

EVLED IMAGE VSC



VIDEO PROCESSOR USER MANUAL

Elation Support

Thank You for Purchasing the EVLED IMAGE VSC

Thank you for your purchasing the Elation Professional EVLED IMAGE VSC Scaler and LED wall control system. Please read the instructions in this manual carefully and thoroughly before attempting to operate this unit. These instructions contain important information regarding safety during use and maintenance. Please fill out and return the enclosed warranty card to validate your purchase.

Customer Service

Elation provides a toll free customer support line, to provide set up help and to answer any question should you encounter problems during you set up or initial operation. You may also visit us on the web at www.elationlighting.com for any comments or suggestions.

All returned service items whether under warranty or not, must be freight pre-paid and accompany a Return Authorization (RA) number. The RA number must be clearly written on the outside of the return package. Items returned without a RA number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a RA number by contacting customer service.

A brief description of the problem as well as the RA number must be written down on a piece of paper and included in the shipping container. If the unit is under warranty, you must also provide a copy of your proof of purchase invoice.

Customer Service hours are Monday through Friday 8:00 a.m. - 5:00 p.m. Pacific Standard Time.

Toll Free: (866) 245-6726 Phone: (323) 582-3322 Fax: (323) 832-9142

Information: info@elationlighting.com
Sales: sales@elationlighting.com
Support: support@elationlighting.com
Forum: forums.elationlighting.com/eve

2-Year Limited Warranty

Elation® hereby warrants, to the original purchaser, Elation Professional® products to be free of manufacturing defects in material and workmanship for a period of 2 Years (730 days) on all internal parts, components, and labor. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.

For warranty service, send the product only to the Elation factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Elation will pay return shipping charges only to a designated point within the United States except Hawaii or Alaska. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, Elation shall have no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof.

This warranty is void if:

- The serial number has been altered or removed
- The product is modified in any manner which Elation concludes, after inspection, affects the reliability of the product
- The product has been repaired or serviced by anyone other than the Elation factory unless prior written authorization was issued to purchaser by Elation
- The product is damaged because not properly maintained as set forth in the instruction manual

This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up. During the period specified above, Elation will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Elation under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Elation. All products covered by this warranty were manufactured after January 1, 1990, and bear identifying marks to that effect.

Elation reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by Elation in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall Elation be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

This warranty is the only written warranty applicable to Elation Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

Revision

Format	Time	ECO#	Description	Principal
1.0	2010-07-21	0000	Release	Lisa
1.1	2010-08-12	0001	 Add the adjustable feature of DE; Page:13-14 Add prompt to save function; Page:14 Add FAQ: Display SDI1 or SDI2 in dual display mode Page:32 HDMI display shows blue screen Page:32 4.Can't be saved ALPHA value Page:32 	Lisa

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1.0 Safety

The general safety information in this summary is for operating person. Any requirement, please feel freely to contact our service engineer.

equirement, please	reel freely to contact our service engineer.
	Power Source This product is intended to operate from a power source between 85~265 volts rms . This product is only workable under correct power condition, which is already mark on the back panel of the power.
0 (5	High Voltage There are many high voltage components inside.
w-c	Do not Remove Covers and Panels Do not remove Covers in any conditions. There are not any spare components inside for maintenance, so do not maintain this product by userrselves, any requirement, please feel free to contact our service engineer. Keep heavy device from power cord.
•	Grounding the Product and Use the Proper Fuse This product is grounded through the grounding conductor of the power cord. To Avoid electrical shock, plug the power cord into a properly wired receptacle before connecting to the product input or output terminals.
	Keep away from Magnet, Motor, TV and Transformer.
	Guard Against Damp Keep using inside clean and dryness environment, once the device get wet, must remove power cord right now.
	Keep away Exploder Do not operate the device inside dangerous and easy explosive gas, which it may make fire, blast or something without expectation.
	Keep away Pour Liquid and Fragment It is forbid to pour liquid, metal fragment or anything else inside this device to avoid fire and other accident. Once that happens, must remove power cord and try to make it clean before power on again.

2.0 Specification

EVLED IMAGE VSC's are designed by the latest high performance image processing technology and can handle the following video input without limitation. Includes; CVBS (Composite, S-Video (YC), YCbCr, YPbPr, RGBHV (VGA, DVI-D, HDMI, SDI (SD-SDI, HD-SDI) and VOIP (Copper RJ45) .

2.1 Specification/Parameters

Composite BNC Input				
Number of Inputs	3			
Supported Standards	PAL/NTSC			
Signal Level	1Vpp±3db (0.7V Video+0.3v Sync) 75ohm			
Multiplex	YCbCr			
S-video DIN4 Input				
Number of Inputs	1			
Supported Standards	PAL/NTSC			
Signal Level	Y:1Vpp±3dB (0.7V Video+0.3v Sync) 75ohm			
	U/V:0.7Vpp±3dB 75ohm			
YPbPr BNC Input				
Number of Inpus	BNC*3			
Supported Standards	analog HD input			
Signal Level	Y:1Vpp±3dB (0.7V Video+0.3v Sync) 75ohn			
	Pb/Pr:0.7Vpp±3dB 75ohm			
VGA DB15 Input				
Number of Inputs	1			
connetor	Standard DB15 socket			
Supported Standards	VGA-UXGA			
Signal Level	R、G、B、Hsync、Vsync:0 to1Vpp±3dB (0.7V			
	Video+0.3v Sync) 75 ohm			
	black level: 300mV Sync-tip: 0V			
DVI Input				
Number of Inputs	1			
Connector	Standard DVI-I socket			
Supported Standards	SMPTE: 625/25 PAL, 525/29.97 NTSC, 625/50p			
	PAL, 525/59.94p NTSC, 1080i50,			
	1080i59.94/60, 720p50 720p59.94/60			
	VESA: 800×600×60Hz, 1024×768×60Hz,			
	1280×768×60Hz , 1280×1024×60Hz ,			
	1600×1200×60Hz , 1920×1080×60Hz ,			
	1920×1080×50Hz			
Signal Level	TMDS pwl, single pixel input, 165MHz bandwidth			

