

GLIC Studio Software and Control System

Software Instructions

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Chapter 1 Summarization

1.1 Function Features

“GLIC Studio” is a software with powerful functions, convenient operations and easy instructions. It can make out and preview programs supporting a big range of formats including txt documents, all picture formats (BMP / JPG / GIF / PCX....), all animation formats (MPG / MPEG / AVI / SWF / GIF) .

1.2 Operating Environment

Operating system

Chinese / English Windows2000/NT/XP/Server2003

Hardware Configuration

CPU: Pentium 300MHz or above

EMS memory: 500M

Chapter 2 Installation and Uninstallation

2.1 Display and PC Linking

Display can be visited by Ethernet or com communication. The following two pictures indicated the No.1 pin's position of the crystal RJ45 and the sequence No. of the two twisted-pair 568A and 568B set in EIA/TIA standard.



568A

1. GREEN WHITE
2. GREEN
3. ORANGE WHITE
4. BLUE
5. BLUE WHITE
6. ORANGE
7. BROWN WHITE
8. BROWN

568B

1. ORANGE WHITE
2. ORANGE
3. GREEN WHITE
4. BLUE
5. BLUE WHITE
6. GREEN
7. BROWN WHITE
8. BROWN

Image2.-1-1

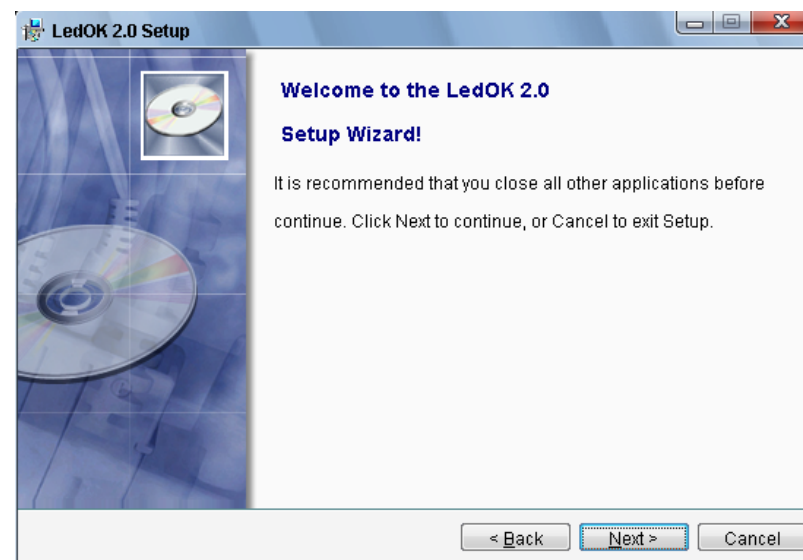
If PC and display connected directly, then the crystal ends of the network cable should use 568A standard in the one end and the 568B standard in another; If PC and display connected through router, concentrator (HUB) or

switching machine, then both ends of the network cable should use the 568B standard.

2.2 Installation

“GLIC Studio” the software installment is very simple, operation as follows: Insert install disc into DVD/CD driver, then run setup.exe, As shown in follow image:

It is really very easy to install the “GLIC Studio” software. Instructions: insert the installation disc CD into computer CD driver, then a setup.exe interface will appear (if not, double click CD). Please see the following pictures for references.



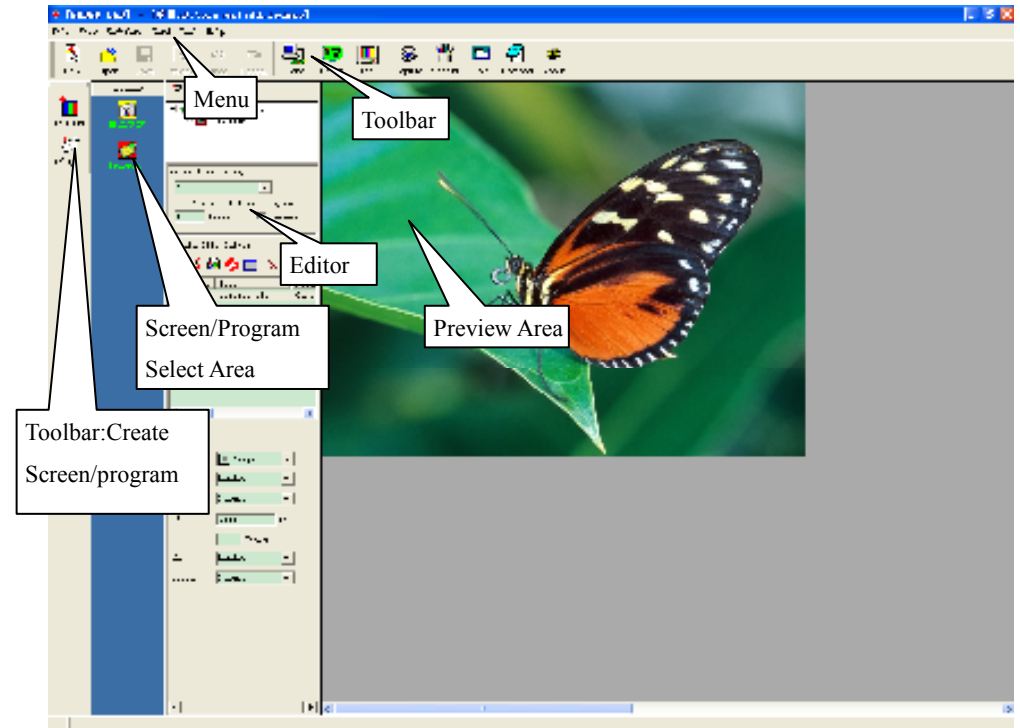
Chapter 3 Software Structure and Detailed

Instructions

3.1 Setup Logo



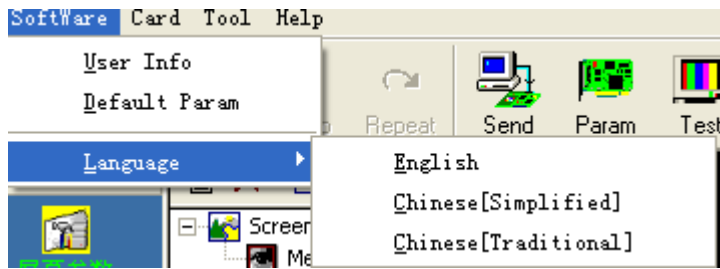
Pic 3-1-1 Logo



Picture 3-1-2 Soft interface frame

Software Language Setting:

Software setting → language → choose language, recently this software can support English, Simplified Chinese and Traditional Chinese and can switch languages without having to restart the software.



3.2 Toolbar Introduction

Toolbar includes three parts:

1. Project button **New** **Open** **Save** **Preview**
2. Assistant button **Capture picture** **Mspaint** **Calc** **Notepad**
3. Communication/Param button **Send** **Param** **Test**

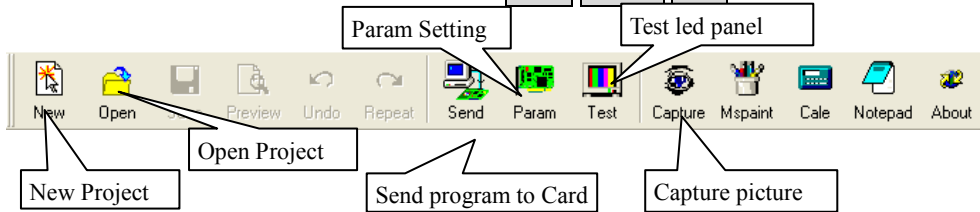
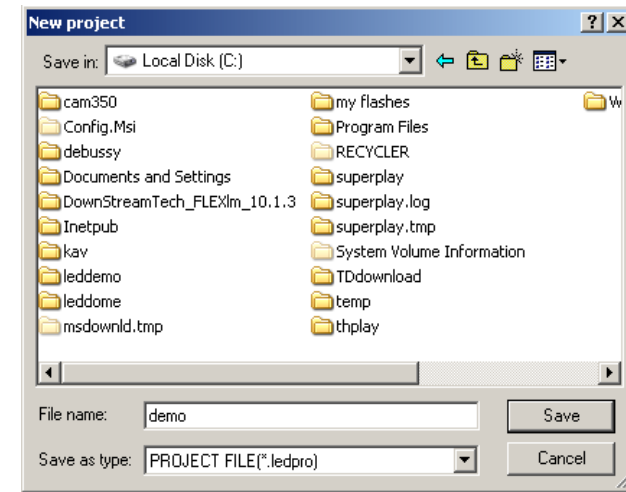


Image3-2-1 Toolbar

3.3 Software structure

This software has project managing function.

Step 1: create a new project



Step 2: Create a Screen , as shown in image3-3-4.

Create program for screen.

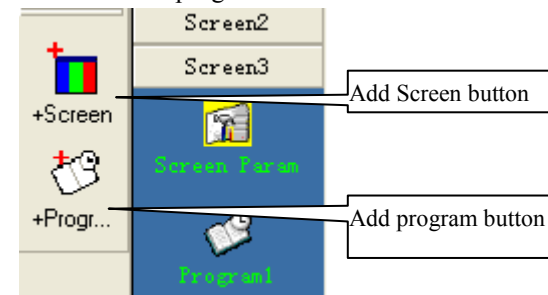


Image3-3-4 Add Screen/Program for project

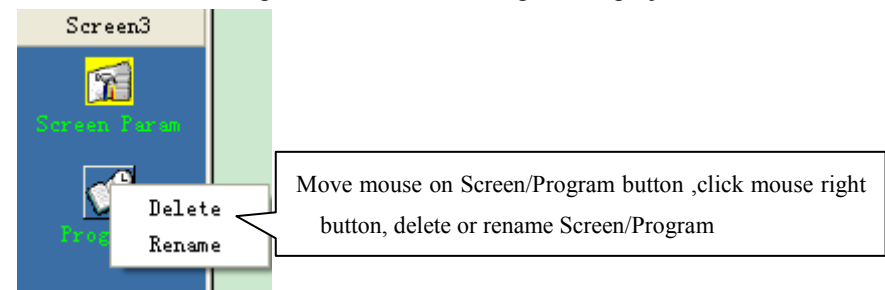


Image3-3-5 delete or rename Screen/Program

Structure as shown in Image3-3-6:

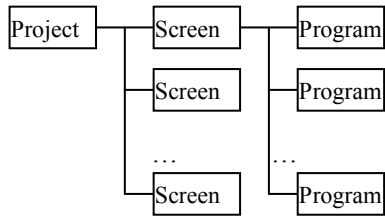


Image3-3-6 Project structure

3.4 : Program structure

Program can be divided to three areas according to the different position on display screen. The three parts are clock, media files and subtitles. Through “Create” button on the top of the edition area, users can create Clock, Media file, Subtitles region. Users can create one or more areas to on displays. See as follows:

