

QUICK START GUIDE

LES1604A, LES1604A-V, LES1604A-T, LES1604A-R, LES1608A

CONSOLE SERVERS

24/7 TECHNICAL SUPPORT AT 877.877.2269 OR VISIT BLACKBOX.COM



STEP 1 - Check Kit Contents

PACKAGE INCLUDES

Your package should include the following items. If anything is missing or damaged, contact Black Box Technical Support at 877-877-2269 or info@blackbox.com.

- **(1) LES1604A, LES1604A-V, LES1604A-T, LES1604A-R OR LES1608A CONSOLE SERVER**
- **(1) DB9F-TO-RJ-45 CROSSOVER SERIAL ADAPTER**
- **(1) 12-VDC SWITCHING DC POWER SUPPLY WITH UK, EU, AU ADAPTERS**
- **(1) RACKMOUNT KIT (1 TAB, 1 EAR, 2 RACK SCREWS, 2 NUTS, 4 SCREWS)**
- **(4) ADHESIVE-BACKED RUBBER FEET**
- **(1) DIGITAL I/O CONVERTER (TERMINAL BLOCK)**

DEFAULT USERNAME AND PASSWORD

- **DEFAULT USERNAME: ROOT**
- **DEFAULT PASSWORD: DEFAULT**

DEFAULT IP ADDRESS/SUBNET MASK

- **DEFAULT IP ADDRESS: 192.168.0.1/24**

OPTIONAL: DOWNLOAD USER MANUAL

For product specifications and regulatory information, refer to the User Manual. You can download this document from our web site.

1. Go to www.blackbox.com
2. Enter the part number (LES1604A, LES1604A-V, LES1604A-T, LES1604A-R or LES1608A) in the search box.
3. Click on the product in the "Product Results" page.
4. Click on the "Support" tab on the product page, and select the document you wish to download.

If you have any trouble accessing the Black Box site to download the manual, you can contact our Technical Support at 877-877-2269 or info@blackbox.com



STEP 2 - Assemble the Hardware

1. If free-standing: attach the adhesive-backed rubber feet to the Console Server's base.
2. If rackmounted: attach the rackmount kit to the side of the Console Server that will be connected to the rack.
3. Connect the Console Server to your primary network via either NET1(C) or NET1(S). NET1(C) is an RJ-45 port. NET1(S) accommodates an SFP (Small Form-factor Pluggable transceiver) module for connecting to either copper or fiber.
4. For Out-of-Band (OOB) management: connect a NET2 RJ-45 port to a management network.
5. Connect other devices to the Console Server's free serial ports, USB ports and NET2 Ethernet ports.
6. Plug in the terminal block and and Digital Input/Output (DIO) devices.
7. Plug in the 12-VDC power supply and turn on power to the Console Server.



STEP 3 - Connect to the Console Server

The Console Server is addressable at either of two IP addresses:

- Its built-in address of 192.168.0.1/24.
 - The address its on-by-default DHCP client accepts from a DHCP server on your network.
1. Using a browser on the same network as the Console Server's NET1 ports with an IP address in one of the Console Server's network ranges (i.e., 192.168.0.x/24 or the range used by your DHCP server): enter `https://192.168.0.1/` or `https://[DHCP-supplied address]/` in the address bar and press Enter.

NOTE: the Console Server has a self-signed SSL certificate. "Untrusted connection" errors will be present.

2. Click through these errors to load the Console Server's login page.

3. Enter the default system username and password:

• **USERNAME: ROOT**

• **PASSWORD: DEFAULT**

and click Submit or press Enter.

4. The Welcome page loads.

NOTE: the Welcome page logs you out after 20 inactive minutes. The current page stays loaded, however, and clicking any UI element loads the login page. Log back in and the requested page loads.

Configuration and management options present in expanded-by-default menus down the left-hand edge. The top-level menus are Manage, Status, Serial & Network, Alerts & Logging and System.

The rest of the page lists configuration tasks required to turn the Console Server into a usable unit. Some of these tasks will be marked as done because of the Console Server's factory settings. The following procedures document initial configuration using the menus rather than the task list.