Standard	DVI 1.1	
SDI Input		
Number of Inputs	2	
Connetor	BNC	
Data Rate Range	19.4Mbps~1.5Gbps	
Supported Standards	ITU-R BT.656,ITU-R BT.601,SMPTE 259M,	
	SMPTE 292, SMPTE 297	
Equalization)	Belden 1694A 200M HD1.485G, 350m SD	
	270Mbps	
SDI Loop-out		
Number of Loop-Through's	1	
Signal Level	800mV±10%	
DC Offset	0V±0.5V	
Rise/Fall Time	HD1.485Gbps<270 ps; SD 270 Mbps 0.4	
	ns~1.5ns	
Overshoot	<10%	
Timing Jitter	SD<0.2UI; HD<1.0UI	
Alignment Jitter	<0.2UI	
HDMI Input		
Number of Inputs	2	
Connector	HDMI (standard type A interface)	
Supported Standards	SMPTE: 625/25 PAL, 525/29.97 NTSC, 625/50p	
	PAL, 525/59.94p NTSC, 1080i50,	
	1080i59.94/60, 720p50 720p59.94/60	
	VESA: 800×600×60Hz, 1024×768×60Hz,	
	1280×768×60Hz , 1280×1024×60Hz ,	
	1600×1200×60Hz , 1920×1080×60Hz ,	
	1920×1080×50Hz	
Signal Level	TMDS pwl, single pixel input, 165MHz bandwidth	
Standard	HDMI 1.3	
SDI Loop-out	T .	
Number of Loop-Throughs	1	
Signal Level	800mV±10%	
DC Offset	0V±0.5V	
Rise/Fall Time	HD1.485Gbps<270 ps ; SD270 Mbps 0.4	
0	ns~1.5ns	
Overshoot	<10%	
Timing Jitter	SD<0.2UI; HD<1.0UI	
Alignment Jitter	<0.2UI	
DVI Output	1	
Number of Inputs	Chandard DVI Lintaria ca	
Connector	Standard DVI-I interface	
Supported Resolution	800×600×60Hz , 1024×768×60Hz ,	

	1024×768×75Hz , 1280×768×60Hz ,		
	1280×1024×60Hz , 1440×900×60Hz ,		
	1400×1200×60Hz , 1600×1200×60Hz ,		
	1920×1080×60Hz , 1920×1200×60Hz ,		
	2048×1152×60Hz		
Signal Level	TMDS pwl,165MHz bandwidth		
VGA Output			
Number of Inputs	1		
Connector	Standard DB15 socket		
Supported Resolution	800×600×60Hz , 1024×768×60Hz ,		
	1024×768×75Hz , 1280×768×60Hz ,		
	1280×1024×60Hz , 1440×900×60Hz ,		
	1400×1200×60Hz , 1600×1200×60Hz ,		
	1920×1080×60Hz , 1920×1200×60Hz ,		
	2048×1152×60Hz,2048×1536×60Hz		
Signal Level	R、G、B、Hsync、Vsync:0 to1Vpp±3dB (0.7V		
	Video+0.3v Sync) 75ohm		
	black level: 300mV Sync-tip: 0V		
HDMI Output			
Number of Outputs	1		
Connector	HDMI (standard type A interface)		
Supported Standards	800×600×60Hz , 1024×768×60Hz ,		
1			
	1024×768×75Hz , 1280×768×60Hz ,		
	1024×768×75Hz , 1280×768×60Hz , 1280×1024×60Hz , 1440×900×60Hz ,		
	1280×1024×60Hz , 1440×900×60Hz ,		
	1280×1024×60Hz , 1440×900×60Hz , 1400×1200×60Hz , 1600×1200×60Hz ,		
Signal Level	1280×1024×60Hz , 1440×900×60Hz , 1400×1200×60Hz , 1600×1200×60Hz , 1920×1080×60Hz , 1920×1200×60Hz ,		
Signal Level Function	1280×1024×60Hz , 1440×900×60Hz , 1400×1200×60Hz , 1600×1200×60Hz , 1920×1080×60Hz , 1920×1200×60Hz , 2048×1152×60Hz		
	1280×1024×60Hz , 1440×900×60Hz , 1400×1200×60Hz , 1600×1200×60Hz , 1920×1080×60Hz , 1920×1200×60Hz , 2048×1152×60Hz		
Function	1280×1024×60Hz , 1440×900×60Hz , 1400×1200×60Hz , 1600×1200×60Hz , 1920×1080×60Hz , 1920×1200×60Hz , 2048×1152×60Hz TMDS pwl, 165MHz bandwidth		
Function Source Switch	1280×1024×60Hz , 1440×900×60Hz , 1400×1200×60Hz , 1600×1200×60Hz , 1920×1080×60Hz , 2048×1152×60Hz TMDS pwl, 165MHz bandwidth Support every signal with alpha key operation		
Function Source Switch PIP	1280×1024×60Hz , 1440×900×60Hz , 1400×1200×60Hz , 1600×1200×60Hz , 1920×1080×60Hz , 1920×1200×60Hz , 2048×1152×60Hz TMDS pwl, 165MHz bandwidth Support every signal with alpha key operation PIP for SD with HD and HD with HD		
Function Source Switch PIP Alpha Key	1280×1024×60Hz , 1440×900×60Hz , 1400×1200×60Hz , 1600×1200×60Hz , 1920×1080×60Hz , 1920×1200×60Hz , 2048×1152×60Hz TMDS pwl, 165MHz bandwidth Support every signal with alpha key operation PIP for SD with HD and HD with HD		
Function Source Switch PIP Alpha Key Extras	1280×1024×60Hz , 1440×900×60Hz , 1400×1200×60Hz , 1600×1200×60Hz , 1920×1080×60Hz , 1920×1200×60Hz , 2048×1152×60Hz TMDS pwl, 165MHz bandwidth Support every signal with alpha key operation PIP for SD with HD and HD with HD support		
Function Source Switch PIP Alpha Key Extras Communication	1280×1024×60Hz , 1440×900×60Hz , 1400×1200×60Hz , 1600×1200×60Hz , 1920×1080×60Hz , 1920×1200×60Hz , 2048×1152×60Hz TMDS pwl, 165MHz bandwidth Support every signal with alpha key operation PIP for SD with HD and HD with HD support RS232 TCP/IP		
Function Source Switch PIP Alpha Key Extras Communication Power Supply	1280×1024×60Hz , 1440×900×60Hz , 1400×1200×60Hz , 1600×1200×60Hz , 1920×1080×60Hz , 1920×1200×60Hz , 2048×1152×60Hz TMDS pwl, 165MHz bandwidth Support every signal with alpha key operation PIP for SD with HD and HD with HD support RS232 TCP/IP 85-264V 2A IEC-3		

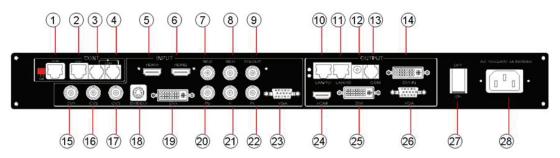
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	0	

Note: Specifications are subject to change without notice.



3.0 Connection

3.1 EVLED IMAGE VSC Back Panel



- 1. VOIP (copper RJ45), Used to connect the computer by 568B-568B twist-pair.
- 2 \ 10/100M interface (copper RJ45). Used to connect the computer by 568B-568A twist-pair.
- 3、RS232 interface (RJ11) for EVLED IMAGE VSC processor. Used to connect the computer
- 4、RS232 interface (RJ11) for cascade connection. Used to connect the next EVLED IMAGE VSC。
- 5-6、HDMI input interface。 Input the signal from HD player, DVD, computer, and so on.



7-8、SDI Input BNC, used to support SD/HD SDI input. Input the video signal from the HD player or HD projector. It can connect to the 7 or 8 interface on the next EVLED IMAGE VSC, using the 75ohm BNC.



