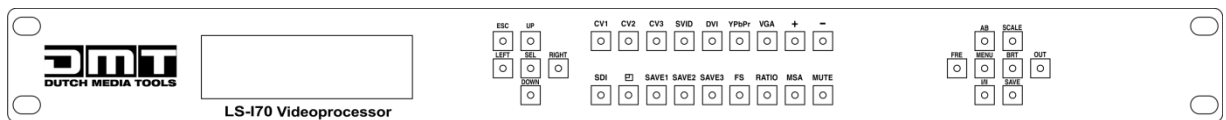


101416 LS-170 Video Processor



User Manual











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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.

	<p>Power Source</p> <p>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.</p>
	<p>High Voltage</p> <p>There are many high voltage components inside.</p>
	<p>Do not Remove Covers and Panels</p> <p>Do not remove Covers in any conditions. There are not any spare components inside for maintenance, so do not maintain this product by userselves, any requirement, please feel free to contact our service engineer. Keep heavy device from power cord.</p>
	<p>Grounding the Product and Use the Proper Fuse</p> <p>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.</p>
	<p>Keep away from Magnet, Motor, TV and Transformer.</p>
	<p>Guard Against Damp</p> <p>Keep using inside clean and dryness environment, once the device get wet, must remove power cord right now.</p>
	<p>Keep away Exploder</p> <p>Do not operate the device inside dangerous and easy explosive gas, which it may make fire, blast or something without expectation.</p>
	<p>Keep away Pour Liquid and Fragment</p> <p>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.</p>

2.0 Specification

DMT series video processors are designed by the latest high performance image processing technology. DMT can handle following video without limit, include CVBS (Composite) 、S-Video (YC)、YCbCr、YPbPr、RGBHV (VGA) 、DVI-D、HDMI、SDI (SD-SDI、HD-SDI) and VOIP (Copper RJ45) .

2.1 Parameters

Composite BNC Input	
Number of Inputs	3
Supported Standards	PAL/NTSC; 480i,576i
Signal Level	1Vpp±3db (0.7V Video+0.3v Sync) 75ohm
S-video DIN4 Input	
Number of Inputs	1
Supported Standards	PAL/NTSC; 480i,576i
Signal Level	Y:1Vpp±3dB (0.7V Video+0.3v Sync) 75ohm U/V:0.7Vpp±3dB 75ohm
YPbPr BNC Input	
Number of Inputs	BNC*3
Supported Standards	Anologue HD Input 480i,576i,480p,576p,720p50,720i60,1080i50,1080p50 1080i50,1080i60
Signal Level	Y:1Vpp±3dB (0.7V Video+0.3v Sync) 75ohm Pb/Pr:0.7Vpp±3dB 75ohm
VGA DB15 Input	
Number of Inputs	1
Connector	Standard DB15 socket
Supported Standards	VGA-UXGA; 1024×768×60, 800×600×60, 640×480×60
Signal Level	R.G.B.Hsync.Vsync:0 to1Vpp±3dB (0.7V Video+0.3v Sync) 75ohm black level: 300mV Sync-tip: 0V
DVI Input	
Number of Inputs	1
Connector	Standard DVI-I socket
Supported Resolution	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

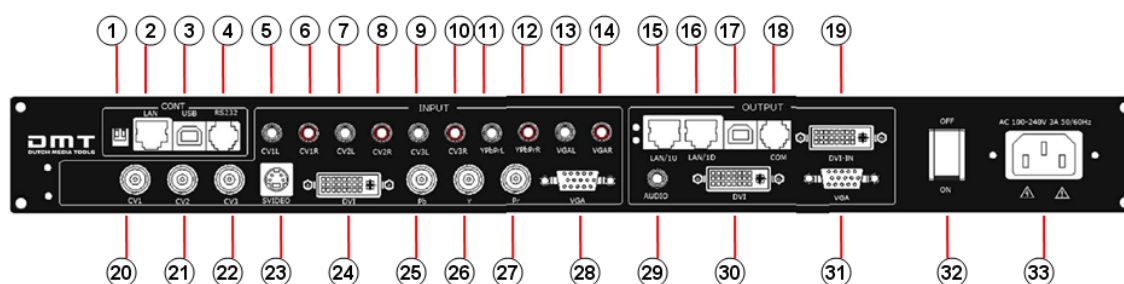
	×60Hz, 1280×1024×60Hz, 1600×1200×60Hz, 1920×1080×60Hz, 1920×1080×50Hz
Signal Level	TMDS pwl, single pixel input, 165MHz bandwidth
Standard	HDMI 1.3
SDI Input (Optional module)	
Number of Inputs	1
Connector	BNC
Data Rate Range	19.4Mbps~1.5Gbps
Supported Standards	ITU-R BT.656,ITU-R BT.601,SMPTE 259M, SMPTE 292, SMPTE 297
Equalization)	Belden 1694A 100M HD1.485G, 350m SD 270Mbps
Audio Input	
Number of Inputs	10
Connector	Standard RCA socket
Audio Standard	48Kbps 24bit balance analog audio
DVI Output	
Number of Inputs	1
Connector	Standard DVI-I Interface
Signal Level	TMDS pwl, 165MHz bandwidth
Supported Standards	VESA: 800×600×60Hz, 800×600×75Hz, 1024×768×60Hz, 1024×768×75Hz, 1280×1024×60Hz, 1920×1080P×60Hz
VGA Output	
Number of Inputs	1
Connector	Standard DB15 socket
Supported Standards	VESA: 800×600×60Hz, 800×600×75Hz, 1024×768×60Hz, 1024×768×75Hz, 1280×1024×60Hz, 1920×1080P×60Hz
Signal Level	R、G、B、Hsync、Vsync:0 to1Vpp±3dB (0.7V Video+0.3v Sync) 75ohm black level: 300mV Sync-tip: 0V
Audio Output	
Number of Outputs	1
Connector	Standard 1/4" socket
Audio Standard	48Kbps 24bit balance analog audio
Function	
Source Switch	support every signal alpha key operation
PIP	PIP for SD with HD and HD with HD
AV Sync	supported
Extras	
Communication	RS232 USB TCP/IP
Power Supply	85-264V 2A IEC-3

Working Environment	0°C~45°C
Stored Environment	10% to 90%
Product Warranty	1 year

 **Note:** Specifications are subject to change without notice.

3.0 Connection

3.1 LS-170 Back Panel



- 1、 Dial the code switch;
- 2、 10/100M interface (copper RJ45). Used to connect the computer by 568B-568A twist-pair;
- 3、 USB interface, Used to connect the computer;
- 4、 RS232 interface (RJ11) for DMT processor. Used to connect the computer;
- 5-14、 Audio interface, support audio signals from DVD player or audio sources;
- 15-16、 Gigabit copper port, connect to LED screen;



- 17、 LED Studio USB Port;
- 18、 COM Port.
- 19、 Gigabit Transmitter card DVI input, connect to DVI output of LS-170.
(This Connection does not support hot-plugging)



- 20-22、 Composite input interface, Composite BNC. Used to input composite signal (PAL, NTSC, SECAM compatible) ;



23、S-Video DIN 4, used to input S-Video signal (PAL, NTSC, SECAM compatible) ;



24、DVI input interface。Input the video signal from computer, DVI signal generator. Connect to the same DVI interface on LS-170;
(This Connection does not support hot-plugging)



25-27、R/Pr G/Y B/Pb BNC, used to support SD/HD analog video input, up to 1080p60;



28、VGA input interface, DB-15, used to support Analog RGB input; Connect to the VGA interface on the VSP processor.



29、AUDIO output interface2, connect to the audio player.
30、DVI output interface, connect to the monitor or LED screen which has DVI interface. (This Connection does not support hot-plugging)

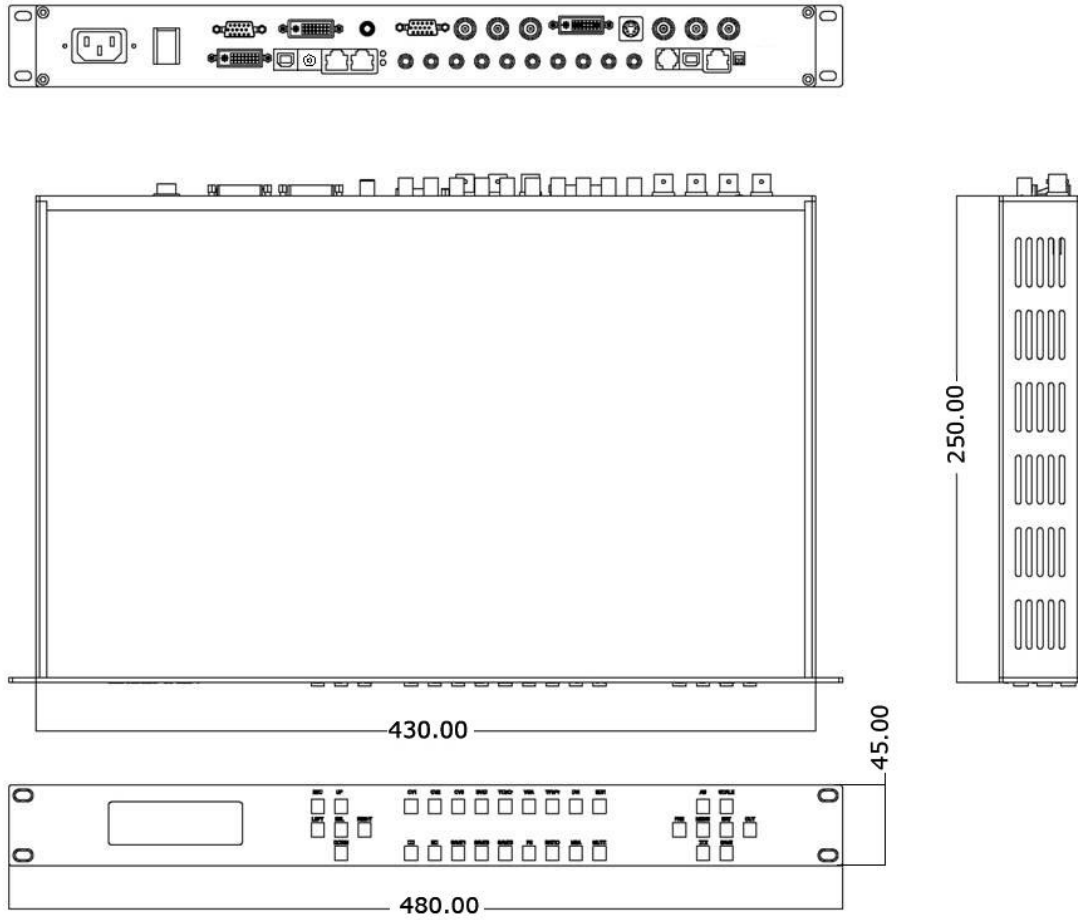


31、VGA output interface, connect to the monitor, projector and so on;