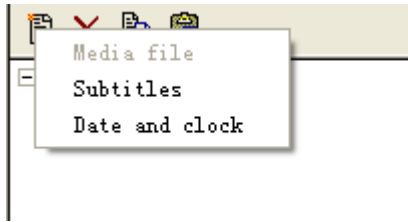


Image3-4-1

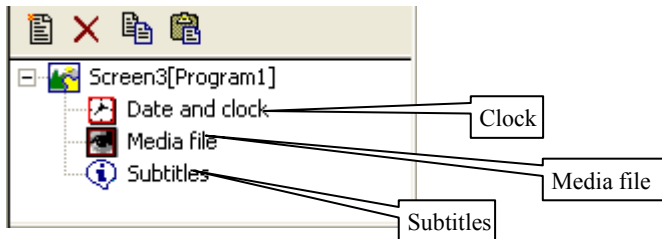


Image3-4-2

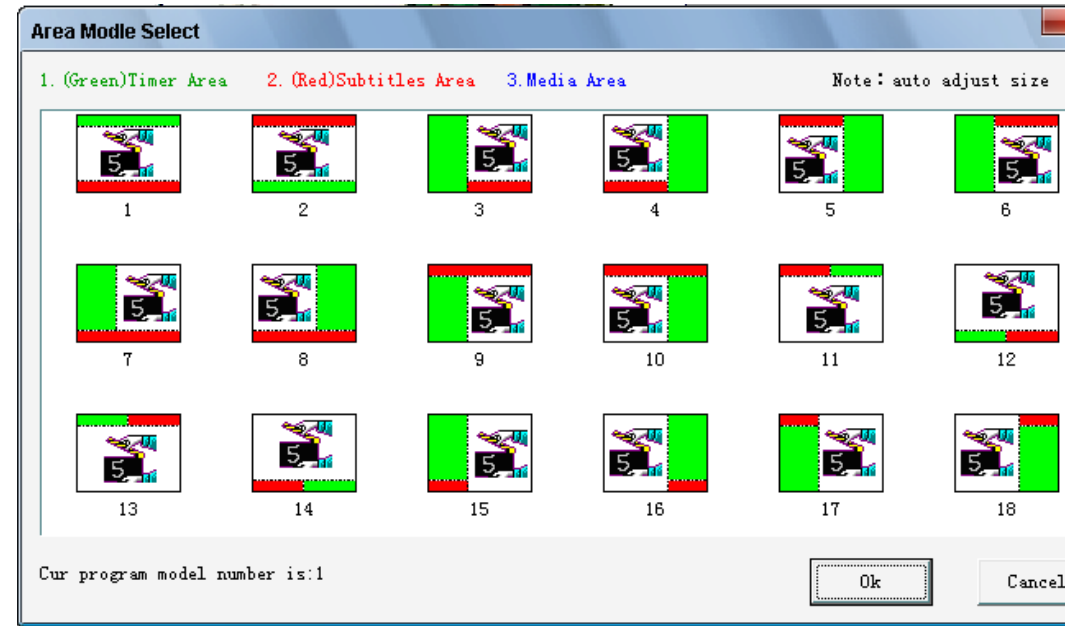


Image3-4-3

Default value is mode1, standard three areas; Users can choose the corresponding mode as required; The mode 1 and 7 preview as follows:



Image3-4-4 mode 1



Image3-4-5 mode 7

3.5 Screen parameters setting



Click the **Screen Parameters** button in the following list.

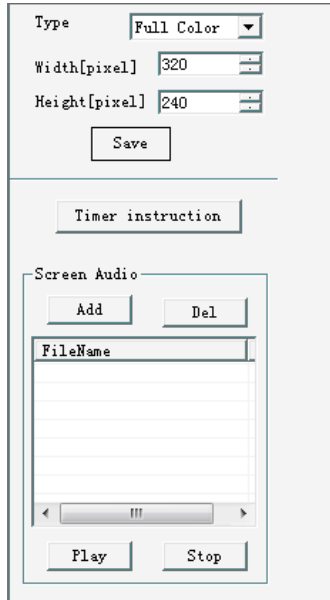


Image3-5-1

Screen parameters setting including:

1. Program's actual size, which must be consistent with the one regulated in the control card.

Note: Here the screen's width, height and type are the program's parameters. The bigger the display is, the bigger the program content will be. After the programs can automatically fit the screen's size after its downloading to the control card.

2. Timing order list (see the 3.6 Timing repertoire)
3. Background music adding.

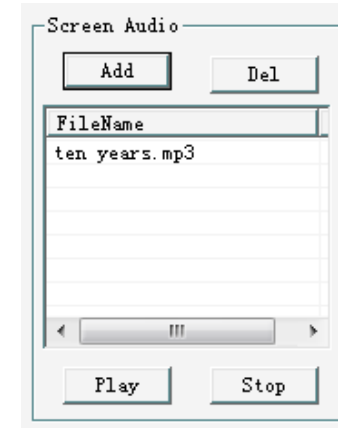


Image3-5-2

The control system will play the background music in turn according to the list. When there are videos in the list, the background will stop automatically. And after playing the videos, the background will continue. When all the programs playing for a cycle, the music will stop automatically.

3.6 Timing repertoire

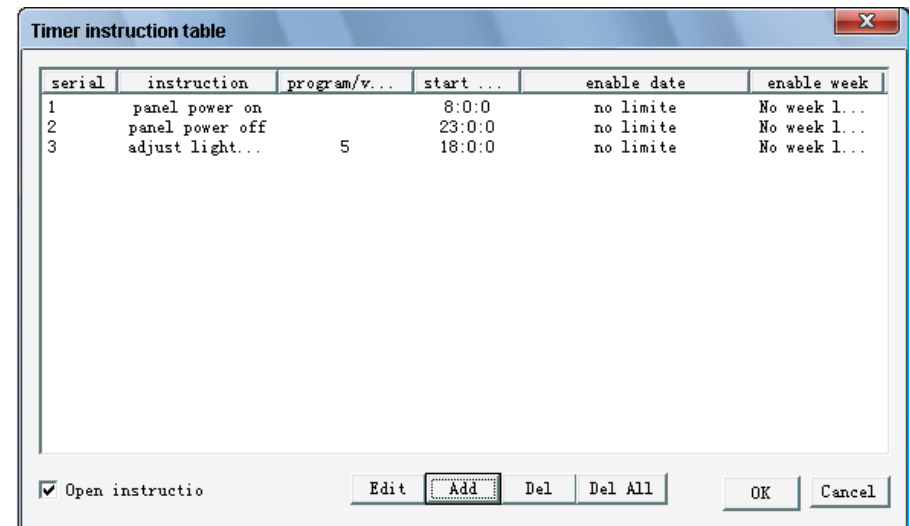


Image3-6-1

Timing orders including: switch screen, brightness and volume adjusting, programs timing playing.

Users choose the timing orders through the list:

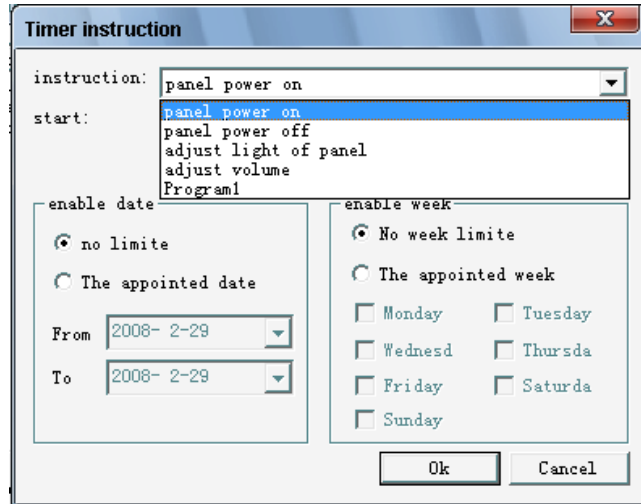


Image3-6-2

Users then set the parameters in the following list, appointing the week and starting time. See the picture as follows: the effect time of starting the screen is every Monday, Wednesday and Saturday from November 1st 2007 to December 31st 2007.

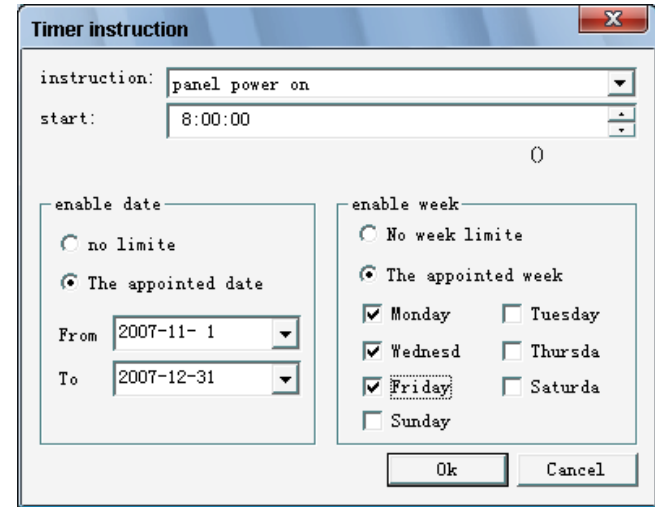


Image3-6-3

See the timing brightness in the picture as follows, it means that from 8:00 am to 16:00 pm the brightness is 8; and 6 from 16:00 pm to 20:00 pm; and 4 after 20:00pm

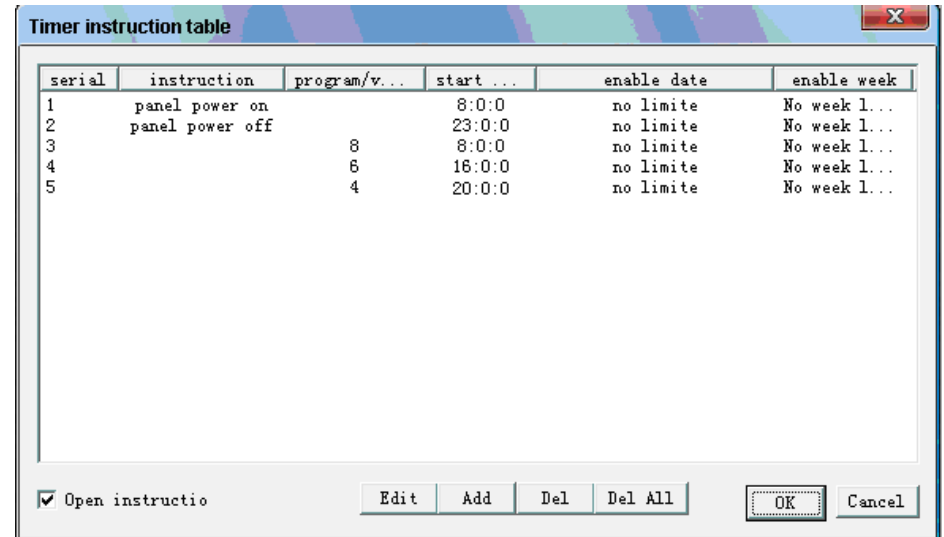


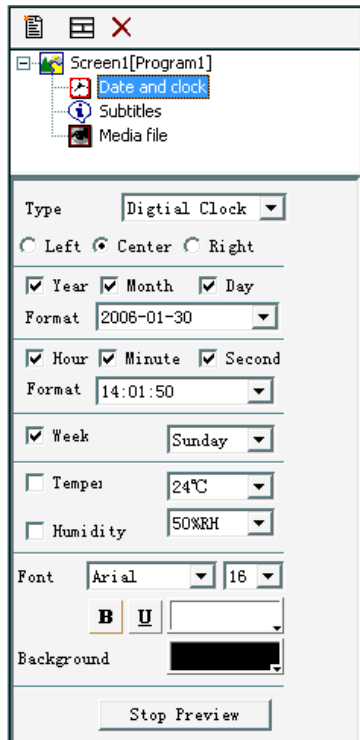
Image3-6-4

Chapter 4 Date Editing

Time is displayed on the top of screen.

Time elements includes: year, month, day, hour, minute, second, week, temperature and humidity.

Users can choose the required element, format type and set font color, font size, background color and so on. See image4-1:



04.02.2007 MON 09:51:24 AM

Image 4-1 Time Editor

in preview

All time element formats are shown as follows:

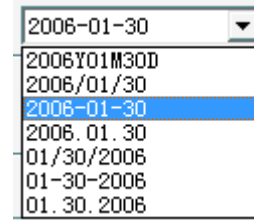


Image 4-3 Y/M/D format

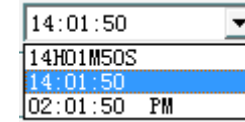


Image4-4 H/M/S format



Image4-5 Week format

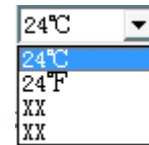


Image4-6 temperature

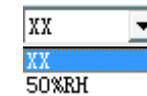


Image4-7 humidity

Chapter 5 Media Files Editing

This software can support many kinds of media file formats. And the file list can be distinguished according to the different color and the type values. Users can open the list and double click the file to edit the related editor. The edited file then will be in the list, and the original file under the original path will not be changed.

