Quick Start Guide

This Quick Start Guide helps you through installation, configuration, and local operation. For more details, refer to the user manual on CD-ROM.
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Follow the steps listed below to get started:

Step 1: Check kit contents.

- LES1508A 8-Port Value-Line Console Server with Cisco® serial pinouts
- This printed quick start guide
- (1) CD-ROM containing a user’s manual in PDF format
- (2) UTP cables
- (1) DB9F-RJ-45 adapter straight-pinned
- (1) DB9F-RJ-45 adapter crossover-pinned
- Universal input 12-VDC power pack

Step 2: Connect the hardware.

- Plug the power pack into the AC power receptacle and connect the DC power cable to the 12 VDC power socket on the Value-Line Console Server.
- Connect the ETH1 port to your network.
- Connect your serial devices to the SERIAL ports. Your Value-Line Console Server has eight RJ-45 serial ports. The RJ-45 serial connectors have Cisco serial pinouts:

<table>
<thead>
<tr>
<th>PIN</th>
<th>SIGNAL</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CTS</td>
<td>Clear To Send</td>
</tr>
<tr>
<td>2</td>
<td>DSR</td>
<td>Data Set Ready</td>
</tr>
<tr>
<td>3</td>
<td>RXD</td>
<td>Receive Data</td>
</tr>
<tr>
<td>4</td>
<td>GND</td>
<td>Signal Ground</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>Signal Ground</td>
</tr>
<tr>
<td>6</td>
<td>TXD</td>
<td>Transmit Data</td>
</tr>
<tr>
<td>7</td>
<td>DTR</td>
<td>Data Terminal Ready</td>
</tr>
<tr>
<td>8</td>
<td>RTS</td>
<td>Request To Send</td>
</tr>
</tbody>
</table>

Figure 1. Cisco serial pinouts.

Step 3: Set up the console server.

The default Value-Line Console Server IP address is 192.168.0.1 (subnet mask 255.255.255.0). With a Web browser on any computer that is connected through the network to the Value-Line Console Server:

- Enter https://192.168.0.1 into the address bar.
NOTE: The network-connected computer must have an IP address in the same network range (192.168.0.xxx) as the Value-Line Console Server. If this is not convenient, you can use the ARP Ping command to set the IP address (refer to the user manual for details). The Value-Line Console Server also has its DHCP client enabled by default, so it will automatically accept any network IP address assigned by any DHCP server on your network—and will then respond at both 192.168.0.1 and its DHCP address.

- Log in using the default system user name: root, and the default password: default. A Welcome screen listing the basic configuration steps is displayed.
- Select “Change the default administration password on the Users page”, enter and confirm a new password for root, and click “Apply.”

![Figure 2. Serial & Network: User & Groups screen.](image)

- To assign your Value-Line Console Server a static IP address or to permanently enable DHCP, select “System: IP” then “Network Interface” and check “DHCP” or “Static” for configuration method.

- By default, only HTTPS and SSH access is enabled to the Value-Line Console Server itself. Use Service Access menu on System: Services to change this, and to change access privileges for connected serial and network devices.
Note: The LES1508-A Value-Line Console Server comes with a second network port (ETH2). This network is inactive by default; however it can be set up to provide network failover/out-of-band access, or to provide a local Management LAN.

Note: Use the Forwarding & Networking menu on System: Firewall to permit remote IP access to devices on Network or Management LAN.

Step 4: Configure serial and network devices.

- Select “Serial & Network: Serial Port,” which will display the label, mode, and protocol options currently set for the serial port. By default, all the serial ports, except Port 1, are set to console server mode (see the user’s manual for other modes).

- To configure a serial port, click “Edit.”
- Configure the common settings (baud rate, parity, data bits, stop bits, and flow control) to match those of the serial device being controlled.
Select the console server protocols (Telnet, SSH, TCP, and RFC2217) that will be used for the data connection to the serial port.

NOTE: Port 1 is configured by default in Local Console (modem) mode. Use the crossover-pinned DB9F-RJ-45 adapter and UTP cable to connect to a terminal emulator application on your PC’s serial COM port. If you plan to use OoB dial-in access, connect this serial port to an external modem as covered in detail in the user manual on the CD-ROM.

Click “Apply.”

To enable access through the Value-Line Console Server to a locally networked computer (referred to as a host), select “Serial & Network: Network Hosts” and click “Add Host.”

Enter the IP address/DNS name of the host.

Edit the permitted services used for accessing this host, for example, HTTPS (TCP port 443), VNC (TCP port 5900), or add custom TCP or UDP port numbers—only the services specified here are tunneled through to the host. All other services are blocked.

Specify the level of information to be logged and monitored for each host access.

Click “Apply.”

Step 5: Add new users.

NOTE: We recommend that you set up a new Administrator user (in the admin group with full access privileges) and log in as this new user for all ongoing administration functions (rather than continuing as root).
For each new user, select “Serial & Network: Users & Groups” and click “Add User.”

Enter a username and enter and confirm a password.

Select one or multiple group memberships for the user. To grant limited access to the management console, check the “users” group. To grant full access to the management console, check the “admin” group. By default, the user is granted no management console access.

Nominate the dial-in options for the user and the accessible hosts and accessible ports the user is allowed to access.

Click “Apply.”

Note: The Value-Line Console Server comes with a default certificate for initial configuration purposes only. You will need to direct your browser to (temporarily) proceed and accept this untrusted certificate. It is recommended as soon as possible thereafter you generate and install a new trusted certificate. To produce the unique CSR and later upload the newly issued certificate, select System: SSL Certificates.
Step 7: Advanced configurations.

The Value-Line Console Server offers many more advanced functions, including:

- The Alerts & Logging: Auto Response facility monitors serial ports, hosts, user logins, UPSs (uninterruptible power supplies), and RPCs (remote power controllers such as PDUs and IPMI devices). A broad selection of trigger events (such as data patterns, temperature, or battery levels) can be specified. When triggered, a warning e-mail, SMS, Nagios®, or SNMP alert can be sent to a nominated destination or a user defined local response sequence can be initiated (such as power cycling a device).

- Extensive management of UPSs and RPCs using Open Source NUT and Powerman tools. The Manage: Power facility enables both administrators and regular users to monitor and control attached PDU power strips, and servers with embedded IPMI BMCs.

- Historical logs of all communications with serial and network-attached devices, system activity, UPS and PDU power status, environmental status, etc. The level of logging is set as ports and devices are configured. Alerts & Logging: Port Log allows this history to be saved locally or remotely. Logs can be viewed from the Status and Manage menus.

- Other advanced features, such as serial port cascading, remote authentication, trusted networks, secure tunneling, Nagios distributed monitoring, and the command line interface are covered in detail in the user manual on the CD-ROM.

NOTE: On the CD-ROM you will find the SDT Connector software tool. Once you have configured the console server, this tool provides you with secure, point-and-click access to the console server and all the attached devices. Refer to the provided SDT Connector Quick Start for details on setting up remote management of the console server and connected devices.

NOTE: On the CD-ROM, you will also find PortShare software, which enables applications on your Windows® or Linux® PC/server/virtual server to control serial port devices attached to a Value-Line Console Server. To use PortShare, configure the Value-Line Console Server serial port in console server mode and specify the appropriate protocol (either RFC2117 or RAW) to be used (see the user's manual for details).
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.

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