

Ethernet Routing Switch 3500 Series Quick Install Guide

Before you start

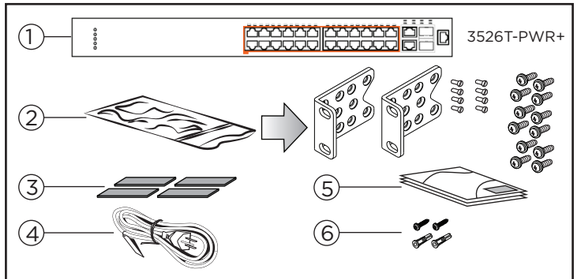
Depending on your hardware model, your switch may appear different than the figures shown in this guide.

1

Confirm that you have the tools and package contents as follows:

Tools Required:
- Phillips #2 screwdriver

Package Contents:



1. Ethernet Routing Switch 3500 Series

2. Rack-mounting hardware that includes:
(not applicable to ERS 3510GT or ERS 3510GT-PWR+)
- Rack-mount brackets (2)
- Screws to attach brackets to the switch (8)
- Screws to attach the switch to the equipment rack (3x4)

3. Rubber footpads (ERS 3510GT and ERS 3510GT-PWR+ only)

4. AC power cord

5. Documentation includes the Quick Install poster and Regulatory documents

6. Screws (2) and wall anchors (2) for wall mounting (ERS 3510GT and ERS 3510GT-PWR+ only)

Depending on your installation, the following accessory kits may be required:

- One 3510-Pair Rack Mount Kit — this accessory kit is used to connect two ERS 3510GT or ERS 3510GT-PWR+ switches together side-by-side and mount them in a 19 inch rack. The kit includes all necessary brackets and fasteners and must be ordered separately (Order Code AL3511002-E6)
- One Spare Rack Mount Kit – this kit can be used to mount an ERS 3510GT or ERS 3510GT–PWR+ under a desk or on to another surface. This kit is also used as a replacement rack mount kit for ERS 3524GT, ERS 3524GT-PWR+, ERS 3526T, ERS 3526T-PWR+, ERS 3549GTS, or ERS 3549GTS-PWR+ systems (Order Code AL3511001-E6)
- One 3510-Single Rack Mount Kit – this kit is used to mount a single ERS 3510GT or ERS 3510GT-PWR+ switch in a standard 19 inch rack. Kit includes all mounting brackets and fasteners and must be ordered separately (Order Code AL3511003-E6)

Note: There is a Kensington Lock slot on the back of each switch. Carefully remove the plastic plug from the hole if you need to use the K-Lock slot of an ERS 3510GT or ERS 3510GT-PWR+ unit.

2

(Optional) Prepare the rack:

a. Provide the equivalent of one rack of vertical space for each switch in an EIA or IEC-standard 19-inch (48.2-centimeter) equipment rack.

b. Ensure that the equipment rack is stable and securely attached to a permanent structure.

c. Ground the rack to the same grounding electrode used by the power service in the area. The ground path must be permanent and must not exceed 1 Ohm of resistance from the rack to the grounding electrode. Extreme Networks recommends using a filter or surge suppressor.

3

When you install the switch into a network, ensure you use the following cables:

- Category 5E or higher specification cabling should be used for 1 Gbps/1000 Mbps operation
- RJ-45 Console port cables as follows:

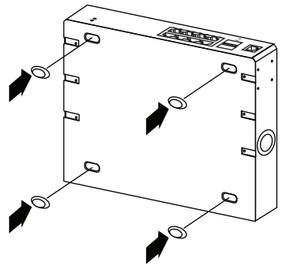
Product Number	Short Description	
AL2011022-E6	RJ-45 CONSOLE CABLE	RJ-45/DB-9 INTEGRATED CONSOLE CABLE **Note:** 1.5m cable with DB-9 Female for PC and RJ-45 for device console port. This is the recommended standard cable.
AL2011020-E6	DB-9 RED	RED DB-9 FEMALE TO RJ-45 ADAPTOR. **Note:** converts DB-9 MALE to RJ-45 serial port. Can be used for PC or device with DB-9 MALE console port. Can be used with Category 5 RJ-45 straight cable to provide console connection.