- 9. SDI loop out BNC, used to loop input SDI signal to next SDI player.
- 10-11. Transmitter card outputs to connect to EVLED screens.



- 12. Transmitter card power interface.
- 13. Transmitter card RS232 control interface.

14. Transmitter card DVI input. Connect to DVI output of EVLED IMAGE VSC; (This Connection does not support hot-plugging)



15-17. Composite input interface, Composite BNC. Used to input composite signal (PAL, NTSC, SECAM compatible);



18 \ S-Video DIN 4, used to input S-Video signal (PAL, NTSC, SECAM compatible) :



19. DVI input interface. Input the video signal from computer or DVI signal generator. Connect to the same DVI interface on EVLED IMAGE VSC.

(This Connection does not support hot-plugging)



20-22 R/Pr G/Y B/Pb BNC, used to support SD/HD progressive input, up to 1080p60:



23. VGA input interface, DB-15, used to support Analog RGB input. Connect to the VGA interface on EVLED IMAGE VSC.



24. HDMI output, use to connect with HDMI monitor or HDMI player.



25. DVI output, Connect to the monitor or LED display with DVI interface.

(This Connection does not support hot-plugging)



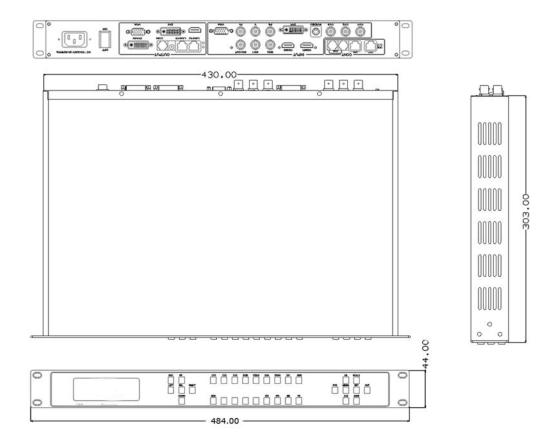
26. VGA output interface, connect to the monitor, projector, etc...



27. Switch and power. It must use IEC-3 power line. Always ground to avoid electric shock.

3.2 How to install

EVLED IMAGE VSC dimensions



4.0 Front Panel Keyboard Operation

Insert power cord and push power to ON position. LCD module on the front panel will show ELATION LIGHTING and go into self verification before it load last setting config and send processed image to the target monitor. For the first setup, CV1 input is default source. With front panel keyboard, user can operate EVLED IMAGE VSC with menu display on LCD module.

4.1 EVLED IMAGE VSC Operator Guideline

EVLED IMAGE VSC front panel description:



3. LCD Module;

4. Keyboard:

ESC: push to exit from current choice item;

SEL: push to confirm the current choice item;

UP: push to select up items;

DOWN: push to select down items;

LEFT: push to select left items;

RIGHT: push to select right items;

CV1: switch to composite 1 input;

CV2: switch to composite 2 input;

CV3: switch to composite 3 input;

SVID: switch to s-video input;

YCbCr: switch to standard definition input;

VGA: switch to analog RGB input;

YPbPr: switch to high definition component;

DVI: switch to DVI input;

SDI1: switch to SDI1 input;

SDI2: switch to SDI 2 input;

HDMI1: switch to HDMI 1 input;



HDMI2: switch to HDMI 2 input;

SAVE1: switch to use the user-defined mode 1;

SAVE2: switch to use the user-defined mode 2;

PBP: switch to show two pictures beside on beside;

PIP: switch to show picture in picture on the screen. CV1 is the default small picture on the top left corner, DVI is the default picture full screen;

POP: switch to show picture out picture on the screen;

FS: switch to selet full screen or zoom view, just for single picture mode;

MENU: push to go to main menu;

FRE: push to freeze the video image or live again

(Freeze→Live→Freeze)

AB: push to switch between front picture and back picture if works in dual channel mode with alpha key, front picture will alpha key in step by step and back picture key out step by step;

SCALE: push to go to between scale → zoom → crop → scale mode;

BRT: push to adjust the brightness and the contrast ratio, push to enter to the relevant Menu, and then push the UP and DOWN to adjust the brightness and the contrast ratio;

OUT: push to select the output format by using the UP and DOWN;

I/II: push to set single or dual channe;

SAVE: push to save current config;

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4.2 Video Processor Menu

System menu as follows;



Fig. 1

The first line shows EVLED IMAGE VSC.

Push the right and left direction key to select the left or right menu. Before the menu item, if there is a * sign, means the menu item has been selected; you can push the Select key to enter it.

The † on the right means you can select the menu items by pushing the up and down direction key.

User can check the information of the equipment in "Dev Info" menu (including the manufacturer, serial-number);

User can get more service and support according to the serial-number.

ELATION LIGHTING >SN: 3204

User can check current input and output sources in Dev Info menu also.

Input: CV1 1024x768x60 Output: CV2 1024x768x60

Touch UP/DOWN to check System time

System time: 2010-07-21 15:12:35

User can do a Factory Settings in Recall menu, after successful reset you will see the menu as follows:

Factory reset was completed!

Push the MENU to enter the main menu, and then push up and down



EVLED IMAGE VSC User Manual Doc. No: RGB-RD-UM-V618E010

direction key, the menu as follows:

>EVLED IMAGE VSC *Language Alpha 1

Push the LEFT/RIGHT to select the relevant submenu.

LANGUAGE submenu as follows:

*LANGUAGE >Chinese English

Push UP/DWON to enter Alpha setup, user can set value from 0 to 100, 0 means video or graphic would be disappear and 100 means normal; Port A and Port B stand for two channel picture;

> *Alpha Port A Value: 100

Push OUT to enter the Output menu, push the UP or DOWN to select different output resolution, push OK to confirm the output resolution. Advance submenu as follows: :

> >EVLED IMAGE VSC *Advance

Screen parameter: Hsize: 1024

Step: user can set the step of scale;

HSize: set the horizontal size of the image;

VSize: set the vertical size of the image;

HPos: set the horizontal position of the image;

VPos: set the vertical position of the image;

User can set size and position of the screen simply, Mainly applies to LED screens users. After setting screen parameter, the user choice PIP or PBP operation, display picture can directly shows on corresponding screen.



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Output >1024x768x60

Push the $\mbox{I/II}$ to enter Single or Dual channel menu , push the UP / DOWN to select the single or dual channel, push SEL to confirm the single channel or dual channel work state;

> Setup Dual

OR:

Setup Single

Select the input channel, push the UP/DOWN, and SEL to confirm the different input channel. User can also push the channel name on the keyboard to go into the input channel.

> Source Select >CV1

AB in EVLED IMAGE VSC is for two image Alpha in and out.

