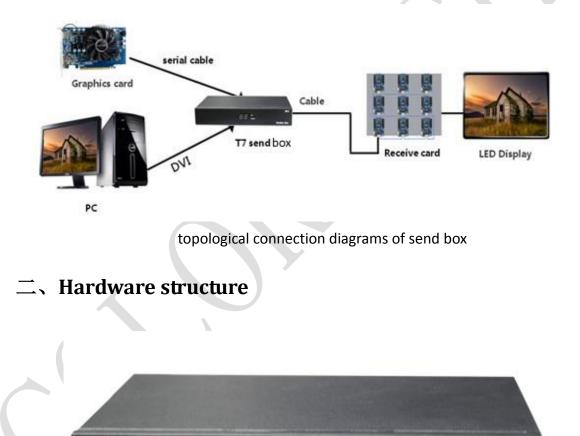
The ST7 Sending Box

Colorlight synchronous send box - ST7, is a professional send box for LED synchronized display, with the function of adapting resolution automatically. One ST7 send box can control the LED display with 1.3 million pixel (maximum columns is 2048points, maximum lines is 1024 points), if over the maximum, the send boxs can be cascaded, and used with DVI or HDMI graphics card. This article focuses on the steps of setting send boxs.

- Connection Diagrams of Send Boxs



58-8

Sender Box



Send box port defined

- 1. Power supply(5V/2A)
 - 100-240V (50Hz-60Hz) AC
 - The red indicator light means the power supply correctly
- 2.Connection
 - Connect ST7 send box with graphics card, by a DVI cable, for transmitting image data

Connect ST7 send box' serial port with the computer's serial port, by a USB serial cable, for setting program to the send box.

- (Note: for the first time, need to install the serial driver. After install the Colorlight LED control system software: LEDShowT9 or LEDVISION, the "PL-2303 Driver Installer.exe" can be found in installation directory and install this file)
- Connect ST7 send box with receive card, by a network cable, for controlling the receive card and the screen

(Note: the connecting cables between send boxs and receive card, and the cables among receive cards are UTP cable or category six cable, the network cable plug comply with the line order of 568B international standard)

3.Button

- The front two buttons for brightness adjustment , the adjustment range is 0-16.
 Digital display shows the current brightness level
- Through the buttons adjust the brightness, the brightness values within the control system software will change accordingly.



LEDVISION 1.73 File(E) Control(C) Tools(T) Late	nguage(L) Setting(S)	Test(D) Help(H)		l	
	■ II ■				
				x	1
Brightness Adjustment					
- Manual Brightness Adjustment -					
	· · · · ·	· · · ·	70%)	stem
Epoble Color Tomphuro	000		Cause		CALL AND THE REAL
Enable Color Tempture	5000 💌		Save		and the
Enable Color Tempture	5000 🔻		Save		
Detect no function card, The a			Save		
Detect no function card , The a	uto operation is invalid.				
Detect no function card . The a	uto operation is invalid.	Current Set Sta			
Detect no function card , The a	uto operation is invalid. Tune Curve Edit	Current Set Sta	ate		
Detect no function card . The a	uto operation is invalid.	Current Set Sta		8	TOPA AND
Detect no function card , The a	uto operation is invalid. Tune Curve Edit	Current Set Sta	ate	8	TOPA AND
Detect no function card , The a	uto operation is invalid. Tune Curve Edit	Current Set Sta	ate	8	TOPA AND
Detect no function card , The a	uto operation is invalid. Tune Curve Edit	Current Set Sta	ate	8	TOPA AND
Detect no function card , The a	uto operation is invalid. Tune Curve Edit 2 3 4	Current Set Sta	ate	8	Non-Anda

Ξ 、Graphics card settings

1.Graphics card model

Currently, there are two mainstream graphics cards series on the market:

NVIDIA's MX Series (model 400, 440, 5200 etc.

ATI's RADEON Series (Model 4670, 5550, 7000,7500,8500,9000 etc.) Install the corresponding graphics card driver correctly.

2.ATI graphics card settings

1)First, we open the graphics card setting interface: Right-click the space on desktop, select [ATI Control Panel] in the menu, just as the following image shows

Arrange Icons By Refresh	
Paste	
Paste Shortcut	
New	

If there is no [ATI control panel] in the menu, we can also click on [Properties], as the following image



ИTI	Catalyst(TM) Control Center
	Arrange Icons By Refresh
	Paste Paste Shortcut
	New
\sim	Properties 1

In the [Display Properties] dialog box, click the [Setting], select the appropriate display resolution, and then click [Advanced] button, as shown below:

