

QUICK START GUIDE

SX-24P16

Enterprise-Class, Fully Managed 24 Port Gigabit Switch with 16 PoE+ Capable Rear Facing Ports
Version 1.0

Contents

Switch Overview	3
Preparing to Install the Switch	4
Installation	4
Logging Into the Switch	5
Changing the IP Address of the Switch	6
Pakedge Zone & VLAN Setup	7
Pakedge Zone Wizard	7
Pakedge Zone Template	7
Manually Configuring VLANs	8
Console Into the Switch	10
Resetting IP address through the console	11
Factory defaulting through the console	11

Switch Overview

The SX-24P16 switch is a fully managed gigabit switch, designed to address a wide range of networking needs. This switch provides 16 PoE+ capable ports with the ability to utilize full 802.3at (30W) PoE+ output on 8 ports simultaneously or full 802.3af (15.4W) PoE on 16 ports simultaneously. The SX Series switches are encased in AV like housings to appeal to customers demand for aesthetics.

The following chart defines the features of the SX-24P16.

Port Speeds	10/100/1000 mbps	High Powered PoE	Yes
Console Port	Yes	High Powered PoE Ports*	8
Web GUI	Yes	SFP	Yes
Ethernet Ports	24	SFP Ports	4
PoE Capable	Yes	Shared SFP	Yes
PoE Ports	16		

*PoE is supplied on a power budget. This means 120W are available for total PoE power on the SX-24P16. A mix of PoE and PoE+ devices may be used at the same time, as long as the total power usage from PoE is under 120W. This allows for 4 devices to be fully powered using PoE+, or 8 devices to be fully powered using PoE.

Preparing to Install the Switch

Installing the SX-24P16 is similar to installing any other Pakedge switch. If you have installed a managed switch before, the process will be very similar. The GUI for all of the SX Series switches will be the same so the configuration steps discussed later in this quick start guide can be used on any of the switches.

Tools required:

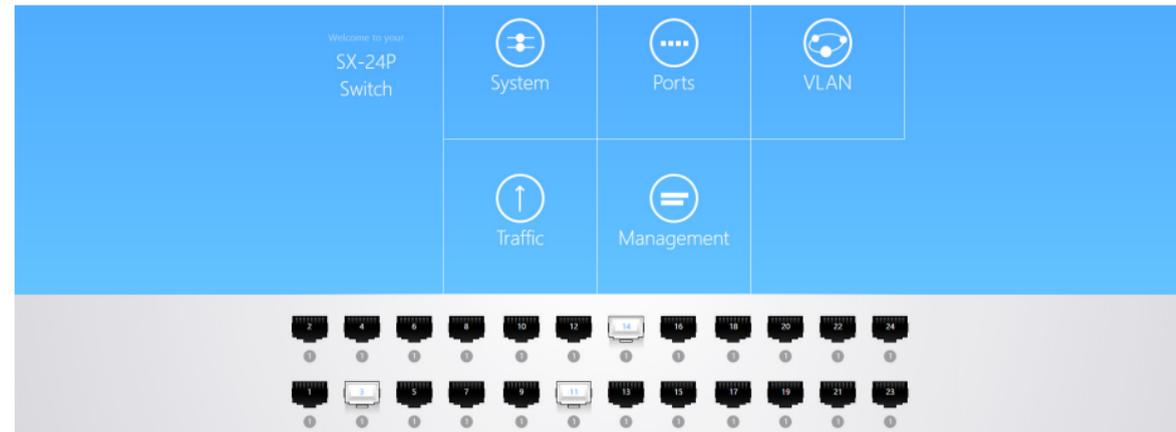
- Philips Screwdriver (if using rack-mount brackets).
- Computer with Ethernet interface and a modern web browser.
- Optional: An integrated "DB-9" port or USB-To-DB9 adapter may be necessary in order to use the console interface.
- Ethernet Cable.