Mounting Options

4 Table/Shelf mouting

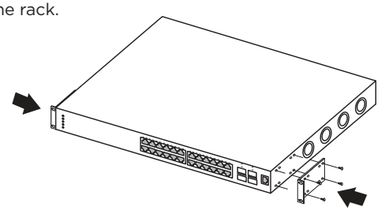
If you are mounting the ERS 3510GT or ERS 3510GT-PWR+ switch on a table or shelf, attach the rubber feet to the device as indicated.

Set the device on a flat surface near an AC power source, making sure there is at least 2 inches (5.1 cm) of space on all sides for proper air flow, and at least 5 inches (12.7 cm) at the back for power cord clearance.

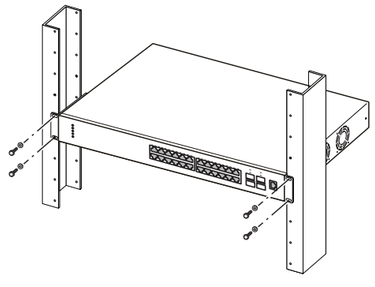


5a Rack mounting - ERS 3524GT, ERS 3524GT-PWR+, ERS 3526T, ERS 3526T-PWR+, ERS 3549 GTS, or ERS 3549 GTS-PWR+

If you are mounting the ERS 3524GT, ERS 3524GT-PWR+, ERS 3526T, or ERS 3526T-PWR+ switch in an equipment rack, attach the rack mount brackets to each side of the device using the screws provided. Choose the appropriate rack-mount for attaching the switch to your data or phone rack.



a. Slide the switch into the rack. Insert and tighten the rack-mount screws.



5b Rack mounting pairs - ERS 3510GT or ERS 3510GT-PWR+

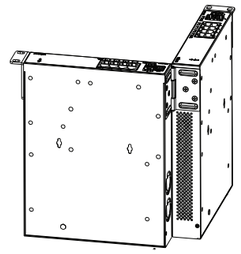
To rack mount a pair of ERS 3510GT or ERS 3510GT-PWR+ switches:

Use the 3510-Pair Rack Mount Accessory Kit (AL3511002-E6) to mount two ERS 3510GT or ERS 3510GT-PWR+ switches together side-by-side in a standard 19" rack.

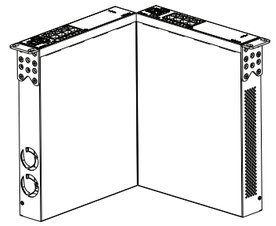
Note: When mounting two 3510GT-PWR+ units side by side in an equipment rack, run the switches in high power mode to ensure adequate airflow.

1. Ensure power is disconnected from the switch.

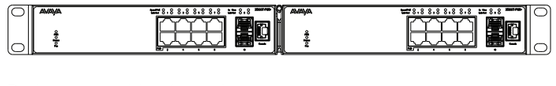
2. Connect the two ERS 3510GT switches together by opening the hinged bracket to 90° and attaching it to each ERS 3510GT switch with three M4 flat head screws (included), as shown below.



3. Attach the standard rack mount bracket ears to the outer end of each switch as shown below.

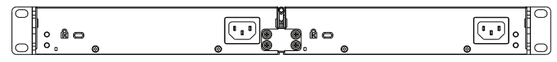


4. Once the switches are joined together, fold the hinged bracket inward.



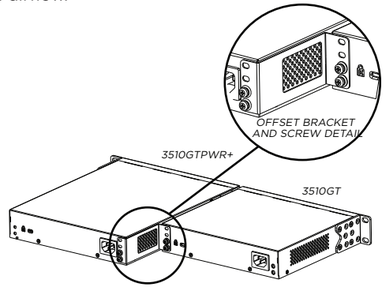
5. Perform one of the following:

- **To connect two ERS 3510GT or two 3510GT-PWR+ switches together** use the rear bracket as shown below, with four M4 pan head screws to secure the switches at the rear. Once the rear bracket has been installed, the switches can be installed in the rack.



- **To connect one ERS 3510GT switch and one ERS 3510GT-PWR+ switch together** use the offset rear bracket with four M4 pan head screws to join the switches at the rear. Once the rear bracket has been installed, the switches can be installed in the rack.

  Note: If you are mounting a mix of ERS 3510GT and ERS 3510GT-PWR+ units side by side, ensure that the ERS 3510GT unit is mounted on the LEFT side (when viewed from the front) for adequate airflow.