Display Properties 🛛 🛛 🔀
Themes Desktop Screen Saver Appearance Settings 2
Drag the monitor icons to match the physical arrangement of your monitors.
1 2
Display:
1. (Multiple Monitors) on ATI Mobility Radeon HD 4300 Series 🛛 🗸
Screen resolution
Less More Highest (32 bit) 5. bmp 类型
1024 by 768 pixels 3 1024 pixels 3 1
Extend my Windows desktop onto this monitor.
Identify Troubleshoot Advance
OK Cancel Apply



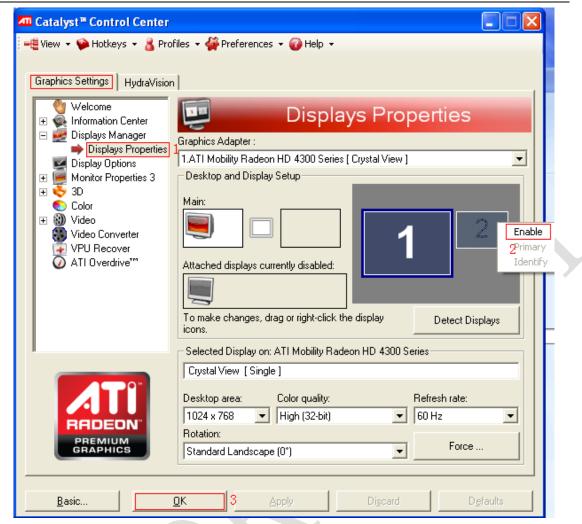
(Multiple Monitors) and ATI Mobility Radeon HD 4300 ? 🔀	
General Adapter <u>Monitor Troubleshoot</u>	
Color Management	
ATI Catalyst™ Control Center	
The ATI Catalyst Control Center is used to configure displays and settings for all your ATI GPUs.	
ATI Catalyst Control Center	
To open the ATI Catalyst Control Center, click on this button:	
ATI Catalyst Control Center	
OK Cancel Apply	

In the interface, click the [ATI Catalyst Control Center] as following image shows, also can open the graphics card settings interface



(Multiple Monitors) and ATI Mobility Radeon HD 4300 ? 🔀	
General Adapter Monitor Troubleshoot	
Color Management Catalyst(TM) Control Center	
ATI Catalyst™ Control Center	
The ATI Catalyst Control Center is used to configure displays and settings for all your ATI GPUs.	
ATI Catalyst Control Center	
To open the ATI Catalyst Control Center, click on this button:	Y
ATI Catalyst Control Center 6	
OK Cancel Apply	

In the ATI control panel, select [Monitors Manager], as following image shows, then right-click simulate monitor 2, click [Enable], select [Copy Mode], and click [Application], [OK].



Colorlight

The interface as shown in below image appears, click [OK] to finish the ATI graphics card setting.

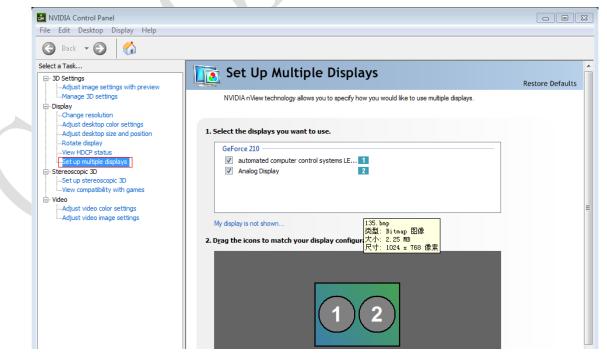


Catalyst™ Control Center ⊂≣ View ▼ ❤ Hotkeys ▼ 🔏 Pro Graphics Settings HydraVision	ofiles 👻 🙀 Preferences 👻 🚱 Help 👻	
 Welcome Information Center Displays Manager Display Properties Display Options Digital Panel (DVI) 2 SD Color Wideo Video Video Video Converter VPU Recover ATI Overdrive[™] 	Displays Properties Graphics Adapter : 1.ATI Mobility Radeon HD 4300 Series [Crystal View + LED 1024X768] Desktop and Display Setup Main: Clone: Main: Clone: Attached displays currently disabled:	
	To make changes, drag or right-click the display Detect Displays	
1	Selected Display on: ATI Mobility Radeon HD 4300 Series	
	Crystal View + LED 1024×768 [Clone]	

3. (NVIDIA graphics card settings)

1)First, open the graphics card setting interface, and its operation is similar to opening ATI setting interface

2) In the [NVIDIA Control Panel], select [set up multiple monitors, and then select [Copy Mode], click [Application] button.



