

# LUXUL

*Simply Connected*

## Quick Install Guide

### AMS-4424P

### AV Series 26-Port Gigabit Stackable PoE+ L2/L3 Managed Switch



Use the AMS-4424P to:

- ▶ Optimize Streaming Media and HDMI Over IP Performance
- ▶ Offer Seamless Network Expansion Up To 384 Ports
- ▶ Connect up to 24 PoE-Enabled Devices (Max Output 250 Watts)
- ▶ Enhance Performance with Layer 2 and Layer 3 Functionality

## Quick Install Guide

Model Number: AMS-4424P

AV Series 26-Port Gigabit Stackable PoE+ L2/L3 Managed Switch

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## DOCUMENT CONVENTIONS

These graphical alerts are used in this document to indicate notable situations:



**NOTE:** Tips, hints, or special requirements that you should take note of.



**CAUTION:** Care is required. Disregarding a caution can result in data loss or equipment malfunction.



**WARNING!** Indicates a condition or procedure that could result in personal injury or equipment damage.

## FCC COMPLIANCE

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.

## CONTACT LUXUL

### Sales

P: 801-822-5450

E: sales@luxul.com

### Technical Support

P: 801-822-5450

E: support@luxul.com

## PACKAGE CONTENTS

The following items are included in the box:

- ▶ 26-Port Gigabit Stackable PoE+ L2/L3 Managed Switch
- ▶ Power Cord
- ▶ Rack Mount Kit
- ▶ Four rubber pads
- ▶ Quick Installation Guide

If any of the listed items are missing or damaged, please contact the Distributor from whom you purchased for return/replacement.

## HARDWARE DESCRIPTION

### Front Panel

The front panel of the AMS-4424P Switch includes dual colored Link/Activity LEDs that can be switched from green to blue. In addition, the front panel has Link/Activity and PoE mode indicators as well as System and Power LEDs.



*AMS-4424P Front Panel View*

### Rear Panel

The rear panel of the AMS-4424P Switch includes 1 console port, 24 Gigabit RJ45 Ports and 2 optical expansion ports that accommodate both 1 Gigabit SFP and 10 Gigabit SFP+ modules (for stacking), as well as LED indicators for each port. Each Gigabit port has one Link/Activity/PoE LED. A push button switch with an LED indicator switches the display between Link/Activity and PoE.



*AMS-4424P Rear Panel View*

## LED Indicators

Each port has one Link/Activity/PoE LED. A push button switch with LED indicator switches the display between Link/Activity and PoE.



### LED Indicators

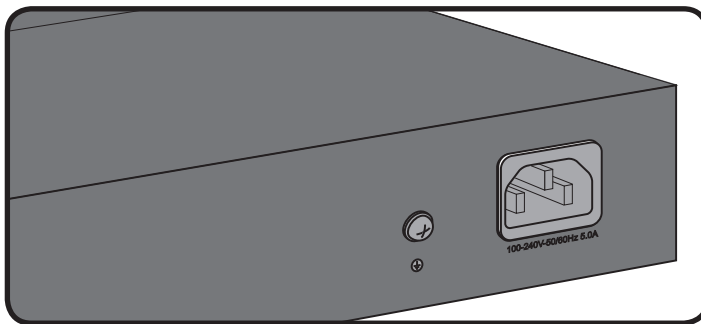
LED indicators show the working status of the switch. The following table describes the LED functionality:

Indicator Name	Description	
System	Green Flashing	Indicates that the AMS-4424P is running normally.
	Green On	Booting up or indicates a malfunction. Contact technical support.
	Off	Indicates that the AMS-4424P is in startup and initialization process or is not on.
Power	Green On	This LED indicates that there is power to the AMS-4424P
	Off	If LED is off, check the power connection on the back of the unit.
Speed/PoE Button	Speed On	Port LED's display Speed status
	PoE On	Port LED's display PoE status
Speed	Green	The Link/Activity LED of the port will be on if there is a 1000Mbps device connected to the port.
	Yellow	The Link/Activity LED of the port will be on if there is a 10/100Mbps device connected to the port.
	Flashing	The Link/Activity LED flashes when a port is receiving or transmitting data.
	Off	There is nothing connected to the port.

