

DOC-8565e Rev. 1

SNMP Enabler Technical Manual



www.drakelighting.com



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2. Default network settings of the SNMP enabler

2.1 Network

DCHP	Disabled
IP Address	192.168.1.25
Subnet Mask	255.255.255.0
Default Gateway	Not configured

2.2 SNMP

SNMP	Disabled
SNMP Traps	Disabled
Default read community	public
Default write community	Private

2.3 FTP

FTP username (1)	adminSNMP
FTP password (1)	SNMP!!tec015
FTP username (2)	admin
FTP password (2)	PASS

2.4 Web Interface

User name	Default password	Rights
user	useruser0!	Can see the light status
admin	adminadmin0!	Same as user but can also change the state and configuration of the light.
super admin	superadmin0!	Same as admin but can also change the Ethernet port settings (IP address and SNMP settings).

3. Initial set-up

3.1 Connecting to the SNMP enabler

To connect to the SNMP enabler, use one of the following methods:

- 1) Connect a computer or laptop directly to the SNMP enabler Ethernet port. You may need to use a crossover Ethernet cable.
- 2) Connect the SNMP enabler directly to your network. Verify that the default address of the SNMP enabler is not conflicting with any other device on your network. Connect a

computer on the same network. You may need to use a straight-thru Ethernet cable for both the computer and the SNMP enabler.

In any case, you have to make sure your computer IP address is on the same subnet (192.168.1.x). Your computer IP address must also be different than the SNMP enabler IP address.

To change your computer IP address to be on the same subnet as the SNMP enabler, use the following steps with Microsoft Windows 7, 8 or 8.1.

- 1) Make sure you are logged in with administrative rights (as an administrator).
- 2) Go to control panel
 - a. Windows 7 -> Click on the Start Menu and then on Control Panel
 - b. Windows 8 or 8.1 -> Go to the Start Screen by pressing the Windows key on your keyboard ■. Then type "Control Panel", then click on "Control panel" in the result.
- 3) Go to the network adapter settings
 - a. Windows 7, 8 & 8.1 -> In Control Panel, click on "Network and Internet" and/or "Network and Sharing Center". Then Click on "Change adapter settings" on the left pane.



- 4) Go to the properties of your network adapter
 - a. Windows 7, 8 & 8.1 -> Right click on your network adapter (in most case "Local Area Connection") and choose "Properties" (Not on Wireless Network Connection). If your cable is connected, you should not see "Network cable unplugged".



5) Click on "Internet Protocol Version 4 (TCP/IPv4)" and on "Properties"

	3	
Atheros AR	8152 PCI-E Fast Ethemet C	ontroller
This connection u	ses the following items:	Configure
QoS Pac	ket Scheduler Vinter Sharing for Microsoft	Networks
Image: Clean for Ima	ket Scheduler Yinter Sharing for Microsoft rotocol Version 6 (TCP/IPv rotocol Version 4 (TCP/IPv r Topology Discovery Map r Topology Discovery Resp	Networks 6) 4) oer I/O Driver bonder
Install	ket Scheduler hinter Sharing for Microsoft rotocol Version 6 (TCP/IPv rotocol Version 4 (TCP/IPv r Topology Discovery Mapi r Topology Discovery Resp Uninistal	Networks (6) 4) orr I/O Driver honder Properties

- 6) Take note of the current settings in this page. You will need to put those settings back at the end of this set-up guide.
- 7) Click on "Use the following IP address:"
- 8) Beside "IP address:" enter the IP address you want to assign to your computer. If you connected your computer directly to the SNMP enabler you can use the IP 192.168.1.2 or any IP address different than the SNMP enabler default IP address in the format 192.168.1.x.

neral	
ou can get IP settings assigned auto nis capability. Otherwise, you need t or the appropriate IP settings.	omatically if your network support to ask your network administrator
 Obtain an IP address automatica Use the following IP address: 	ally
IP address:	192.168.1.1
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	I a war
Obtain DNS server address auto	matically
O Use the following DNS server ad	dresses:
Preferred DNS server:	9 6 9
Alternate DNS server:	ar a a
Validate settings upon exit	Advanced

- 9) Beside "Subnet Mask:" enter 255.255.255.0
- 10) Click OK

3.2 Logging to the web interface

- 1) Turn on the light controller.
- 2) You now need to log on to the SNMP enabler web interface. Open an internet browser like Internet Explorer or Chrome.
- 3) In the address bar type the SNMP enabler default IP address (192.168.1.25) and hit enter.
- 4) You should see a page like this:

S http://192.168.1.25/Technostrobe/login.html	,D = → 🧔 Demo Techno	×	二回 X 命 示 際
TECHNOSTROBE	Home		EN V
AC	Identificatior User : Password : Login Log	out	Lighting system calls a since

5) For the start-up configuration you will need to log using the super admin then click on "Login".

