

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

### Quick Start Guide

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



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This quick-start guide provides brief descriptions of the LES301A 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](mailto:info@blackbox.com).

### LES301A-KIT and LES301AE-KIT:

- (1) Ethernet Serial Server
- (1) CD-ROM containing configuration utility and a user manual in PDF format
- (2) wallmounting screws
- (1) power adapter (PS012 for LES301A-KIT); (PS012E for LES301AE-KIT)
- (1) 3-pin Phoenix connector
- This printed quick-start guide

### LES301A:

- (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 (LES30X-TB5)

## QS.3 Hardware Setup

### Interfaces

#### NOTES:

1. The RS-232/422/485 interface does not support isolation.
2. Press the LES301A's reset button to reset the settings to the default values.

Figure QS-1 shows the interface.

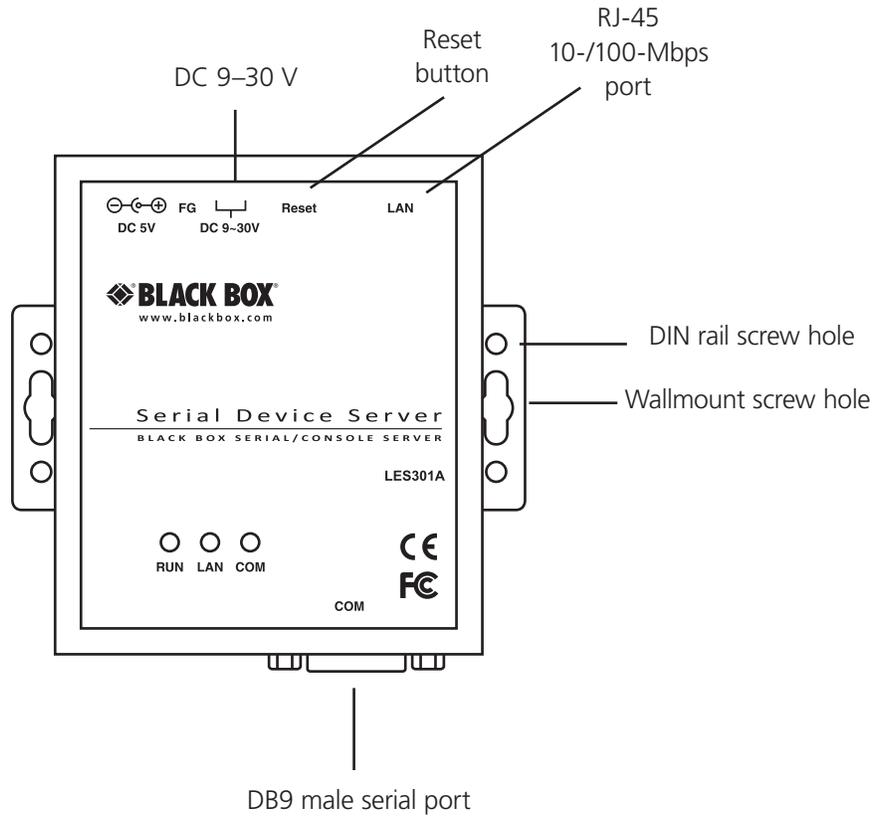


Figure QS-1. LES301A interface.

## Indicators

Table QS-1 describes the indicators on the LES301A.

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

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## Installation Steps (LES301A-KIT and LES301AE-KIT)

1. Connect an LES301A to the included power supply (PS012 or PS012E) or to a 9–30 VDC source.
2. Connect an LES301A 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 LES301A, make sure that the PC is in the same subnet as the LES301A.*

3. Connect the LES301A's serial port to a serial device.

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

4. You can mount the LES301A 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 LES301A supports the DHCP function. By default, the DHCP function on the LES301A is disabled; you can use SerialManager.exe to enable this function (see Figure QS-2).

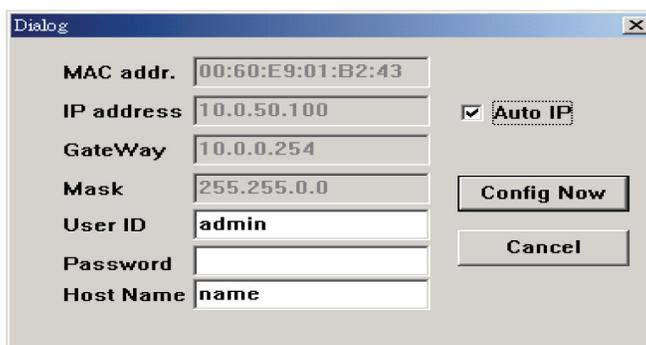


Figure QS-2. SerialManager.exe utility Dialog Window.

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

### Using Telnet

1. Telnet to the LES301A using the DOS command "Telnet IP\_address." Example: telnet 10.0.50.100
2. The LES301A'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 LES301A units connected to your local area network. Then select the desired LES301A to configure the network setting individually.

## Using Web Browser

1. Make sure your PC is located on the same network subnet as LES301A.
2. Open a Web browser, then type in the IP address of the LES301A to be configured. The default user name is "admin" and the default password is null (leave it blank).
3. The LES301A's network, link mode, and COM ports 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 connector on LES301A 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-485 to RS-422 applications.*

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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)
9	N/A	N/A



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