PoE	On	Connected device is receiving PoE Power.
	Off	Connected device is not receiving PoE power.
	Green	Power being supplied within PD Specified limits
	Yellow	Power exceeds PD Specified limits
	Yellow Flashing	PoE Fault( i.e. problem with Ethernet cable or PoE device).

At startup, port LEDs will flash for 1 second as a self test.

## Rear Panel



AMS-4424P Rear Panel View

**Power Input:** Please use the included power cable

## PREPARING FOR INSTALLATION

### System Requirements

- ▶ **Ethernet Cables** to connect the AMS-4424P to Ethernet enabled devices
- ▶ **Computer** equipped with a Web browser. Supported Web browser versions include Microsoft I.E. 9.0, Firefox 3.6, Safari 5.0, Chrome 6.0, Opera 10.6 and up. The Web browser is used to configure the AMS-4424P.
- ▶ **Power** must be AC 100-240V~ 3.6A 50/60Hz.

## Before Connecting to the Network

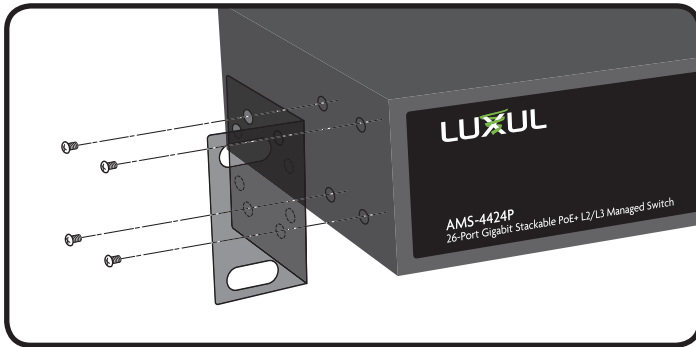
The AMS-4424P can be rack-mounted or used as a desktop switch. Before connecting to the network, please be aware of the following requirements:

- ▶ Install the AMS-4424P in a stable/safe place to avoid any possible damage
- ▶ Make sure there is space around the AMS-4424P for adequate ventilation and proper heat dissipation. It is recommended to have at least 4-6 inches around all sides.
- ▶ Do not place heavy articles on the AMS-4424P.
- ▶ Power outlets should be within 5 feet of the AMS-4424P.
- ▶ Verify the ground connection of the outlet is functioning properly.
- ▶ Check the power cord to confirm a secure connection.
- ▶ Avoid placement in direct sunlight.
- ▶ When installing the AMS-4424P on a flat surface, attach the rubber feet to the bottom of the device to avoid scratching the surface.

## AMS-4424P INSTALLATION

### Installing the AMS-4424P in a Rack

The AMS-4424P can easily be installed in a standard 19" rack. The AMS-4424P includes two mounting ears for installing and stabilizing the switch. When attaching the mounting ears and installing the switch within a rack, please refer to the following illustration:

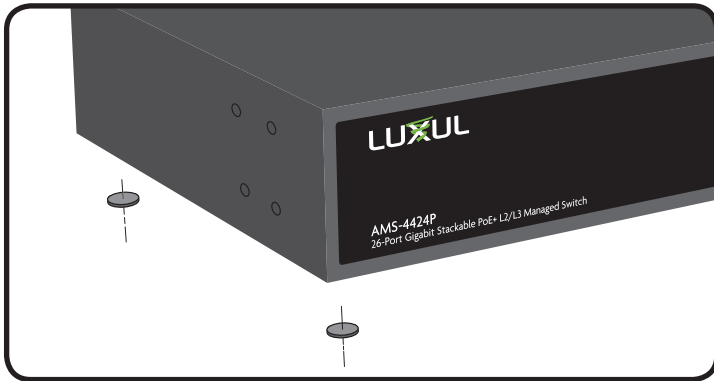


### *Rack-Mounting the AMS-4424P*

- ▶ Using the included screws, attach the mounting ears to each side of the switch.
- ▶ Mount the switch in the rack with the LEDs facing outwards. Be sure the switch is level and properly secured within the rack.

### **Desktop Setup**

For use as a desktop device, position and apply the included rubber feet to the bottom of the AMS-4424P.



### Attaching the Rubber Feet to the AMS-4424P

#### Network Connections:

The AMS-4424P supports 10/100/1000 Mbps Ethernet; 10/100 Mbps half/full-duplex mode and 1000 Mbps full-duplex mode. All RJ-45 ports support Auto MDI/MDIX and can be used as ordinary ports or as Uplink ports. Any RJ-45 port can be used to connect the AMS-4424P to an Ethernet enabled device (including servers, routers, and other switches) without a crossover cable.

