

How to Use This Guide

Use this guide to quickly set up your Enterasys® A4 switch. Enterasys Networks recommends that you refer to the *Enterasys A4 Hardware Installation Guide* for specifications and safety warnings.

The latest A4 documentation is located at:
<https://extranet.enterasys.com/downloads/>

Hardware Components

The following figures show the several types of front panel port and rear panel connections on your A4 switch.

Figure 1 A4 Switch Front Panels

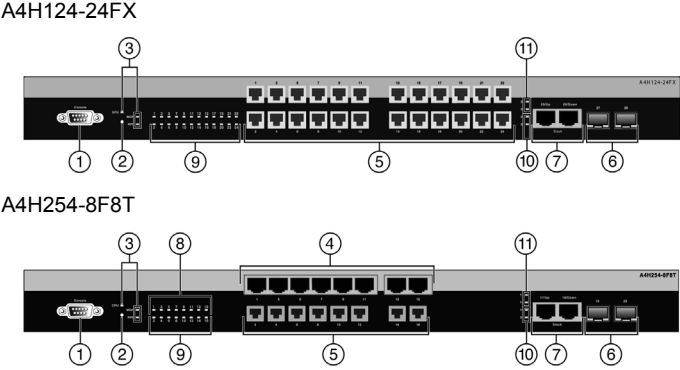
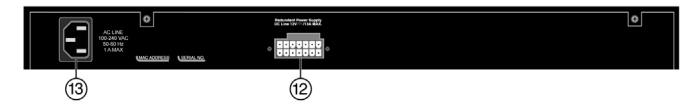


Figure 2 A4 Switch Back Panel



Key			
1	Console port	8	RJ45 port status LEDs
2	Password reset button	9	MT-RJ port status LEDs
3	Switch status LEDs	10	SFP port status LEDs
4	RJ45 10/100 Mbps ports	11	RJ45 stack port status LEDs
5	MT-RJ fiber optic ports	12	Redundant power supply (RPS) connector
6	SFP slots	13	AC power input connector
7	RJ45 10/100/1000 stack ports		

Handling the Switch

 **Caution:** The switch can be damaged by electrostatic discharge.

To prevent electrostatic damage, attach an electrostatic discharge (ESD) wrist strap to your wrist before handling the switch.

Unpack the switch as follows:

1. Remove the packing material protecting the switch.
2. Remove the tape seal on the non-conductive bag to remove the switch.
3. Perform a visual inspection of the switch for any signs of physical damage. Contact Enterasys Networks if there are any signs of damage. See [“Getting Help”](#) for more information on contacting Enterasys Networks.

Stacking Switches

Up to eight A4 switches can be stacked together and connected via their front-panel RJ45 connectors using standard Category 5 or better UTP cable, which allow the entire stack to operate with a single IP address.

 **Note:** You can stack an A4 switch only with other A4 switches.

For complete information about stacking, refer to the *Enterasys A4 Hardware Installation Guide*.

Connecting Power to the Switch

 **Electrical Hazard:** Only qualified personnel should perform installation procedures.

You can connect to a single, primary source of power, or to two sources of power for redundancy. The example used here describes connecting to two power sources.

The following redundant power supply is available to be purchased from Enterasys Networks for connection to an A4 switch:

- STK-RPS-150PS, a 156 watt DC power supply capable of providing power to a fully-loaded A4 switch

To power-up your A4 switch:

1. Attach the power cord from your redundant power supply into the A4 switch's redundant power receptacle.
2. Attach the AC power cord to the A4 switch's AC power receptacle.
3. Plug the redundant power supply and the A4 switch AC power cords into separate dedicated, grounded AC outlets.
4. Once power is connected, verify that the CPU (system) LED turns amber until the A4 switch finishes its initialization. Refer to [Table 1](#) below for status LED information.

If the initialization process is successful, the CPU LED turns green. If the CPU LED does not turn green, refer to the *Enterasys A4 Hardware Installation Guide* for troubleshooting information.