Setup A on B

OR:

Setup A on B

Push SCALE to set the size and position of the image, push UP/DOWN and SEL to confirm the relevant items;

Step: user can set the step of scale;

HSize: set the horizontal size of the image;

VSize: set the vertical size of the image;

HPos: set the horizontal position of the image;

VPos: set the vertical position of the image;

Scale > Step 10

Push the FRE to freeze the live image or live the freeze image.

Freeze Frame Once gain for live

OR:

Live Frame Once gain for live

Push BRT to set the brightness and the contrast ratio:

EVLED IMAGE VSC Brightness 50 ↓

OR:

EVLED IMAGE VSC Contrast 50 ↑

Push SAVE and then push SAVE1 or SAVE2 to save the operation to SAVE1 or SAVE2; Push SAVE1 or SAVE2 to execute relative operation after user save the operation sucessfully.

> Select Save Mode! Push Esc To Exit

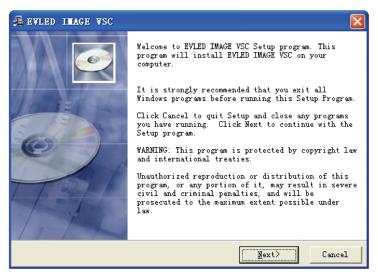
5.0 Communication Software Guideline

With user-friendly communication software, EVLED IMAGE VSC is very easy to configure. The software supports drag and drop operation for editing and display functions.

5.1 Installing Software

Double click EVLEDIMAGE.exe to install, select Chinese or English version as the default language and click "OK".

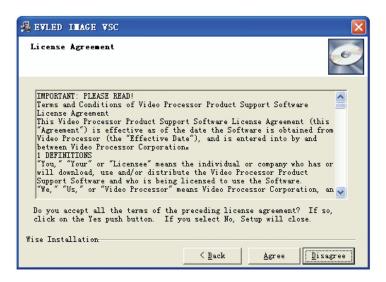


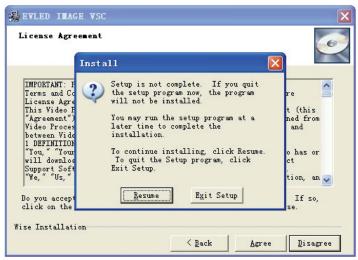


If user agrees to install the EVLED IMAGE VSC software, click "Next".

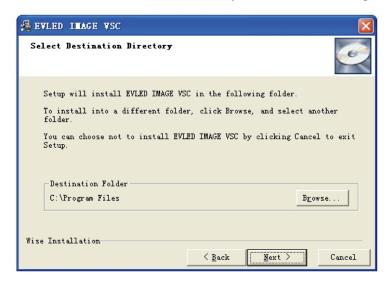
Otherwise, click "Cancel" to exit.

In the next dialog window, is the software License Agreement. Click "Agree" to continue or "Disagree" to exit. Click "Back" to view the previous window.





If user agrees, user can select the directory to install to. Otherwise, the software will install to the default directory, which is "C:\Program Files".

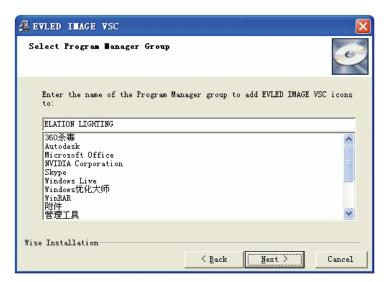


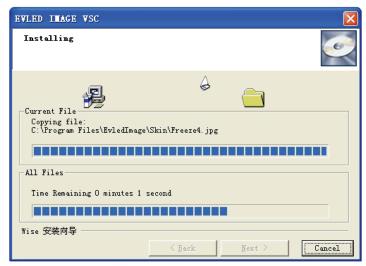
Click "Next" to continue.



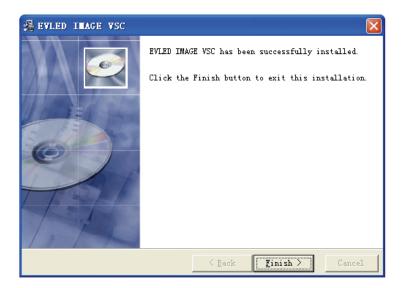


Click "Next" to continue.



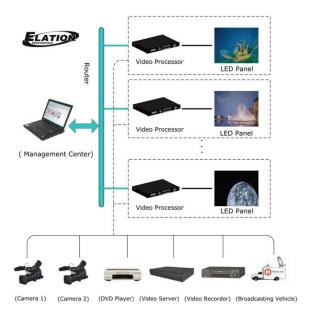


Click "Finish" to finalize installation.

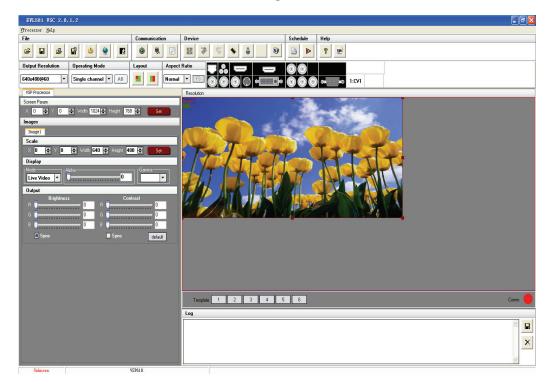


5.2 Run EVLED IMAGE VSC Software

Run EVLED IMAGE VSC software and the console will auto detect the hardware device in the serial or network via Com port or pre-defined IP address.



After it has been detected, open the device console. EVLED IMAGE VSC console will load as displayed below. If no device is detected, EVLED IMAGE VSC will be the default console configuration that loads.



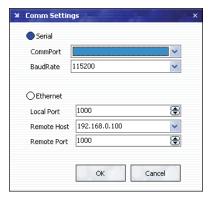
Setup Communication

EVLED IMAGE VSC Console supports COM port or Ethernet (UDP) to communicate with EVLED IMAGE VSC software. When running for the first time,

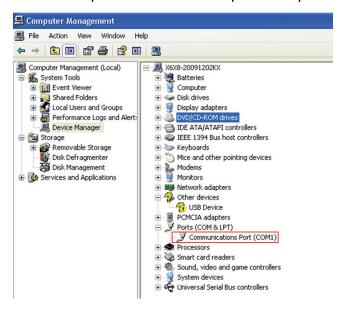
user must click the to close COM Port. Click to change the COM Port and Baudrate settings.

Serial (RS232): User can select between existing com ports and baud rates; default baud rate is 115200.

Ethernet: User can select any number smaller than 1023 in the Local Port setting. The Remote Host must be 192.168.0.100 and the Remote Port must be 1000.

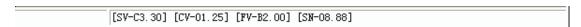


The COM Port is decided by user's COM connection. Right click the my computer icon, select Hardware→Device Manager in the system attributes dialog. Under Ports, the COM in red in the picture below is the port that you are connected to.



COM6: Opened. to open COM communication. will display after successful communication.