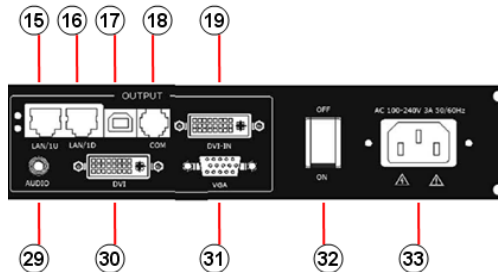
32-33、Switch and power. It must use IEC-3 power line. Always ground to avoid electric shock.

3.2 Dimensions

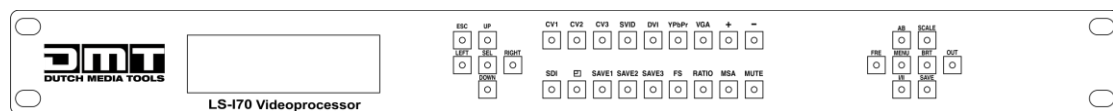



4.0 Quick Start

1. Use the included DVI-DVI cable to link **19** + **30** to. 




2. Install the LED Studio Software.
3. Connect a USB cable to 17.
4. Start LED Studio and program the sending card.
The sending card is built in 15-19.
5. After your LED screen has been set to work with the LED Studio Software, select the input source on the front panel of the LS-170.



6. Push the scale button  to set output resolution.
7. This is the pixel size of your LED screen.

If you use the DMT E12.5 pixel screen, it is 32 pixels wide and 64 pixels high. A setup of 4x3 panels will have a pixel size of $4 \times 32 = 128$ pixels horizontally and $3 \times 64 = 192$ pixels vertically.

In this example you will have to set the  scale button to 128x192.

4.1 Front Panel Keyboard Operation

Insert power cord and push power to ON position. LCD module on the front panel will show HIGHLITE 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 VSP with menu display on LCD module.

4.2 LS-170 series Operator Guideline

LS-170 series front panel as following:



1. LCD Module;

2. Keyboard:

ESC: push to exit from current choice item;

SEL: push to confirm the current choice item;

UP: push to select up items in LCD menu;

DOWN: push to select down in LCD menu;

LEFT: push to select the left items

RIGHT: push to select the right items

CV1: switch to composite 1 input

CV2: switch to composite 2 input;

CV3: switch to composite 3 input;

SVID: switch to SVideo;


VGA: switch to analog RGB input;


YPbPr: switch to high definition component,

DVI: Switch to DVI input

+:Switch to amplify the audio;

-:Switch to down scale the audio;

 **PBP:**Switch to show two pictures in side by side mode;

 **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 with full screen.

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

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

SAVE3: switch to use the user-defined mode 3;

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

RATIO: switch to select aspect ratio 4: 3 or 16: 9;


MSA: switch to select the audio channel which send to output in multi picture mode;

MUTE: Switch to select mute sound or return;

MENU: push to go to main menu;

FRE: push to freeze the video image or live again; (Freeze→Live→Freeze)

AB: Channel Switch, only works under the PBP mode. Push it to switch between the picture of main channel and the picture of subchannel. For instance, if processor now works under subchannel mode, user can switch channels in subchannel; be under subchannel mode if you push Reset button.

 Note:	AB in LS-170 doesn't support Fade-In-Out.
--	---

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 channel

SAVE: push to save current config.

4.3 Video Processor Menu

System menu as follows;

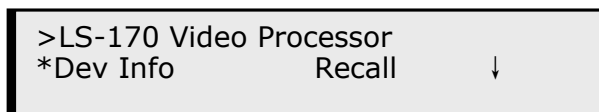


Fig. 1

The first line shows LS-170.

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.

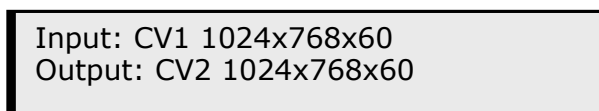
The ↑ on the right means you can select the menu items by pushing the up and down direction key.

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.



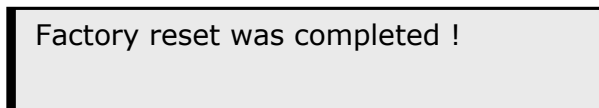
User can check current input and output sources in Dev Info menu also.



Touch UP/DOWN to check System time



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



Push the MENU to enter the main menu, then push up and down direction key, the menu as follows:

```
>LS-170 Video Processor
*Language           Alpha      ↑
```

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:

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.

```
Output
>1024x768x60
```

Push the 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
```

```
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 LS-170 is used to enable channel if dual channel mode.

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

 Note:	When shown in one single image, the ratio between the horizontal and the vertical of the image should be equal to or less than 3.
	When shown in dual image, there is a limit of aspect ratio of the image in the left side: The horizontal of the image in the left side should be larger than that of the image in the right side. This rule still need to be followed even if the images are dragged to the opposite.

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:

LS-170 Video Processor
Brightness 50 ↓

OR:

LS-170 Video Processor
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 successfully.

 Note:	Add prompt to save function
	For LS-170 series, when user push the SAVE key, the SAVE1、SAVE2 and SAVE3 lights on the front panel will go on at the same time, it reminds user must press SAVE1 or SAVE 2 to finish the final save function.

Select Save Mode !
Push Esc To Exit

Touch FS button can realize screen switch between scale mode and full screen mode.

Picture mode
Full Size

Picture mode
Small Size

Touch RATIO button, set screen width and height.

Size: 4:3

Size: 16:9

Size: Normal

MSA : touch the main sub-channel audio and audio channel switching button, main channel will play sound.

Main window audio

Touch again, sub-channel will play sound.

Sub window audio

MUTE: mute the equipment, shown as the picture:

Mute

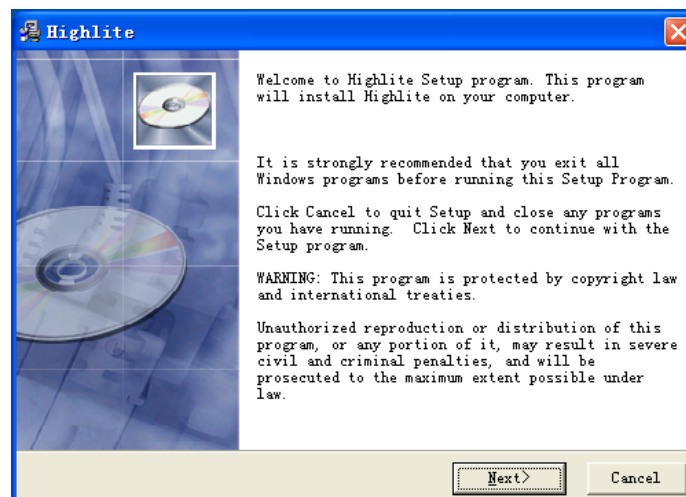
Touch MUTE again will recovery to play sound.

5.0 Communication Software Guideline

DMT video processor is very easy to be configured with user friendly communication software, support drag and drop operation for edit and display. Also can customized with schedule function.

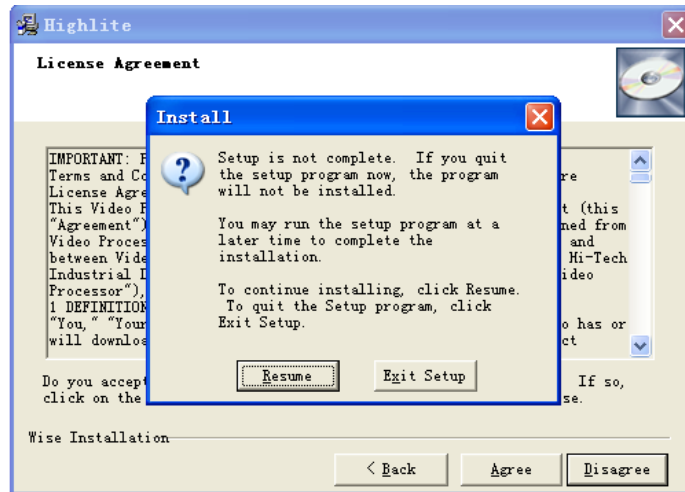
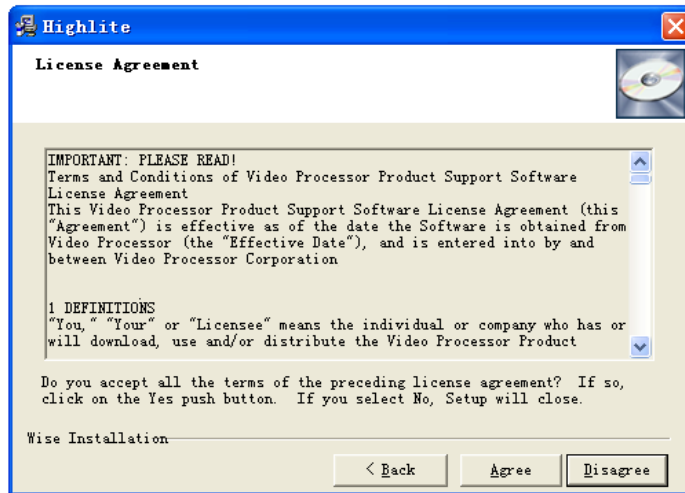
5.1 Install Software

Dual click DMT.exe to install, select Chinese or English version for use, after click “select ” to next dialog.