For the RJ-45 ports, Category-5, super Category-5 or Category-6 unshielded twisted pair (CAT5/CAT5e/CAT6 UTP) should be used.



**NOTE:** For best results, it is recommended that Category-6 shielded twisted pair be used to ensure stable data transmission at 1000 Mbps.

The AMS-4424P also offers 2 optical expansion ports that accommodate both 1 Gigabit SFP and 10 Gigabit SFP+ modules (for stacking). Please see below for recommended SFP module and cable options.

#### Stacking the AMS-4424P

The AMS-4424P support stacking of up to 16 Switches (total of 384 Ports) enabling you to Manage the stacked Switches in one easy to use interface. Stacking in the AMS-4424P is Enabled by default and requires an SFP+ (10Gbps) link to be connected between Switches. When connecting more than two Switches there will be a Master Switch that feeds the other Switches. Stacked Switches automatically connect to the IP Address of the Master, facilitating Seamless management of the entire Stack





## SFP Cable

Due to the typical mounting proximity of Stacked Switches, Luxul recommends using an SFP+ Copper Twinax Cable. SFP+ Fiber adapters can also be used and Luxul recommends Multimode Fiber combined with Multimode capable Fiber SFP+ adapters for Stacking Switches at distances greater than those supported by Twinax Cables. Single Mode SFP+ Adapters can be used but must be selected to conform to the Single Mode Fiber Lines used for interlink and due to the number of possible options, Luxul has no standard recommendation. We recommend contacting the Fiber Manufacturer for specifications to obtain the correct Single Mode adapters required. The Switch does support SFP Multi Mode and SFP Single Mode adapters but will not take advantage of the Stacking function when these modules are used.

## Default IP Address

The AMS-4424P default IP address is 192.168.0.4. This address can be changed. However, for hassle free installation of other plug and play Luxul devices, it is recommended that the default IP value be maintained.

## Login

The AMS-4424P is not equipped with internal DHCP server. However, if your switch is connected to a Luxul Router, configuration will be automatic. Otherwise, the IP address of the computer for login and configuration will need to be manually configured. The table below lists the default parameters of the AMS-4424P.

Parameter:	Default Value
Default IP address:	192.168.0.4
Default user name:	admin
Default password:	admin

**Login to the switch with the following steps:**

1. Plug an Ethernet cable into any of the ports of the switch
2. Plug the other end into the Ethernet port of your computer
3. Power on the switch
4. Check to see that the IP address of the computer is within this network segment: 192.168.0.xxx (“xxx” ranges 1-254). For example, 192.168.0.100.
5. Open the Web browser, and enter 192.168.0.4. The login window appears.
6. Enter the user name and password (default user name and default password are both set as “admin”), and then click “OK” to login to the switch configuration window.

**ADVANCED SETTINGS**

For login and advanced settings information go to [luxul.com](http://luxul.com)

**WARNINGS AND SAFETY INFORMATION**

- ▶ Verify that the electrical circuits have appropriate grounding and overload protection.
- ▶ Attach only approved power cords to the device.
- ▶ Verify there is adequate ventilation around the device, and that ambient temperatures meet equipment operation specifications.
- ▶ The AMS-4424P is designed for indoor use only. DO NOT place this outdoors.
- ▶ DO NOT install in or near hot or humid places, such as a kitchen or bathroom. Take care to minimize exposure to excessive heat or moisture.
- ▶ Small parts and plastic bags used for packaging may be harmful to small children. KEEP ALL ACCESSORIES OUT OF THE REACH OF CHILDREN!
- ▶ The AMS-4424P may become warm when in use for extended time periods. This is normal and is not a malfunction. DO NOT install where it will be exposed to paper, cloth or other flammable materials.

## FCC Statement:

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 generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with part 15 of the FCC Rules.



Hereby, Luxul, 14203 Minuteman Drive, Suite 201, Draper, Utah, 84020, declares that this Luxul AMS-4424P is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

For a copy of this report send a self addressed stamped envelope to:  
Luxul CE, 14203 Minuteman Drive, Suite 201, Draper, Utah, 84020.

## Industry Canada

CAN ICES-3(A)/NMB-3(A)

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