C () (http://192.168.1.25/Technostrobe/login	.html 🔎 = 🔿 🍯 Demo Techno 🛛 🗴	日日 (1) (1) (1) (1) (1) (1) (1) (1)
	Home	EN V
TECHNOSTROBE		Lighting system date & time
	Identification	
	User : super admin	
	Password :	
	Login Logout	

- 6) At first login you will be asked to change the password. You can either put back the existing password or enter a new one. To do so, under "Password modification", enter the new password once beside "New", and a second time beside "Confirm", then click on "Modify".
- 7) You can also enter an expiration delays for the password. To do so, enter an expiration delay in days beside "Expiration delay [Day] :" then click on "Modify Delay".

Identification			
User : super admin			
Password : •••••••••			
Logout Main Page			
Configuration Page			
Password modification			
New:			
Confirm : •••••••••• 🔹			
Modify			
User parameters			
Expiration delay [Day] :			
Reset password Modify delay			

3.3 Adjusting Date and Time used for event logging.

1) From the login page titled "Home" click on "Main Page". From the "General Monitoring" page click on "Configuration".

TECHNOSTROBE	<u>Site Name</u> General Monitoring Identifier Controller		Site Name Web Interface Version - SIM General Monitoring Lighting system date			- 2.04 EN 🔽
			Status			
	Identifier PSU #1	Status	Level 9	Description PsuDescription		
	Configuration Up		date E Back	vents		

- 2) Under "Date & Time":
 - Beside "Time Zone Offset" enter the time zone where the light is located.
 Beside "Daylight Saving Time", check if Daylight Saving Time is active where the light is located.
 - b. Beside "Source" select "UserDefine"
 - c. Enter the Year, Month, Day, Hour, Minute, Second of the current Date and Time where the light is located.
- 3) Click on the save button when done.
- 4) After changing the date & time, you may need to login again using super admin. If so, once you're logged back, click on "Main Page" and "Configuration". This will bring you back to this section.

Date & Time]	
	Time Zone Offset	(GMT-05:00) Eastern Tim 🗸
	Daylight Saving Time	
	Source [UserDefine 🗸
	Year [20xx]	
	Month [112]	
	Day [131]	
	Hour [023]	
	Minute [059]	
	Second [059]	
		Save

3.4 Entering site information

- 1) Under "Customer Information", you can specify a Site Name, Custommer's Name and an Installation Date for future reference.
- 2) Click on the save button when done.

Customer Information	
Site Name	Site Name
Customer's Name	Customer's Name
Installation Date	Installation Date
	Save

3.5 Configuring the number of light present.

1) Under PSU, set "PSU Count" to the number of light connected to the same SNMP enabler then click on "Save".

-PSU	PSU Count	1
₩		Save

- 2) Click on the "Back" button at the end of the page.
- 3) Click again on the "Back" button to return to the login page.

3.6 Ethernet Port Configuration

From the login page titled "Home" click on "Configuration Page". This will bring you to the Ethernet port (XPort Pro) configuration page.

3.6.1 SNMP Configuration

- 1) Click on "SNMP" on the left pane.
- 2) You can enable or disable SNMP communication on the line "State".

If you intend to use SNMP communication, you must make sure the community on your SNMP manager correspond to those configured here.

For security purpose, it is advised to change the default community and reflect the change on your SNMP manager. To do so, enter your preferred community beside "Read Community:" and "Write Community:".

3) You can enable or disable SNMP traps on the line "Traps State".

If you intend to use SNMP traps, enter a traps destination IP address on the line "Traps Primary Destination". You can also add a secondary destination IP address beside "Traps Secondary Destination".

4) Click on "Submit".

