



# Installation Job Aid (English) for Avaya Ethernet Routing Switch 4000 Series (NN47205-303, ver 01.01)

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## How to get help

To access the complete range of services and support that Avaya provides, go to [www.avaya.com](http://www.avaya.com).

You can also go to [www.avaya.com/support](http://www.avaya.com/support) to access the following pages:

- technical documentation
- product training
- technical support

If you purchased a service contract for your Avaya product from a distributor or authorized reseller and you need assistance, contact the technical support staff for that distributor or reseller.

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## Notices

Notice paragraphs alert you about issues that require your attention. The following paragraphs describe the types of notices used in this guide.

 **Note:**

Notes provide tips and useful information regarding the installation and operation of Avaya products.

 **Electrostatic alert:**  
**ESD**

ESD notices provide information about how to avoid discharge of static electricity and subsequent damage to Avaya products.

 **Caution:**

Caution notices provide information about how to avoid possible service disruption or damage to Avaya products.

 **Warning:**

Warning notices provide information about how to avoid personal injury when working with Avaya products.

 **Voltage:**

Danger — High Voltage notices provide information about how to avoid a situation or condition that can cause serious personal injury or death from high voltage or electric shock.

 **Danger:**

Danger notices provide information about how to avoid a situation or condition that can cause serious personal injury or death.

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## Safety messages

 **Warning:**

Installation must be performed by qualified service personnel only. Read and follow all warning notices and instructions marked on the product or included in the documentation.

 **Voltage:**

This equipment relies on the building's installation for overcurrent protection. Ensure that a fuse or circuit breaker no larger than 120 VAC, 15 A U.S. (240 VAC, 16 A International) is used on the phase conductors.

 **Caution:**

This device is a Class A product. In a domestic environment, this device can cause radio interference, in which case the user may be required to take appropriate measures.

**⚠ Caution:**

When mounting this device in a rack, do not stack units directly on top of one another in the rack. Each unit must be secured to the rack with appropriate mounting brackets. Mounting brackets are not designed to support multiple units.

**⚠ Voltage:**

Use only power cords that have a grounding path. Without a proper ground, a person who touches the switch is in danger of receiving an electrical shock. Lack of a grounding path to the switch can result in excessive emissions.

**⚠ Warning:**

Disconnecting the power cord is the only way to turn off power to this device. Always connect the power cord in a location that can be reached quickly and safely in case of an emergency.

**⚠ Warning:**

Fiber optic equipment can emit laser or infrared light that can injure your eyes. Never look into an optical fiber or connector port. Always assume that fiber optic cables are connected to a light source.



**⚠ Caution:**

Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

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## Installation preparation

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### Before you begin

Ensure the area where you install and use the 4000 Series switch meets the following environmental requirements:

- Ambient temperature between 32° and 106° F (0° and 50° C)
- Relative humidity between 10% and 90% noncondensing
- No nearby heat sources such as hot air vents or direct sunlight
- No nearby sources of severe electromagnetic noise
- No excessive dust
- Adequate power source within six feet; one 15-Amp circuit required for each power supply
- At least 2 inches (5.08 cm) on all sides of the switch unit for ventilation
- Adequate space at the front and rear of the switch for access to cables

If you are installing a single Avaya Ethernet Routing Switch on a table or shelf, ensure the surface can support at least 15 to 20 pounds (7 to 9 kilograms).

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### Installing the switch in an equipment rack

Required tool: Phillips screwdriver for attaching brackets to the switch.