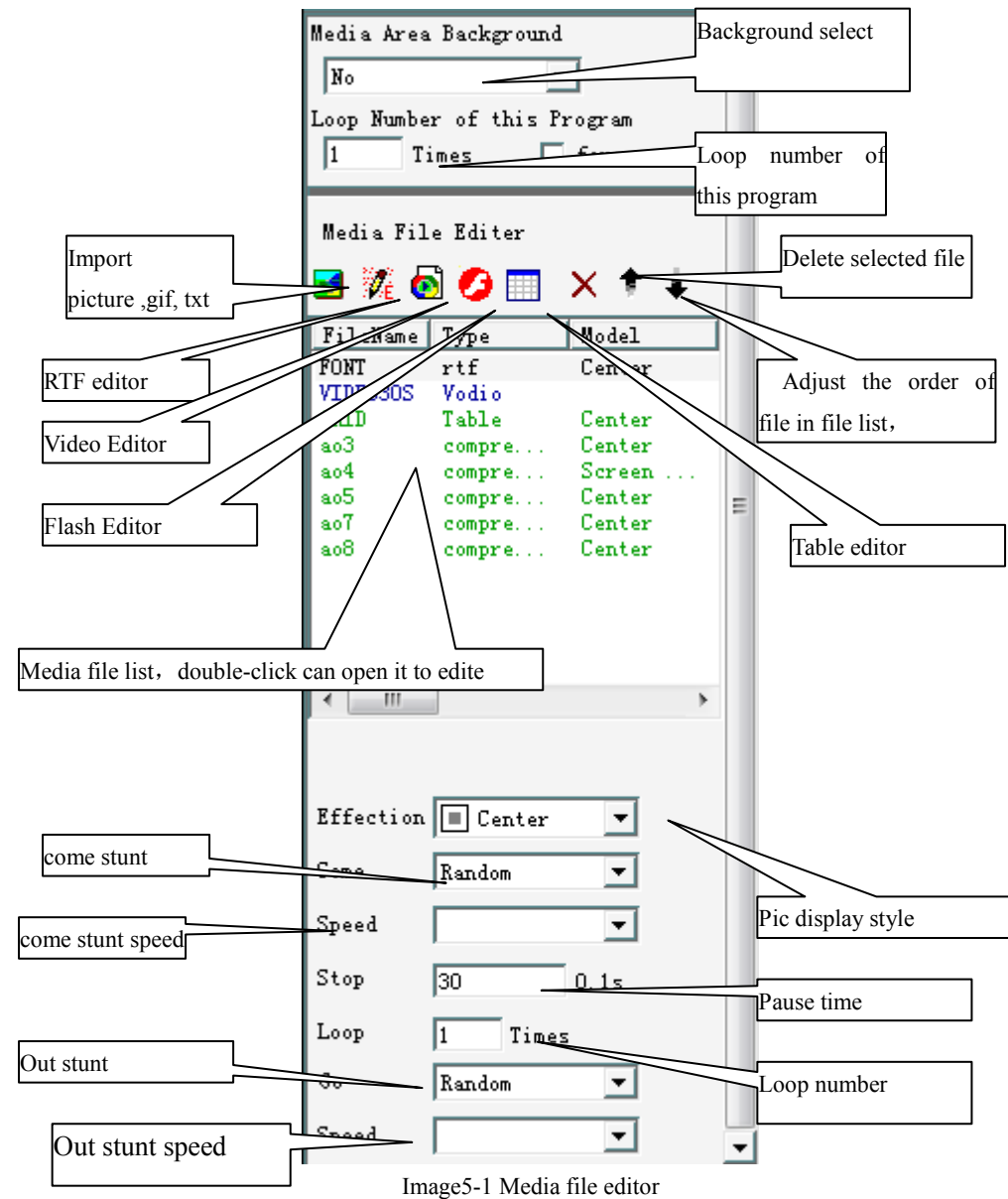
This software can support all kinds of picture formats including jpg, bmp, png, ico, tif, tga,pcx, wbmp, emf,j2k.jp2.jbg.j2c jpc.pgx.pnm.pgm.ppm.ras, gif and so on.

And the video formats the software can support include: general video format (**avi**, **mpg**, **mpeg**), windows media player format (**wmv**, **asf**), realplay format(**rm**, **rmvb**), quicktimer format (**mov**), flash video format(**flv**), other formats (**mp4**, **3gp**, GIF and SWF animations).

This software supports background filling; Users can flexibly set the cycled times of each program in one cycle.

The picture supports many kinds of the displaying modes with various kinds of coming and going stunts. Users can choose the needed ones and flexibly set the speed, cycled times and staying time. And users can also set gif and the cycled times of videos.

As for the details please see the following image 5-1 for reference:



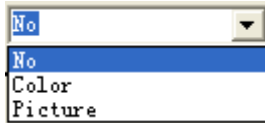


Image5-2 background choices

Users can preview and adjust the media files scale according to the screen scale, which is helpful for users to find the appropriate files.

Users can choose the media files here in the following frame and then can preview them before adding to the playing list. By doing so, users can finally choose appropriate picture.

See Image5-3:

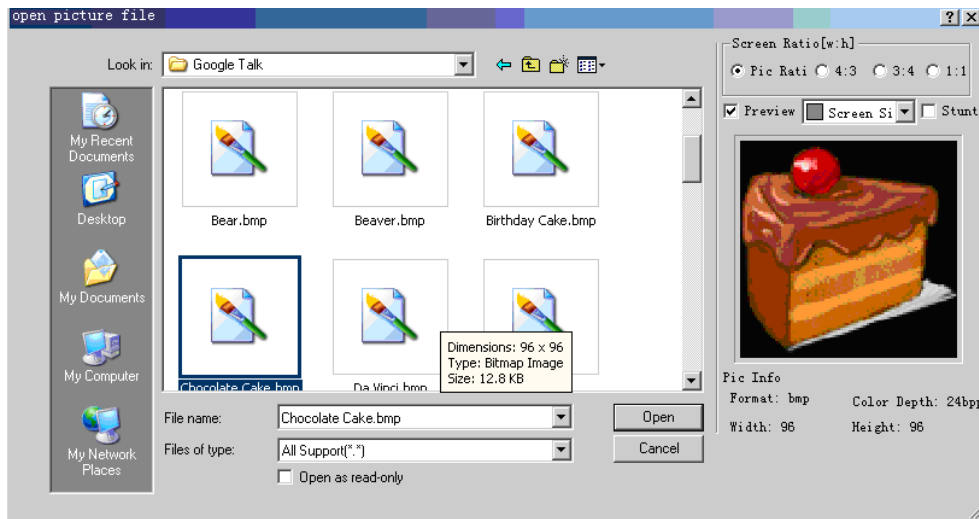


Image 5-3

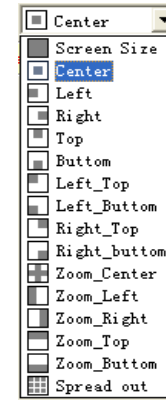


Image5-4 Picture displaying modes

After having chosen the displaying modes, users can adjust different scales of all kinds of pictures to fit the display screen scale.

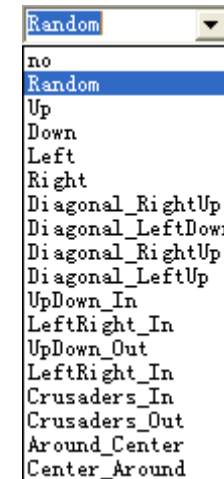


Image 5-5 Picture stunts, going stunt
(control card has about ten stunts for the moment now)

5.1 TXT editing

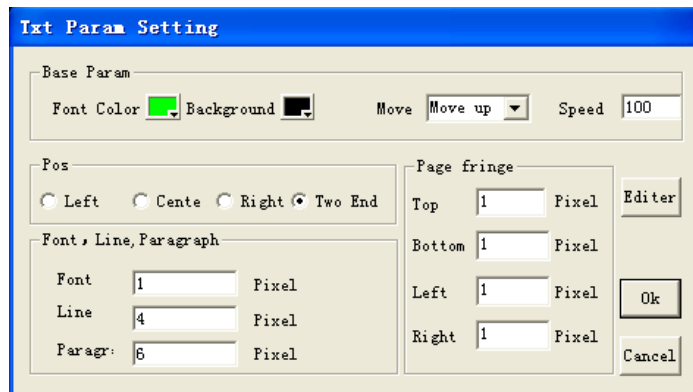



Image 5-1-1 Double -Click txt file to edit the related parameters

5.2 RTF editor

 Users can create a new rtf with colorful and also can edit the already existed rtf.

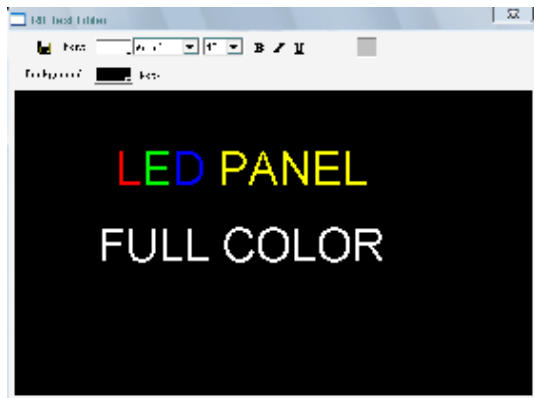



Image 5-2-1 Text Editor

The fonts can be used from the already installed ones in windows. If needed, users also can copy more colorful fonts to the system disk:\\window\\fonts

Users can flexibly change the background color of text, size, bold, italic, underline and the modes (centered, left or right) of the fonts.

Editor supports rtf format. And users also can copy (ctrl+c) texts from other software and then paste (ctrl+v) them directly to the txt editor.

5.3 video editor

 This editor can support all kinds of video regardless of what kind of formats, sizes and capacities. Also editor can support intercepting fragments, revolving and overturning functions.

Users can alter code rate and frame rate to get the satisfied effect.

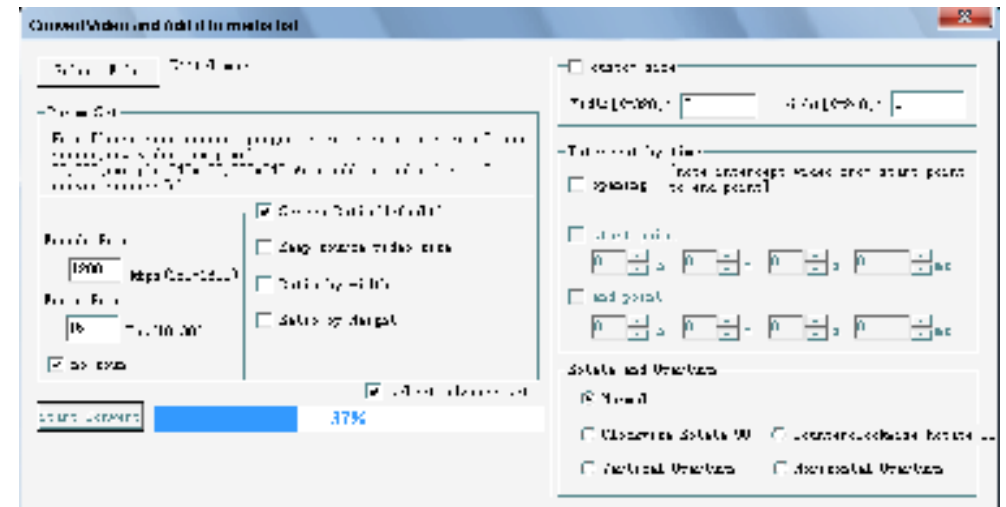


Image 5-3-1

Default code rate is 200K bps, frame rate is 20Fps; The video scale can be zoomed according to the display screen scale.

Now card support video pixel is smaller than 80000, if screen size is large, video will be played in the middle. Or you can reduce the encode rate and frame rate.

Users can get the required video scale by using different scale choices. And in the “advanced set”, video fragments can be obtained through setting the beginning and ending points. (Note: the time length of the fragment should not exceed the video’s total time length). Videos can also be set to rotate or rotate by 90 degrees, flip horizontally or vertically.

