



### Dataline Communications Link



**The GLINK-E allows access to the dataline for global programming, monitoring and control. The GLINK-E also provides a central time clocking function which automatically synchronizes/sets the clocks in all of the Lighting Automation Panels.**

The GLINK-E incorporates a built-in Ethernet Network card which is discoverable with supplied software. No need for comports! No need for an additional Dataline Power Supply unit as the GLINK-E now has a built-in Dataline Power Supply.

#### Features

1. Industry standard Ethernet port for communications.
2. 300/1200/2400/4800/9600/1900 auto baud.
3. **LED** status indicators for **POWER, ON LINE** and **DATALINE** activity.
4. Alarm contacts with **LED** indication to annunciate failed field devices or the **GLINK-E** itself.
5. System synchronization clock with automatic adjustments for Daylight Savings and Leap Year.
6. Supports multiple GLINK-Es on the dataline.



## GLINK-E Installation

### Connect Dataline

Locate Quick Connect at the rear of the GLINK-E and connect dataline accordingly.



### Connect Ethernet Cable and Power

Locate the 12 VDC connection and Ethernet connection.



## NOTES:

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**GLINK-E ON Line but, no communication to LAPS**

If DATALINE LED is OFF, check dataline connections and polarity. If an external Dataline Power Supply is being used, verify that it is operational.

If Internal Dataline Power Supply being used, check 24 VDC AC adapter.



**Caution: If there is existing Dataline power present do not use the 24 VDC connection. Only to be used when no dataline power is present!!!**





## GLINK-E Configuration

### ROUTER:

The GLINK-E is designed to be implemented using the buildings router. It is not accessible from the internet due to the fact there is no firmware written for this function. The router assigns IP addresses dynamically which means they can change if the router goes down and new devices are added. To avoid this problem the IT adminster can assign static IP addresses. The IT adminster records the address so no other device in the network gets the same IP address.

The Lantronix "Device Server Configuration Manager" can be used to assign an IP address if a static IP address is used.

### Lantronix "Device Server Configuration Manager":

The device installer is used to initialize the Ethernet (xPico) controller in the unit. It sets up the port, RS232 communications format, connection, etc. You can download the device installer from

(<https://www.lantronix.com/products/deviceinstaller/#tab-docs-downloads>)

At the web site select Device installer (FAQ 644). Next select "Web Setup application for Windows (1.3 MB) – ZIP Archive". Download this ZIP file and save.

1. Run CDM20802\_Setup.exe from the ZIP file
2. After installation run Deviceinstaller.exe, I create a shortcut for future use.
3. The device installer will look for Lantronix products (MAC addresses) and provide a list on the screen. At this point the xPico device will not be shown since RLINK is not turned on.
4. Power up the RLINK and any other component(s) in the system. The Ethernet device inside the RLINK will take a few

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## Troubleshooting

**NOTE:** When the GLINK-E is first powered up the FIELD FAIL LED will flash for approximately 10 seconds while it performs internal diagnostics.

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### Normal Operation

POWER LED	ON
ON LINE LED	ON if PC is connected.
DATALINE LED	ON flickers when there is activity on the dataline.
LINK FAIL LED	OFF Flashes when GLINK-E hardware failure, shorted dataline or non-programmed clock is detected.
FIELD FAIL LED	OFF Flashes when relay failure or loss of LAP program is detected.
ALARM RESET	Push to open contacts (FAIL LED will continue to flash until reset by software).

### No Communications with GLINK-E

Check the POWER LED is OFF, check AC power supply. Refer to GLINK-E Configuration section for network issues.

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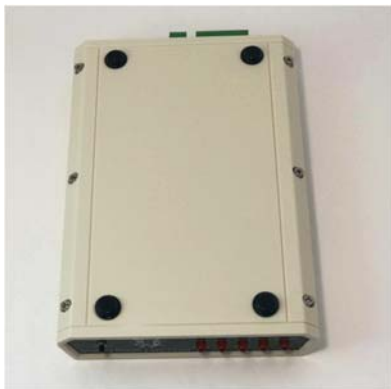
GLINK-E



## Multiple GLINK-E's on a Dataline

The GLC dataline communications system supports multiple access points – **GLINK-E's**. Each **GLINK-E** supports global programming, monitoring and control of the distributed Lighting Automation Panels. However, to avoid conflicts, only one unit (the "Master") can broadcast the time of day.

Remove the six Philips screws on the bottom of the **GLINK-E**.



CAUTION: In a multiple GLINK-E system, the 2<sup>nd</sup>, 3<sup>rd</sup>, ....nth GLINK-Es must be configured as "Slaves" by moving the jumper as described below.

Remove the top cover of the housing unit.



Locate and move the jumper from Master to Slave pins.



minutes to connect with the building router and receive an IP address.

5. Once powered, click **Device** then then **Search** and the installer will search for all Lantronix devices connected to the router.
6. On the list you should see xPico. If not, **Search** again till the xPico device is found.
7. Under xPico open the sub directories until you see the xPico IP address. Record this for TLC.
8. Click on the IP address and the Device Info on the right of the screen will appear.
9. Click on **Web Configuration**. The screen will change showing the address of the Lantronix IP address used to initialize xPico.
10. To the right there is an inverted green arrow pointing to the right click on this then press enter to get past the login.
11. The screen display is xPico Device Server Configuration Manager. Under **xPico** is a list of setup parameters.

### xPico Setup:

Once the device installer has been started and the xPico device found you can now setup the xPico. The xPico has two serial ports and two Connection protocols. We are using Channel #1 so Channel #2 can be ignored since the defaults for it are appropriate.

### Channel #1:

Click on Channel 1 **Serial Settings** and set as follows:

### Port Settings

Disable Serial Port	No
Protocol:	RS232
Flow Control	CTS/RTS (Hardware)
Baud Rate	19200
Data Bits	8
Parity	None
Stop Bits	1



### Pack Control

Enable Packing                      unchecked

We are not using Pack Control so the rest do not require changing.

### Flush Mode:

All no

Next click **OK** at the bottom and next to it will respond **Done!**

On the menu bar click on **Connection** under Channel 1.

### Connect Protocol:

Protocol                                  TCP

### Connect Mode:

Passive Connection	Accept Incoming: Yes
Active Connection	With any character
Password Required	No
Start Character	None
Password	Blank
Modem Mode	None
Modem Escape Sequence	Yes
Show IP address after ring	Yes

### Endpoint Configuration:

Local Port	10001
Remote Port	10001

Note: Record the local port (10001) for use with TLC.

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Auto Increment for active connect    blank

Remote Host                                  blank

### Common Options:

Telnet Com Port                              Disable

Leave the rest at default

### Disconnect Mode:

On Mdm_Ctrl_In_Drop	No
Hard Disconnect	Yes
Check EOT (Ctrl-D)	No
Inactivity Timeout	blank

Press **OK** at the bottom and the response will be **Done!**

To send the settings to xPico click on Apply Settings at the bottom of the menu bar. This will take a few minutes depending upon the traffic in the router.

Once done you can test the communications by clicking on **Tools** then **Ping**. Type in the IP address for the xPico then click on **Ping** to the right of the IP address. The results will be displayed. The IP address and local port number will be used when TLC is used.

### TLC: SmarTLC 3.1

To communicate with the new GLINK-E do whatever it is you normally do. When it is time to setup the communications in "Configuration" enter the RLINK IP address and port number.

Example: TCP/IP [192.168.254.154:10001]

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