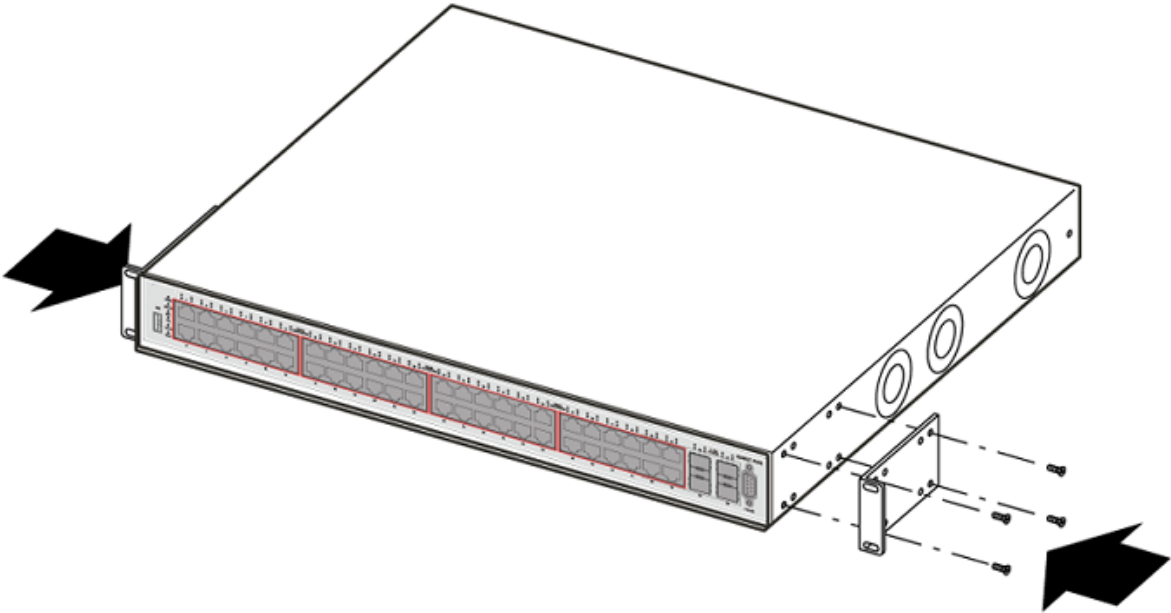
Rack requirements:

- A space of 2.8 inches for each switch in an EIA or IEC standard 19 inch (48.2 centimeter) equipment rack.
  - The rack must be bolted to the floor and braced, if necessary.
  - The rack must be grounded 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.

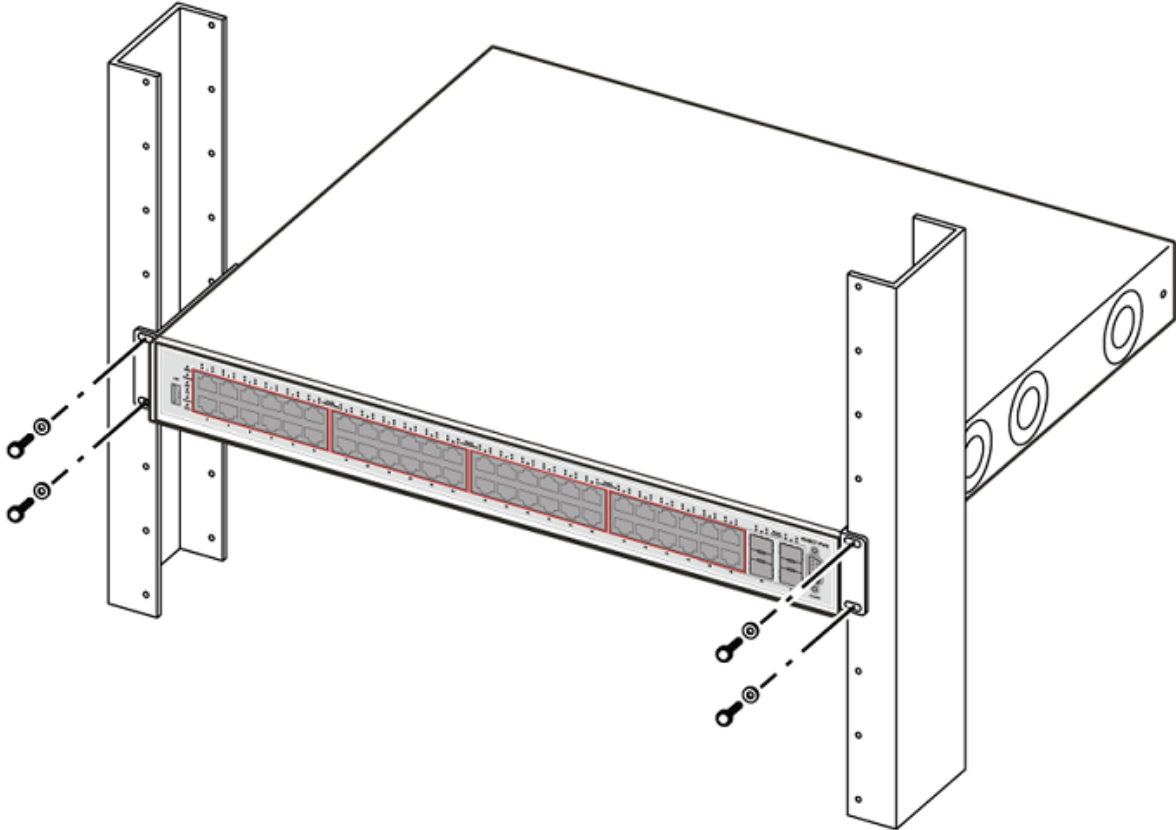
The following figures provide instruction for installing the switch in a rack.