Installation

1. Remove the switch from the box.
2. Optional: If mounting the switch in a standard 19" AV rack, attach the rack-mounting brackets that come with the switch to the sides. If not rack-mounting, ensure that the switch is physically mounted near power and network connections (i.e, backbone switch or firewall/router).
3. Connect power to the device.
4. Connect an Ethernet cable from your computer to any LAN port on the switch.
5. You are now ready to configure the switch with an IP address in your network range.

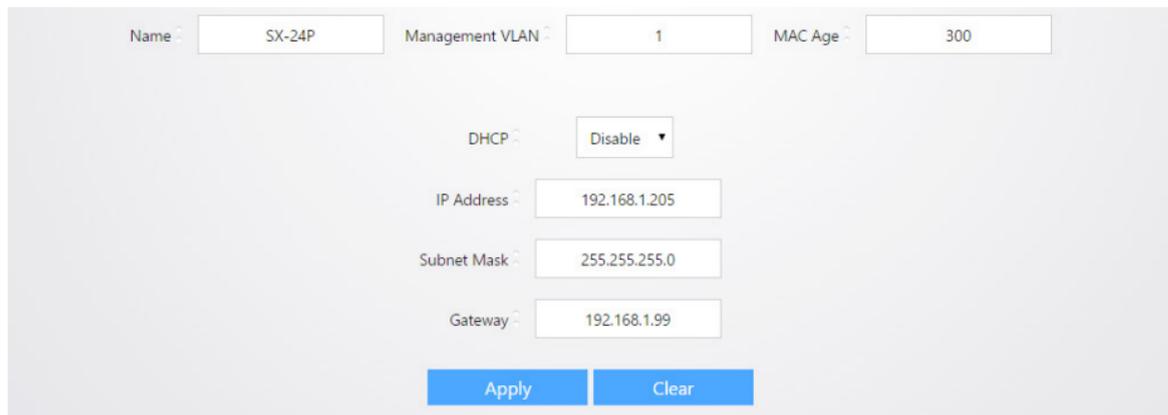
Logging Into the Switch

1. Connect the SX-24P16 to power. The PWR LED will light up and the fans will start.
2. Connect a PC or laptop to any LAN port on the switch.
3. Configure the PC with a static IP address of 192.168.1.10 and subnet mask of 255.255.255.0 (Default Gateway and DNS can be left blank) and then open any browser.
4. In the browser, enter the switch's default IP address of **192.168.1.205** into the Address Bar and press **<ENTER>**.
5. A web page will appear asking you for a Username and Password. The default username is **pakedge** and the password is **pakedges**.
6. Once you have logged into the switch you will have access to the GUI and will be able to make any changes you wish. The following is an example of the switch dashboard.



Changing the IP Address of the Switch

1. There are two ways to reach the IP Address settings on the switch. From the Dashboard at the center of the screen or the menu at the top of the page, click "**System**" and then go to "**System Settings > Basic Settings**".
2. In this section you can enter the switch IP address in the box next to "**IP Address**". By default the switch IP is 192.168.1.205. You will also need to enter the "**Subnet Mask**" and "**Gateway**" settings for your network. By default on a Pakedge network subnet mask is 255.255.255.0 and the Gateway will be 192.168.1.99.
3. Click on "**Apply**" at the bottom of the page and the switch will be updated with the new IP settings. If the IP address you have changed the switch to is in the same IP subnet range you will be redirected automatically. Otherwise you will need to update your computers IP settings to match the new IP of the switch in order to access it again.



The screenshot shows a configuration page for a switch. At the top, there are three input fields: "Name" with the value "SX-24P", "Management VLAN" with the value "1", and "MAC Age" with the value "300". Below these, there is a "DHCP" dropdown menu set to "Disable". Underneath, there are three more input fields: "IP Address" with the value "192.168.1.205", "Subnet Mask" with the value "255.255.255.0", and "Gateway" with the value "192.168.1.99". At the bottom of the form, there are two buttons: "Apply" and "Clear".

