# **LED Light Source**

# **Ethernet Manual**

## (XPort [Lantronix] Application Tool)

HAYASHI-REPIC CO., LTD.

## 1. Outline

This section describes the default settings on the PC side for operating the light source via Ethernet. The Ethernet device of this measure uses Lantronix X-PORT.

About the operation method using command signal, please see the "Command Manual". The OS is Windows 10.

## 2. Connection image view



### 3. Connector

### RJ45 Connector pin assignment

Signal Name	DIR	Contact	Primary Function
TX+	Out	1	Differential Ethernet transmit data +
TX-	Out	2	Differential Ethernet transmit data -
RX+	In	3	Differential Ethernet receive data +
RX-	In	6	Differential Ethernet receive data -
Not used		4	Terminated
Not used		5	Terminated
Not used		7	Terminated
Not Used		8	Terminated
SHIELD			Chassis ground

### **Display function**



### 4. Prepare program

#### · Device setting program

XPortDevice setting program <sup>r</sup>DeviceInstaller<sub>J</sub> Download site <u>http://ltxfaq.custhelp.com/app/answers/detail/a id/644</u> (Please search [DeviceInstaller] for the latest version)

#### · Virtual port allocation program

XPort Virtual port allocation program <sup>r</sup>ComPort Redirector<sub>J</sub> Download site <u>http://ltxfaq.custhelp.com/app/answers/detail/a id/928</u> (Please search [ComPort Redirector] for the latest version)

Please download each program and install. For more information, please refer the Lantronix manufacturer site.

## 5. Installation process

#### Setting the XPort

- · It uses DeviceInstaller to do the default settings for the "XPort".
- · Prepare an IP address that you will optional set (use).
- · If you do not set it optional, it will be assigned automatically.
- · Connect the LAN cable to the light source and turn on the power.
- ・Start DeviceInstaller, and if there is no device on the right side "Type(タイプ)", click "Search(検索)".
- $\cdot$  If the device is not displayed, check the LAN cable connection and power on of the light source.
- $\cdot$  If you connect the LAN cable, "restart" the power supply.
- $\cdot$  If you connect the LAN cable when the power is on, the device may not be detected correctly.
- · If a device is detected, [XPort-03 / 04] will be displayed in black color.
- · If it displays in red color, check the LAN cable and power (as if there were no device).



- If you double-click the detected device that does display the device setting information.
  Select the "Web Configuration(Webコンフィグレーション)".
  Click on the "Navigate".

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2 192.168.1.40	and and and	名前		
	13 KPort	DHCP Device Name		
	E	グループ		
		コメント デバイスファミリー	XPort	
	5555	5711×77×9=	XPort-03/04	
		ID	X5	
		バードウェアアドレス	00-20-4A-C6-BD-90	
		ファームウェアバージョン	6.6	
		エクステンデッドファームウェアバー		
		オンラインステータス	オンライン	
		IPアドレス サポート:ダイナミック₽	192.168.1.40 Dynamically	
		DHCPでの取得	- Dynamically 線フ	
		BOOTPでの取得	終了 終了	
		RARPでの取得	無効	
		自動IPの取得	終了	
		サブネットマスク	255.255.255.0	
		デフォルトゲートウェイ	0.0.0.0	
		最大COBパーティション数 ポート数	6	
		ハート鉄   TCPキーブアライブ有効範囲	45	
		Telnet有効	45 終了	
		Telnetポート	9999	
		WEB有纳	線了	

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□ 温 Lantronix Devices - 1 device(s) □ 語 ローカル エリア接続 (192.168.1.31) □ アドレス http://192.168.1.4080 「 192.168.1.40 Navigate
◆ デバイスのナビゲーションを開始するためにGOボタンをクリックして下さい。
▲ レディー

· It output a warning, click the "OK".

192.168.1.40 へ接続			? ×
		G F	
(null) のサーバー 192	2.168.1.40 (こはユーザ・	ー名とパスワードが必要	です。
警告: このサーバーは. することを要求していま	、ユーザー名とパスワー ます (安全な接続を使	-ドを安全ではない方法 わない基本的な認証)	で送信 。
ユーザー名(山):	<b>1</b>		-
パスワード( <u>P</u> ):			
	🔲 パスワードを語	記憶する( <u>R</u> )	
		ОК <b>+</b> +>	セル

· XPort Home is displayed.

