

## 4. Apply DC Power

Connect the DC power cord to the pluggable terminal block on the Hardened Ethernet Extender, and then plug it into a standard DC outlet.

Connect the ground connection from the terminal block to the grounding surface.

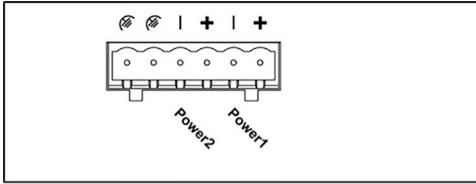


Figure 3. Terminal block on the extender.

## 5. DIP Switch

Table 2. DIP Switches

Pin	Up	Down
DIP Switch 1 (Site)	Auto mode	Local mode
DIP Switch 2 (Type)	Turn on link down relay	Turn off link down relay

Distance and data rate for the Ethernet Extender port:

Table 3. Distance and Data Rate.

Distance (m)	Data Rate (Mbps)
300	100
400	80
600	60
800	40
1200	20
2600	1



Great tech support is just 60 seconds away at 724-746-5500 or blackbox.com.

**NOTE for Table 3:** This distance/data rate information is measured according to a testing standard in the laboratory. The actual installation will be affected by the quality of the copper wire and the impact of noise disturbance. The connection speed will be affected.

### Customer Support Information

Order toll-free in the U.S.:  
Call 877-877-BBOX  
(outside U.S. call 1-724-746-5500)

FREE technical support  
24 hours a day, 7 days a week:  
Call 724-746-5500 or  
fax 724-746-0746

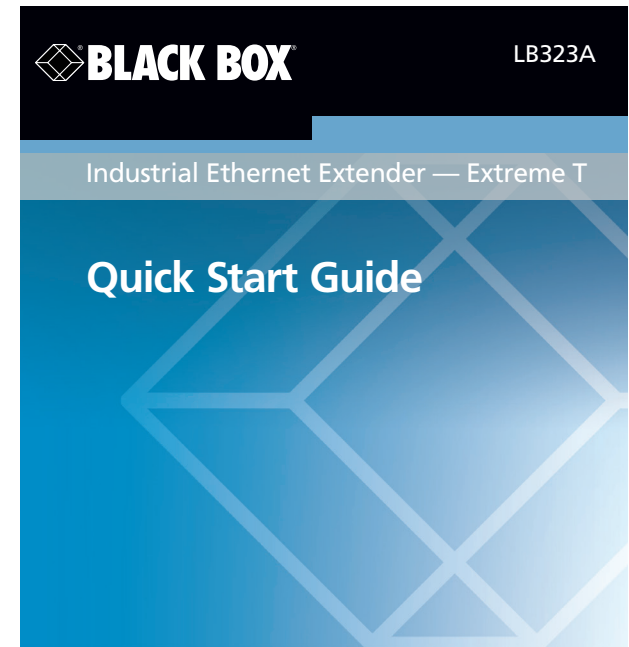
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lb323a\_qsg\_rev1



### 1. Unpacking

Unpack the items. Your package should include:

- One LB323A Hardened Industrial Ethernet Extender
- This printed quick start guide

If items are missing or damaged, contact Black Box Technical Support at 724-746-5500 or info@blackbox.com. Keep the carton and packing material.

### 2. Select a Location

- Installation: Desktop, Wallmount, DIN-Rail mount.
- Identify a power source within 6 feet (1.8 meters).
- Choose a dry area with ambient temperature between -40 and +167° F (-40 and +75° C).
- Keep away from heat sources, sunlight, warm air exhausts, hot-air vents, and heaters.
- Be sure there is adequate airflow.
- Keep the device at least 6-ft. (1.8-m) away from the nearest source of electromagnetic noise, such as a photocopy machine.

### 3. Connect to the Data Ports

1. Insert one end of the Ethernet cable into a switch port.
2. Connect the other end into the Ethernet port of the device.
3. Insert the voice grade copper wire between one pair of Hardened Ethernet Extenders via the Ethernet Extender port (RJ-11 connector or terminal block).



Figure 1. Front view of the extender.



Figure 2. Top view of the extender.

Table 1. LEDs on the extender.

LED	Color	Status
Power 1, 2	Green	ON = Receiving power OFF = Power off
Ethernet Extender Port		
Link Activity	Green	ON = Connection is established OFF = No connection is established Flashing = Port is sending or receiving data
Line Speed	Green	ON = Displays the link speed in Mbps
10/100TX port		
Link/Activity	Green	ON = Valid network connection OFF = No data transmission on port Flashing = Port is sending or receiving data
Speed	Yellow	ON = Link speed at 100 Mbps OFF = Link speed at 10 Mbps