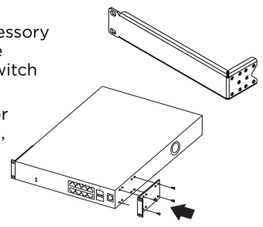
6. Slide the switches into the rack. Insert and tighten the rack mount screws.

7. Verify that the switch is securely fastened to the rack.

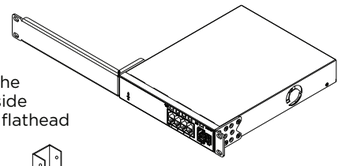
5c Rack mounting singles - ERS 3510GT or ERS 3510GT-PWR+

To rack mount a single ERS 3510GT or ERS 3510GT-PWR+ switch:

Use the 3510-Single Rack Mount Accessory Kit (AL3511003-E6) to mount a single ERS 3510GT or ERS 3510GT-PWR+ switch in a standard 19" rack.

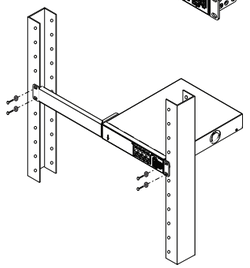


1. With the front of the ERS 3510GT or ERS 3510GT-PWR+ unit facing you, attach the small bracket from the optional kit to the right side of the switch using the flathead screws provided.



2. With the front of the ERS 3510GT or ERS 3510GT-PWR+ unit facing you, attach the long bracket from the optional kit to the left side of the switch using the flathead screws provided.

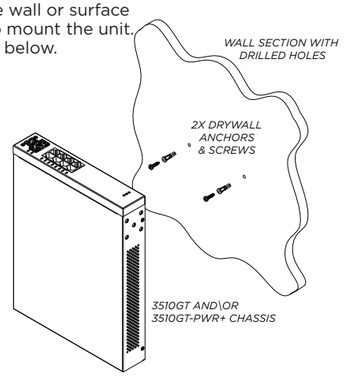
3. Slide the switches into the rack. Insert and tighten the rock mount screws.



6 Wall Mounting - ERS 3510GT or ERS 3510GT-PWR+

To wall mount an ERS 3510GT or ERS 3510GT-PWR+ unit:

a. Drill two 4.5 mm diameter holes (separated 108.5 mm apart horizontally) in the wall or surface where you want to mount the unit. Refer to the figure below.

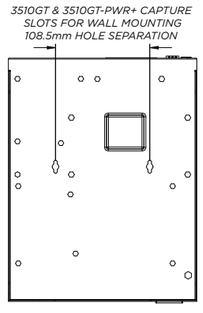


b. Press fit the plastic body of conical drywall anchors into each of the drilled holes.

c. Install a tapping screen into each anchor and fully set it to expand the anchor into the wall or surface.

d. Back the screw out from the fully seated position by 1.5 mm.

e. Slip the ERS 3510GT or ERS 3510GT-PWR+ chassis capture slots over the exposed screw heads to hang it from the wall or surface.



7 Configuring Stacking

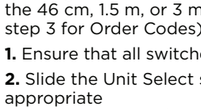
The Ethernet Routing Switch 3500 Series provides fail-safe stackability. You can connect up to eight ERS 3500 Series devices in a stack to provide uninterrupted connectivity for up to 192 to 208 ports. You can manage the stack as a single unit.

To install/add a unit to a stack, you must change the default mode from standalone to stacking mode and reboot the unit. See Installing the Ethernet Routing Switch 3500 Series for more details.

Note: Stacking is not available for ERS 3510GT or ERS 3510GT-PWR+ switches. Stacking is only supported with switches operating with Release 5.1 or later software.

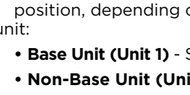
The Ethernet Routing Switch 3524GT, 3524GT-PWR+, 3526T, 3526T-PWR+, 3549 GTS, and 3549 GTS-PWR+ back panel provides a Unit Select switch, Cascade Down port, and Cascade Up port for stacking purposes as shown below:

ERS 3524GT/3524GT-PWR+ rear panel



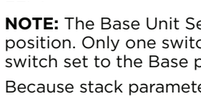
1 = Cascade down port
2 = Cascade up port
3 = Base Unit Select Switch - used to designate the Base Unit in a stack. When set to the RIGHT position, this unit acts as the Base Unit for the stack

ERS 3526T/3526T-PWR+ rear panel



1 = Cascade down port
2 = Cascade up port
3 = Base Unit Select Switch - used to designate the Base Unit in a stack. When set to the RIGHT position, this unit acts as the Base Unit for the stack

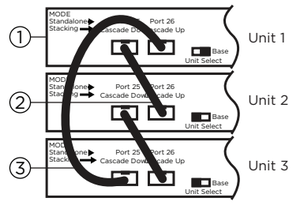
ERS 3549 GTS/GTS-PWR+ rear panel



1 = Cascade down port
2 = Cascade up port
3 = Base Unit Select Switch - used to designate the Base Unit in a stack. When set to the RIGHT position, this unit acts as the Base Unit for the stack

Base Unit Select Switch – used to designate the base unit in a stack.