Control card now can support videos within 80 thousand pixels. If exceeded 80 thousand pixels, the playing speed will be comparatively slow. And when screen exceeds 80 thousand pixels, the following two ways should be used.

1. To use videos less than 80 thousand pixels with the original size unchanged.
2. To decrease code and frame rate, which also will affect the video’s clarity and continuity.

5.4 FLASH(*.swf) editor

This editor can support all swf files intercepting (including action script, one frame with several flash intercepted fragments).

You can set the first frame and last frame in flash, then capture the fragment.

(There will be slight differences between the original one and the intercepted fragment of some complicated script with action script. However, that slight difference will not affect the displaying.)

Note: All the intercepted fragments will be stored as pictures into the memorizer, which will occupy a great deal of capacity. Therefore users are

suggested to store the fragments as videos (eg: avi, flv formats).



Image 5-4-1 swf Editor

Chapter 6 Rolling Words Editing

Users can input the rolling words, edit the font color, size, bold, italic, underline and background. Users can only type words into the input frame. As for the actual size of the words, users can see from preview area.

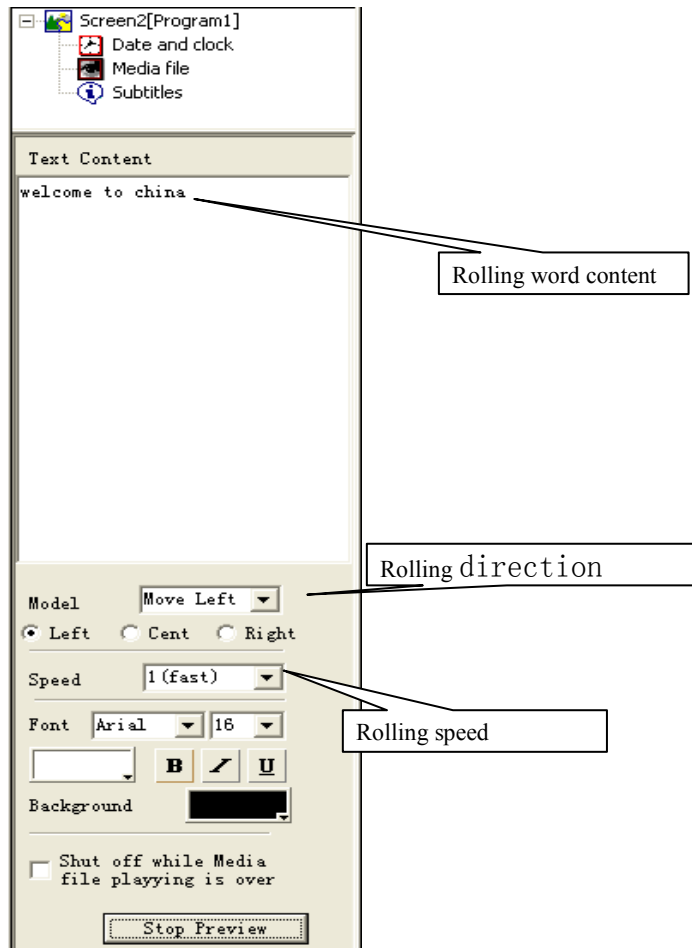


Image 6-1 rolling words editing area

Chapter 7 Picture Capturing Function

“GLIC Studio” software has very good capturing function. Users can capture any size of pictures. At the same time pictures can be automatically saved to the media file list and copied to the clipboard. If need any amendments, users can use “ctrl+v” first and then go to edit it in the drawing software.



Image 7-1 Capture button

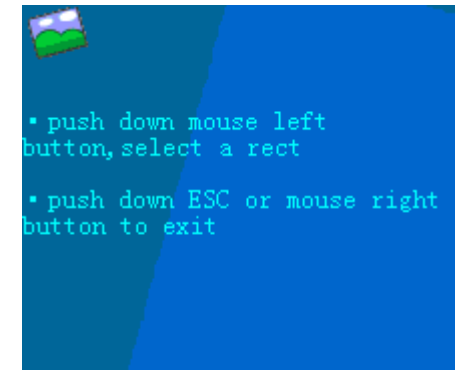


Image 7-2 Capture step 1

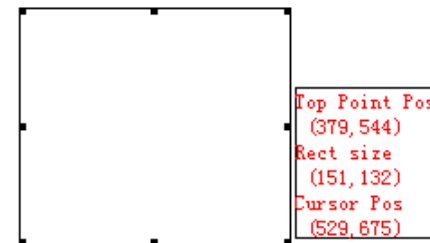


Image 7-3 Capture step 2

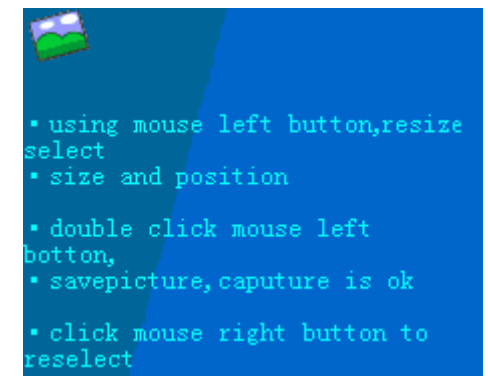


Image 7-4 Capture step 3

Chapter 8 Downloading

This software use network communication and can realize controlling several cards at the same time.

8.1 Network function

Sending: users can flexibly choose whatever programs they like. They can choose one or multiple programs from the internet and then download to the memorizer in display's controlling system. (This way can take the full advantage of LAN and realize the convenient managing and more safe updating)

8.2 U disk function

1. Use USB-disk to play programs: firstly, insert U disk into PC USB port; send the selected programs to U disk; Then insert that U disk into the control card and the control card will automatically copy programs and play out. Advantage: easy to carry and upgrade. Also the capacity of the control card memorizer can be flexibly expanded.
2. Use USB-disk to upgrade control card: Firstly, insert u disk into PC USB port and send the selected programs to U disk; Then insert that U disk into the control card and the control card can automatically copy programs into the flash memorizer. Advantage: easy to carry and upgrade.



Image 8-2-1 downloading tool icon

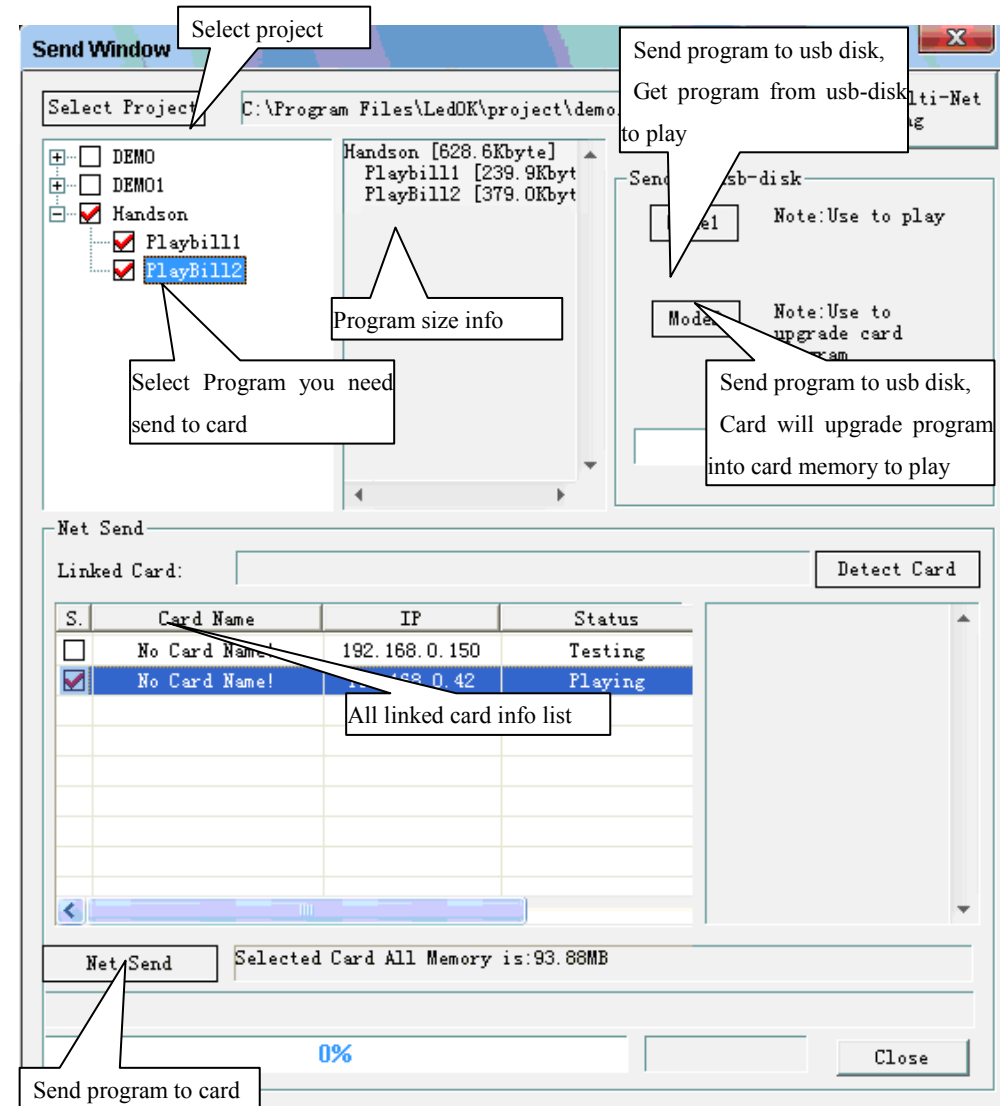


Image 8-2-2downloading Window

8.3 Multi-network-cards

If there are multi-network-cards and links in the system, then users can set the parameters to decide which network cards will be connected to the control card. Concrete steps are shown as follows:

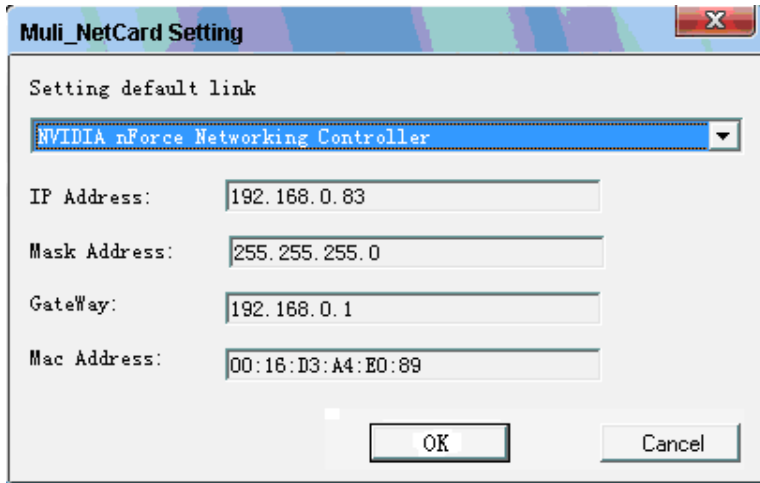


Image 8-3-1

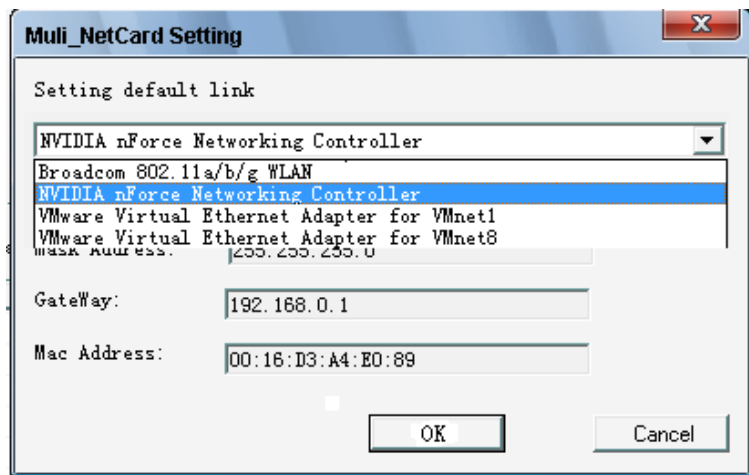


Image 8-3-2

Chapter 9 Software Parameters Setting

Users can set the parameters of media files, time and rolling words through this software. When users need to create media files, time and rolling words the next time, all the parameters will be the same as the original ones that users already set. Therefore, users can save much more time and also can increase the speed to make out programs.