Status 삶 CLI	SNMP		> [Logout] > [Technostrobe]
CPM	State:	Enabled Disabled	configuration of the SNMP Agen
Diagnostics	Read Community:	<configured></configured>	
mail	Write Community:	<configured></configured>	
ilesystem	System Contact:		-
TP	System Name	<default name="" system=""></default>	
ost	System Description		
ттр	system Description.	<default description=""></default>	
Address Filter	System Location:	<default location=""></default>	
ine	Traps State:	Enabled Disabled	
PD	Traps Primary	192.168.1.23	
etwork	Trans Secondary		
pp	Destination:		
rotocol Stack			
luery Port			
\$5			
NMP			
SH			
SL			
yslog			
ystem			
erminal			
FTP			
unnel			
IP			

3.6.2 Setting the IP address

1) Click on "Network" on the left pane.

Status 🔐	-			-> [Logout]
CLI		-> [Technostrobe] This page is used to view the status		
СРМ		of the Network interface on the device.		
Diagnostics	1	There are two columns displayed.		
DNS	Str	operational settings. The second		
Cilcovotom		column shows the expected setting after the device is rebooted. If both BOOTP and DHCP are turned on DHCP will run but not		
TP	Network 1 (eth0)			
Host				BOOTP.
нтр		Current	After Reboot	When BOOTP or DHCP fails to discover an IP Address, a new
P Address Filter	BOOTP Client:	Off	Off	address will automatically be
- Hunned I Http:		0.00	011	denerated using AutoiP. This
ine	DHCP Client:	Off	Un	address will be within the
ine .PD	DHCP Client: IP Address:	0# 192.168.1.91	0π 192.168.1.91	address will be within the 169.254.x.x space.
.ine .PD Modbus	DHCP Client: IP Address: Network Mask:	0ff 192.168.1.91 255.255.255.0	192.168.1.91 255.255.255.0	address will be within the 169.254.x.x space.
Line LPD Modbus Vetwork _{Da}	DHCP Client: IP Address: Network Mask: Default Gateway:	0# 192.168.1.91 255.255.255.0 192.168.1.12	0ff 192.168.1.91 255.255.255.0 192.168.1.12	address will be within the 169.254 x x space:
Line LPD Modbus Network	DHCP Client: IP Address: Network Mask: Default Gateway: Hostname:	Off 192.168.1.91 255.255.255.0 192.168.1.12 <none></none>	0ff 192.168.1.91 255.255.255.0 192.168.1.12 <none></none>	address will be within the 169.254.x.x space:
Line LPD Modbus Network PPP	DHCP Client: IP Address: Network Mask: Default Gateway: Hostname: Domain:	Off 192.168.1.91 255.255.255.0 192.168.1.12 <none> <none></none></none>	0m 192.168.1.91 255.255.255.0 192.168.1.12 <none> <none></none></none>	address will be within the 169.254 x.x space.
Vidences Files	DHCP Client: IP Address: Network Mask: Default Gateway: Hostname: Domain: DNS Suffix Search List:	Off 192.168.1.91 255.255.255.0 192.168.1.12 <none> <none></none></none>	0m 192.168.1.91 255.255.255.0 192.168.1.12 <none> <none></none></none>	address will be within the 169.254 x.x space:
Line LPD Modbus Network Protocol Stack Query Port	DHCP Client: IP Address: Network Mask: Default Gateway: Hostname: Domain: DNS Suffix Search List: DHCP Client ID:	Off 192.168.1.91 255.255.255.0 192.168.1.12 <none> <none></none></none>	Om 192.168.1.91 255.255.255.0 192.168.1.12 <none> <none> <none> <none></none></none></none></none>	address will be within the 169.254 x.x space:

2) Click on "Configuration".

XPo	rl'Pro		EVOLUTION OS
Status 🗇 CLI CPM Diagnostics DNS Email Filesystem FTP	Network 1 (eth	Network 1 Interface Link Status Configuration 0) Interface Configuration	→> [Logout] →> [Lechnostrobe] This page is used to configure the Network interface on the device. To see the effect of these items after a reboot, view the Status page. The following items require a reboot to take effect: BOOTP Client On/Off DHCP Client On/Off IP Address DHCP Client ID
Host HTTP IP Address Filter Line	BOOTP Client: DHCP Client: IP Address:	On Off On Off 192.168.1.25/24	If BOOTP or DHCP is turned on, any configured IPAddress, Network Mask, Gateway, Hostname, or Domain will be (pnored. BOOTP/DHCP will auto-discover and erlinge these configuration.
LPD Modbus Network PPP	Default Gateway: Hostname: Domain:	[192.168.1.12 ×]	Items. If both BOOTP and DHCP are turned on, DHCP will run, but not BOOTP. When BOOTP or DHCP fails to
Protocol Stack Query Port RSS	DHCP Client ID:	Text O Binary	discover an IP Address, a new address will automatically be generated using AutolP. This address will be within the 169.254.xx space.
SNMP SSH SSL	Secondary DNS: MTU:	<none> 1500</none>	IP Address may be entered alone. in CIDR form, or with an explicit mask: 192 168.1.1 (default mask) 192 168.1.1/24 (CIDR) 192 168.1.1/25 (255 255 0) (explicit
Syslog System		Submit	mask) Hostname must begin with a letter,