Cascade Down and Cascade Up ports – used to connect a switch to the next unit in the stack through a cascade cable. Connect one end of the Cascade Down cable to the Cascade Up port of the next switch in the stack (shown in the three-switch stack connection block diagram below):



Base Unit Select switches
To create a stack connection, order the appropriate Ethernet Routing Switch 3500 Series cascade cables to ensure fail-safe stacking. For stacking three or more units (maximum eight units per stack), order the 46 cm, 1.5 m, or 3 m cables as applicable (see "Before You Start" – step 3 for Order Codes).

1. Ensure that all switches for the stack are rack mounted.

2. Slide the Unit Select switches on the back of the units to the appropriate
position, depending on whether they are a base unit or non-base unit:

- **Base Unit (Unit 1)** - Slide the Unit Select switch to the RIGHT
- **Non-Base Unit (Units 2-8)** - Slide the Unit Select switch to the LEFT

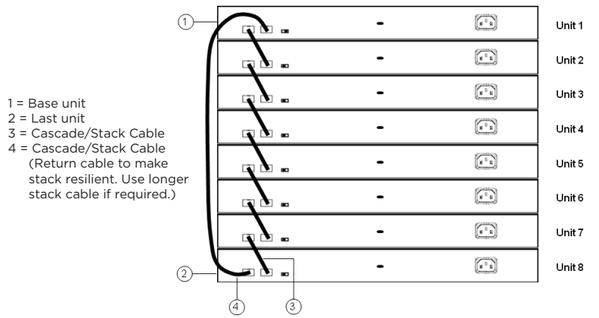
NOTE: The Base Unit Select switch defaults to be in the Non-Base position. Only one switch in the stack must have the Base Unit Select switch set to the Base position.

Because stack parameters are associated with the base unit, the physical stack order depends on the base unit position and whether you configure the stack cascade up (stack up) or cascade down (stack down). This designation depends on the stack cabling arrangement.

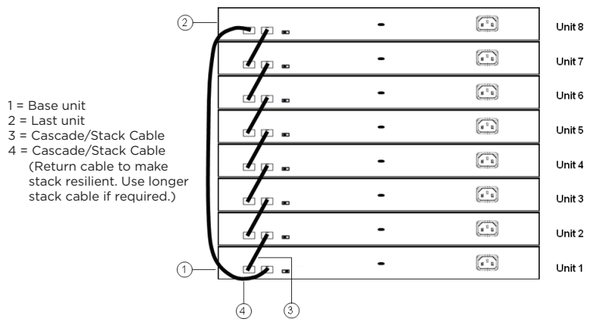
IMPORTANT: Extreme Networks recommends that you use a Cascade Down configuration.

3. Connect stacking cables as required for a Cascade Up (stack up) or Cascade Down (stack down) configuration as shown below:

Cascade Down - Recommended configuration



Cascade Up configuration



Powering Up

8

Connect the AC power cord to the back of the switch or switches, and then plug the other end of the cord into an AC power outlet. If powering up a stack of switches, power on all switches together.

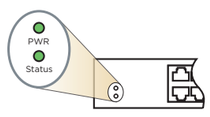


Warning: You must use a power cord set approved for the ERS 3500 Series switch and the power receptacle type in your country.

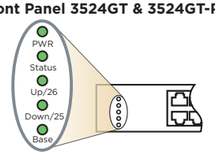
9

Check the front-panel LEDs as the device powers on to be sure the PWR LED is lit. If not, check that the power cord is plugged in correctly.

