.222
	Wind	internet.wind	无	无	212.245.255.2

日本 (Japan)	Vodafone (J-Phone)	vodafone	ai@vodafone	vodafone	61.195.195.153, 61.195.194.26
哈萨克斯坦 (Kazakhstan)	Beeline	internet.beeline.kz	internet.beeline	无	212.19.149.53, 194.226.128.1
拉脱维亚 (Latvia)	LMT	internet.lmt.lv	无	无	212.93.96.2, 212.93.96.4
	Tele2	internet.tele2.lv	gprs	internet	-
黎巴嫩 (Lebanon)	Cellis FTML	internet.ftml.com.lb	plugged	plugged	动态
立陶宛 (Lithuania)	Bite GSM	banga	无	无	213.226.131.131, 193.219.32.13
	Omnitel (contract)	gprs.omnitel.net	无	无	194.176.32.129, 195.22.175.1
	Omnitel (no contract)	gprs.startas.lt	omni	omni	-
卢森堡 (Luxembourg)	LUXGSM	web.pt.lu	无	无	194.154.192.101, 194.154.192.102
	Tango	internet	tango	tango	-
	VOXmobile	vox.lu	无	无	212.88.139.12, 212.88.139.11
马来西亚 (Malaysia)	DIGI	diginet	无	无	203.92.128.131, 203.92.128.132
	Maxis	internet.gprs.maxis	无	无	202.75.129.101, 10.216.4.21
	Timecel	timenet.com.my	无	无	203.121.16.85, 203.121.16.120
	TM Touch	internet	无	无	202.188.0.133
马耳他 (Malta)	Go Mobile (contract)	gosurfing	无	无	
	Go Mobile (pre.pay)	rtgsurfing	无	无	
墨西哥 (Mexico)	Telcel	internet.itelcel.com	webgprs 2002		
摩尔达维亚 (Moldavia)	Moldcell	internet	gprs	gprs	
荷兰 (Netherlands)	KPN Mobile	internet	KPN	gprs	62.133.126.28, 62.133.126.29
	O2	internet	无	无	-
	Telfort	internet	telfortnl	密码	-
	T-Mobile (Ben) acitive	internet-act	无	无	193.79.251.39, 193.79.237.39

	Vodafone (normal)	web.vodafone.nl	vodafone	vodafone	-
	Vodafone (business)	office.vodafone.nl	vodafone	vodafone	-
新西兰 (New Zealand)	沃达丰 (Vodafone)	www.vodafone.net.nz	无	无	202.20.93.10, 203.97.191.189
尼日利亚 (Nigeria)	Globacom	gprs	wap	无	
挪威 (Norway)	Telenor Mobil	internet	型号的名字	1111	212.17.131.3
	Netcom	internet.netcom.no	无	无	212.45.118.43, 212.45.118.44
巴基斯坦 (Pakistan)	Ufone	ufone.internet	ufone	ufone	动态
巴拿马 (Panama)	Cablw& Wireless	apn01.cwpanama.com.pa	xxx	xxx	172.25.3.5
秘鲁 (Peru)	Claro (TIM)	tim.pe	tim	tulibertad	
菲律宾 (Philippines)	Globe Telecoms	internet.globe.com.ph	globe	globe	203.127.225.10, 203.127.225.11
	Smart	internet	witsductoor	banonoy	202.57.96.3, 202.57.96.4
	Sun Cellular	minternet	无	无	无
波兰 (Poland)	ERA	erainternet	erainternet	erainternet	213.158.194.1, 213.158.193.38
	Heyah	heyah.pl	heyah	heyah	213.158.194.1, 213.158.193.38
	Idea	www.idea.pl	idea	idea	194.9.223.79, 194.204.159.1
	Orange	internet	internet	internet	194.204.159.1, 194.9.223.79
	Polkomtel	www.plusgsm.pl	无	无	212.2.96.51, 212.2.96.52
葡萄牙 (Portugal)	Optimus	internet	无	无	194.79.69.129
	TMN	internet	无	无	194.65.3.20, 194.65.3.21
	Vodafone PT	internet.vodafone.pt	无	无	212.18.160.133, 212.18.160.134
罗马尼亚 (Romania)	Connex (Vodafone)	internet.connex.ro	internet.connex.ro	connex	193.230.161.3, 193.230.161.4