Table 1 Switch Status LEDs

LED	Color	State
CPU	Off	Power disconnected
	Solid red	Boot-up failed
	Blinking red	Diagnostics have failed
	Solid amber	Diagnostics are running
	Blinking amber	Code image is being downloaded
	Solid green	System is fully functional
MGR	Blinking green	Boot-up in process
	Off	Switch is operating as member of stack
	Solid green	Switch is operating as manager of stack
RPS	Off	RPS LED remains off whether the RPS is attached or not. The off state is not an indication that the RPS is not functioning properly.
	Solid amber	The switch internal power supply failed and the RPS is providing the proper power to the switch.

Completing Switch Setup and Downloading the Latest Firmware

Once you have connected power to the A4 switch and verified LED activity, you can complete the setup process as follows. Refer to the *Enterasys A4 Hardware Installation Guide* for more information.

1. Determine the latest A4 firmware version by visiting the Enterasys Networks download site at: <https://extranet.enterasys.com/downloads/>
2. Connect the switch to the network.
3. Connect a management station to the console port.
4. Verify that the network devices connected to the switch ports are powered on, and that each link/activity LED is on (solid green or blinking green).

5. At the device connected to the console port, perform the following:
 - a. Enter **admin** for Username.
 - b. At the Password prompt, press **ENTER** (RETURN).
 - c. At the command prompt, determine if the latest firmware image is loaded on the switch by entering this command:
show version
 - d. If the output (under **FW Version**) displays an older version number than that determined in step 1, download and activate the new version as directed on the download website. (Alternatively, you can use the CLI commands listed in [Table 2](#).)

Basic Setup Commands

[Table 2](#) lists CLI commands that are required for setting up the A4 switch with the latest firmware. [Table 3](#) lists additional configuration commands for your A4 switch. For the complete list of CLI commands, see the *Enterasys A4 CLI Reference*.

Table 2 Required CLI Setup Commands

Step	Task	CLI commands
1	Set a new password	set password [username]
2	Set the switch IP address	set ip address ip-address [mask ip-mask] [gateway ip-gateway]
3	Download, activate, and verify new firmware on the switch using TFTP copy	copy tftp://tftp_server_ip_address/ filename system:image set boot system filename show version
Note: You can reboot the system immediately with the set boot system command, or reboot later with the reset command.		

Table 3 Optional CLI Setup Commands

Task	CLI commands
Save the active configuration	save config
Enable or disable SSH	set ssh enable disable
Enable or disable Telnet	set telnet {enable disable} [inbound outbound all]
Enable or disable HTTP management (WebView)	set webview {enable disable}
Enable or disable SNMP port link traps	set port trap port-string {enable disable}
Set the per port broadcast limit	set port broadcast port-string threshold-value
Configure a VLAN	set vlan create vlan-id set port vlan port-string vlan-id modify-egress
Set a Syslog server IP and severity	set logging server index ip-addr ip-addr severity severity state enable
Configure and enable a RADIUS server	set radius server index ip-addr port [secret-value] {realm {management-access any network-access}} set radius enable

Specifications

For a complete list of specifications, see the *Enterasys A4 Hardware Installation Guide*.

Interfaces

Table 4 A4 Interface Descriptions

A4H124-24FX	• 24 100BASE-FX compliant MT-RJ ports • Two 10/100/1000BASE-TX RJ45 ports for stacking • Two Gigabit Ethernet SFP ports
A4H254-8F8T	• Eight 10/100BASE-T RJ45 ports • Eight 100BASE-FX compliant MT-RJ ports • Two 10/100/1000BASE-TX RJ45 ports for stacking • Two Gigabit Ethernet SFP ports