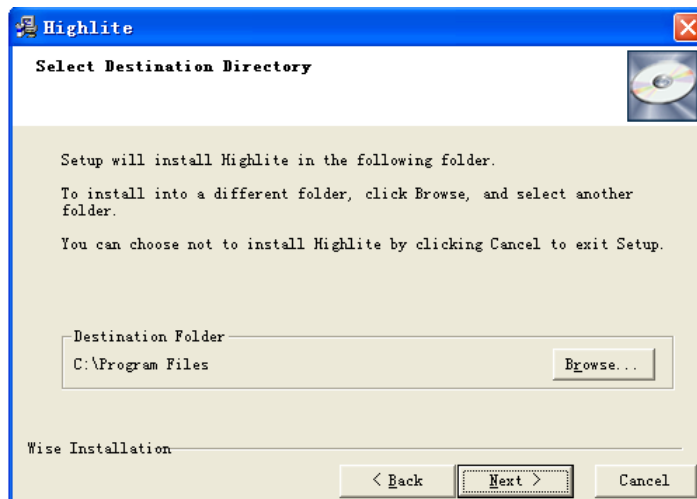


If user agree to install this software, please click next to go on, else click esc to exit this install.

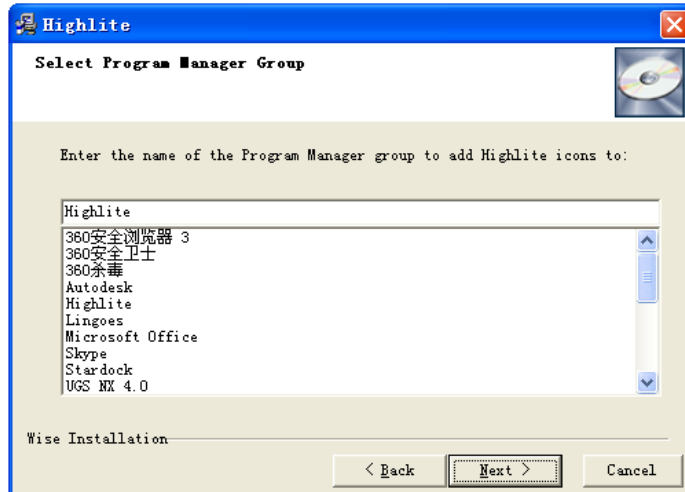
And in next dialog is the user agreement of the software, click agree to go on and refuse to exit.



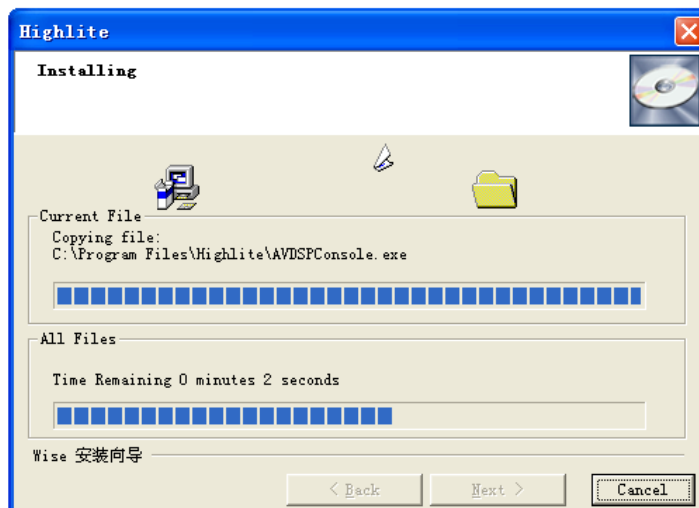
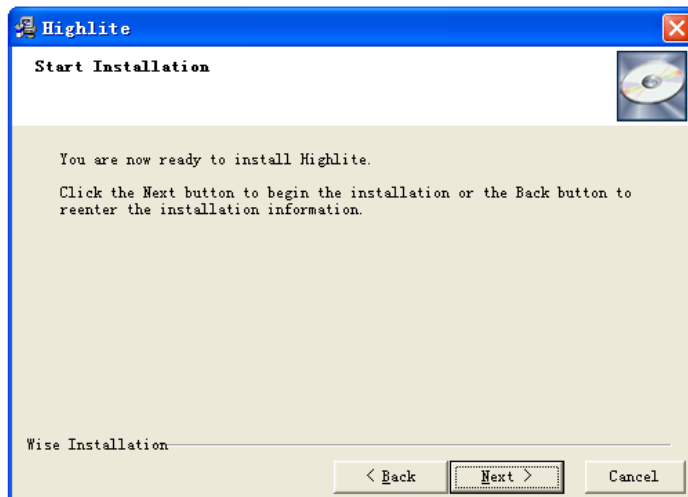
If users agree to the agreement, user can select install directory in next dialog, else, click next to install software to default directory "C:\Program Files".



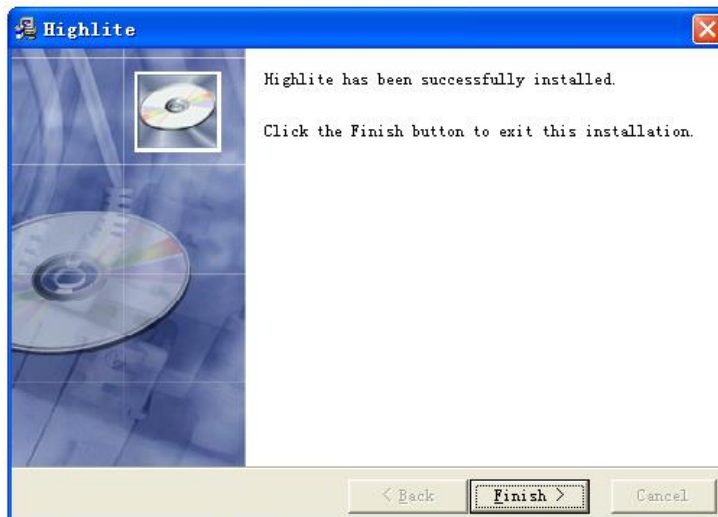
Click "next" to go on.



Click “next ” to go on.

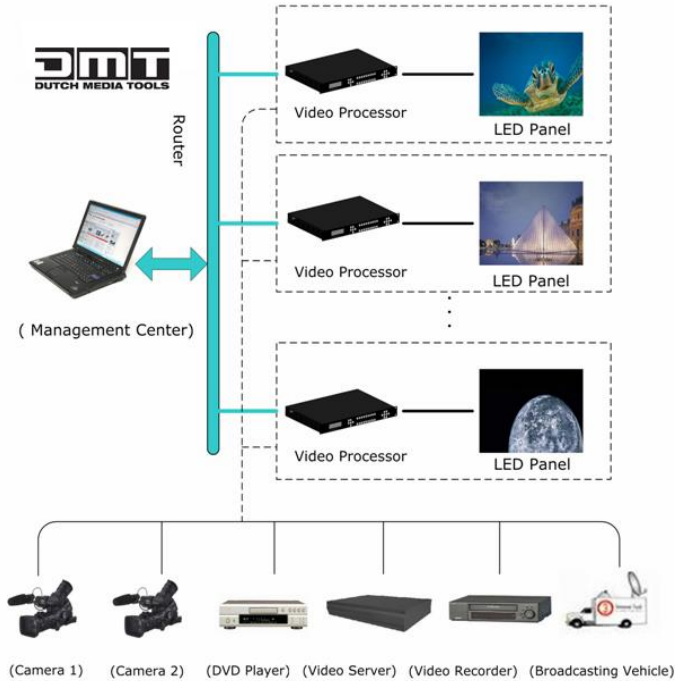


Click “finish” and ready to run DMT console.