·Click the "Serial Settings" to set the communication terms.



- Setting Baud Rate:9600, Data Bits:8, Parity:None, Stop Bits:1
- · Click the "OK".
- · Clicking the "Apply Settings", it updates the data in the XPort.
- If the update is complete, it will be returned to the top page.
- · If check to the update status, click the "Serial Settings" again.
- · This completes the Xport settings.
- $\cdot$  Next, use the "Com Port Redirector" to set the virtual port on the PC side.

	ギュレーションTelnet設定
< 🔁 🛞 アドレス http:/	//192.168.1.40/secure/ltx_conf.htm 🔽 🔁 😌   🖓 🖾
	Firmware Version: V6.6.0.2 MAC Address: 00-20-4A-C6-BD-90
ាល់ Network	Serial Settings
Server	Channel 1
Serial Tunnel	Disable Serial Port
Hostlist	
Channel 1 Serial Settings	Port Settings
Connection	Protocol: RS232  Flow Control: None
Email	Baud Rate: 9600 🔽 Data Bits: 8 💌 Parity: None 💌 Stop Bits: 1 💌
Trigger 1 Trigger 2	
Trigger 2 Trigger 3	Pack Control
Configurable Pins	Enable Packing
Apply Settings	Idle Gap Time: 12 msec 💌
Apply Defaults	Match 2 Byte Sequence: Yes INO Send Frame Immediate: Yes INO
	Match Bytes: 0x00 0x00 (Hex) Send Trailing Bytes: ⊙ None O One O Two
	Flush Mode
	Flush Input Buffer Flush Output Buffer
	With Active Connect: O Yes O No With Active Connect: O Yes O No
	With Passive Connect: O Yes O No With Passive Connect: O Yes O No
	At Time of Disconnect: O Yes O No At Time of Disconnect: O Yes O No
	<u>ок</u>
	₩
LANTRONIX	Firmware Version: V6.6.0.2     Firmware Version: V6.6.0.2     Firmware Version: V6.6.0.2
	Ferniare Vesion: V6.6.0.2
企 <sup>1</sup> Network	Image: Mark And Section 1         Mark And Section 2         Mark And Section 2
Server Please wa	ait while the configuration is saved
	will reboot in order for the settings to be applied.
Channel 1	
Serial Settings Connection	Tripper 3 Configure 2 Pros
Email Trigger 1	Apply Settings Apply Debuts
Trigger 2	Device Server Configuration Manager Version 1.7.0.1
Trigger 3 Configurable Pins	Updating
Apply Settings	
Apply Defaults	
	<b>尽一切像示不能</b> 成定

"Setting the virtual port on the PC side"

- · Start up the "CRP Manager".
- · The [Com Ports] are displayed.
- · Click the "Add and Remove Com Ports" and select the port number to use.
- The Port 10 is used in this description.
- · Check the "Com10" and click the "OK".

