LES424A Quick Start Guide

Reset switch operation.

| Hold in Reset (mode) switch for...	Result
0 to 2 seconds	Initiates a hardware reset.
2 to 10 seconds	Enters Console mode.
More than 10 seconds	Resets to factory defaults.

Serial Port Pinout — DB9
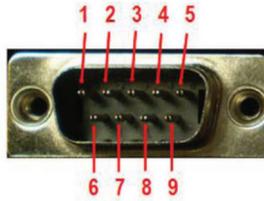
Table B-1. DB9 M connector pinout.

DB9 M Pin	RS-232	Direction (RS-232)	RS-422/485 4-Wire	RS-485 2-Wire
1	DCD	Input	RDA (-)	—
2	RD	Input	RDB (+)	—
3	TD	Output	TDB (+)	Data B (+)
4	DTR	Output	TDA (-)	Data A (-)
5	GND	—	GND	GND
6	DSR	Input	—	—
7	RTS	Output	—	—
8	CTS	Input	—	—
9	—	—	—	—

Specifications

Certifications — FCC Part 15 Class A, CE, NEMA TS2

Enclosure — Rating: IP30;
Mounting: DIN rail mount (35 mm);
Size: 1.8"H x 4.4"W x 6.75"D (4.57 x 12.2 x 17.1 cm)

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Specifications (Continued from page 5)

Environment — Operating Temperature: -40 to +176° F (-40 to +80° C);
Storage Temperature: -40 to +185° F (-40 to +85° C);
Operating Humidity: 10 to 95%, noncondensing

Power Supply — Voltage requirements: 10- to 58-VDC;
Consumption: 6.0 watts maximum

### Customer Support Information

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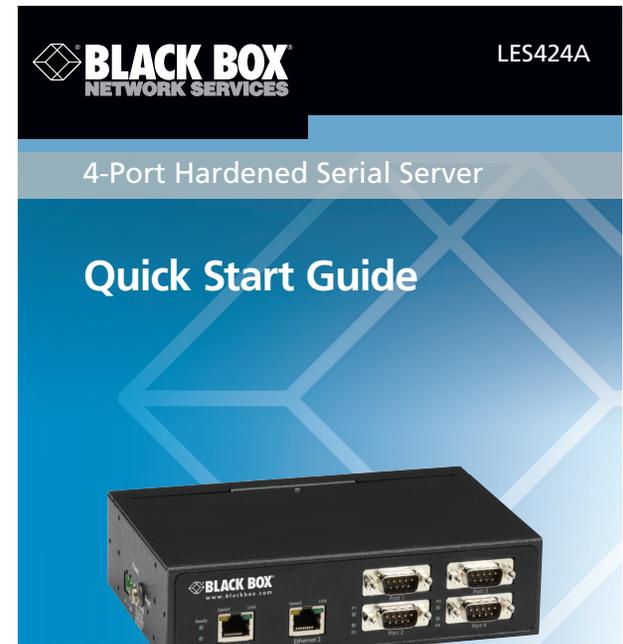
4-Port Hardened Serial Server

Quick Start Guide

Step 1. Install/Connect the Hardware.

- Unpack your serial server from the shipping container. Verify that all included items are present.
  - 4-Port Hardened Serial Server
  - CD with Hardened Serial Server Software
  - (2) panel mount adapters and (4) mounting screws
  - DIN rail mount adapter and (3) mounting screws
  - This Quick Start Guide
- Mount the serial server using panel or DIN rail mount adapters.
- Connect a 10- to 58-VDC power supply (6.0 W required).
- Connect to the network (using a standard Ethernet cable).
- Connect the serial devices (using an RS-232 with DB9 cable, straight-through for DCE device, null-modem for DTE device).

Step 2. Install/Run Serial Server Software.

• Install Hardened Serial Server Software.
- Insert the Black Box Hardened Serial Server Software CD into the computer. The install program should automatically run.
- Follow the prompts to install the software.
• Run Serial Software.
- Click "Start—>Programs—>Black Box—>Serial Server Software—>Serial Server."
- The Discovery page opens.

- Select "Network."
- If you know the IP address, select "The device is at this address," and type in the address.
- If not, select "I don't know the IP address of the device."
- Click on the "Connect" button. The Hardened Serial Server Software will search for any serial servers on the network.
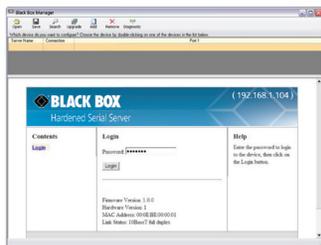
• Login to the Hardened Serial Server.
- Select the Hardened Serial Server from the list.
- Login to the device. (The factory password is blank. Just click "Login.")

Step 3. Configure the Serial Server.

• General Setup.
- Enter a name for the serial server. This name will show up in the serial server list in the Hardened Serial Server Software.
- Change the login password if desired.
• Enter the Network Settings.
- The serial server is configured at the factory to get an IP address automatically (DHCP). If a DHCP server is not available on your network, it will default to 169.254.102.39.
- If a static IP is desired, uncheck the box "I want DHCP to setup the network." Enter the static IP, Subnet Mask, and default Gateway information.
• Setup of the Serial Port Communications.
- For each serial port on the device: Select the communications mode: RS-232, RS-422, RS-485 (2-wire), or RS-485 (4-wire).
- Select the communications parameters (Baud Rate, Data Bits, Stop Bits, Parity, and Flow Control) for your serial device.

• Setup of the Serial Port Network Protocol.
- Select the type of network protocol you want to use for each port: TCP, UDP, VCOM, or Paired Mode.
- TCP: Select whether the serial server will operate as a Client or Server, then configure the required IP address, port numbers, and other related parameters.
- UDP: Configure the IP addresses, ports, and other related parameters for the devices you want to receive data from and send data to.
- VCOM: Configure the serial port to act as a virtual COM port on the PC. You must also add the VCOM driver to the PC using the "Add" button in the Hardened Serial Server Software.

- Paired Mode: Configure the serial server to be paired with another serial server, configure it as either the client or the server in the pair, and set up the IP address, port numbers, etc.
- Set up Advanced parameters as necessary for your application. Click on the the "Advanced" button to set up serial and network timers and packet delimiters.
• Save your configuration to the serial server.
- The device will reboot after saving the settings.

Step 4. Test and Verify Operation.

• Set up the serial server as a TCP Server on serial port 1.
• Set serial port to RS-232 on serial port 1.
• Set to 9600 8-N-1 on serial port 1.
• Loopback serial port 1 by connecting TD to RD.
• Open a command window and type "telnet x.x.x.x yyyy" where x.x.x.x is the IP address of the serial server and yyyy is the port number of the serial port.
• Type characters on the keyboard. The characters should appear in the window. If not, double-check your settings.

LED status indicators.

LED	Color	Status
Power	Green	ON = power connected
Ready	Green	ON = initialization Flashing slowly = Normal operation Flashing quickly = Device is rebooting
Speed	Yellow	ON = 100 Mbps OFF = 10 Mbps
Link	Green	ON = Ethernet connected Flashing = Data TX/RX
Serial Ports 1, 2, 3, 4	Green	ON = Serial port is open Flashing = Data TX/RX