STEP 4 - Set the Root User's Password

Set a strong, high-entropy password for the root user.

1. Click Serial & Network > Users & Groups.
2. Click Edit for the Root User.
3. Enter a strong, high-entropy passcode in the Password field.
4. Re-enter the passcode in the Confirm field.
5. Click Apply.

The screenshot shows a web-based configuration interface for 'Serial & Network: Users & Groups'. On the left is a navigation menu with categories like Serial & Network, Alerts & Logging, System, Status, and Manage. The main content area is titled 'Edit an Existing User' and is for the 'root' user. It contains the following fields and options:

- Username:** root (A unique name for the user.)
- Description:** Root User (A brief description of the user's role.)
- Password:** [Redacted] (The user's authentication secret. Note: A password may not be required if remote authentication is being used.)
- Confirm:** [Redacted] (Re-enter the user's password for confirmation.)
- SSH Authorized Keys:** [Redacted] (Paste the public keys of authorized public/private keypairs to allow pass-key authentication for this user. This is more secure than password based authentication.)
- Disable Password Authentication:** (Check to only allow public key authentication for the user when using SSH.)
- Save Password across firmware erases:** (Check to save the password hash in the non-volatile configuration partition, which does not get erased on firmware reset. Note: If the password is lost, the device will need to be firmware recovered.)

Figure 1. Set root user password



STEP 5- Set NET1's Network Configuration Method

1. Click System > IP.
2. Click Network Interface if it is not the front-most tab.
3. For Configuration Method, click either the DHCP or Static radio button.
4. If Static, enter an IP Address and Subnet Mask for the NET1 interface.
5. Click Apply.

The screenshot shows the 'System: IP' configuration page. The 'Network Interface' tab is selected. Under 'IP Settings: Network', the 'Configuration Method' is set to 'Static'. The 'IP Address' field is empty, with a tooltip that says 'A statically assigned IP address.' The 'Subnet Mask' field is also empty, with a tooltip that says 'A statically assigned network mask.' The 'Gateway' field is empty, with a tooltip that says 'Default gateway for the unit. Please only set this on one interface.' The 'Primary DNS' and 'Secondary DNS' fields are empty, with tooltips that say 'A statically assigned primary name server.' and 'A statically assigned secondary name server.' respectively. The 'Media' dropdown menu is open, showing options: 'Auto', '100baseTx-FD', '100baseTx-HD', '100baseT-FD', and '100baseT-HD'. The 'DHCP Server' field is empty, with a tooltip that says 'Server for the interface.' The 'IP Alias' field is empty.

Figure 2. Set NET1 configuration



STEP 6 - Set NET2's Network Configuration Method

The four Ethernet ports that make up NET2 are set to inactive by default. To activate them:

1. Click System > IP.
2. Click Management LAN Interface to make it the front-most tab.
3. Click the Deactivate this network interface checkbox to de-select this option and activate NET2.
4. For Configuration Method, click either the DHCP or Static radio button.
5. If Static, enter an IP Address and Subnet Mask for the NET2 interface. For OOB, set these for your management network. For IP-passthrough, set these to match an unused private IP range.

6. Click Apply.

NOTE: the Console Server's firewall determines which protocols and services can access which ports and devices. HTTPS and SSH are enabled to the Console Server itself by default. To change access settings for the Console Server, and for connected serial ports, click System > Services, click the Service Access tab and adjust as required.



STEP 7 - Configure Managed Devices

1. Click Serial & Network > Serial Port. The Console Server's serial ports and their labels, modes and protocols display. To configure a port:
2. Click Edit.
3. Set the Common Settings for Port x to match the device connected to serial port x.
4. To enable remote access to the device, check the Console Server Mode radio button in Console Server Settings and click the checkboxes for allowed protocols (e.g., Telnet, SSH and Web Terminal).
5. Click Apply.

NOTE: Configure user access policies for connecting to such ports in Serial & Network > Users & Groups. An AAA server can configure them remotely. The Console Server User Manual has details.



NOTES



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