Switch Dimensions

Size: 44.1 W x 4.4 H x 36.85 D cm
17.4 W x 1.7 H x 14.5 D in

Power Consumption

Input Voltage: 100 to 240VAC, 50-60 Hz, 2A max

Temperature and Humidity

Operating temperature: 0°C to 50°C

Storage temperature: -40°C to +70°C

Operating relative humidity: 5% to 95%

Getting Help

World Wide Web	www.enterasys.com/support/
Phone	1-800-872-8440 (toll-free in U.S. and Canada) or 1-978-684-1888 To find the Enterasys Networks Support toll-free number in your country: www.enterasys.com/support/
Internet mail	support@enterasys.com To expedite your message, type [Switching] in the subject field of your message.
Latest image and release notes	https://extranet.enterasys.com/downloads/

Related Documents

The latest A4 documentation is located online at:

<https://extranet.enterasys.com/downloads/>

Warranty

Warranty information for the A4 switch is located online at:

www.enterasys.com/support/warranty.aspx

www.enterasys.com/company/literature/enterasys-lw-ds.pdf

Notice

Enterasys Networks reserves the right to make changes in specifications and other information contained in this document and its web site without prior notice. The reader should in all cases consult Enterasys Networks to determine whether any such changes have been made.

The hardware, firmware, or software described in this document is subject to change without notice.

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All other product names mentioned in this manual may be trademarks or registered trademarks of their respective companies.

Regulatory Compliance Information

Federal Communications Commission (FCC) Notice

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment uses, generates, and can radiate radio frequency energy and if not installed in accordance with the operator’s manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference in which case the user will be required to correct the interference at his own expense.

WARNING: Changes or modifications made to this device which are not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

Industry Canada Notice

This digital apparatus does not exceed the class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n’émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la class A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

Class A ITE Notice

WARNING: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Clase A. Aviso de ITE

ADVERTENCIA: Este es un producto de Clase A. En un ambiente doméstico este producto puede causar interferencia de radio en cuyo caso puede ser requerido tomar medidas adecuadas.

Klasse A ITE Anmerkung

WARNHINWEIS: Dieses Produkt zählt zur Klasse A (Industriebereich). In Wohnbereichen kann es hierdurch zu Funkstörungen kommen, daher sollten angemessene Vorkehrungen zum Schutz getroffen werden.

VCCI Notice

This is a class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may arise. When such trouble occurs, the user may be required to take corrective actions.

この装置は、情報処理装置等電波障害自主規制協議会（V C C I）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

BSMI EMC Statement — Taiwan

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

警告使用者：
這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

AS/NZS CISPR 22



Hazardous Substances

This product complies with the requirements of European Directive, 2002/95/EC, Restriction of Hazardous Substances (RoHS) in Electrical and Electronic Equipment.

European Waste Electrical and Electronic Equipment (WEEE) Notice



In accordance with Directive 2002/96/EC of the European Parliament on waste electrical and electronic equipment (WEEE):

- The symbol above indicates that separate collection of electrical and electronic equipment is required and that this product was placed on the European market after August 13, 2005, the date of enforcement for Directive 2002/96/EC.
- When this product has reached the end of its serviceable life, it cannot be disposed of as unsorted municipal waste. It must be collected and treated separately.
- It has been determined by the European Parliament that there are potential negative effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment.
- It is the users’ responsibility to utilize the available collection system to ensure WEEE is properly treated.

For information about the available collection system, please go to www.enterasys.com/services/support/ or contact Enterasys Customer Support at 353 61 705586 (Ireland).

产品说明书附件
Supplement to Product Instructions

部件名称 (Parts)	有毒有害物质或元素 (Hazardous Substance)					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr ⁶⁺)	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
金属部件 (Metal Parts)	×	○	○	○	○	○
电路模块 (Circuit Modules)	×	○	○	○	○	○
电缆及电缆组件 (Cables & Cable Assemblies)	×	○	○	○	○	○
塑料和聚合物部件 (Plastic and Polymeric parts)	○	○	○	○	○	○
电路开关 (Circuit Breakers)	○	○	○	○	○	○
○： 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。 Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is below the relevant threshold of the SJ/T 11363-2006 standard. ×： 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006 标准规定的限量要求。 Indicates that the concentration of the hazardous substance of at least one of all homogeneous materials in the parts is above the relevant threshold of the SJ/T 11363-2006 standard. 对销售之日的所售产品, 本表显示。 凯创供应链的电子产品信息产品可能包含这些物质。注意: 在所售产品中可能会也可能不会含有所有列出的部件。 This table shows where these substances may be found in the supply chain of Enterasys' electronic information products, as of the date of sale of the enclosed product. Note that some of the component types listed above may or may not be a part of the enclosed product.						