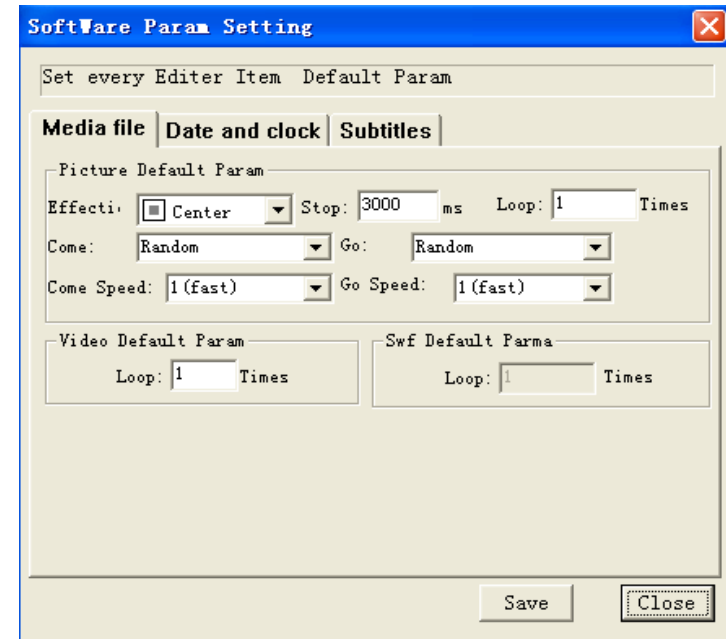


Image 9-1Media file default parameters setting

Chapter 10 Hardware Parameters Setting and Testing

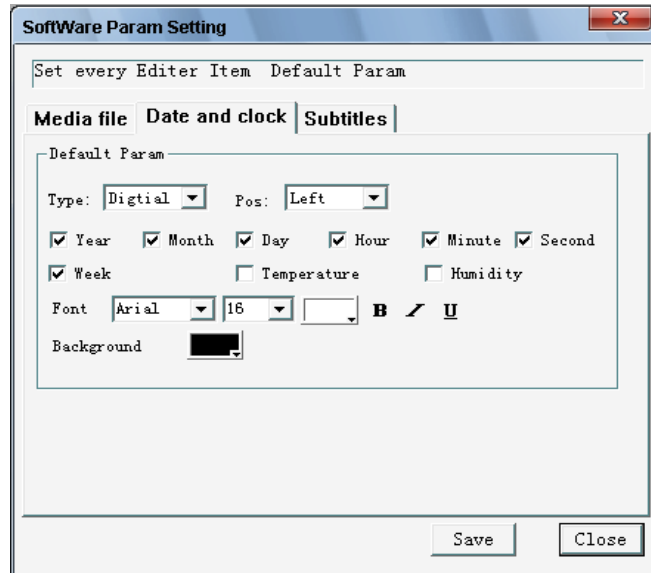


Image 9-2 Date and clock default param setting window

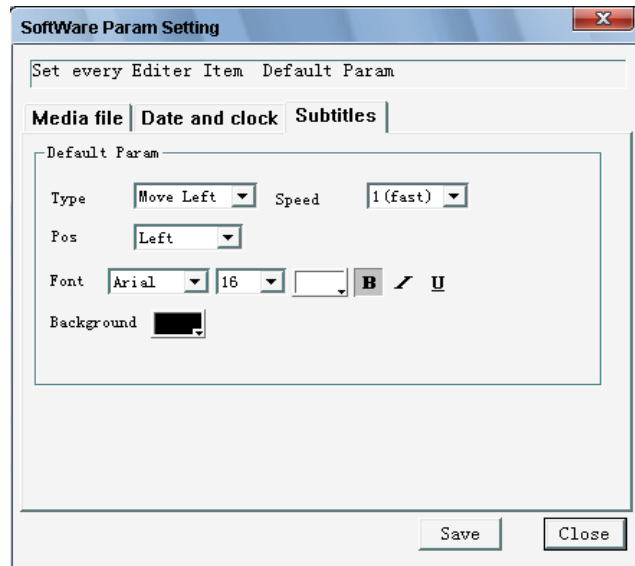


Image 9-3 Rolling word default setting window



Card hardware Parameter setting

Password : 888. Wrong hardware parameters setting may cause abnormality to display, therefore, it is suggested not to tell the end user's password.

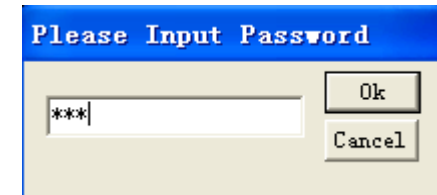


Image 10-1

Basic and advanced parameters setting: after setting and adjusting, the parameters should be saved to the control card, or else it will be the original parameters after next startup. After saving the parameters, the control card will replay the programs automatically. At that time, control card will temporarily offline and will continue connecting network automatically. (as for the hardware parameters setting, please see the hardware instructions)

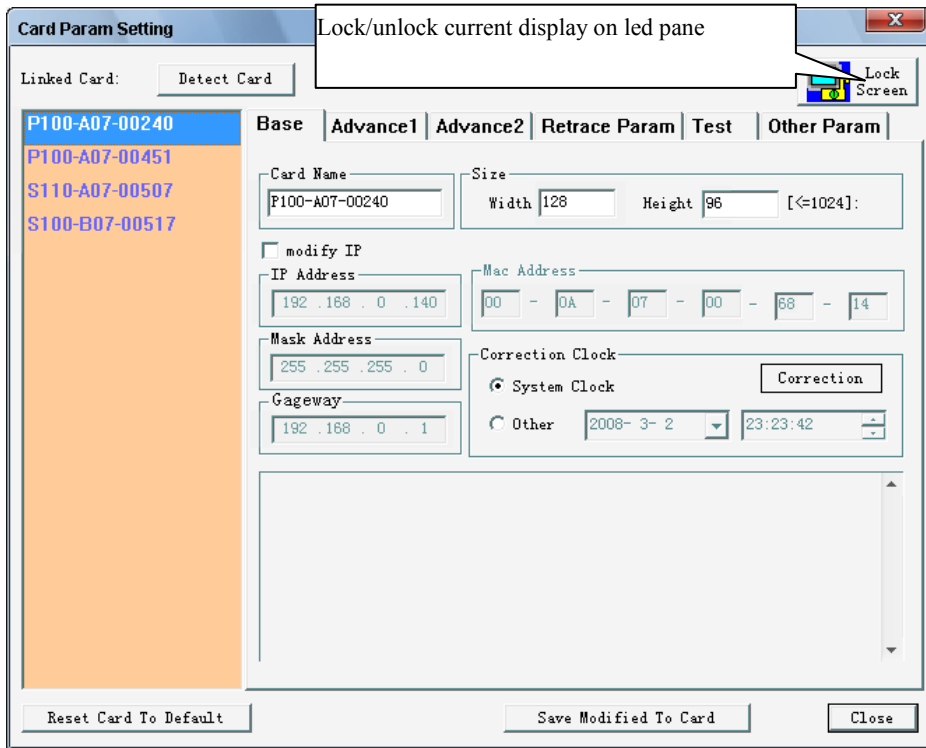


Image 10-2 Param setting window

The left side with orange color is the control card searched by LAN.

“Reset card to default” button: use the default parameters in factory

P100 default value: width 128, height 512, 1/16 scanning method

S100 default value: width 128, height 160, 1/8 scanning method

S200 default value: width 128, height 320, 1/8 scanning method

After using the default: IP will changed to be: 192.168.0.x ; x is the last two numbers of the control card's sequence number.

“Save modified to control card” button: save the modified parameters to the

control card. When users modify the basic parameters of the control card, eg: IP address, sub-mask, gateway address, the control card will restart automatically. At that moment, the control card will be offline with the computer for a short time around 5 seconds, then will automatically resume to the line.

10.1 Basic parameters

The basic parameters configured by control card includes type, size (width and height), IP address, sub-mask, gateway, MAC address, control card's time. The control card's time can be set the same as PC or anytime users like to.

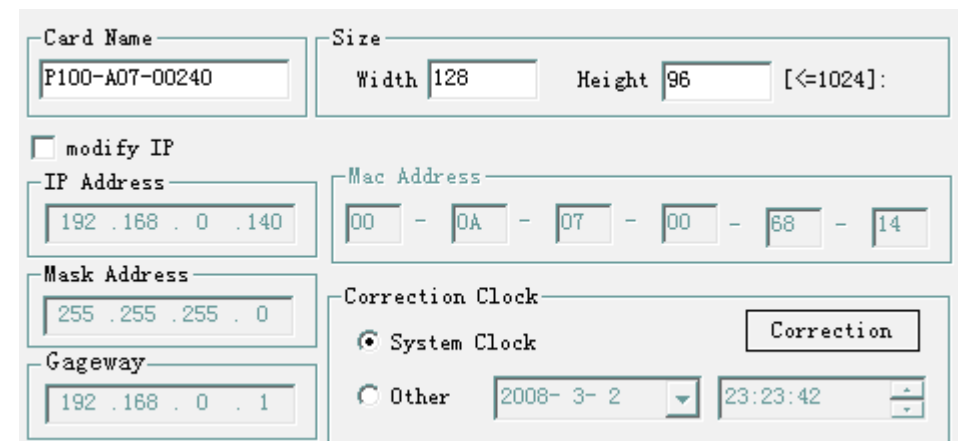


Image 10-2-1 Control card basic parameters setting

Card name: help to memorize the related display, users can name it by themselves.

Size: the actual width and height of the display screen controlled by control card.

IP amendment: Users can amend the IP address and then use the amended ones to communicate with PC in LAN. (And the PC must be of the same network section with control card when control card is connected directly

with PC. The network cable of the RJ-45 linker should use 568A in the one end and 568B in another.)

The control card of “GLIC Studio” can support visiting different network sections. (As for the explanation of the network section: 192.168.0.12 and 192.168.0.14 are of the same network sections; And 192.168.0.12 and 192.168.1.14 are of the different network sections.) Please see the details in 12.3 about IP, Mask and gateway in different network sections.

Time emending: real time clock of control card. Users can set user-defined time or the same as computer’s.

10.2 Advanced parameters setting

Advance parameters: brightness, OE signal, duty cycle, clock frequency, grayscale, color exchange, GAMMA.

GAMMA can be debugged separately by R, G, B or also can be debugged. Through the gamma debugging, the display effect will also be displayed correspondingly. Through this item setting, users can find out the proper GAMMA value which enable a more colorful and clear displaying.

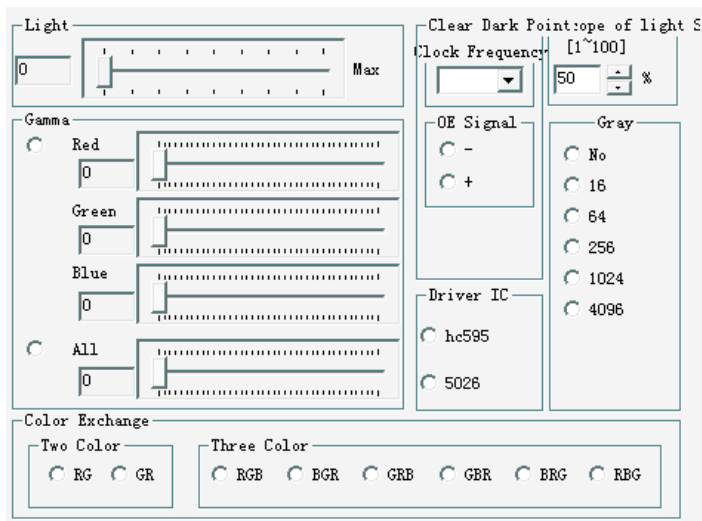


Image 10-2 advance parameter setting window

Brightness has 8 grades, 0 is the darkest and 8 is the brightest

Brightness range of the sensor: it should work with our company’s brightness sensor. The range percentage refers to the fluctuations up or down the present brightness; The range is 1% to 100%.