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Com 1 (Inacce Con 6 (Inacce		Com 6 (Inaccessib	ile)					
	Com Ports	· · · ·						
	🔽 Gomi	🗖 Com21	🗖 Com41	🗖 Com61	Com81	🗖 Com101	🗖 Com121	
	Com2	Com22	Com42	Com62	Com82	Com102	Com122	
	Com3	🗖 Com23	Com43	🗖 Com63	Com83	🗖 Com103	🗖 Com123	
	Com4	🗖 Com24	Com44	🗖 Com64	🗖 Com84	🗖 Com104	🗖 Com124	
	🗖 Com5	🗖 Com25	🗖 Com45	🗖 Com65	🗖 Com85	🔲 Com105	🗖 Com125	
	🔽 Com6	🗖 Com26	🗖 Com46	🗖 Com66	🗖 Com86	🔲 Com106	🗖 Com126	
	🗖 Com7	🔲 Com27	🗖 Com47	🗖 Com67	🗖 Com87	🔲 Com107	🗖 Com127	
	🗖 Com8	🔲 Com28	🗖 Com48	🔲 Com68	🗖 Com88	🗖 Com108	🗖 Com128	
	Com0	🔲 Com29	🗖 Com49	🔲 Com69	🗖 Com89	🔲 Com109	🗖 Com129	
	🔽 Com10	🗖 Com30	🗖 Com50	🗖 Com70	🗖 Com90	🗖 Com110	🗖 Com130	
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evices Address	— [] Com12	🗖 Com32	🗖 Com52	🗖 Com72	Com92	🗖 Com112	🗖 Com132	
1331000	— Com13	🗖 Com33	🗖 Com53	🗖 Com73	🗖 Com93	🗖 Com113	🗖 Com133	
	Com14	🗖 Com34	🗖 Com54	🗖 Com74	🗖 Com94	🗖 Com114	🗖 Com134	
	🗖 Com15	🗖 Com35	🗖 Com55	🗖 Com75	🗖 Com95	🗖 Com115	🗖 Com135	
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	Com18	Com38	Com58	Com78	Com98	Com118	Com138	
	Com19	Com39	Com59	Com79	Com99	Com119	Com139	
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	ок	Cancel		heck (Range)	1 🗄 to	256 🕂		
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- · "Com10" is added to the main screen.
- · Click the "Com10" to switch to change the Setting screen.
- · Click the "Search For Devices" to search for XPort devices.
- The searched XPort is displayed in the Devices column. The searched XPort is displayed in the devices column.

If it is not displayed, please check to the LAN cable is connected or the light s	source power on.
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CPR Manager Eile <u>C</u> om Port <u>D</u> evice	<u>T</u> ools <u>H</u> elp							
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om Ports All Com Ports (3)		Com Port List	75 4 11			N		[ oor
🖃 Com 1 - 10		Com Port Com 1 (Inaccessible) Com 6 (Inaccessible)	IP Address	TCP Port   Co	m Status	Network Status		221
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◆CPR Manager <u>F</u> ile <u>C</u> om Port <u>D</u> ev	ice <u>T</u> ools H	Np						
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		Reset to Default		ts		Cimork Otatus.		
		Buffer Writes	(Keep checked for be	etter write perfor	mance)	7 🕂 Connecti	ion Tin	neout (in seconds)
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r		2 3		<u>L</u>			-	id on UDP port 43283.
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		6		port to th port has	e Firewall. already be	If the button en added and c	captio an be	n reads 'Remove Rx Pc removed by pressing th -
Devices IP Address	TCP Port	Device Name	Port Name		HW Addres	s	ID	Product
								odified
Devices								
IP Address	TCP Port	Device Name	Port Name		HW Addre:		ID	Product
192.168.1.40 (1)	10001				00:20:42	A:C6:BD:90	X5	XPort-03
	1	1						lodified

- · Check the "IP Address" in the displayed Devices column and double-click the address.
- · Displayed in the Host item in Setting.
- Finally, click the "Save Settings" to entry.
  A confirmation of entry will be displayed. Click the "Yes".

🔷 CPR Manager					
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Com Ports	Settings				
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Com i Vinaccessible) Com 6 & accessible) <b>Com 10 (New</b> )	Window's Port Name: Window's Device Name: window's Service Name:		Com Status: Network Status:	Error Disco	nnected
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	I Buffer Writes (Keep I Server Reconnect I No Net Close	o checked for better write p	erformance ) 7 🚍 Connec Timeout Rec		eout (in seconds)
	🗖 Listen Mode	Normal – port closed a	fter disconnect 🖉	TCP Port	t Add To
	TCP KeepAlive	7200000 📩 Keep Alive	Time (msec) 🛛 🚺 Keep	oAlive In	terval (msec)
	Trac 2217 DTR (In (Tracert) Tx Emp	): Tie DTR to DCD, DSR ty: CPR Transmit Buffer B			
	Service Host 1 192.168.1.40 2	then	RNING! If the Host is on the UDP ports 30718, 43282 an vall's exclusion list. You may	d 43283	3 may need to be added
	3 5 6	unal this port	, some legacy device servers ole to connect to a device se machine is blocking this port to the Firewall. If the button has already been added and	rver, on Press n captio	ne possible cause is the the 'Add Rx Port' butto in reads 'Remove Rx Pc
Devices	-			-	8
IF Address         TCP Port           192.168.1.40         10001	Device Name	Port Name	HW Address 00:20:4A:C6:BD:90	ID X5	Product XPort-03
			0.10. m.00.20.90		
l Searching		1	1	M	odified ,;;



- If entry is completed, "Com10 (New)" of ComPorts will change to [Com10].
  This completes the virtual port settings.