除非另外特别的标注, 此标志为针对所涉及产品的环保使用期标志。某些零部件会有一个不同的环保使用期(例如, 电池单元模块)贴在其产品上。
此环保使用期限只适用于产品是在产品手册中所规定的条件下工作。
The Environmentally Friendly Use Period (EFUP) for all enclosed products and their parts are per the symbol shown here, unless otherwise marked. Certain parts may have a different EFUP (for example, battery modules) and so are marked to reflect such. The Environmentally Friendly Use Period is valid only when the product is operated under the conditions defined in the product manual.



Safety Information
Class 1 Laser Transceivers

The single mode interface modules use Class 1 laser transceivers. Read the following safety information before installing or operating these modules.

The Class 1 laser transceivers use an optical feedback loop to maintain Class 1 operation limits. This control loop eliminates the need for maintenance checks or adjustments. The output is factory set, and does not allow any user adjustment. Class 1 Laser transceivers comply with the following safety standards:

- 21 CFR 1040.10 and 1040.11 U.S. Department of Health and Human Services (FDA).
- IEC Publication 825 (International Electrotechnical Commission).
- CENELEC EN 60825 (European Committee for Electrotechnical Standardization).

When operating within their performance limitations, laser transceiver output meets the Class 1 accessible emission limit of all three standards. Class 1 levels of laser radiation are not considered hazardous.

When the connector is in place, all laser radiation remains within the fiber. The maximum amount of radiant power exiting the fiber (under normal conditions) is -12.6 dBm or 55 x 10⁻⁶ watts.

Removing the optical connector from the transceiver allows laser radiation to emit directly from the optical port. The maximum radiance from the optical port (under worst case conditions) is 0.8 W cm⁻² or 8 x 10³ W m² sr-1.

Do not use optical instruments to view the laser output. The use of optical instruments to view laser output increases eye hazard. When viewing the output optical port, power must be removed from the network adapter.

Safety Compliance

Warning: Fiber Optic Port Safety



When using a fiber optic media expansion module, never look at the transmit laser while it is powered on. Also, never look directly at the fiber TX port and fiber cable ends when they are powered on.

Avertissement: Ports pour fibres optiques - sécurité sur le plan optique



Ne regardez jamais le laser tant qu’il est sous tension. Ne regardez jamais directement le port TX (Transmission) à fibres optiques et les embouts de câbles à fibres optiques tant qu’ils sont sous tension.

Warnhinweis: Faseroptikanschlüsse - Optische Sicherheit



Niemals ein Übertragungslaser betrachten, während dieses eingeschaltet ist. Niemals direkt auf den Faser-TX-Anschluß und auf die Faserkabelenden schauen, während diese eingeschaltet sind.

Declaration of Conformity

Application of Council Directive(s): **2004/108/EC**
2006/95/EC

Manufacturer’s Name: Enterasys Networks, Inc.
Manufacturer’s Address: **50 Minuteman Road**
Andover, MA 01810
USA

European Representative Address: Enterasys Networks Ltd.
Nexus House, Newbury
Business Park
London Road, Newbury
Berkshire RG14 2PZ, England

Conformance to Directive(s)/Product Standards: **EC Directive 2004/108/EC**
EN 55022:2006
EN 55024:1998
EN 61000-3-2:2006
EN 61000-3-3:1995
EC Directive 2006/95/EC
EN 60950-1:2006
EN 60825-1:2007
EN 60825-2:2004

Equipment Type/Environment: **Information Technology Equipment, for use in a Commercial or Light Industrial Environment.**

Enterasys Networks, Inc. declares that the equipment packaged with this notice conforms to the above directives.