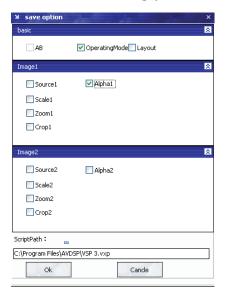
Once there is successful communication, your EVLED IMAGE VSC software screen will display the software version, device core version, firmware version and serial number on the bottom right corner.



How to use

Operator can check parameters via software.

Save script. Save current user config parameters as script.



Open script. User can open saved script.



: Import template. There are six templates for user.

Template1 (Ctrl+1)

Template2 (Ctrl+2)

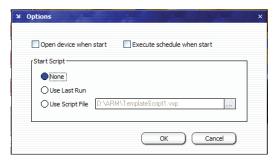
Template3 (Ctrl+3)

Template4 (Ctrl+4)

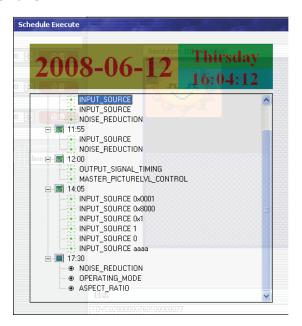
Template5 (Ctrl+5)

Template6 (Ctrl+6)

- Export template. Export current config as template.
- : Option. User can choose to open device, use last saved script, execute schedule or do nothing at start up.
- Click in to choose the script that you want to open.



If user chooses to execute schedule at start up, the following dialog will display when the software runs.



- Language. The software supports Chinese and English.
- : Exit.

Communication



EVLED IMAGE VSC User Manual Doc. No: RGB-RD-UM-V618E010

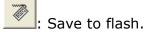


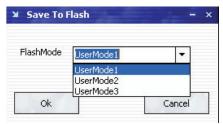




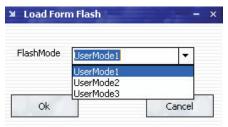
Device



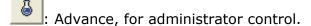




Load from Flash.







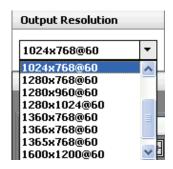


Help

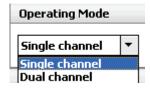




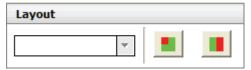
Output resolution: User can choose different output resolution by selecting from the pull down list.



Operating mode: choose to work in single channel or dual channel mode.



Layout: If in dual channel mode, user can set the device to work in PIP or PBP mode directly with quick preset layout button as follows.



Input: The white area display's the input interface name when the mouse is over the interface picture on the left. The orange highlight outline represents the current active interface.



If working in dual channel, channel 1 includes VOIP, CV1, CV2, CV3, SVideo, YCbCr, SDI 1 and SDI 2. Channel 2 includes DVI, YPbPr, VGA, HDMI1 and HDMI2. The cross over a specific interfaces means it cannot be accessed. The orange highlight outline represents the current active interface for channel 1. The blue highlight outline represents the current active interface for channel 2.



Screen parameter:

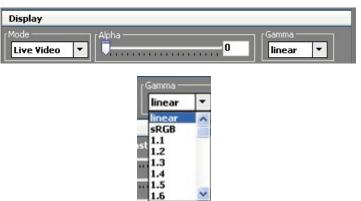
User can set size and position of the screen easily... mainly applies to LED screens users. After setting screen parameters, the user can choose PIP or PBP functions. The selected function will display picture corresponding to the screen.



Images: User can scale the images; Image 2 cannot be selected when operating in single channel mode.



Display Toolbar:

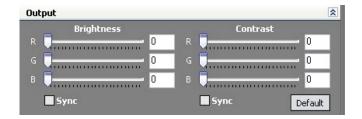


Display toolbar; Users can set Alpha value of "dynamic Video" and "static current frame" through display toolbar.

Setting Gamma is generally not recommended, since LED screens themselves typically include Gamma functions.

For further information, please contact our customer service team.

Output: user can customize the brightness and the contrast.



Display: The position and size of an image can be changed by dragging and dropping an image. This process is synced to the parameters in the images toolbars.



Log: user can save or delete the operation log file.



Added functions



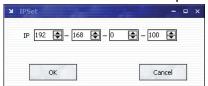
Alpha delay time

Alpha can set AB button Fade effect.



IP set

Users can set the equipment IP address. Usually used under the condition of one Computer. Control or remote control several computers.



Clock

Users can set or adjust date and clock settings.

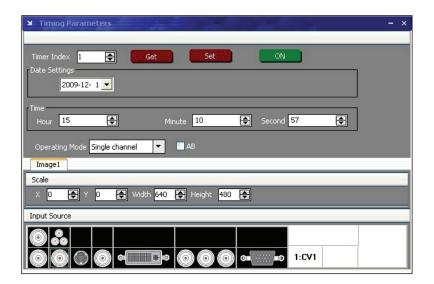


Equipment Schedule function

Users can set device to trigger on a preset schedule. The device can automatically switch between single or dual channel modes, resize image, switch video with fade effect in desired.

Device currently supports max 10 standard content files; users can set in the "timing" option.

Please refer to Appendix III, on how to automatically schedule a function.



6.0 FAQ

6.1 No output in target display

- 1) Check the output configuration of the video input.
- 2) Check the input channel configuration. Example The composite 1 interface is connected to the composite interface of video source.
- 3) Check the connection of output is ok.
- 4) Check the target monitor or display to ensure it is not damaged or powered down.
- 5) Check the output resolution of EVLED IMAGE VSC is not out of the maximum resolution of the target display.
- 6) Check ALPHA value is not set to 0.
- 7) For further assistance, please contact our customer service dept.

6.2 VGA input could not work with EVLED IMAGE VSC Console

- 1) Check VGA source output is ok.
- 2) Check VGA input resolution is not out of EVLED IMAGE VSC Console support list... the biggest input resolution is 1024*768*60Hz.
- 3) Check EVLED IMAGE VSC Console works in VGA input mode.
- 4) For further assistance, please contact our customer service dept.

6.3 DVI input could not work with EVLED IMAGE VSC

- 1) Check DVI source is ok.
- 2) Check DVI source output is not out of EVLED IMAGE VSC support list.
- 3) Check EVLED IMAGE VSC works in DVI input mode.
- 4) Check the connection between EVLED IMAGE VSC and DVI source is correct. Restart DVI source and check output.
- 5) For further assistance, please contact our customer service dept.

6.4 Component input could not work with EVLED IMAGE VSC

- 1) Check the connection between EVLED IMAGE VSC and component source is correct. Especially Y signal. Refer to cabling example on page 5. High Definition component YPbPr is only supported in YPbPr input. Standard definition YCbCr supports 480i and 576i only; High Definition YPbPr supports 480i 576i 480P. 576P、720P50、720P60、1080i50 and 1080i60.
- 2) Check component source, normally DVD component output should be open from its menu.
- 3) It is not recommend to output component and SVideo input from the same source.
- 4) For further assistance, please contact our customer service dept.

