LES302A
LES302A-KIT
LES302AE-KIT

2-Port 10/100 Device Server RS-232/422/485 DB9 M

Quick Start Guide

Access two serial RS-232 or RS-422/485 devices over a 10- or 100-Mbps network.

Customer Support Information

Order toll-free in the U.S.: Call 877-877-BBOX (outside U.S. call 724-746-5500)
FREE technical support 24 hours a day, 7 days a week: Call 724-746-5500 or fax 724-746-0746
Mailing address: Black Box Corporation, 1000 Park Drive, Lawrence, PA 15055-1018
Web site: www.blackbox.com • E-mail: info@blackbox.com

This quick-start guide provides brief descriptions of the LES302A to help you get started. For detailed information, refer to the user's manual on the product CD.

QS.1. What's Included

Your package should contain the following items. If anything is missing or damaged, contact Black Box Tech Support at 724-746-5500 or info@blackbox.com.

LES302A-KIT or LES302AE-KIT:

- (1) Ethernet Serial Server
- (1) CD-ROM containing configuration utility and a user manual in PDF format
- (2) wallmounting screws
- Power adapter with 12-VDC, 1.75-A jack (PS012B [U.S.] or PS012BE [Europe])
- This printed quick-start guide

LES302A:

- (1) Ethernet Serial Server
- (1) CD-ROM containing configuration utility and a user manual in PDF format
- This printed quick-start guide

QS.2 Optional Accessories

- DIN Rail Kit (LES30X-DR)
- DB9 to TB5 Adapter (for RS-422 or RS-485) (LES30X-TB5)

QS.3 Hardware Setup

Interfaces

NOTES: The RS-232/422/485 interfaces do not support isolation.

Press the LES302A's reset button to reset the settings to the default values.

Figure QS-1 shows the interface.

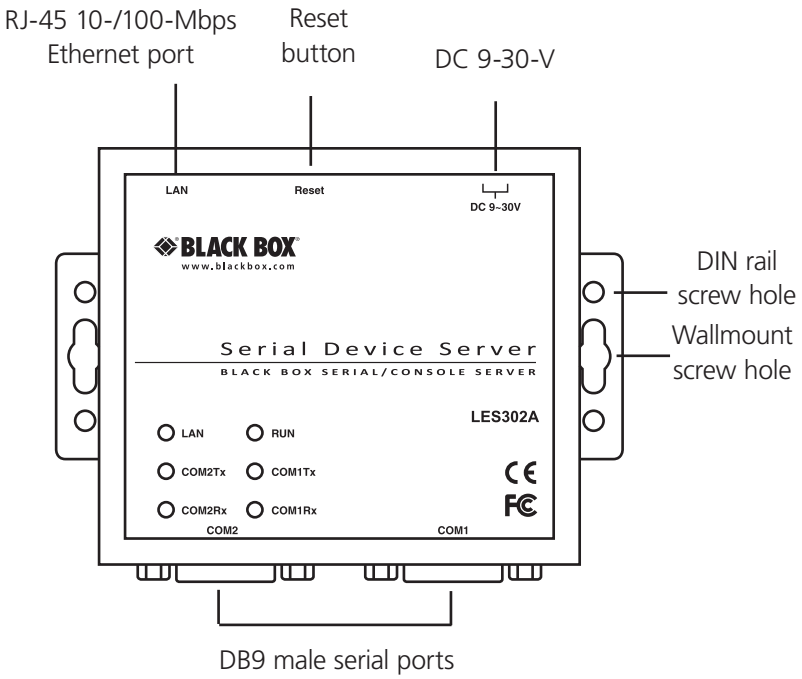


Figure QS-1. LES302A interface.

Indicators

Table QS-1 describes the indicators on the LES302A.

Table QS-1. LED indicators.

LAN LED Message	Description
Off	Ethernet disconnected
Blinking green	Data is transmitted on Ethernet at 100 Mbps
Blinking orange	Data is transmitted on Ethernet at 10 Mbps
COM Port LED Message	**Description**
Off	No data is transmitted on COM port
Blinking	Data is transmitted on COM port
RUN LED Message	**Description**
On	Jumper JP1 Pin 1 and Pin 2 are shorted to disable AP firmware running
Blinking (rate: 0.5 sec.)	AP firmware is running normally

Installation Steps (LES302A-KIT or LES302AE-KIT):

1. Connect an LES302A to the supplied power adapter (PS012B [U.S.] or PS102BE [Europe]).
2. Connect an LES302A to your Ethernet network. Use a standard straight-through Ethernet cable to connect it to a hub/switch. Use a crossover cable to connect it to a PC's Ethernet port.

NOTE: If you connect the PC to the LES302A, make sure that the PC is in the same subnetwork as the LES302A.

3. Connect the LES302A's serial ports to two serial devices.

NOTE: You may need an LES30X-TB5 adapter for RS-422 or RS-485 applications.

4. You can mount the LES302A to a wallplate (mounting screws are included) or a DIN rail using the DIN rail kit (LES30X-DR).

QS.4 Software Setup

Table QS-2. Software default settings.