🔷 CPR Manager	
<u>File ComPort D</u> evice <u>T</u> ools <u>H</u> e	lp
1 🦻 🖬 🔎 🖻	
ComPorts	Settings Com 10 Tests
🖃 All Com Ports (3)	-Com 10
⊡-Com 1 - 10 Com 1 (Inaccessible)	
Com 6 (Inaccessible) Com 6 (Inaccessible) Com 10	Window's Port Name:         Lantronix CPR Port (COM10)           Window's Device Name:         ¥Device¥CprDevice10
	window's Service Name: _OprDrvr
	Reset to Defaults Cancel Edits
Change the Com(New) to Com10	Buffer Writes (Keep checked for better write performance) Server Reconnect
	No Net Close
	Listen Mode Normal - port closed after
	TCP KeepAlive 7200000 🚍 KeepAlive Tim
	■ RFC 2217 DTR (m): Tie DTR to DCD, DSR alwa
	(TruPort) Tx Empty: CPR Transmit Buffer Empt
	Service Host TCP Port WARNI
	1 192.168.1.40 10001 then UD firewall'
	Also, so unable t

## 6. Change the IP address

"IP assignment after search"

- · Change the IP address as needed.
- · The factory settings are as follows.

Item	Set value	Note	
IP address	192.168. 0.101	Factory default	
Sub-net mask	255.255.255. 0	Factory default	
Default gateway	0. 0. 0. 0	Factory default	

· Use DeviceInstaller to change the IP address.

- · If DeviceInstaller to starts up, click "IP assign(IP割当)" and select "Assignment method(割当方法)".
- ・Check "Assign specific IP address(特定IPアドレスの割当)" and click "Next(次へ)".



- · Enter the "changed IP address" in the IP address field and click "Next(次へ)".
- · Click the "Assign(割当)" button.
- · After completed the settings, click the "Finish(終了)" button.



· After update, the changed IP address will be displayed.

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- 会議 ローカル エリア接		917	名前	グループ	גטאקק	ハードウェアアドレス	ステータス
E 29 U ~ 70 µ ⊥9 / ¥9	ດຽວ (192.108.1.32)	₩XPort-03/04			192.168.1.150	00-20-4A-C6-BD-90	オンライン
レディー							

#### "IP assignment before search"

- If inquiring about the device ID at that assigning an IP address, select the MAC address. (It is written on the XPort inside the main unit)
- · After setting the device ID, the process is the same as "IP assignment after search".
- · If you cannot set the IP address, refer to "Notes on IP assignment".

😒 I P アドレスの割当	<u></u>		
	デバイスID		
	デバイスのハードウェアアドレスを入力してください。 組込みタイプのデバイス でない場合は、通常デバイスの裏面に記載されています。(例: 12-34-56- 78-9A-BC)		
MBAR	00-20-4A-C6-BD- Ж		
	< 戻る 次へ> キャンセル		

"Notes on IP assignment".

- · It is need to match the subnet mask to the PC at that an IP assigning.
- · If it a different subnet assigning in the PC, the IP address cannot be changed.
- · In that case, if you search with DeviceInstaller, it will be displayed in red color.
- $\cdot$  For setting, match the subnet mask on the PC side.

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Lantronix Devices - 1 device(s)	タイプ	名前	グループ	IPアドレス	ハードウェアアドレス	ステータス
- 金 - 金 - 日 - 二 - 二 - 二 - 二 - 二 - 二 - 二 - 二	¥ XPort−03/04			192.168.2.150	00-20-4A-C6-BD-90	無応答

- $\cdot$  Do not set the same IP address when setting while connecting several devices. Also, do not connect devices with the same IP address.
- · If there is a device with the same address on the network, it will not be detected even if it is searched.