6.5 User settings can not save

EVLED IMAGE VSC supports multi config mode. For multi config mode, the equipment starts to work automatically with the SAVE1 mode. According to different equipment, you can solve the problems that modes can't be saved by the following steps.

Press the "SAVE" button > press "SAVE1" or "SAVE2" (which every you wish to save to), this will save the current operation mode/settings to "User Mode 1" (SAVE1) or "User Mode 2" (SAVE2). Pressing the "SAVE1" or "SAVE2 button thereafter should call up your settings. After successfully saving, user should not perform a factory reset or any Save operation, to the relevant SAVE1 or SAVE2 button, as this will overwrite any previously saved settings.

6.6 Can't update main board software

Power OFF EVLED IMAGE VSC > connect the computer to your EVLED IMAGE VSC > Select *.mot > Download file to device > Power up EVLED IMAGE VSC > right-click the ".mot" file at the left side of menu, when the screen shows "waiting for update", the unit is ready to updated > choose "download file to device", start to loading.

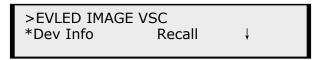
7.0 Quick Guide

7.1 Single-screen control

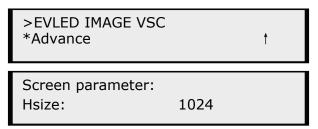
Set screen parameters

Users can easily change the screen size and location by setting the parameters with keyboard and LCD menu.

Press MENU to access main menu. Display should read as follows:



Press UP / DOWN button to change the menu options as shown as below:



Scale pictures

Step: Set the step change per button press when adjusting screen size or coordinates. Select between 1, 10 & 100 steps.

HSize: Set horizontal size; VSize: Set vertical size;

Hpos: Set horizontal coordinates (horizontal phase);

VPos: Set vertical coordinates (vertical phase);



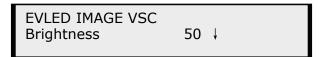
Set alpha

Enter Alpha sub-menu to set the alpha of a video. Press, UP /DOWN to set the alpha value. Port A and Port B represent the two video channels.



Set Brightness Contrast

BRT brightness and contrast button should be used to set the brightness and contrast of active video. See below:



EVLED IMAGE VSC Contrast 50 ↑

Freeze Frame

Press FRE static frame button to freeze the current active image; You can make the screen switch between static and active with this button. See below:

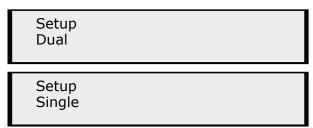
> Freeze Frame Once gain for live

or

Live Frame Once gain for live

7.2 Set dual screen fade

1. Press I/II button to switch between single channel or dual channel. Menu is as follows:



- 2. Choose two input sources from CV1、CV2、 CV3 、SVID、 DVI、YPbPr、VGA、 SDI1、SDI2、HDMI and HDMI2.
- 3. Press AB button to realize dual screen fade.

CV1、CV2、 CV3 、SVID、SDI1 and SDI2 are small screens by default, DVI、 YpbPr、VGA、HDMI1 and HDMI2 are large screens by default while realizing dual screen, If you want the two screens the same size, you can set the screen size by SCALE button. For LED users, who are familiar with LED set/studio, you can also set the display window via PC with LED set/studio software. And PC output by VGA or DVI, Use SCALE to make the CV1、CV2、 CV3 、SVID、SDI1 and SDI2 the same size as LED set/studio display window. AB button can quickly realize dual screen fade;

Step: Set the step change per button press when adjusting screen size or coordinates. Select between 1, 10 & 100 steps.

HSize: Set horizontal size; VSize: Set vertical size;

Hpos: Set horizontal coordinates (horizontal phase);

VPos: Set vertical coordinates (vertical phase);



Press LEFT/RIGHT keys or UP/DOWN keys, Select menu; * in front of the menu means this menu is selected. Press SEL key, you can enter corresponding menu to set and view in real time.

7.3 Displaying subtitles and LOGO

Users could add subtitles and Logos on the video via the "set subtitle" option in the "Video Processor" menu options.

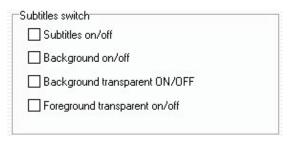
Subtitles Switch

In "Subtitles Switch" options, you can choose whether to display subtitles and background on the video.



Note:

Subtitles show on top of the image without subtitle background. Foreground transparency refers to subtitles's transparency and background transparency refers to subtitles background, which defaults to be 50% transparency. You cannot adjust the transparency value.



Displaying Subtitles

Key in a subtitle that you want to show on your display (eg. Advertising Slogans). Maximum 80 characters allowed. Next, click the "submit" button. Subtitles will appear on the screen shortly.



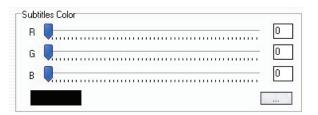
Note:

The subtitle font size is limited. Chinese fonts default to Times New Roman and size is 24X24 (pixels); English font default to Arial and size is 16X24 (pixels). The subtitle font cannot be modified.



Subtitles color or subtitles background color

You can change the subtitles color or subtitles background color through dragging the scroll bar, via mouse, or key in a specific value in the RGB color palette to set a desired color.









Subtitles Movement

Configuration of parameters in the "subtitles rolling" menu option. Subtitles can be set to scroll or be static. Currently, this device supports horizontal scrolling (left or right) only. Vertical scrolling is not available.



Subtitle Scrolling Speed

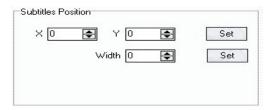
Dragging the scroll bar, via mouse, you can set the scrolling speed.



Subtitle Position

By setting the value of horizontal or vertical coordinates, subtitles position on the screen can be adjusted.

Subtitle Width refers to the width of the subtitles display area. As long as the parameters have been set, subtitles will be displayed in the configured area.



LOGO display

Users can import any LOGO to display.

When users select the "background color mark", the screen background color would be black and LOGO display's on it.

When users select "trademark transparent", LOGO would be translucent.

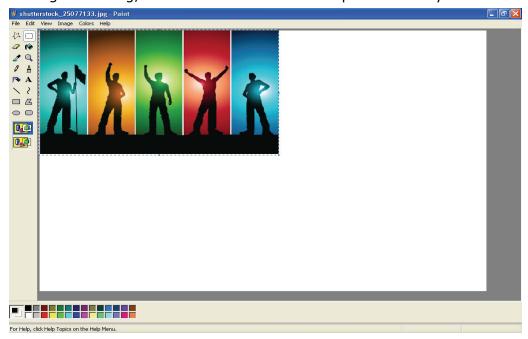


Note:

The value of this transparency cannot be modified.



Users could change the image format and pixels with Paint program in Windows OS. The picture would be cut on the right side and bottom if the picture is too big. If the current picture is larger than the new size, the right side and the bottom part of the picture will be cut off in order to adapt to smaller areas. If the image is too big, users would have to cut the picture first by the Toolbox.