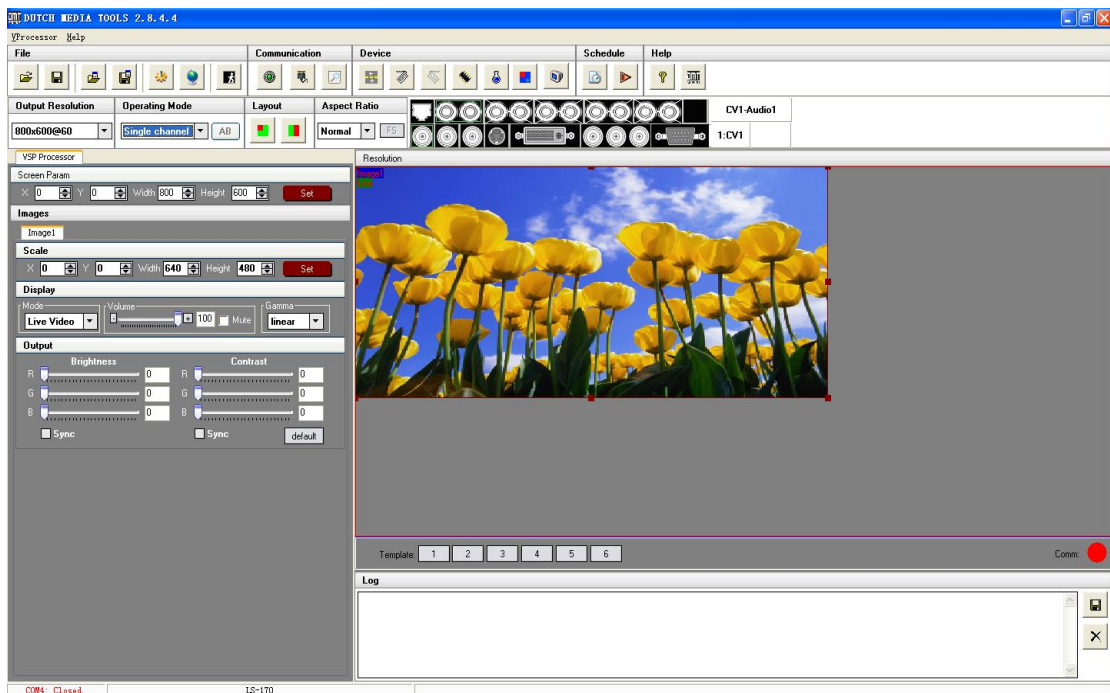


5.2 Run DMT Console



Run DMT.exe and the console will auto detect device in serial or networks by detected Comm port and pro-define IP address.



After detect, open the device console, for example, if the device is LS-180, then LS-180 console will be load, as following. Default loading is LS-170 if can not detect any device.

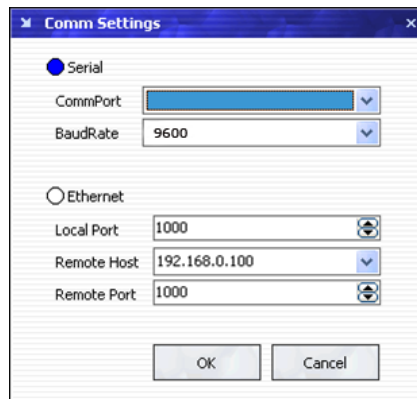


Setup Communication

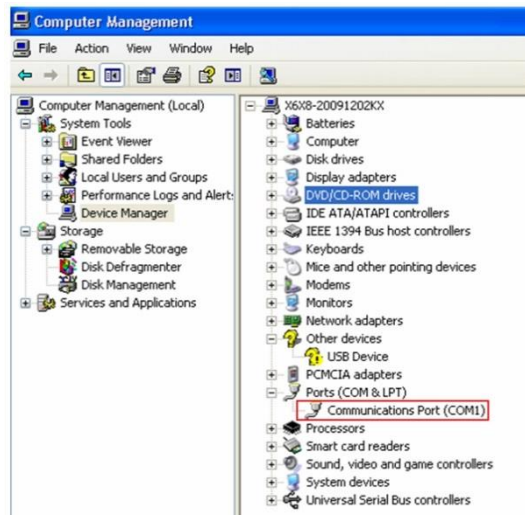
DMT Console support COM port or Ethernet (UDP) to access DMT. For the first running, user must click the  to close COM Port. Click  to change the COM Port and the Baudrate.


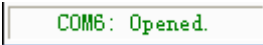
Serial: user can make choice between existent com ports and baud rates; default Baudrate is 9600.

Ethernet: user can fill any number less than 1023 in Local Port. The Remote Port must be 192.168.0.100 and the Remote Port must be 1000.

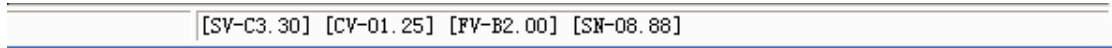


The COM Port is decided by user's COM. Right click my computer icon on desktop, select Hardware → Device Manager in the system attributes dialog. The COM in red in the picture is the COM user can make choice.



Then click  to open COM.  will display after success to connect the COM.

If DMT console success to detect device in chain, the software version, device core version, firmware version and serial number will display on the bottom right corner of the screen.

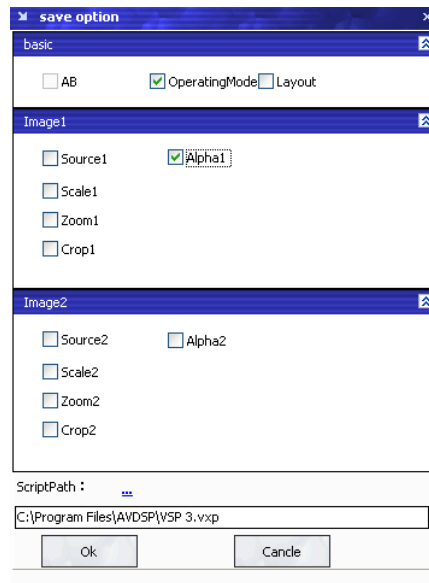


5 How to use

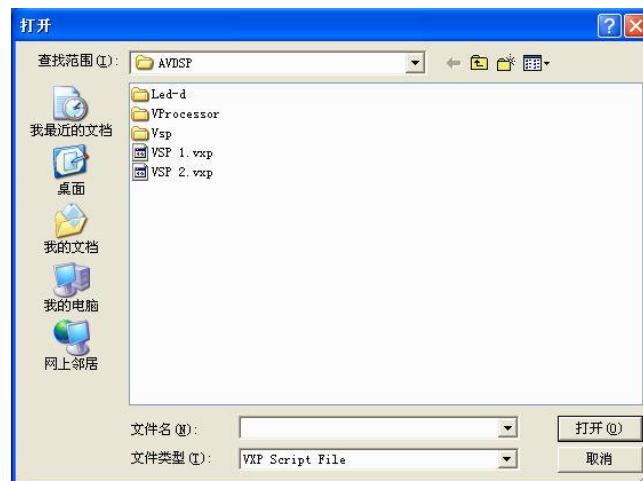
Operator can check parameters by software.



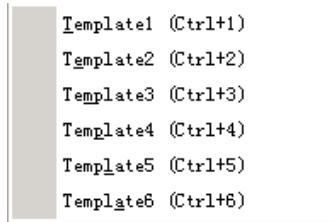
: Save script. Save current user config parameters as script.



: Open script. User can open saved script.




: Import template. There are six templates for user.

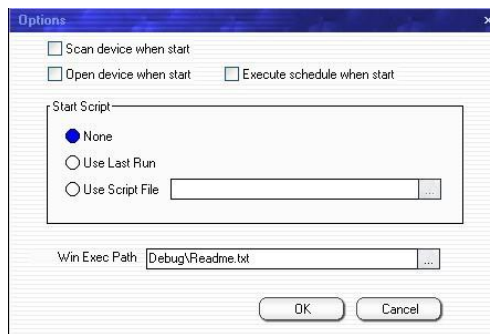


: Export template. Export current config as template.

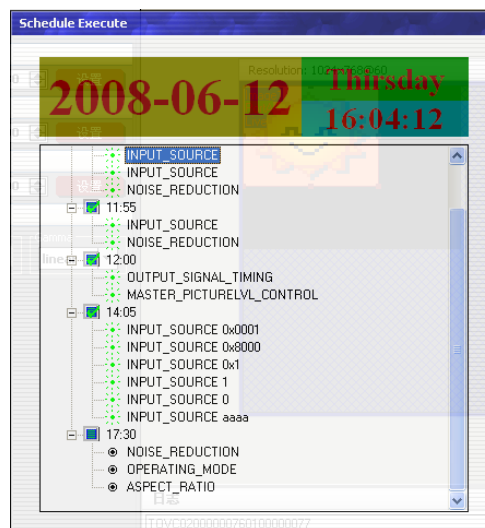


: Option. User can choose open device when start and using script saved before or execute schedule edited before when start.

If user choose open device when start, user can use last run, use script file or none when user start. User can click  to choose which script user want to open.



If user choose execute schedule when start, the next dialogue will display when software run.



: Language. The software supports Chinese and English version. The picture following is the Chinese dialogue.



: Exit.

Communication



: Open COM.



: Close COM.



: Set COM.

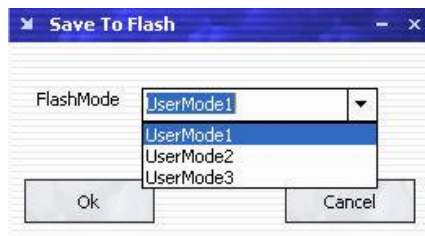
Device



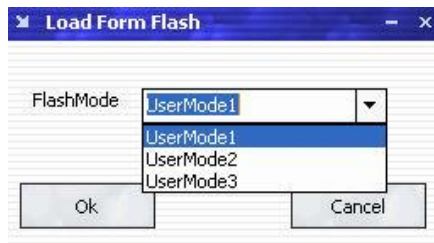
: Synchronization.



: Save to flash.



: Load form Flash.



Load user config from flash.



: Factory setup



: Advance, for adm. inistrator control.



: Execute schedule or stop schedule.

Help

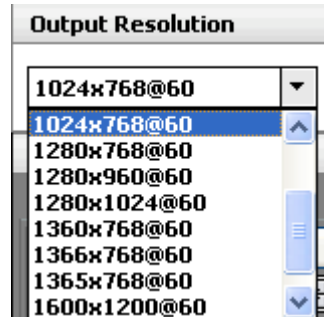


: Help. Display helps dialogue.