Pakedge Zone & VLAN Setup

New to the SX Series switches are the Pakedge Zones. Pakedge Zones provide a simple way to configure the switch to use the specialized VLAN settings of a Pakedge network. There are two options for configuring the switch using Pakedge Zones.

Pakedge Zone Wizard

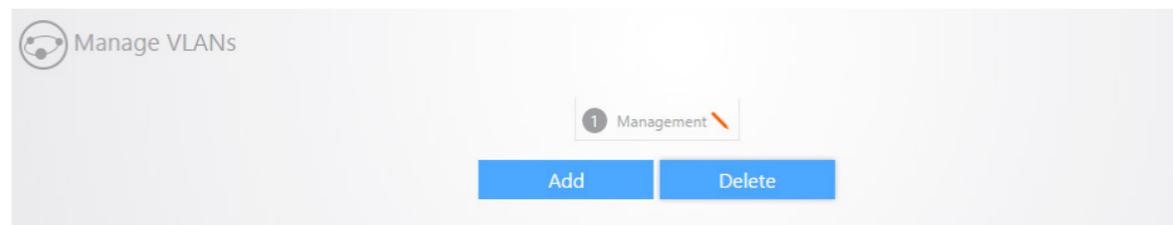
The Pakedge Zone wizard offers the simplest way to individually configure all switch ports with the specific VLAN settings required for the network. The wizard provides a step-by-step guide through the configuration process.

Pakedge Zone Template

The Pakedge Zone Template option provides a quick setup option based on several pre-defined Pakedge Zone port configurations. Simply select a Template and apply the configuration.

Manually Configuring VLANs

1. To manually add and configure VLAN settings go to VLAN>Configuration>Advanced.
2. Under the "**Manage VLANs**" section you can click "**Add**" to input a new VLAN ID number and name.

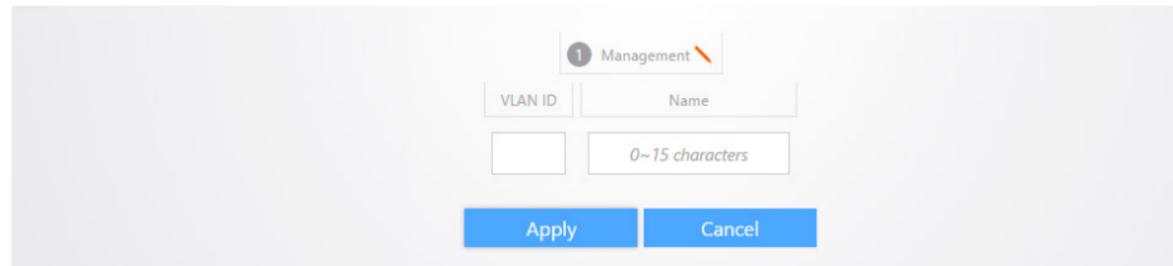


Management

Add Delete

Then click "**Apply**" to save that VLAN to the switch. VLAN ID's 1 - 6 are color coded to match the Pakedge Zones these are used for.