四、Set send box's parameters

1. Control interface

Open Colorlight control system software, click [Control screen] -[Management screen], select the [Send card send], passwords, [168], just as the following image of [Management screen] interface

Screen Management
Send Mode O By Net Card O By Send Card
Send Card Set Auto COM Selection Net Port Control Area Setting
Serial Port COM3 V 10.1 Custom V High Setting
Serial Port Detect send card Detect Receiving card X Y Width Height
Port1 0 0 1920 320 Send
Port1:Detect 4 receive cards. Port1:Detect the 4 card is 5A 8.7 (Normal Chip,N
Port1:Detect the 3 card is 5A 8.7 (Normal Chip, Normal Ch
Set Send Card Resolution
Control Area Set Display Area Location and Size
X 0 Y 0 Width 256 Height 256 Apply Config Selected One
No. X Y Width Height Paran Load or Edit Configuration
LED1 0 0 256 256 D:\Documents and Settings\CLT-shiqin\Desktop\512X128screen.rcvr



2, send box resolution setting

Click [resolution setting]

Screen Management	\mathbf{X}
Send Mode O By Net Card	• By Send Card
Send Card Set	Net Port Area Setting
Serial Port Detect send card	X Y Width Height
Detect Recieve Card	Port1 0 0 1920 320 Send
Port1:Detect 4 receive cards. Port1:Detect the 4 card is 5A 8.7 (Normal Chip,Ni	Revealed a second secon
Port1:Detect the 3 card is 5A 8.7 (Normal Chip,N	
Control Area	
Screen Count 1	
X 0 Y 0 Width 256	Height 256 Apply Config Selected One
No. X Y Width Height	Parameters File Path
LED1 0 0 256 256	D:\Documents and Settings\CLT-shiqin\Desktop\512X128screen.rcvp

Send boxs' default resolution is 1280x1024, 9.9 version send box support the function of adapting resolution automatically., click [set to the current display resolution], also can select the same resolution to current display, in the drop-down menu of [send card resolution] and click [set], just as following image shows.

Reslution Setting		×
Sending Card Resition	1280x1024	

After click [set] or [set to the current display resolution], it will appear the progressing interface, as show below

After the transmission, the software will prompt [send successfully, please power off the send box, and restart! [Note: After restart the send box, need to do the steps of graphics card setting again, in Chapter III of this article]

 Serial ports choice Connect ST7 send box' serial port with the computer's serial port, by a USB serial cable, for setting the program to the send box. When the serial ports communicates well, the status of serial port, in the software's management interface, will be just as below image shown [found to send cards, can set parameters] (Note: For the first time, need to install the serial driver. After install the Colorlight LED control system software: LEDShowT9 or LEDVISION, the "PL-2303 Driver Installer.exe" can be found in installation directory and install this file)

Screen Management	\mathbf{X}
Send Mode O By Net Card O By	Send Card
Serial Port COM3 ID.1 2 Serial Port Detect send card	Net Port Area Setting Custom V High Setting X Y Width Height
Detect Recieve Card Port1:Detect 4 receive cards. Port1:Detect the 4 card is 5A 8.7 (Normal Chip, Normal Chip	Port1 0 1920 320 Send Port2 0 320 1920 320 Reslution Setting
Control Area Screen Count 1	
X 0 Y 0 Width 256 Heig	ht 256 Apply Config Selected One
LED1 0 0 256 256	D:\Documents and Settings\CLT-shiqin\Desktop\512X128screen.rcv;

2. Detecting receive card

For testing whether the receive card communicate well (or observe whether the green lamp on receive card flash quickly). If detect no receive card, or the quantity of detected receive cards does not match with the actual receive cards, please check whether the receive cards has been powered well, or whether the network cable is in good connection. The correct operation as shown in below image

creen Management Send Mode		
By Net Card	• By Send Card	
Serial Port COM3 10.1 Serial Port Detect send card	Net Port Area Settin Custom X Y	Ig High Setting Width Height
Port1:Detect 4 receive cards. Port1:Detect the 4 card is 5A 8.7 (No Port1:Detect the 3 card is 5A 8.7 (No	mal Chip, N 😑	1920 320 Send
Control Area Screen Count 1 💙 X 0 Y 0 Wid	h 256 Height 256 Apply	Config Selected One
No. X Y Widt	Height	Parameters File Path
LED1 0 0 256	256 D:\Documents and Set	ttings\CLT-shiqin\Desktop\512X128screen.rcvp

3. network interface control area setting

Colorlight

According to the size of LED display, choose network interface control area, just as the image (a), then click [Send], send to the card. If the screen is a little larger, need to use dual network interface, also can use the custom mode, such as display (1344 * 672), set the network interface, just as image (b), then [Send], send to the card.

Net Port Area Setting			Net Port Area Setting
	Custom 🗸	High Setting	Custom High Setting
	1024 x 768 1280 x 720	Width Height	X Y Width Height
Port1	1280 × 1024 1600 × 768	1920 320 Send	Port1 0 0 1920 320 Send
Port2	1920 x 640 Custom	1920 320	Port2 0 320 1920 320

network interface control area setting Above are all the steps for setting ST7 send box