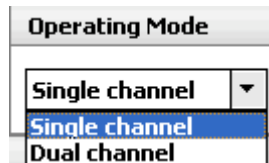


: About.

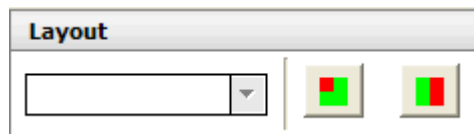
Output resolution: user can choose different output resolution by selecting from pull down list.



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



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 following.



Input: the white area display the name of input interface when the mouse is over the interface picture on the left. The orange pane means current selected interface.



If work in dual channel, channel 1 includes VOIP, CV1, CV2, CV3, SVideo, YCbCr, SDI 1 and SDI 2, and channel 2 includes DVI, YPbPr, VGA, HDMI1 and HDMI 2. The cross over interface picture means they can not access. The orange pane means selected interface for channel 1. The blue pane means selected interface for channel 2.



Screen parameter:

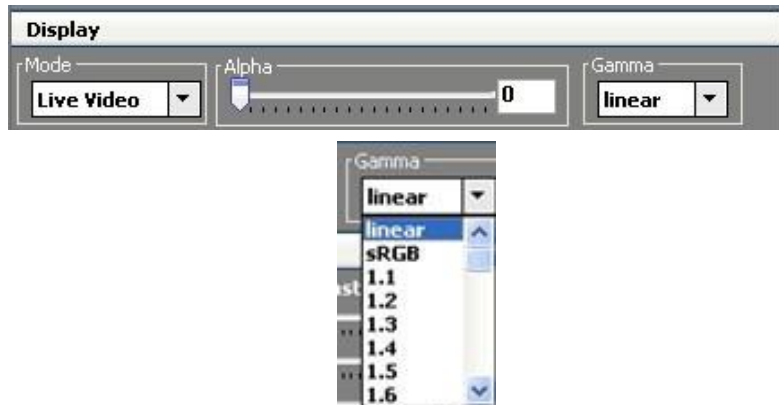
User can set size and position of the screen simply, Mainly applies to LED screens users. After setting screen parameter, the user choice PIP or PBP operation, display picture can directly shows on corresponding screen.



Images: User can scale the images; image 2 can't choose in single channel mode.



Display Toolbar:

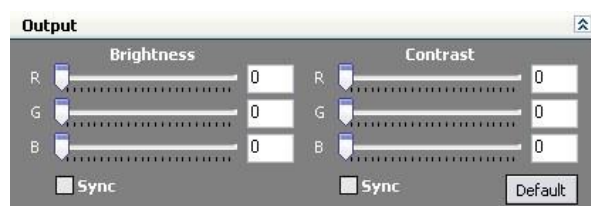


Display toolbar Users can set Alpha value of "dynamic Video" and "static current frame" through display toolbar.

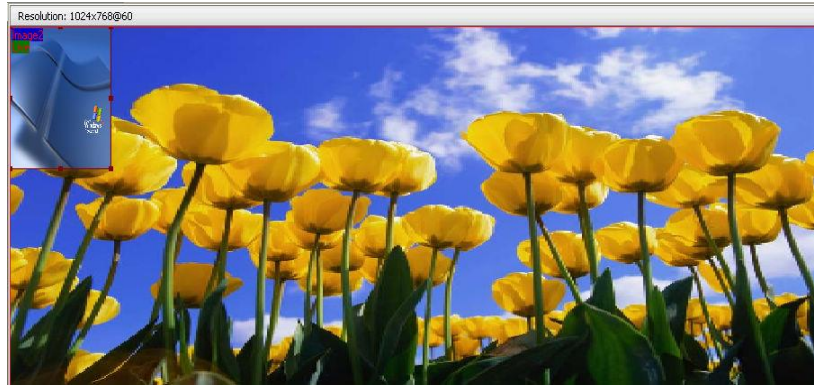
Setting Gamma is generally not recommended, since LED large screen itself has Gamma function.

For further information, users can contact with our customer service team.

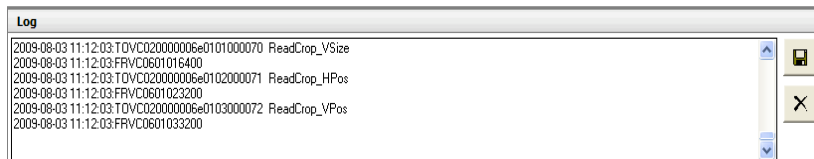
Output: user can customize the brightness and the contrast.



Display: user can customize image or images position and size just by drag and drop image (images) in this area. This process is sync to the parameters in images toolbars.



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



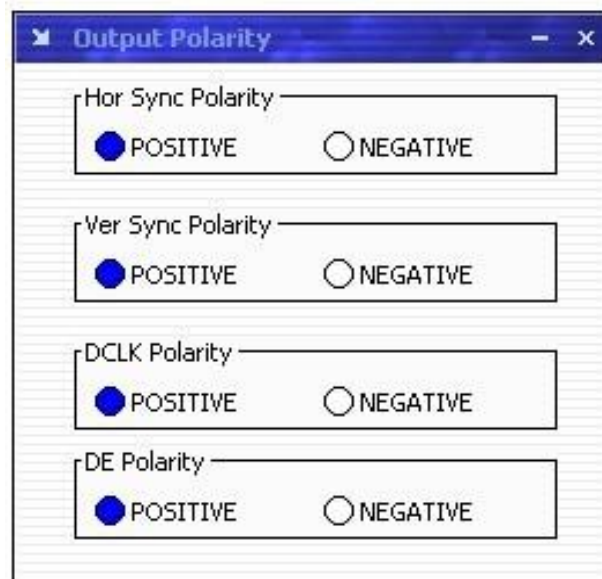
Added functions



- **Output polarity**

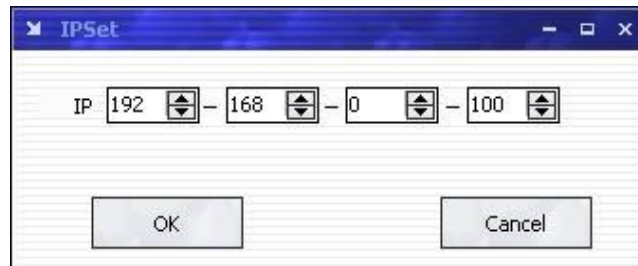
Normally, the polarity will set to be positive.

If the Horizontal and vertical polarity of LS-170 equipment is different from Tx, the polarity should be negative, or else it can not send data to the LED screen correctly.



- **IP set**

Users can set equipment IP, Usually used under the condition of one computer control or remote control several computers.



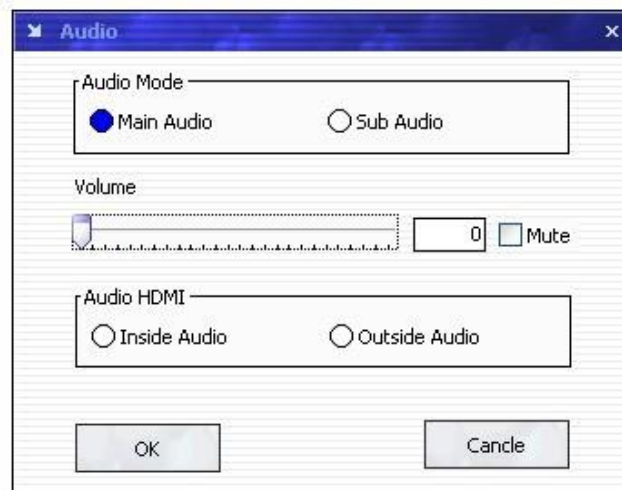
- **Sound**

If worked under the dual-screen mode, users can select main screen sound or sub-picture sound by clicking option box.

HDMI can transmit audio and video signals at the same time on one data line.

If users choose HDMI signal source with sound, users should choose “embedded audio”;

If users choose HDMI signal source without sound, users can broadcast sound through External speaker and choose” HDMI outside embedded audio”.



- **Clock**

Users can set or adjust lower computer time through” clock”



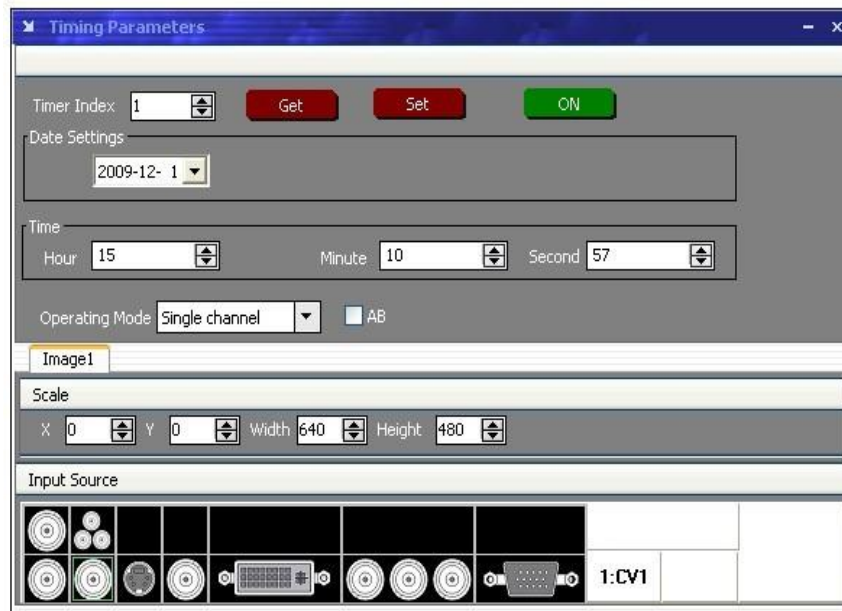
- **Equipment Schedule function**



Users can set device to work with schedule, and then device can automatically switch between single or dual channel, resize image, switch video and with fade effect in need.