3. To configure ports as different VLANs, use the "**Port Assignments**" section.



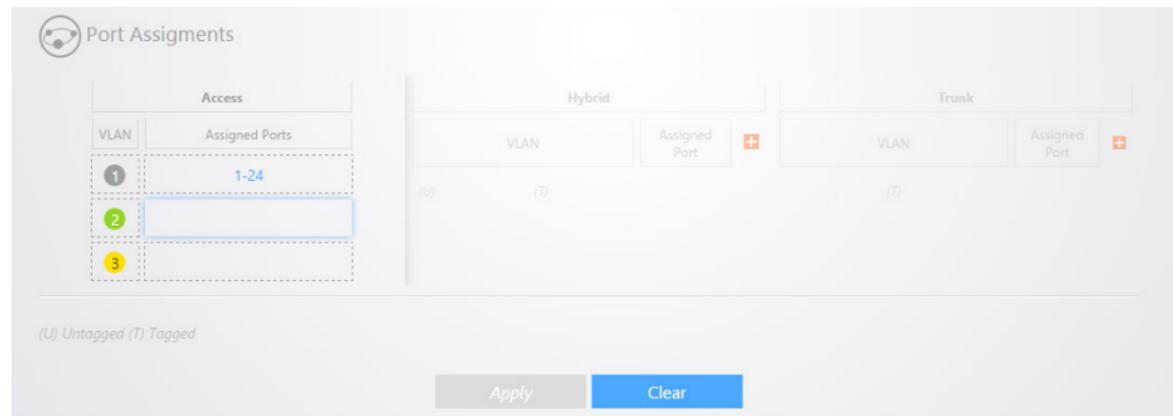
Management

VLAN ID Name

0~15 characters

Apply Cancel

4. To set ports with the ability to only access a single VLAN, click the VLAN you want to use under "**Access**".



Port Assignments

Access		Hybrid		Trunk	
VLAN	Assigned Ports	VLAN	Assigned Port	VLAN	Assigned Port
1	1-24	(U)	(T)	(T)	
2					
3					

(U) Untagged (T) Tagged

Apply Clear

Then click on the ports above you wish to set with that VLAN. Once you have the ports you want selected, click Apply at the bottom of the page to save those settings.

5. To set ports in Hybrid mode (one Default VLAN and multiple Tagged VLANs), first click the "+" symbol under "**Hybrid**". You will then be in the Hybrid profile configuration mode.
6. First select the Untagged Default VLAN to be used on the port (normally VLAN1).
7. Next select one or more other VLANs to be used for tagged VLAN traffic.
8. Lastly, click on the box under "**Assigned Port**" and then click on one of the ports above to set this profile on a switch port.
9. Once the changes have been made you can click "**Apply**" at the bottom of the page to save the settings.

Console Into the Switch

The SX Series switches have a console port to serve as a back door entrance to the switch. This can be beneficial in case the switch is not functioning properly or if the incorrect IP address was configured. To console into the switch please take the following steps:

1. Connect the console cable to the console port on the back of the switch and then connect the other end to your computer. You may use a USB to serial adapter in case your computer doesn't have a serial port. You will also need to have either PuTTY or Terra Term to connect to the switch's command line console.
2. Open PuTTY or Terra Term and enter the COM port that your computer is using and then set the following settings:

Baud Rate: 115200
Character Size: 8
Parity Code: None
Stop Bits: 1
Flow Control: None

The following is an example if you are using putty:

3. If you are using putty you need to go to Session on the left hand side and select Serial for the connection type and then click open to actually initiate the console session.
4. Once the connection is established you should black terminal window
5. You now have console access into the switch.

Resetting IP address through the console

You can reset the IP address of the switch through the console. This can be helpful in case of miss-configuration. To do this you will first need to console into the switch as previously described and then take the following steps:

1. Type **show ip** and press enter to see the current IP address
2. Type **configure terminal** and press enter
3. Type **ip address 192.168.1.205 255.255.255.0** and press enter
4. The switch should now be accessible on its default IP address

Factory defaulting through the console

You can factory default the switch through console in case it is not functioning properly. To do this you will first need to console into the switch as previously described and take the following steps:

1. Type **erase startup-config** and press enter
2. Type **reload** and press enter
3. The switch will now reboot and come back up at default settings

Technical Support

Please visit our website for up to date support information.

Web: www.pakedge.com

Email: support@pakedge.com

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 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.

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. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

pakedgedevice&software inc

3847 Breakwater Avenue Hayward, CA 94545

Main: 650-385-8700 Fax: 650.685.5520

www.pakedge.com

sales@Pakedge.com