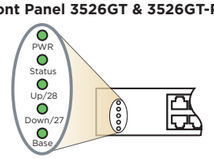
Front Panel 3510GT & 3510GT-PWR+



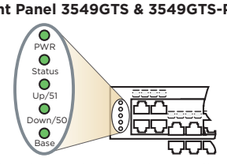
Front Panel 3524GT & 3524GT-PWR+



Front Panel 3526GT & 3526GT-PWR+



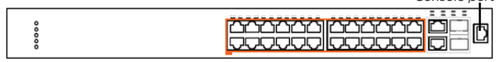
Front Panel 3549GTS & 3549GTS-PWR+



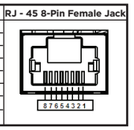
The ERS 3500 Series switches begin switching data after the switch is powered up and has loaded the agent code software which is indicated by both the PWR and Status LEDs being lit solid green.

10 Console Port pin assignments

The console port is the RJ-45 port shown with a blue border outline on the front of your ERS 3500 Series switch (note orientation). The port is labeled console, and can be used to establish a management terminal connection to the switch.



You can use an RJ-45 to DB-9 cable to connect the switch console port to your management terminal. Extreme recommends you use the RJ-45 Console Cable part number: AL2011022-E6. Alternatively a DB-9 to RJ-45 adapter or other suitable console cables can be used - the maximum length of a console cable is 25 feet (8.3 meters). The following table describes the RJ-45 console port pin-out information. You can use the pin-out information to verify or create a console cable for use with your maintenance terminal.

RJ - 45 Jack	Name	Requirement	RJ - 45 8-Pin Female Jack
1	RTS (Ready To Send)	Optional - can swap or link with pin 8	
2	DTR (Data Terminal Ready)	Optional	
3	TXD (Transmit Data)	Mandatory	
4	DCD (Carrier Detect)	Optional	
5	GND (Ground)	Mandatory	
6	RXD (Receive Data)	Mandatory	
7	DSR (Data Set Ready)	Optional - can swap or link with pin1	
8	CTS (Clear To Send)	Optional – can swap or link with pin1	

11 Setting IP parameters using the console port and CLI QuickStart

To set IP parameters using the console port and CLI Quickstart, perform the following tasks:

a. Connect a terminal to the console port of the switch.
Any terminal or PC with an appropriate terminal emulator can be used as the management station. The Terminal emulation settings table below lists the parameters that must be used with any terminal emulation software used to connect to the switch.

To connect to the switch console port, you require a console cable with an RJ-45 connector to match the console port on the switch.

Terminal emulation settings

Property	Value
Baud Rate	9600 bps
Data Bits	8
Stop Bits	1
Parity	None
Flow Control	None

b. Set the terminal protocol on the terminal or terminal emulation program to VT100 and VT100/ANSI.
c. Connect to the switch using the terminal or terminal emulation application.
d. The Extreme switch banner appears when you connect to the switch through the Console port. Enter Ctrl+Y and type the following CLI commands:
- enable
- install

The ERS 3500 will set a default IP address of 192.168.1.1/24 by default if the switch does not get its IP from another source.
The CLI Quickstart welcome screen helps you to enter the information requested at each prompt.

CLI Quickstart welcome screen

```
##################################################################
          Welcome to the ERS3500 setup utility.
You will be requested to provide the switch basic connectivity settings.
After entering the requested info, the configuration will be applied and
stored into the switch NVRAM.

Once the basic connectivity settings are applied, additional
configuration can be done using the available management interfaces.
Use Ctrl+C to abort the configuration at any time.

##################################################################

Please provide the in-band IP Address[192.168.10.6]:
Please provide the Default Gateway[0.0.0.0]:
Please provide the Read-Only Community String[**********]:
Please provide the Read-Write Community String[**********]:
Please provide the Quick Start VLAN <1-4094> [1]:
Please provide the in-band IPV6 Address/Prefix Length[::/0]:
Please provide the in-band IPV6 Default GatewaY[::]:
Do you want to enable the DHCP server? y/n [n]:

##################################################################
Basic stack parameters have now been configured and saved.
##################################################################
```

Quick CLI Command guide:

boot - reboot the switch
boot default - reboot and use the factory default configurations
restore factory - default <-y> - reset the switch to factory default configurations, use -y option for no prompts

Extreme®
Connect Beyond the Network

To obtain additional documentation references, go to : http://www.extremenetworks.com/support/documentation/ and download the following:
- Regulatory Information
- Installing the Ethernet Routing Switch 3500 Series
- Product Release Notes
- Getting Started
- Documentation Roadmap

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Poster part number: 700503194 Rev.04
NN47203-300 04.04