Equipment currently supports max 10 regular content; users can set in the "timing" option.

Specifically how to implement devising schedule function, please refer to Appendix II.



6.0 FAQ

6.1 No output in target display

- 1) Check the output config of the input video.
- 2) Check the input channel config is ok. Ex.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 is not destroyed or power down.
- 5) Check the output resolution of DMT is not out of the maximal resolution of target display.
- 6) Check ALPHA value is not 0.
- 7) Any requirement, please feel free to contact our customer service engineer.

6.2 VGA input could not work with DMT Console

- 1) Check VGA source output is ok.
- 2) Check VGA input resolution is not out of DMT Console support list, as following. The biggest input resolution is 1024*768*60Hz
- 3) Check DMT Console works in VGA input mode.
- 4) Any requirement, please feel free to contact our customer service engineer.

6.3 DVI input could not work with DMT

- 1) Check DVI source is ok.
- 2) Check DVI source output is not out of DMT support list.
- 3) Check DMT works in DVI input mode.
- 4) Check the connection between DMT and DVI source is correct. Restart DVI source and check output.
- 5) Any requirement, please feel free to contact our customer service engineer.

6.4 Component input could not work with DMT

- 1) Check the connection between DMT and Component source is correct. Especially

Y signal. Refer to cabling example in page 5. High Definition component YPbPr is only support in YPbPr input. Standard definition YCbCr support 480i and 576i only; High Definition YPbPr support 480i、 576i、 480P、 576P、 720P50、 720P60、 1080i50 and 1080i60;

2) Check component source works, normally DVD component output should be open from its menu.

3) No recommend to output component and SVideo input from the same source.

4) Any requirement, please feel free to contact our customer service engineer.

6.5 User settings can not save

LS-170 supports multi config mode. For multi config mode, the equipment starts to work automatically with the SAVE1 mode. According to different equipments, you can solve the problems that modes can't be saved by the following steps.

LS-170

Confirm to press the "SAVE" button, then press "SAVE1", or "SAVE2", or "SAVE3", that will save the current operation mode to the "user mode 1", "user mode 2" or "user mode 3"; After that, push button "SAVE1", "SAVE2", "SAVE3", it will call out the corresponding set -ting of user-mode. If that, the saving is successful.

After saving process, user should not do factory reset or any saving operation to user mode 1, otherwise, "SAVE1" will be over write.

6.6 Can't update main board software

Connect the computer and DMT Series, select *.mot. Download file to device.

After the equipment power up, right-click the ".mot" file at the left side of 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.

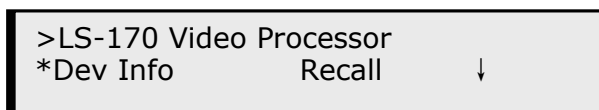
7.0 Quick Start

7.1 Single-screen control

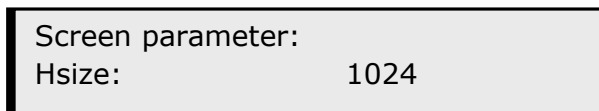
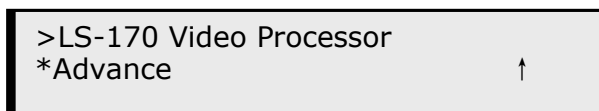
Set screen parameters

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

Press MENU to access main menu, Menu shows as below picture:



Press UP / DOWN button to turn the menu shown as below pictures:



Step: Set the unit of zoom and move every time;

HSize: Set Horizontal size;

VSize: Set vertical size;

Hpos: Set horizontal coordinates(horizontal phase);

VPos: Set vertical size(vertical phase);

Scale pictures

Step: Set the unit of scale and move every time;

(Three steps available:1, 10,100)

HSize: Set horizontal size;

VSize: Set vertical size;

HPos: Set horizontal coordinates(horizontal phase);

VPos: Set vertical size(vertical phase);



Set alpha

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

*Alpha
Port A Value: 100

Set brightness contrast

BRT brightness and contrast button can set brightness and contrast of active window video shown as below pictures:

LS-170 Video Processor
Brightness 50 ↓

LS-170 Video Processor
Contrast 50 ↑

BRT brightness and contrast button can set brightness and contrast of active window video shown as below pictures:

LS-170 Video Processor
Brightness 50 ↓

LS-170 Video Processor
Contrast 50 ↑

Freeze Frame

Press FRE static frame button can freeze, press the button can freeze current active window image; You can make the screen switch between static and active with this button; Pictures show as below:

Freeze Frame
Once gain for live

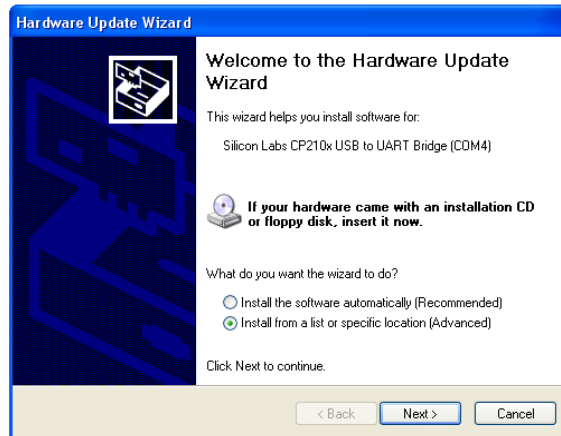
or

Live Frame
Once gain for live

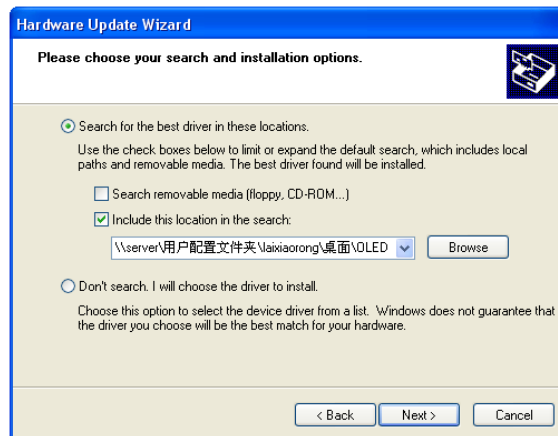
7.2 How to control processor with console software by USB?

- 1. Install the driver;

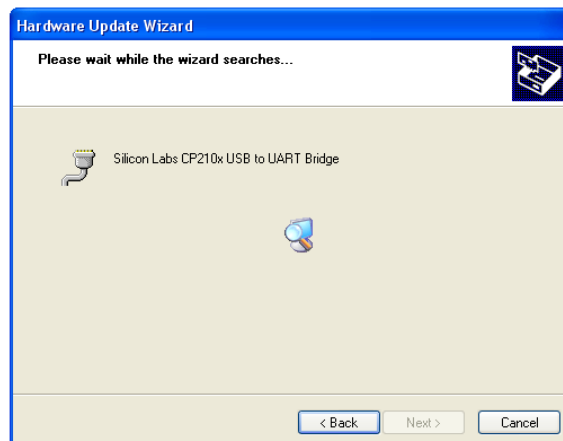
Connect the USB cable to the PC and the video processor. Turn on the LS-170, for the first time to use USB, the PC will remind finding the new hardware and ask to install the driver for this new driver.



Install from the list or specified location, press "NEXT":