 **Note:**

Avaya ERS 4000 Series hardware can vary in size and shape. Your switch might appear different than the following example figures.



Attach a bracket to each side of the switch.



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

**\* Note:**

The ERS 4000 Series mounting hardware is specific for each switch model. Do not mix screws or brackets between different ERS 4000 Series switches.

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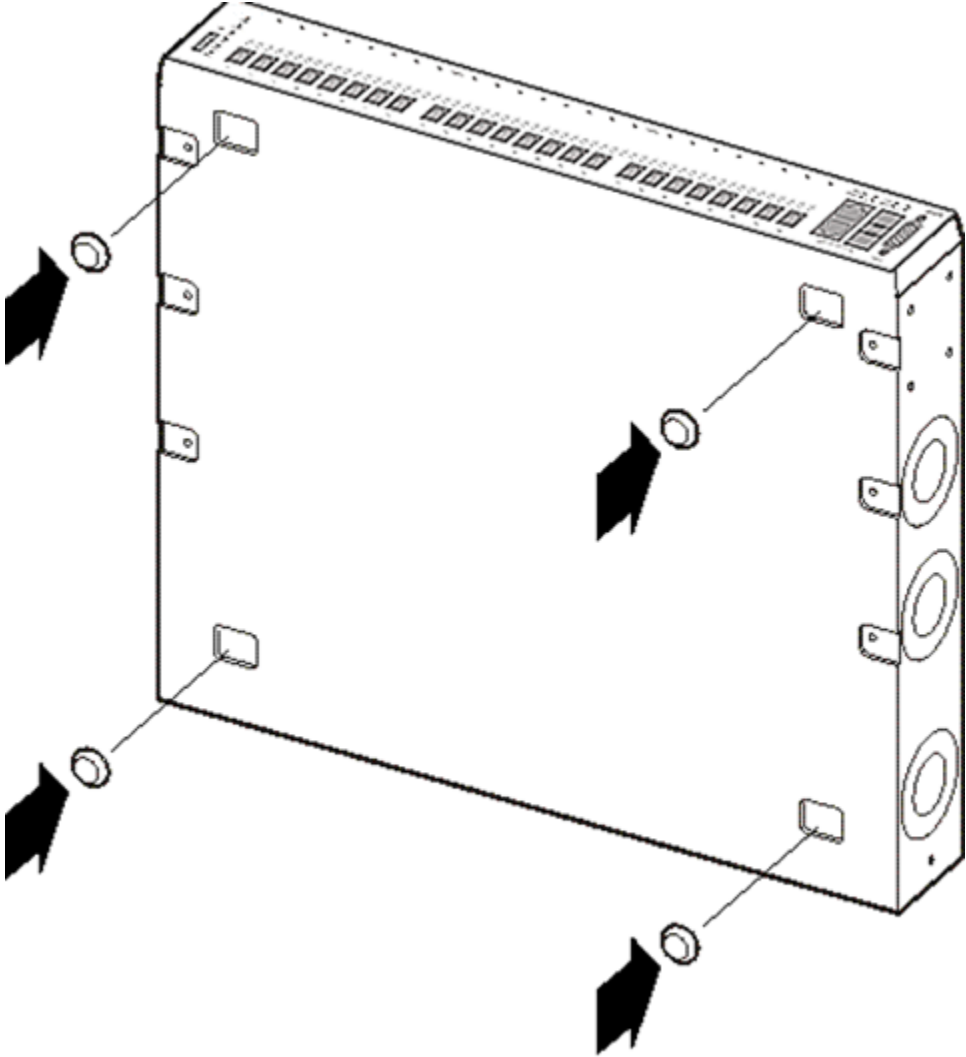
## Installing the switch on a table or shelf

You can install a single Avaya Ethernet Routing Switch on any flat surface that can safely support the weight of the switch and attached cables (15 to 20 pounds or 7 to 9 kilograms).

The following figures provide instructions for installing the switch on a table or shelf.