3) Here you can set the IP address for the light as following:

DHCP Client	Turn ON if you want your DCHP server to assign an IP automatically to the SNMP enabler. Turn OFF if you want to set a static IP address.
IP Address	The IP Address may be entered alone, in CIDR form, or with an explicit mask : Default mask : 192.168.1.25 CIDR : 192.168.1.25/24 Explicit mask : 192.168.1.25 255.255.255.0
Default Gateway	If you intend to connect to the SNMP enabler from outside your network you must enter the IP address of your router here.

Status 🚮				1	-> [Logout]
LI .		Network 1			This page is used to configure the
PM		Interface 11	. k		Network interface on the device. To see the effect of these items after a
hagnostics	interface Link				reboot, view the Status page.
mail			to take effect.		
ilesystem					BOOTP Client On/Off
ТР	Network 1 (eth	0) Interface (onfiguratio	on	IP Address
lost	DOOTD Clinety	los en			If BOOTE or DHCP is burned on an
ITTP	BOOTP Client:	O On ● Off			configured IP Address, Network
^o Address Filter	DHCP Client:	O On ● Off			Domain will be ignored.
ine	IP Address:	192.168.1.91/24	1.1.4		and eclipse those configuration
PD	Default Gateway:	192.168.1.12			If both BOOTP and DHCP are
etwork	Hostname:				turned on, DHCP will run, but not
PP	Domain:	T		1	When BOOTP or DHCP fails to
rotocol Stack		1			address will automatically be
uery Port	DHCP Client ID:	● Text ○ Binar	y	-	generated using AutoIP. This address will be within the
SS	Primary DNS:	<none></none>			169.254.x.x space. IP Address may be entered alone
NMP	Secondary DNS:	<none></none>			in CIDR form, or with an explicit
si	NATU:	1500	-		192,168.1 1 (default mask) 192,168.1 1/24 (CIDP)
vslog	MIU.	1500			192.168.1.1 255.255.255.0 (explicit
ystem					Hostname must begin with a letter
erminal					continue with letter, number, or hypohen, and must end with a letter
TP					or number.
unnel					
IP					

- 4) Click on "Submit" to save changes.
- 5) Click on "System" on the left page and then on "Reboot".
- 6) Select OK.
- 7) If your computer is connected directly to the SNMP enabler, disconnect it and connect it to your network with an Ethernet cable.
- 8) Set your computer IP address as it was before changing it

4. Software update

This section describe how to update the software of the SNMP enabler.

4.1 Preparation

To update your SNMP enabler, you should have received an update package from Technostrobe. Unzip the content of the zip file in a known folder on your computer. The zip file contain a folder named "http" and a file named "xport_pro.romz". A mib file may be included.

You also have to connect a computer to the same network as the SNMP enabler.

4.2 Update HTTP folder

1) In Microsoft Windows, open Explorer (not Internet Explorer).



2) In the address bar type "ftp://ip.address". Replace "ip.address" by the IP address of the SNMP enabler to update and press enter. If you did not change the IP address of the SNMP enabler, type the default IP address.



3) You should be asked for a user name and password; enter the default FTP username and password. There is 2 different default username and password, use the second if the first doesn't work.

~	accepted.	ver does not allow anonymous logins	or the e-mail address was not
	FTP server:	192.168.1.91	
	User name:	adminSNMP	÷
	Password:		
	After you log	on, you can add this server to your f	Favorites and return to it easily.
▲	ETD does not	encrypt or encode passwords or dat	a before sending them to the and data, use WebDAV instead.
	server. To pr	otect the security of your passwords	

- 4) Click on "Log On"
- 5) You should see a folder named "http". Delete this folder.