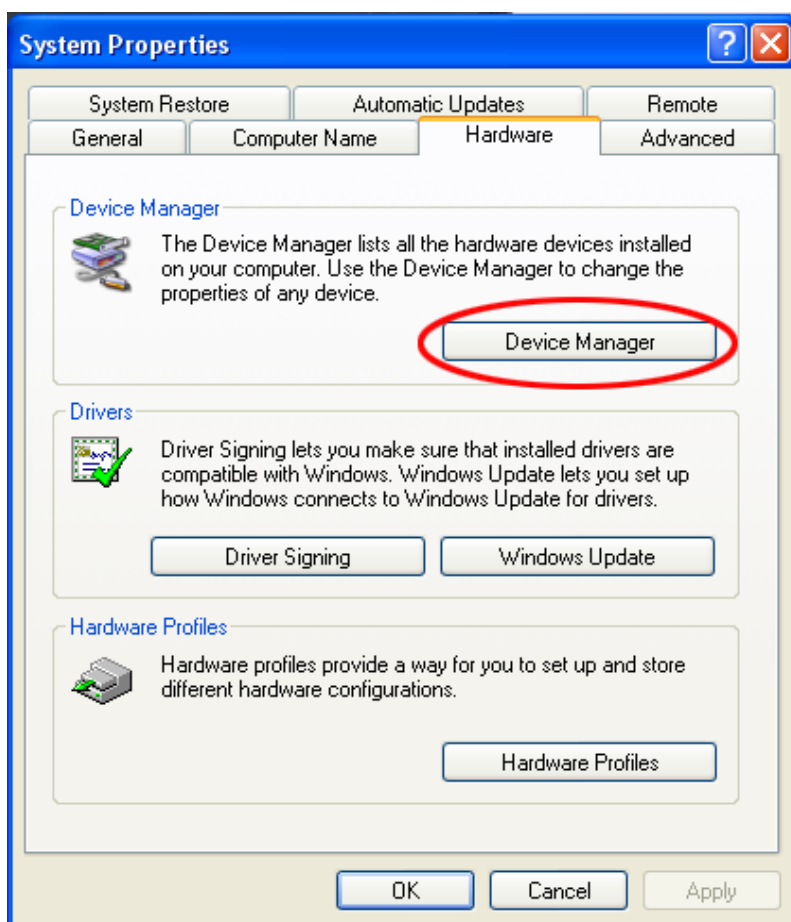


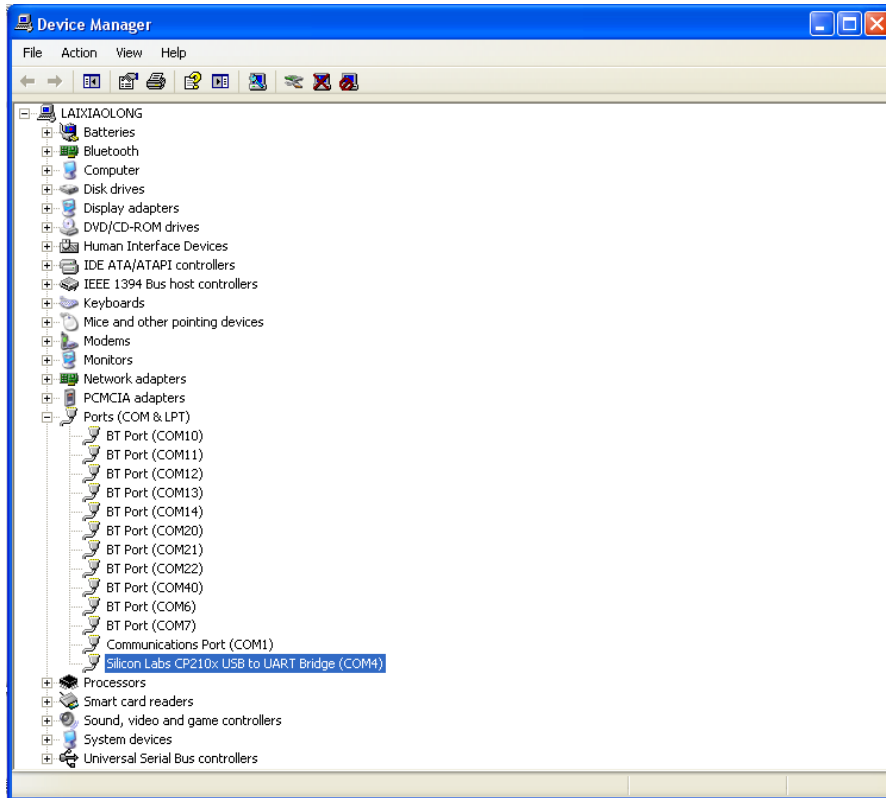
Press " browser" to find the driver, and press "NEXT"



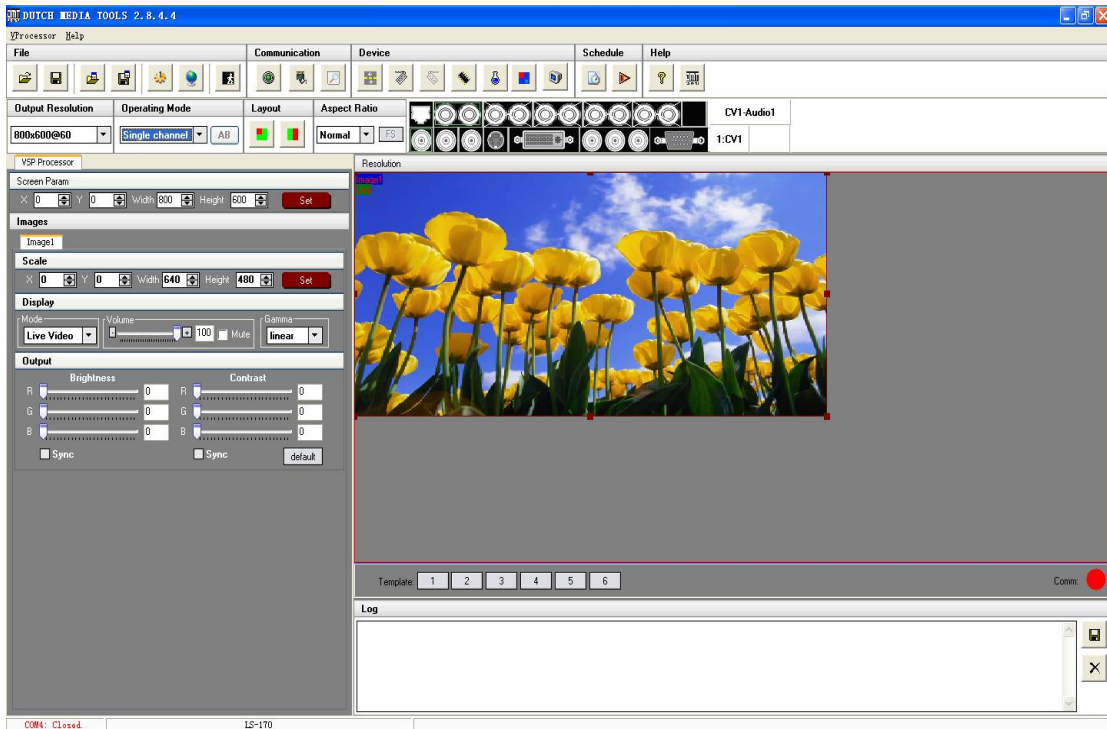


When the installation finishes, you can go to check the installed COM port inside the device management, as the following picture shows:



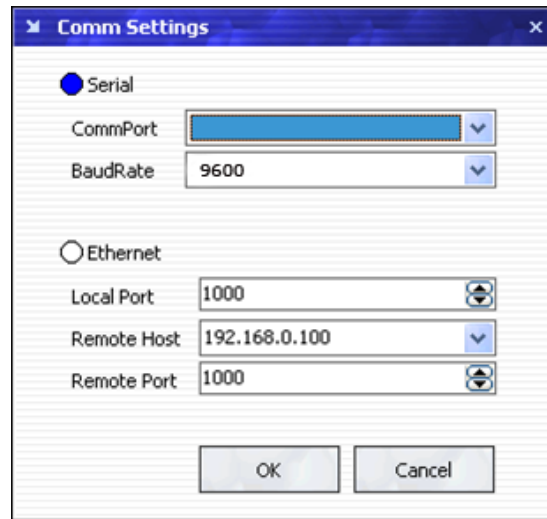



2. Install the console software, and run after install, shows the interface of the console as following:








: Set the RS232 as installed just now, and set the LS-170 Boud Rate to be: 9600.




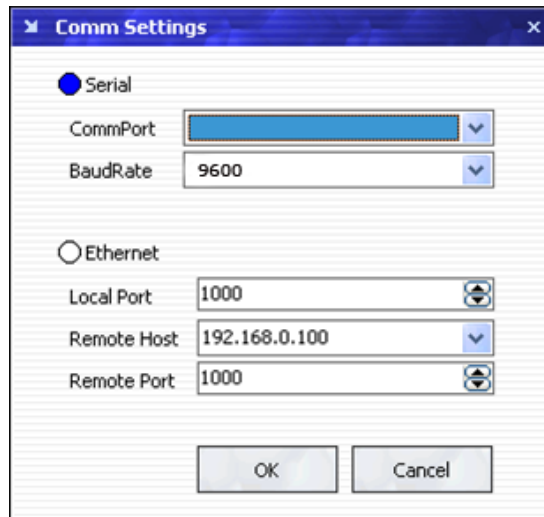
Press  to start RS 232 communication, when there is green point in the right down corner showing on the software, it means the communication is OK, and you can use the software to control the device now; the software operation is the same as LS-170, just can see the difference of the SDI input;


 <p>Note:</p>	<p>If power off during communication, should close the port by  first, and plug in out of the USB and do communication  again.</p>
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7.3 How to Use LINSN Ledset software?

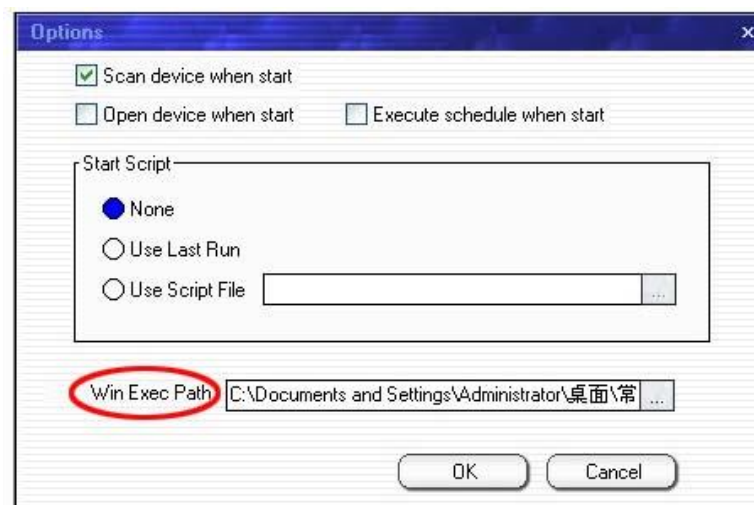
1. First, Install DMT software and LINSN software.
2. Run DMT software;