	Orange	internet	无	无	172.22.7.21, 172.22.7.20
俄 罗 斯 (Russia)	BeeLine	internet.beeline.ru	beeline	beeline	194.190.195.66, 194.190.192.34
	Megafon (dv)	internet.dv	无	无	83.149.52.66, 194.186.112.18
	Megafon (kvk)	internet.kvk	无	无	83.149.24.244, 62.183.50.230
	Megafon (ltmsk)	internet.ltmsk	无	无	10.22.10.20, 10.22.10.21
	Megafon (mc)	internet.mc	无	无	81.18.129.252
	Megafon (NWGSM)	internet.nw	无	无	-
	Megafon (Siberia)	internet.sib	无	无	81.18.129.252
	Megafon (UGSM)	internet.ugsm	无	无	83.149.32.2, 83.149.33.2
	Megafon (usi)	internet.usi.ru	无	无	212.120.160.130, 195.42.152.34
	Megafon (Volga)	internet.volga	无	无	83.149.16.7, 195.128.128.1
	Motiv (uses BeeLine)	internet.beeline.ru	beeline	beeline	217.118.66.243, 217.118.66.244
	MTS	internet.mts.ru	mts	mts	213.87.0.1, 213.87.1.1
	NCC	internet	ncc	[supplie d]	10.0.3.5, 10.0.3.2
	NTC	internet.ntc	无	无	80.243.64.67, 80.243.68.34
	PrimTel	internet.primtel.ru	无	无	-
圣 卢 西 亚 (Saint Lucia)	Cable & Wireless	internet	无	无	
塞 黑 (Serbia-Mo ntenegro)	MobtelSrbija	internet	mobtel	gprs	217.65.192.1
	Telekom Srbija	gprsinternet	mts	064	195.178.38.3
新 加 坡 (Singapore)	M1	mobilenet	无	无	202.79.64.21, 202.79.64.26
	SingTel	internet	无	无	165.21.100.88, 165.21.83.88
	Starhub	shwapint	无	无	203.116.1.78, 203.116.254.150

斯洛伐克 (Slovakia)	Eurotel	internet	无	无	-
	Globtel	internet	无	无	213.151.200.3, 195.12.140.130
	Orange	internet	无	无	-
斯洛伐克 (Slovenia)	Mobitel (Internet)	internet	mobitel	internet	193.189.160.11, 213.229.248.161
	Mobitel (Internet Pro)	internetpro	mobitel	internet	193.189.160.11, 213.229.248.161
	Simobil	internet.si.mobil	无	无	121.30.86.130, 193.189.160.11
南非 (South Africa)	Cell-C	internet	无	无	168.210.2.2, 196.14.239.2
	MTN	internet	无	无	196.11.240.241
	Vodacom	internet	无	无	-
西班牙 (Spain)	Amena	internet	CLIENT E	AMEN A	213.143.33.8, 213.143.32.20
	Telefonica (Movistar)	movistar.es	movistar	movistar	194.179.001.100, 194.179.001.101
	Vodafone (Airtel)	airtelnet.es	vodafone	vodafone	212.73.32.3, 212.73.32.67
瑞典 (Sweden)	Tele2, Comviq	isplnk1.swip.net	gprs	internet	-
	Telia	online.telia.se	无	无	10.0.0.1, 10.0.0.2
	Tre (3G)	data.tre.se	void	void	-
	Vodafone (GPRS)	internet.vodafone.net	无	无	
	Vodafone (3G)	services.vodafone.net	无	无	
瑞士 (Switzerland)	Orange CH	internet	无	无	213.55.128.1, 213.55.128.2
	Sunrise	internet	internet	internet	212.35.35.35, 212.35.35.5
	Swisscom	gprs.swisscom.ch	无	无	164.128.36.34, 164.128.76.39
台湾 (Taiwan)	Chunghwa Telekom	emome or internet	无	无	10.1.1.1
	Far EasTone	fetnet01	无	无	210.241.199.199
	KG Telecom	internet	无	无	-
	Taiwan Cellular	internet	无	无	-
泰国 (Thailand)	AIS	internet	无	无	202.183.255.20, 202.183.255.21
	DTAC	www.dtac.co.th	无	无	203.155.33.1, 203.44.144.33

土耳其 (Turkey)	Aycell	aycell	无	无	212.156.4.1, 212.156.4.4
	Telsim	telsim	telsim	telsim	-
	Turkcell	internet	gprs	gprs	212.252.168.240, 212.252.119.4
阿联酋 (UAE)	Etisalat	mnet	mnet	mnet	
英国 (UK)	Jersey Telecom	pepper	abc	abc	212.9.0.135, 212.9.0.135
	O2 (contract)	mobile.o2.co.uk	web	password	193.113.200.200, 193.113.200.201
	O2 (contract, faster)	mobile.o2.co.uk	faster	password	193.113.200.200, 193.113.200.201
	O2 UK (pre-pay)	payandgo.o2.co.uk	payandgo	payandgo	-
	Orange (pay monthly)	orangeinternet	user	pass	158.43.192.1, 158.143.128.1
	Orange (Pay and Go)	orangewap	Multimedia	Orange	158.43.192.1, 158.143.128.1
	T-Mobile	general.t-mobile.uk	user	pass	
	Virgin Mobile	goto.virginmobile.com	user	无	
	Vodafone (contract)	internet	web	webs	
乌克兰 (Ukraine)	Djuice	www.djuice.com.ua	igprs	igprs	-
	Jeans	www.jeans.ua	无	无	80.255.64.23, 80.255.64.24
	Kyivstar	www.kyivstar.ua	igprs	internet	-
	Mobi-GSM	internet.urs	无	无	213.186.192.254, 193.239.128.5
乌拉圭 (Uruguay)	ANCEL	gprs.ancel	无	无	200.40.30.245, 200.40.220.245
美国 (USA)	Cingular	isp.cingular	isdpa@cingulargprs.com	CINGULAR1	66.209.10.201, 66.209.10.202
	T-Mobile (Internet)	internet2.voicestream.com	无	无	216.155.175.105, 216.155.175.106
乌兹别克斯坦 (Uzbekistan)	Uzdunrobita	net.urd.uz	user	pass	
委内瑞拉 (Venezuela)	Digitel TIM	gprsweb.digitel.ve	无	无	