Organize 🔻							H 🔻 🤅
Favorites	*	Name	Size		Туре	Date modified	Date created
📃 Desktop		📕 http			File folder	2014-12-31 19:00	2014-12-31 19:
📕 Downloads		log			File folder	2014-12-31 19:00	2014-12-31 19:
🔢 Recent Places	=	📕 storage			File folder	2014-12-31 19:00	2014-12-31 19:
		login.cfg		1 KB	CFG File	2014-12-31 19:00	2014-12-31 19
🗃 Libraries							
Documents							
J Music							
Pictures							
Videos							
	-	+			m		

- 6) Copy the folder "http" from the update package to this window.
- 7) Wait for all files to transfer.
- 8) Close the FTP window.

4.3 Update xport_pro.romz

Do the following steps to update the "xport_pro.romz" file :

- 1) Open a web browser like Internet Explorer or Chrome.
- 2) In the address bar type the SNMP enabler default IP address (192.168.1.25) and hit enter.

3) You should see a page like this:



4) For the start-up configuration you will need to log using the super admin then click on "Login".

🕞 🕘 🧭 http://192.168.1.25/Technostrobe/login.html	P = → 🍯 Demo Techno	×	22 日 第 公 公	
TECHNOSTROBE	Home	EN Lighting system date á		
	Identification			
	User: <mark>super admin</mark>			
	Password :			
	Login Logout			

5) From the login page titled "Home" click on "Configuration Page". This will bring you to the Ethernet port (XPort Pro) configuration page.



XPo	orf'Pro		EVOLUTION OST
Status 💮	System		-> [Logout] -> [Technostrobe]
CPM Diagnostics DNS Email	Reboot Device		When the device is rebooted, your browser should be refreshed and redirected to the main status page after 30 seconds. Note that the redirect will not work as expected if the IP Address of the device chances after reboot.
Filesystem FTP	Restore Factory Defaults Factory Defaults		After setting the configuration back to the factory defaults, the device will automatically be rebooled.
Host HTTP IP Address Filter	Upload New Firmware	Parcourir	the device while uploading new firmware. Once the upload has completed and the new firmware has been verified and flashed, the
Line LPD	Upload		device will automatically be rebooted.
Modbus Network PPP Protocol Stack Query Port	Name Short Name: Long Name: Submit		
RSS SNMP	Current Configuration		
SSH	Firmware Version:	5.2.0.1R5	
SSL	Short Name:	xport pro	
System System Terminal TETP Tunnel VID	Long Name:	Lantronix Xport Pro	
XML			

- 8) Click on browse and select the file "xport_pro.romz" from the update package.
- 9) Click on "Upload".

Status 佔 CLI	System
CPM Diagnostics DNS Email Filesystem FTP Host HTTP IP Address Filter Line LPD Modbus Network PPP	Reboot Device Reboot Restore Factory Defaults Factory Defaults Upload New Firmware Upload 2 Name Short Name: Long Name:
Query Port	Submit
	Message de la page Web
? w	ARNING: Are you SURE you want to upload a new Firmware Ima

11) Wait 30 seconds and close your browser.

5. Finding the IP address of the SNMP enabler

The best way to find the IP address of a SNMP enabler is to use a computer on the same network and run Device Installer. Using Device Installer, you can search all SNMP enabler within your local area network.

You can download Device Installer from the Lantronix website at (http://www.lantronix.com/products/deviceinstaller/).

Open Device Installer and it will automatically start to search for devices. It will take several seconds for the list of devices to display in the device list. In the image below, Device Installer found one device with IP address 192.168.1.91.

2	1	Lantronix DeviceInstaller 4.4.0.2RC3			+	-			
File Edit View Device Tools	Help Upgrade								
Lantronix Devices - 1 device(s) Ethemet (192.168.1.23) Comparison XPot XPot Pot 192.168.1.91	Name Street Pro	User Name	User Group	IP Address 192.168.1.91	Hardware Address 00-80-A3-A3-6F-79	Status Online			
Ready	11							_	ai

You may find more than one device on your network. In this case, use the MAC address to differentiate devices. The MAC address is printed on the label on the SNMP enabler. On the image below the MAC address is 00-20-4A-C4-DF-E8.



You should note that if your PC has more than one network adapter (example: Ethernet and Wi-Fi), you can select the one you want using. In Device Installer, click on the menu "Tools", "Options" and in the tab "Network" select the network adapter to use.