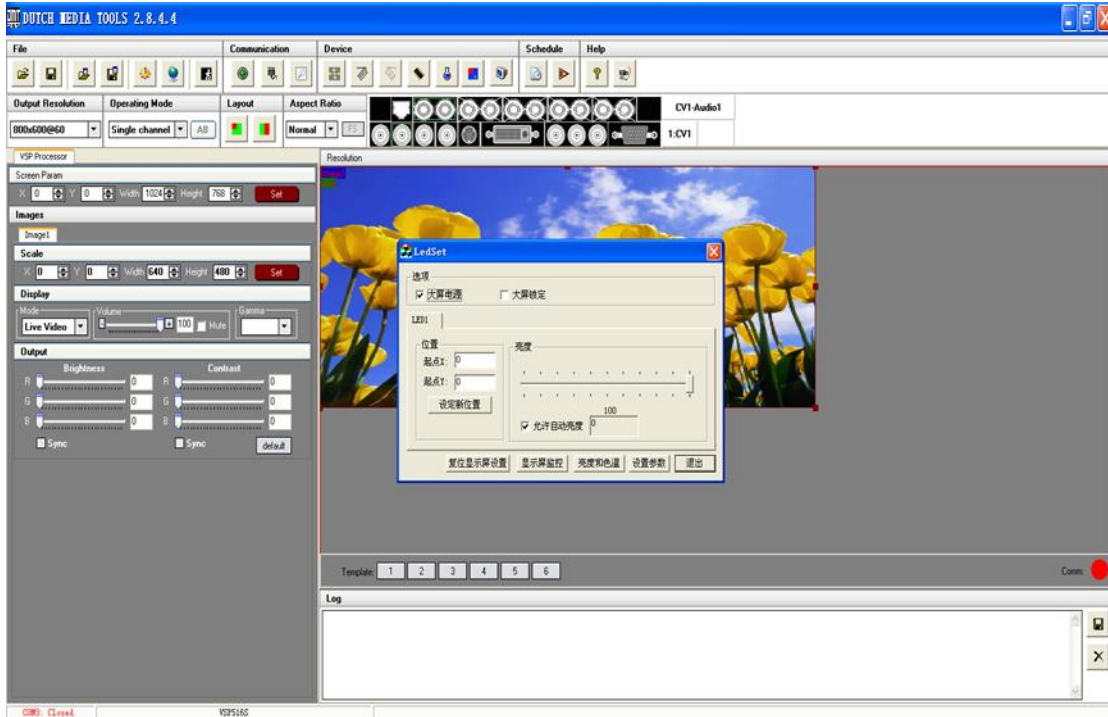
① Press  to set the RS232. first choose the current RS232 you are using, then set the baud rate.







Press  to start the RJ232, when the green point showing on the right down corner, it means the communication is successful.

Press :option. Find the LINSN software installation file LEDSET.EXE through "external progress route"as following picture:





As LINSN software will use RS232 for communication too, so user should first close DMT console software RS232 communication after that press  ;
 If in used  , then to start the LINSN software. When you want to use DMT software, you just need to close LINSN software, start the RS232  again.

 Note:	<p>Before using DMT console software to execute the LINSN software, you should first internally connect the device's 100M board with sending card.</p> <p>Any question, please feel free to contact our customer service engineer.</p>
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8.0 Appendix

8.1 Appendix I Download the IP software

Turn off the power, take the two coding switch to "ON" state. 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.



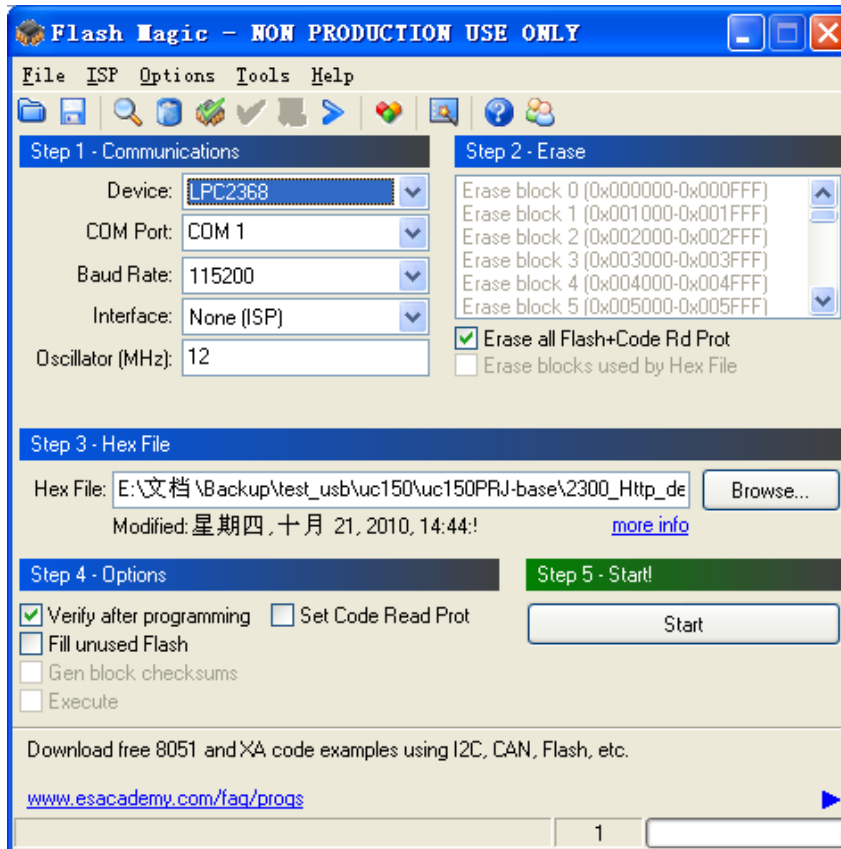
Double click Flash Magic to run Flash Magic ,setting as below:

First, users can choose the right serial port, set the baud rate to 9600, choose LPC2368, and to load the aim document (hex.document) of IP board upgrading.

Secondly, confirm the two option box by tick.



Finally, click the "Start" button.




After download, exit the program, turn off the power, tuck the two coding switch back, as below, restart the equipment power, check if the equipment work normally.

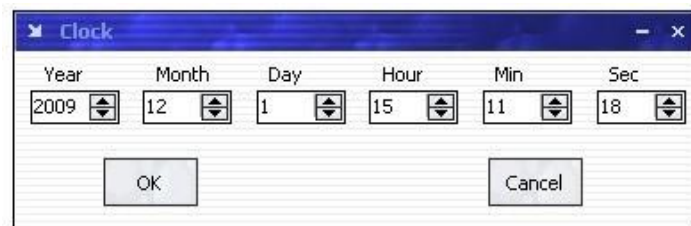


8.2 Appendix II How to add tasks.

Use "Device Schedule" can add tasks, make device automatically run to the Schedule input source in specified time or schedule display modes such as fade in and out.

- First of all, set lower computer current time through host computer "clock".

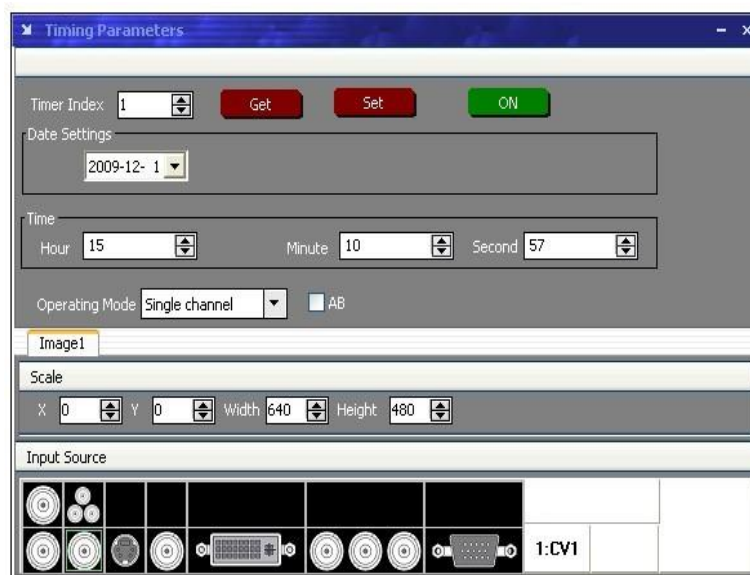
	Note: Reset to factory settings after setting the clock will affect the time before.
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After Clock setting, users can check whether successfully set through button. Press MENU button to enter system main menu, then press Dev Info (device information), then press SEL button can show device information. Touch /DOWN, check in the System time. Shown as below picture:



- 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 set may fail.

Click "start" button , when the button changes to , it means time can start.

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




Press SEL button to enter advanced menu

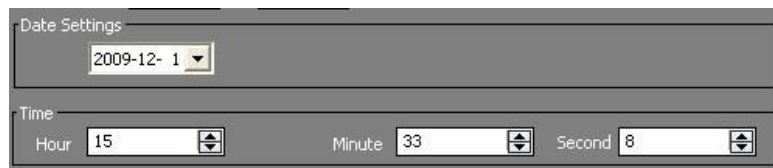


2. When the timer count is set to 1, it indicates that the setting contents will be stored in the "timing 1". If you need to set more, you can set up one by one and saved in different "Timer index".



 **Note:** Equipment currently supports 10 task scheduler.

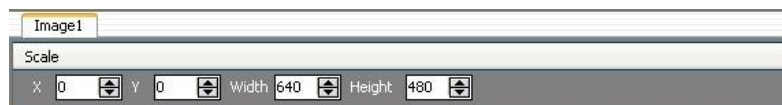
3. Set "task schedule" playing time, can up to second.



4. Select the signal source to play works in dual channel or single channel mode, and check whether to use fade during dual channel mode.



5. Users can control the image position and size by change the data or click the drop-down arrow.




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;

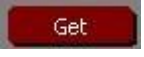
When device works under the dual channel mode, need to switch image 1 and image 2 set input signal one by one.



Users can see the image 1 and image 2 input source information in the input source toolbar after setting. Shown as the picture:



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

Click button , you can 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" switching