Default Network Setting	Default User Name/Password
IP: 10.0.50.100	User name: admin
Gateway: 10.0.0.254	Password: null (leave it blank)
Subnet: 255.255.0.0	—

Auto IP (Dynamic IP):

A DHCP server can automatically assign the IP address and network settings. The LES302A supports the DHCP function. By default, the DHCP function on the LES302A is disabled. You can use SerialManager.exe to enable this function (see Figure QS-2).

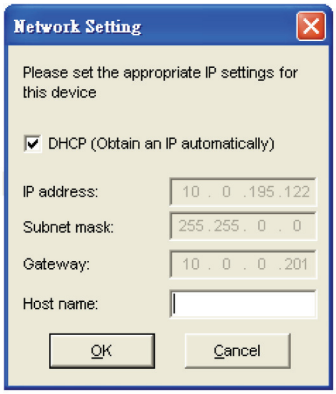


Figure QS-2. SerialManager.exe utility Dialog window.

Assign a Static IP address by: Using Telnet, SerialManager.exe utility, or Web browser.

Using Telnet

1. Telnet to the LES302A using the DOS command "Telnet IP_address." Example: telnet 10.0.50.100
2. The LES302A's network, link mode, and COM ports settings can be configured in the Telnet window.

Using SerialManager.exe Utility

Use SerialManager.exe (included on the product CD) to automatically search for all LES302A units connected to your local area network. Then select the desired LES302A to configure the network setting individually.

Using Web Browser

1. Make sure your PC is located on the same network subnet as LES302A.
2. Open a Web browser, then type in the IP address of the LES302A to be configured. The default user name is "admin" and the default password is null (leave it blank).
3. The LES302A's network, link mode, and COM port settings can be configured in different Web pages.
4. Click on "Save Configuration" to save settings.
5. Click on the "Restart" button to make the change effective if necessary.

QS.5 Pin Assignments

The pin assignments of the DB9 connectors on LES302A are shown in the following table:

Table QS-3. DB9 connector pin assignments.

Pin Number	RS-232 Full-Duplex	2-Wire RS-485 Half-Duplex	RS-422/4-Wire RS-485 Full Duplex
1	DCD	N/A	N/A
2	RXD	N/A (reserved)	TXD+
3	TXD	DATA+	RXD+
4	DTR	N/A	N/A
5	SG (Signal Ground)	SG (Signal Ground)	SG (Signal Ground)
6	DSR	N/A	N/A
7	RTS	DATA-	RXD-
8	CTS	N/A (reserved)	TXD-
9	N/A	N/A	N/A

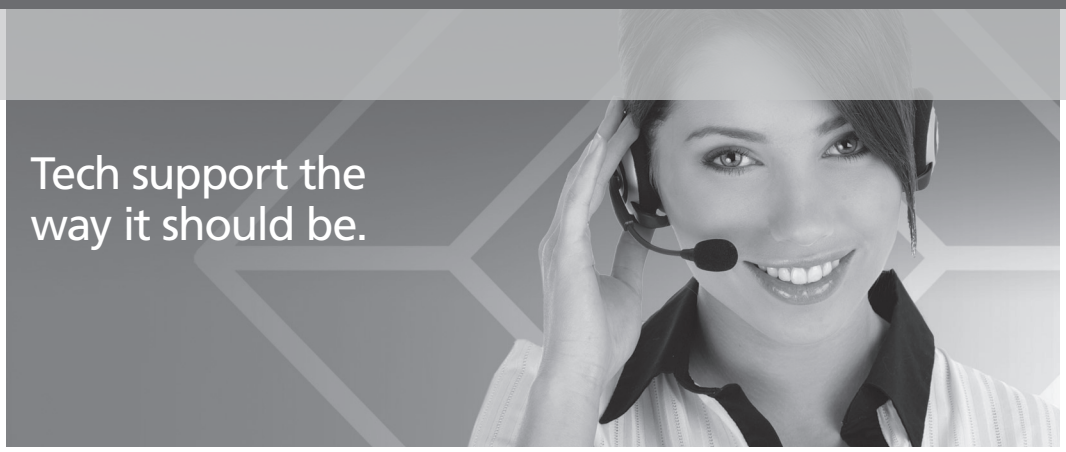
NOTE: Use an LES30X-TB5 adapter for RS-422 and RS-485 applications.

The LES30X-TB5 terminal block pin assignments are shown in Table QS-4.

Table QS-4. Terminal block pin assignments.

Pin Number	RS-422/4-Wire RS-485 Full Duplex	2-Wire RS-485 Half-Duplex
1	T+	Not connected
2	T-	Not connected
3	R+	Data+
4	R-	Data-
5	SG (Signal Ground)	SG (Signal Ground)

Black Box Tech Support: FREE! Live. 24/7.



Great tech support is just 30 seconds away at 724-746-5500 or blackbox.com.

BLACK BOX®
NETWORK SERVICES

About Black Box

Black Box provides an extensive range of networking and infrastructure products. You'll find everything from cabinets and racks and power and surge protection products to media converters and Ethernet switches all supported by free, live 24/7 Tech support available in 30 seconds or less.

© Copyright 2011. Black Box Corporation. All rights reserved. Black Box® and the Double Diamond logo are registered trademarks of BB Technologies, Inc. Any third-party trademarks appearing in this white paper are acknowledged to be the property of their respective owners.

LES302A Quick Start Guide, version 1