Controller can automatically adjust the brightness values of LED display according to environment changes tested by the modules of sensor. The brighter the outside is, the brighter the display will be; And the darker the outside is, the darker the display will be. This parameter is the percentage of the display’s brightness value in the darkest outside to the value in the brightest outside. And the bigger the percentage is, the bigger the range controlled by the sensor will be.

OE signal: the function is to enable the outputting signals to work effectively. If OE is set wrong value, then the display screen will appear darker.

Gamma: the color-brightness range of display screen. Users can adjust the gamma’s value of R, G, B separately according to color displaying. Proper or correct set of the gamma value can help to get the very good vision effect.

Display clock: Shift register clock of LED driver-IC.

Grayscale: the grayscale of display: the maximum grayscale is 1024 scales of P100(double-color control card) and 4096 scales of S100, S200 and S110 (full-color control card)

Reverse data: the driver-chip setting according to different display IC; If its data set reversed, then the picture color on display will appear out to be its reverse one.

Color exchange: stands for the color sequence of RGB related to display. If the color-sequence displayed on the screen were wrong, then users can amend it through this item setting.

10.3 Advanced parameters 2

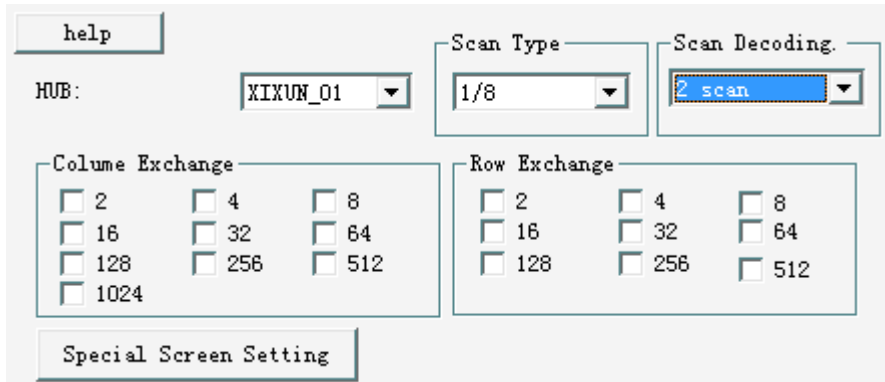


Image 10-3 Advance Parameter 2 setting window

Picture 10-3 Control card advanced parameters(2) setting

HUB port: defaulted as GLIC STUDIO company's: GLIC STUDIO_01.

Scanning method: it should be chose according to different displays. There are several values including 1/4,1/8 and 1/16 scanning method; (The 1/2 method often with retracing, which need to be set in the retrace parameters, please see 10.4 retrace parameters setting.)

Rows scanning code types: two types: 138 code and none.

Column exchange: stands for the numbers in the same column half-to-half exchanged. Take the 16*8 (pixels) unit display board as example:

2 columns exchange:

- data in the 1st and 2nd columns exchanged with each other
- data in the 3rd and 4th columns exchanged with each other
- data in the 5th and 6th columns exchanged with each other
- data in the 7th and 8th columns exchanged with each other
- data in the 9th and 10th columns exchanged with each other
- data in the 11th and 12th columns exchanged with each other

- data in the 13th and 14th columns exchanged with each other
- data in the 15th and 16th columns exchanged with each other

4 columns exchange:

- Data in the 1st and 2nd columns exchanged with the 3rd and 4th columns'
- Data in the 5th and 6th columns exchanged with the 7th and 8th columns'
- Data in the 9th and 10th columns exchanged with the 11th and 12th columns'
- Data in the 13th and 14th columns exchanged with the 15th and 16th columns'

2 and 4 columns exchange(That is to say the above two kinds of types are chosen together):

- Data in the 1st and 2nd columns exchanged with 4th and 3rd columns'
- Data in the 5th and 6th columns exchanged with 8th and 7th columns'
- Data in the 9th and 10th columns exchanged with 12th and 11th columns'
- Data in the 13th and 14th columns exchanged with 16th and 15th columns'

The “rows exchange” is the similar to “column exchange”.

10.4 Retrace parameters setting

This retrace parameters setting only apply to the displays with retrace scanning or the static displays; Through retrace parameters setting, users can make the enable the control card to be available to all kinds of outdoor and indoor displays.

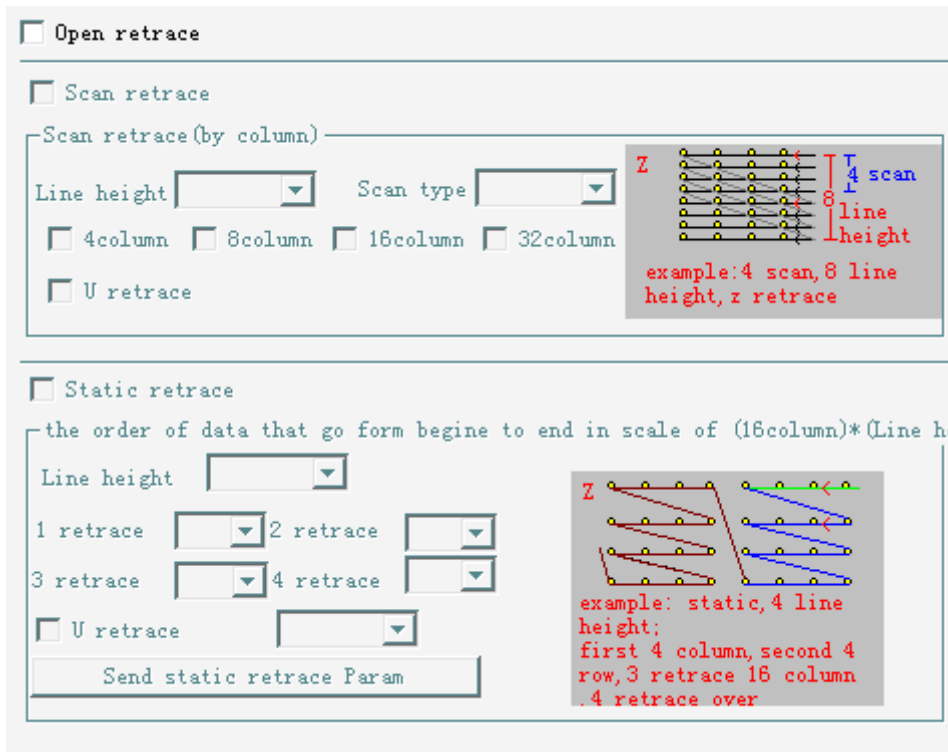


Image 10-4-1 control card retrace parameters setting

Scanning with retrace(explanation): eg: 32*16 (pixels) unit display board, each board has two arrays, each array has 8 rows, 1/4 scanning type, every 8 columns will have one retrace.

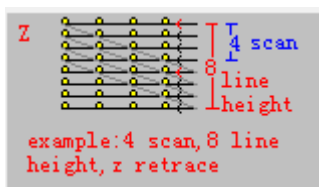


Image 10-4-2

Set as follows:

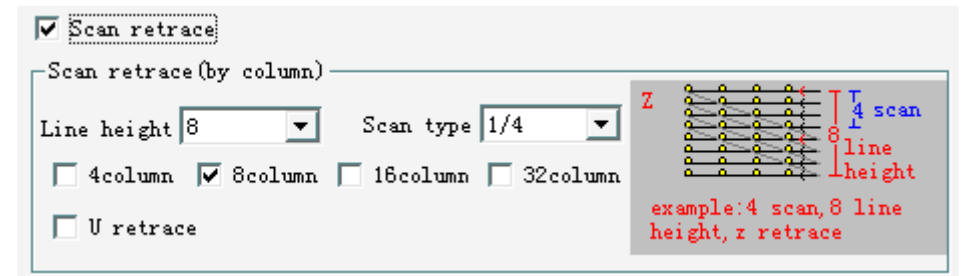


Image 10-4-3

Static display setting (explanations): eg: 16*8 (pixels) unit display board, each module has one array, and each array has 8 rows, static. As for the data' route, please see as the following picture:

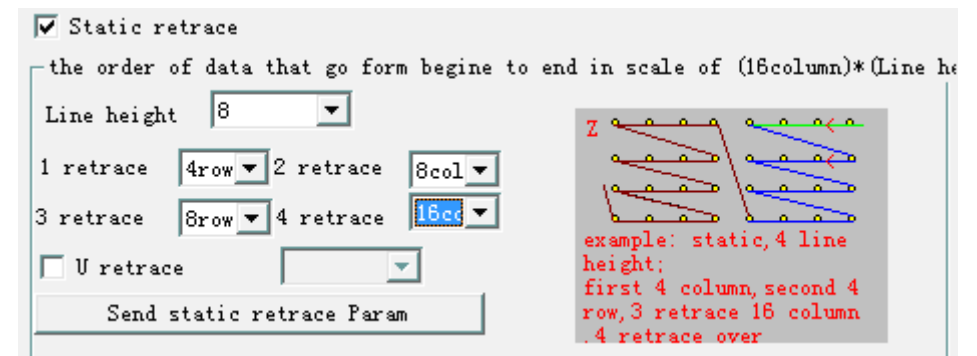


Image 10-4-4

10.5 Screen testing function

Screen testing: users can use different methods to test LED screen including grid testing, grayscale testing and dots testing. Which is convenient for users to test the smoothness of the screen, uniformity of the pitches, bad lamps and the even changes of the grayscale.

Grid testing: users can set the color, grid and intervals of grid lines. Also in this item, users can test horizontal line, vertical line and the italic line.

(suggestion: when testing the italic line, set the intervals as the number which can not be aliquant, eg: 7, 15 avoid of wrong estimation.)

Grayscale testing: it can test one or multiple color changes, which is convenient for testing the screen scale, even changes and bad lamps.

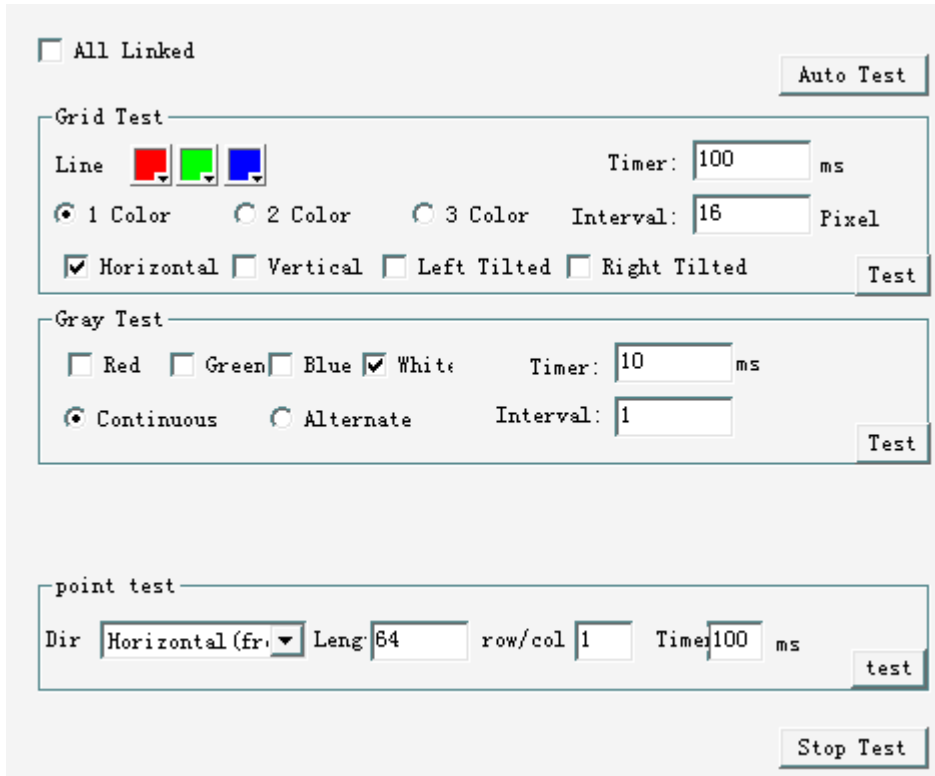


Image 10-5 testing screen function

10.6 other functions

Com parameters of control card setting: the COMs of control card only used for special purpose, eg: used for connecting sensor. (However, it can not be used for sending or upgrading programs edited through GLIC Studio software by users).