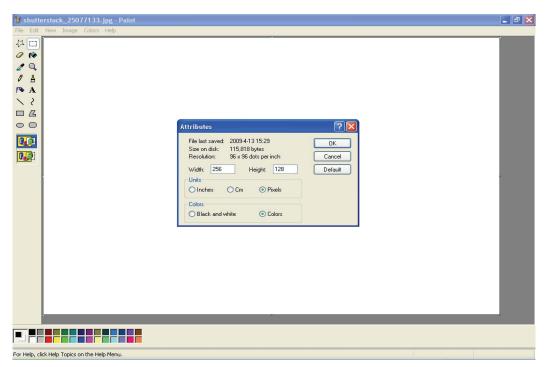


Change image size, and then click "properties" on "image" menu. Select the width and height of the measurement in pixels. Enter the width and height values in the "width" and "height" box.

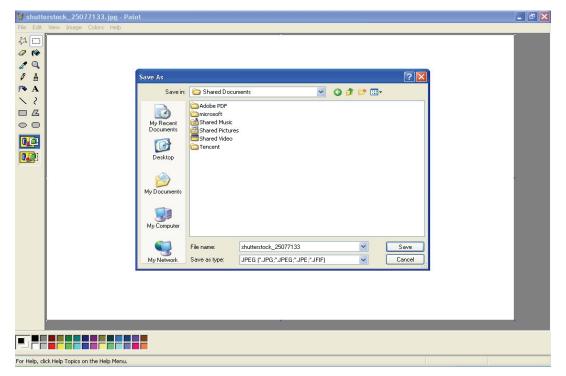


Note:

the EVLED IMAGE VSC only supports 16 bit color bitmap in bmp format with maximum pixels of 256x128.



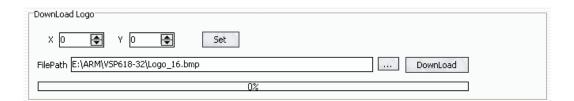
After setting LOGO picture to the correct size, save the image to 16 bit color bitmap bmp format.



Download LOGO

After the LOGO picture is saved, users can download it to the device and enable the LOGO display function, to display it on the screen.

By setting the parameters of X or Y coordinates, the LOGO position can be adjusted on screen.



8.0 Appendix

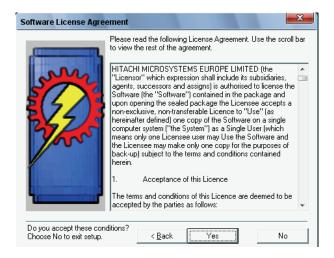
8.1 Appendix I Download the main board software

Installation

Double-click fdt2_2 setup.exe.



Click the next button.



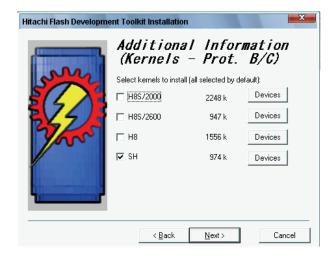
Click the yes button.



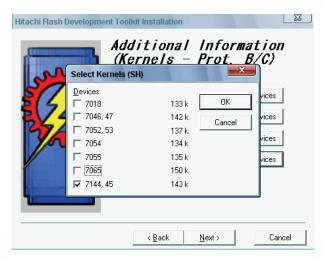
Click the next button.



Click the next button.



Unselect H8S/2000, H8S/2000, H8. Click the next button.



Select 7144.45, Click the OK button.



Select the location using the browse button. Click the next button.



Click the next button.



Click the next button.



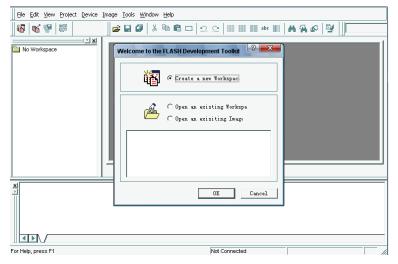




Click the finish button.

Download

Open the Flash Development Toolkit 2.2.

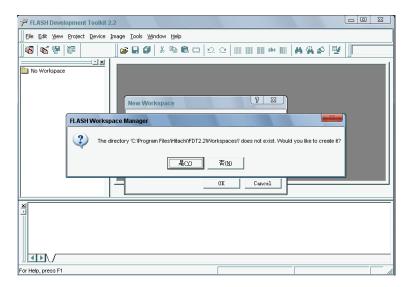


Click the OK button.

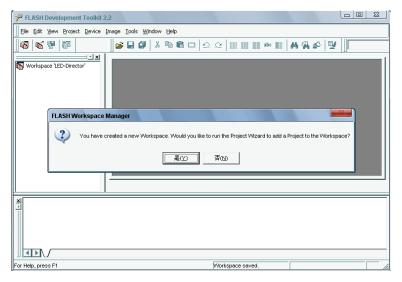


Fill in the file name. Click the OK button.

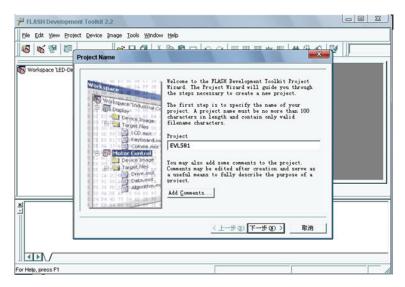




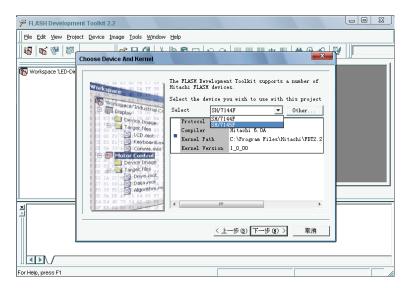
Click the (Y) button.



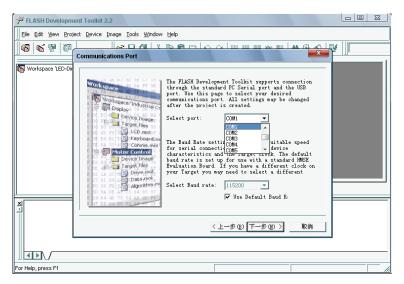
Click the (Y) button.



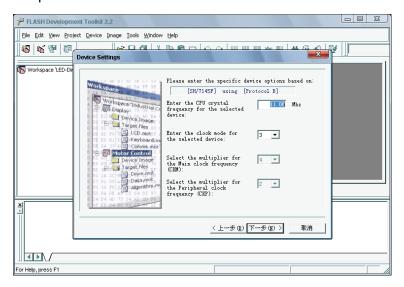
Fill in the file name. Click the OK button.



Select sh/7145f. Click the next button.

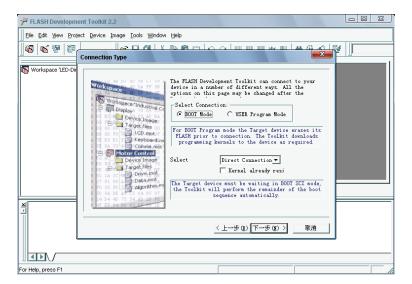


Select the COM port. Click the next button.