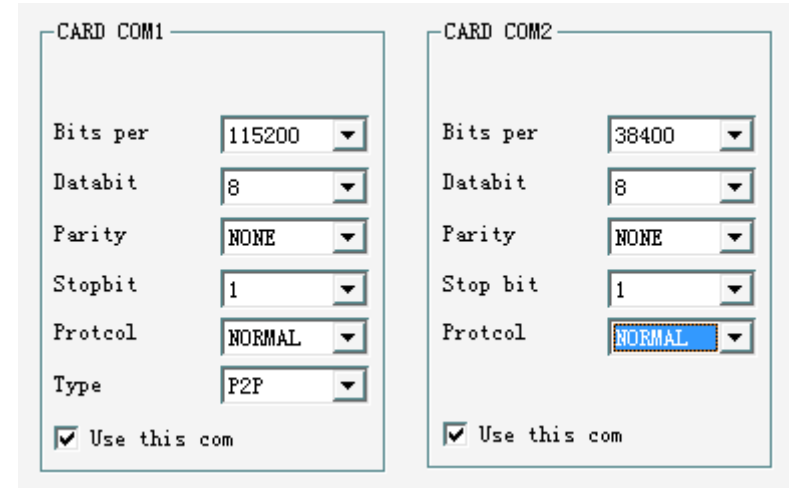


Image 10-6-1

Baud rate: velocity of serial port in communication, and the value is:

- 2400
- 4800
- 9600
- 19200
- 38400
- 57600
- 115200

Parity bit: value is

- NONE
- ODD
- EVEN

NORMAL: stands for GLIC STUDIO Company's communication protocol.

Communication type: value is

- P2P
- BUS

P2P: point to point communication way. When working under the RS232 electrical level or RS485, COMs use point to point communications.

BUS: point to points communication way. When working under the RS485 electrical level, COMs use point to points communications.

Chapter 11 Program Upgrading and Updating

This software provides the function to upgrade control card software. The users just need to download the newest upgraded installing bag at the address: www.GLIC Studio .com. After installing, run “GLIC Studio” software, then do as follows:
Menu->Help->Update

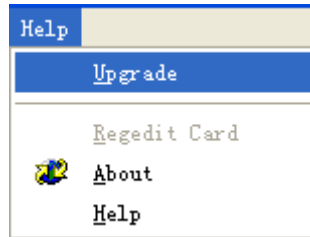


Image 11-1

Two ways of upgrading:

11.1 Through network upgrading

Select the control card that needs to upgrade, click **Start upgrade** button. At same time, the control card can get all the functions before upgrading just need to click **restore content before upgrade**

11.2. Upgrade through U disk

Click **send to USB-disk** button, then click the mark of USB disk (example: I:\). After the sending is over, take the U disk out of PC and insert to USB port of control card, then the upgrade will automatically complete.

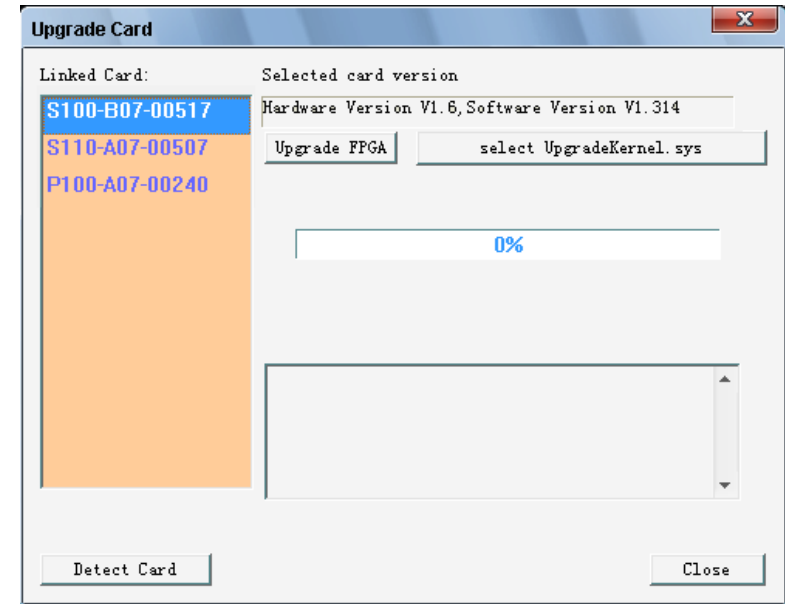


Image 11-2 upgrade window

Click the control card that need to upgrade and click the button **UpgradeKernel.sys** at the same time. Then users can find the UpgradeKernel.sys files in the related upgraded bag.

Chapter 12 FAQs and Answers

12.1 Videos cannot be previewed

Answer: if the videos added cannot be previewed, please install the plug named video.exe in CD. It existed under the catalogue in CD: others \video.exe.



12.2 Network cannot find the control card

Answers:

- Check whether the network cable has been connected well and indicator lamps whether work or not. If the lamps work, then it means no problems.
- Check whether the IP address of PC has already been changed to 192.168.0.X or of the same network section with control card.
(Note: The IP address of PC should not be the same with controller's)
- If there are two network cards, forbid or disable one of them.

12.3 If PC and control card are not of the same network section, two ways to realize the communications

- (suggested to use) Change the IP address of PC to 192.168.0.X or of

the same section with controller card's and also must make sure that the IP addresses are not the same.

- (applied to the PCs that communicating with control card and its IP address is not of the same network section with control card; and the IP can not be changed; and need control card work within the network section of PC)

(Note: if users want to set the IP address of controller not in the same network section with PC, please remember the IP address after setting. Then change the IP address to the same network section with the already set address of the control card. After this two steps, users can realize communication. If users forgot the IP address after setting, then the serious result is they can not find out the control card.)

Eg: PC's IP: 192.168.5.12

Controller's IP: 192.168.0.25

Purpose: change the controller's IP to 192.168.5.25 which is in the same network section with PC.

First step: change PC's IP from 192.168.5.12 to 192.168.0.12 which is in the same network section with controller's IP(192.168.0.25);

Second step: connect control card, changed the control card's IP to 192.168.5.25 in the parameters setting → basic parameters setting;

Third step: changed the PC's IP to 192.168.5.12, PC and controller are in the same network section: 192.168.5.x. Then PC will communicate with control card.

12.4. Different network sections

GLIC STUDIO control card can support communications among different network sections. That is to say, PC and GLIC STUDIO

control system are in the same LAN but different network sections.

About setting communications in different network sections, examples are shown as follows:

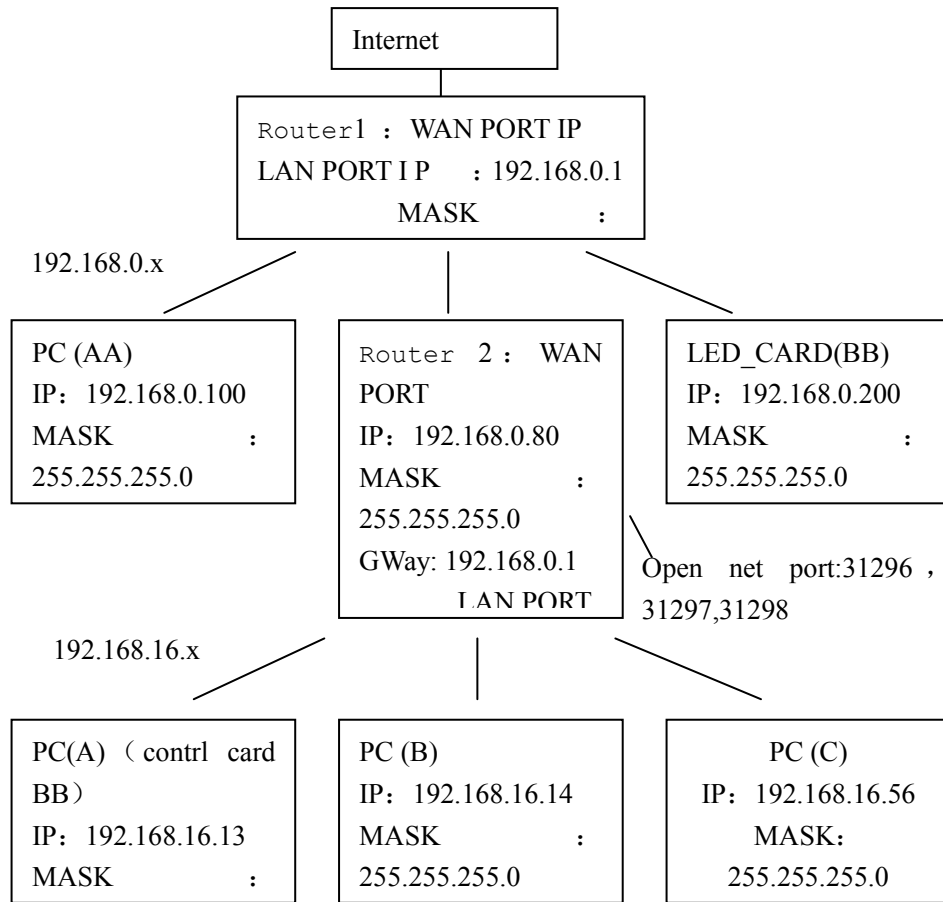


Image 12-1

As shown in the picture above Router 1 is connected into LAN and control the next network section 192.168.0.x. Router 1's LAN IP address is 192.168.0.1 and work as the network gate for PC(AA), Router 2 and Control Card (BB).

As the PC(AA) which is controlling the control card is in the network section 192.168.16.x controlled by Router 2; Therefore the control card's network gate can be set the same as Router 2's IP address: 192.168.0.80. (Note: The Router 2's route should be set as static route.)

Router 2's WAN port's IP is 192.168.0.80 working in the same LAN position with PC (AA) and (BB). As PC(A), PC(B) and PC(C) under Router 2 also need to visit internet, therefore WAN port's gateway of Router 2 should be set as 192.168.0.1.

The next network section controlled by Router 2 is 192.168.16.x and Router 2's LAN port's IP address is 192.168.16.1. Router 2 work as the gateway for PC(A), PC(B) and PC(C).

Note:

Control card send out data through three ports: 31296, 31297 and 31298. If that three ports were not open, then users can set them through Router 2.

The software setting related to different network sections

In the downloading window of the software "GLIC Studio 2.0", users (already knew the control card's IP) need to set the control card's information first (add all the information of the control card to the list on the downloading window). Then the software will check the control card's state through the IP information added to the list on the downloading window.