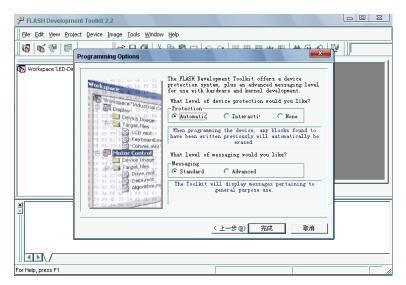


Click the next button.

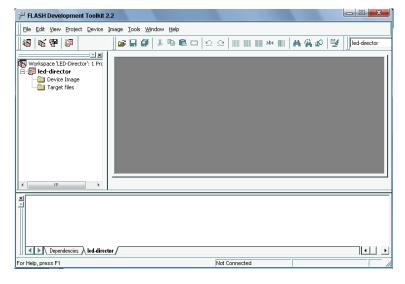




Click the next button.



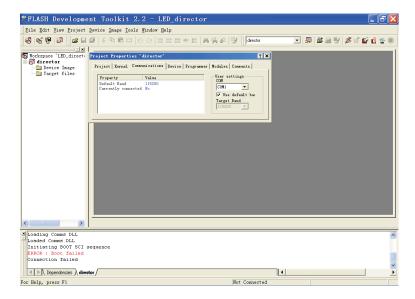
Click the finish button.



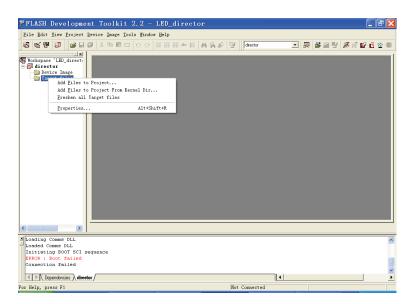
Select project/properties/communications. Select the COM port in user settings.

Do not check User default baud rate and select Target Baud as 9600.

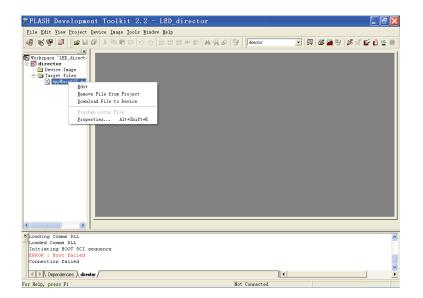




Click the target files by right clicking with your mouse. Select add files to project, and select user *.mot.



Connect the computer and EVLED IMAGE VSC, select *.mot. Download file to device. After the equipment power up, right-click the ".mot" file at the left side of the menu. When the screen shows "waiting for update", you can update the main board program. Next, choose the "download file to device", start to loading. After update, the device will auto run into operation mode without reset process.

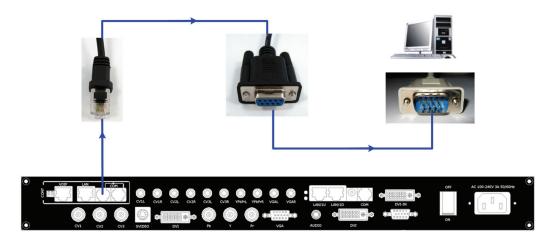


8.2 Appendix II Download the IP software

Turn off the power, take the two coding switch to "ON" sate. As below:



Connect one side of the RJ11 download line to the RS232 on the video processor, and the other side to be connected to the serial port on the PC.





Double click $^{\rm Flash\ Magic}$ to run Flash Magic, setting as below:

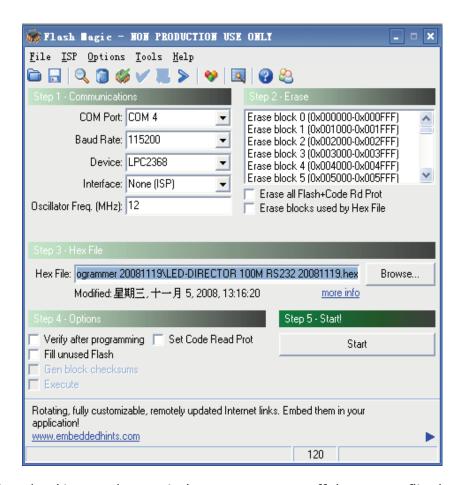
First, users can choose the right serial port, set the baud rate to 115200, choose LPC2368 to load the aim document (hex.document). Secondly, confirm the two option boxes by checking them.





Finally, click the "Start" button.





After download is complete, exit the program, turn off the power, flip the two dip switches back to top position, as pictured below, re-power.



8.3 Appendix III How to add tasks.

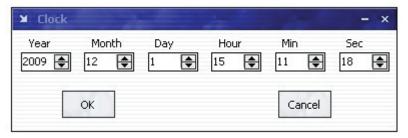
Use "Device Schedule" to add tasks. The EVLED Image VSC can automatically run on a schedule. Specified times or schedule display modes such as fade in and out to trigger automatically.

• First, synchronize computers so slave computer matches that of the host computer.



Note:

A Reset to factory settings after setting the clock will change the previously set time.



After Clock setting, users can check whether successfully set through button. Press MENU button to enter system main menu, press Dev Info (device information), then press SEL button to display device information. See picture below:



• After device clock set, add task plan through" Timing Parameters".



1. Users need to start "time-enabled" before using "timing device". If you forget to start "time-enabled", time set may fail.

Click "start" button on the button changes to off, it means

time is enabled and has started.

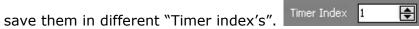
Press MENU button to enter system main menu, touch UP/DOWN to enter advanced menu options, as the picture below:



Press SEL button to enter advanced menu



2. When the timer count is set to 1, it indicates that the setting contents will be stored in the "timing 1". If you need to set more, you can set up one by one and

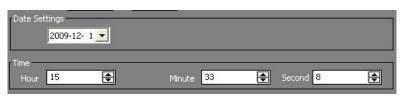




Note:

Up to 10 task schedule Timer Index's can be stored.

3. Set "task schedule" playing time.



4. Select the signal source to play. Works in dual channel or single channel modes. Check "AB" to include fade for dual channel mode.

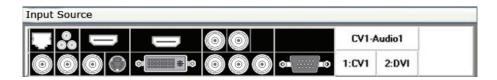


5. Users can control the image position and size by editing the data or clicking the drop-down arrows.



6. When device works under the single channel mode, click the interface Icon. Red box indicates current interface has been selected as the input interface; When device works under the dual channel mode, need to switch image 1 and image 2 set input signal one by one. Image1 Image2

Users can see image 1 and image 2 input source information in the input source toolbar after setting. As pictured below:



Set 7. When you finished above step, click button to finish adding" tasks plan".

Click button to see the input source, playing time, image size, position, etc. of the current "tasks plan".

Users can see all the "tasks plan" relevant content through "Timer index" Timer Index 1 • switching