List making way: A list should include screen IP and user-defined name;
Operation: use "ctrl+shift+f2" in the sending window and then "ctrl+shift+f3" to open the following red area:

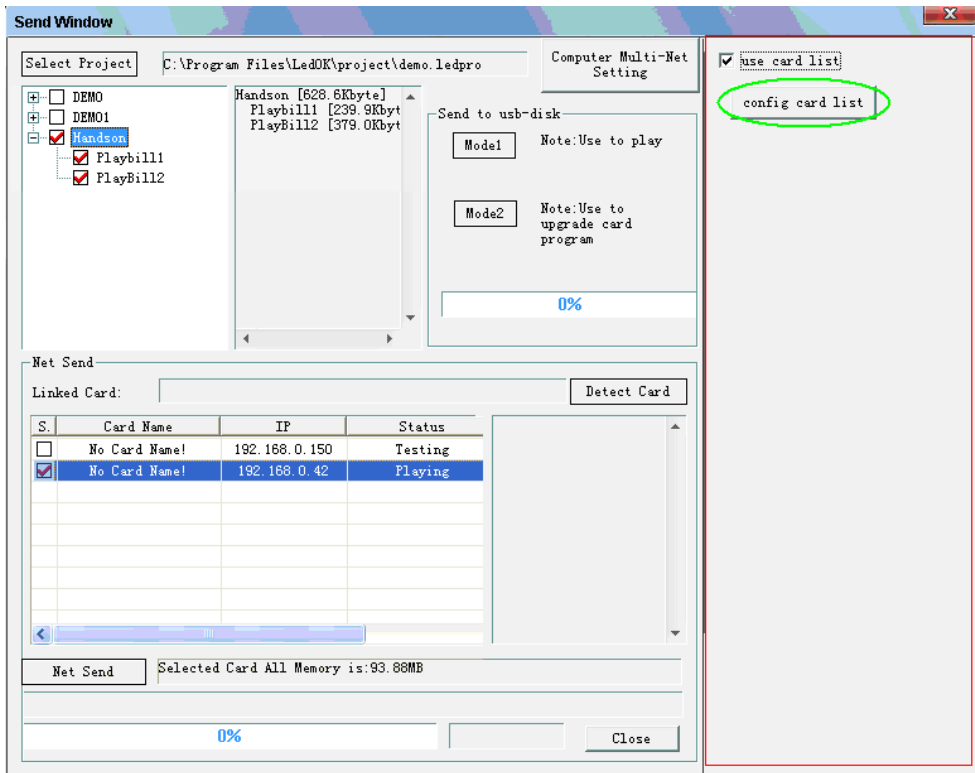


Image 12-4-1

Click the control card's list button, see the picture as follows: users can add, edit and delete the control card's information required.

The frame in the green color circle(used the already existed IP to check)

Click button: means to use the already existed IP (applied to different network sections of control card)

Automatical button: means to automatically search LAN or all the connected control cards' IP. (applied only to the control cards that in the same network section of computer.)

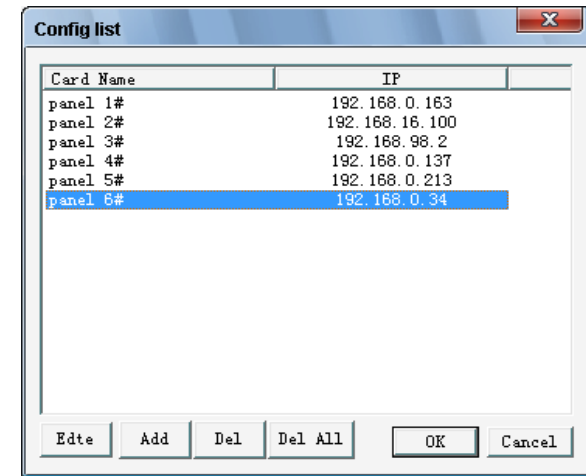


Image 12-4-2

User-defined frame of control card information

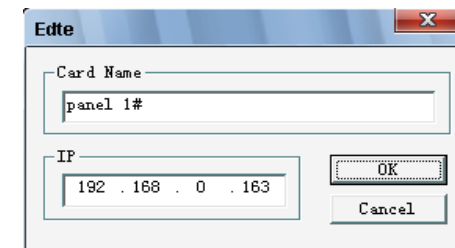


Image 12-4-3

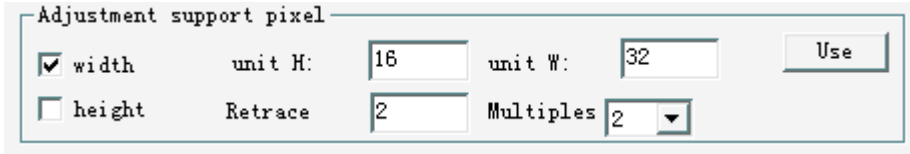
12.5 Special display setting

Special displays includes:

1. The size exceeds the maximum height and width the control card can support.
2. For certain customers.

3. Pictures spinning or mirroring (displaying the pictures like in the mirror)

12.5.1 Display's size exceeds the maximum height and width the control card can support



Enlarging width: means when the pixels of the screen width exceed the maximum one that the control card can support; Eg: P100's maximum, which control card can support is 1024. If screen's width exceeds 1024, then users need to enlarge the maximum width the control card can support.

Display unit board and unit board's width: must use the actual size.

Retrace times: the numbers of lines from HUB port to unit board's port in the unit board's horizontal direction.

The display is 1088*96(pixels), and unit board is 64*32 (pixels). See the blue lines as follows:

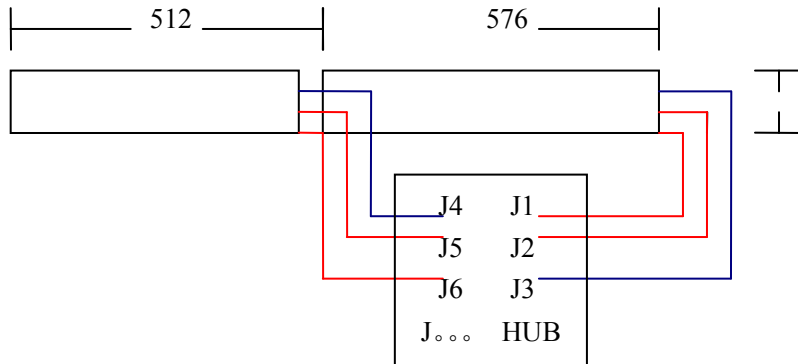


Image 12-5-1-1

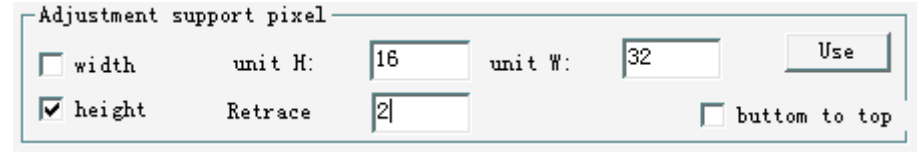


Image 12-5-1-2

Enlarge the height: means when pixels of screen's height exceeds the maximum one that the control card can support; This applied to the S200 and P100.

Eg: the maximum height P100 can support is 512, if screen height exceeds 640, then users need to enlarge the maximum height the control card can support.

Display unit board and unit board's width: must use the actual size.

Retrace times: the retrace times of lines (see the blue lines as follows) Eg: two retrace times of the 128*640 (pixels) display and the unit board is 64*32 (pixels). See the picture as follows:

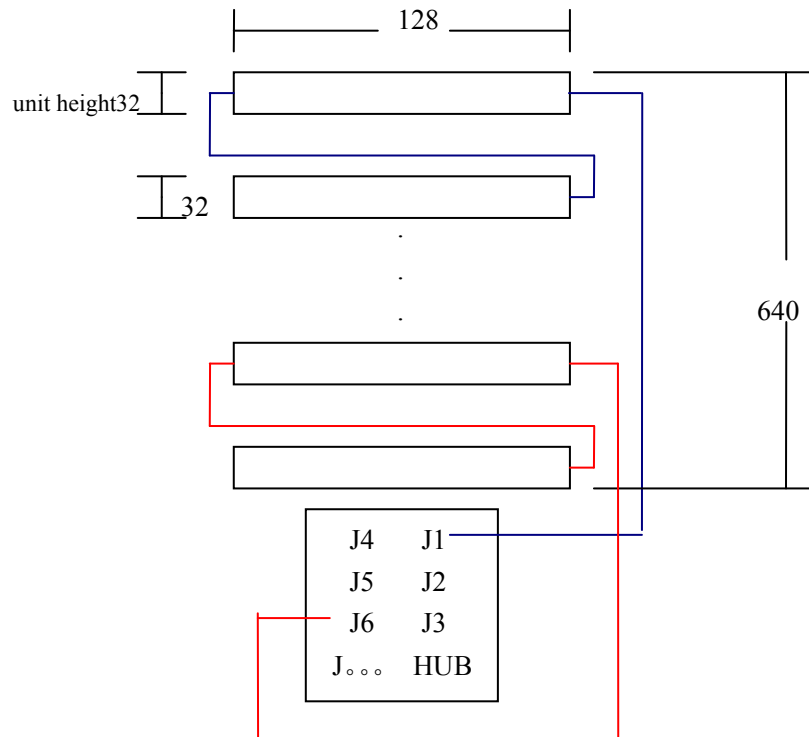
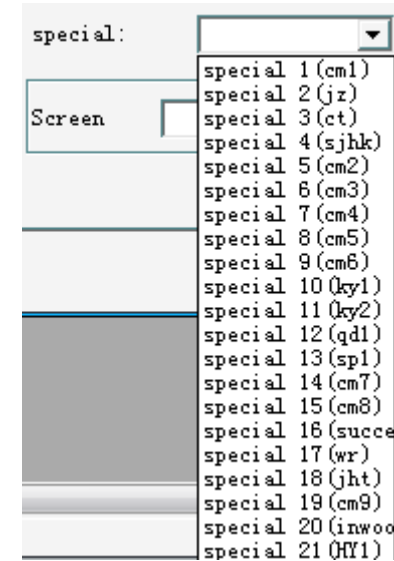


Image 12-5-1-3

12.5.2 Certain factory's display

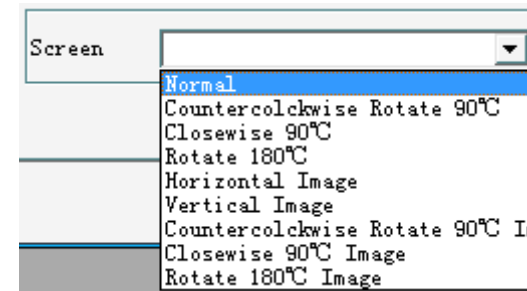
This LedLock has been specially made out for certain customers. Most of the time, users do not need to set this item.



mage 12-5-2-1

12.5.3 Spinning or mirroring

Please see the following picture for references. This setting is related to size (width and height) of screen. Users need to set the following frame each time of changing the screen size.



mage 12-5-2-2

12.5.4 Other points for attention

1. If the proportion of the video resolution to the screen size were not 1:1,

the speed will be comparatively slow. It is suggested to change the video resolution the same as the screen's.

2. There will be difference between the preview effect and the original effect in some very small parts of GIF animations (the displaying effect on screen as the standard not on computer)

Attention:

1. Do not store other files under the software catalogue.
2. Do not store other files to under the catalogue of files editing.

Accessories: International Standard Network Cables

Making Method

There are two standards to make twisted-pair wire internationally: EIA/TIA568A and EIA/TIA568B. And also two ways to connect the twisted-pair wire: direct way and indirect way.

Both ends of the network cables in direct way connecting follow the standard of T568A or A568B. All the ends of the cable's two sides are of the same standard T568B and of the same color order. This direct way connecting is often used in the connection from control card to the exchange machine.

As for the indirect way, one end of the cable follows T568A standard and the another follows T568B. That is to say, the 1st and 2nd line of the crystal end is corresponding to the 3rd and 6th in the crystal end B. And the 3rd and 6th in the crystal end A is corresponding to the 1st and 2nd in the crystal end B. This way of connecting is often used between computers.

As for the lines' order in the standard T568A and T568B, please see the picture as follows:

568A

- 1. GREEN WHITE**
- 2. GREEN**
- 3. ORANGE WHITE**
- 4. BLUE**
- 5. BLUE WHITE**
- 6. ORANGE**
- 7. BROWN WHITE**
- 8. BROWN**

568B

- 1. ORANGE WHITE**
- 2. ORANGE**
- 3. GREEN WHITE**
- 4. BLUE**
- 5. BLUE WHITE**
- 6. GREEN**
- 7. BROWN WHITE**
- 8. BROWN**

Chromatogram's explanation:

The lines color order in T568A standard: 1. orange white, 2. orange, 3. green white, 4. blue, 5. blue white, 6. green, 7. brown white, 8. brown;

The lines color order in T568B standard: 1. green white, 2. green, 3. orange white, 4. blue, 5. blue white, 6. orange, 7. brown white, 8. brown.