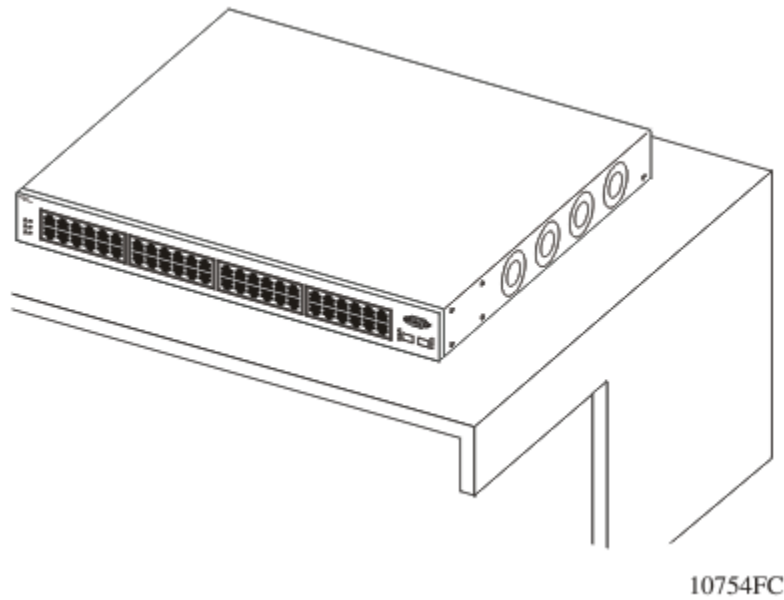
**\* Note:**

Avaya ERS 4000 Series hardware can vary in size and shape. Your switch might appear different than the following example figures.



10753FC

Attach the rubber feet at the marked locations.



Set the switch on a table or shelf.

**\* Note:**

Allow at least 2 inches (5.1 cm) on each side for proper ventilation and at least 5 inches (12.7 cm) at the back for power cord clearance.

## AC power specifications

The following table describes the AC power specifications for the Ethernet Routing Switch 4000 Series.

Model	Input current (amps maximum at 100-120 VAC)	Input current (amps maximum at 200-240 VAC)	Input voltage (rms, VAC at 50-60 Hz)	Input voltage (rms, VAC at 50-60 Hz)	Power consumption (watts max)	Thermal rating (Btu/h maximum)
ERS 4548GT	3	1.5	100-120	200-240	150	415
ERS 4548GT-PWR	6.5	3.3	100-120	200-240	470	788
ERS 4550T	3	1.5	100-120	200-240	150	240


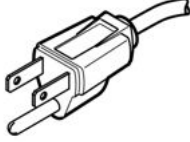
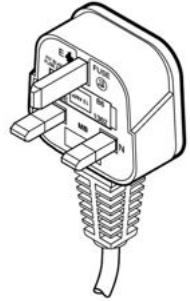
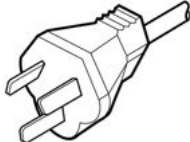


<b>Model</b>	<b>Input current (amps maximum at 100-120 VAC)</b>	<b>Input current (amps maximum at 200-240 VAC)</b>	<b>Input voltage (rms, VAC at 50-60 Hz)</b>	<b>Input voltage (rms, VAC at 50-60 Hz)</b>	<b>Power consumption (watts max)</b>	<b>Thermal rating (Btu/h maximum)</b>
ERS 4550T-PWR	6.5	3.3	100-120	200-240	470	615
ERS 4526FX	3	1.5	100-120	200-240	150	256
ERS 4526GTX-PWR	6.5	3.3	100-120	200-240	470	546
ERS 4526GTX	3	1.5	100-120	200-240	150	307
ERS 4526T-PWR	6.5	3.3	100-120	200-240	470	375
ERS 4526T	3	1.5	100-120	200-240	150	188
ERS 4524GT	3	1.5	100-120	200-240	150	290
ERS 4524GT-PWR	6.5	3.3	100-120	200-240	470	478
ERS 4550T-PWR+	12	6	100-120	200-240	213	726
ERS 4526T-PWR+	12	6	100-120	200-240	119	406
ERS 4850GTS	5	2.5	100-120	200-240	94.6	323
ERS 4850GTS-PWR+	12	6	100-120	200-240	248	846
ERS 4826GTS	5	2.5	100-120	200-240	74.3	254
ERS 4826GTS-PWR+	12	6	100-120	200-240	149	508

## Connecting AC power

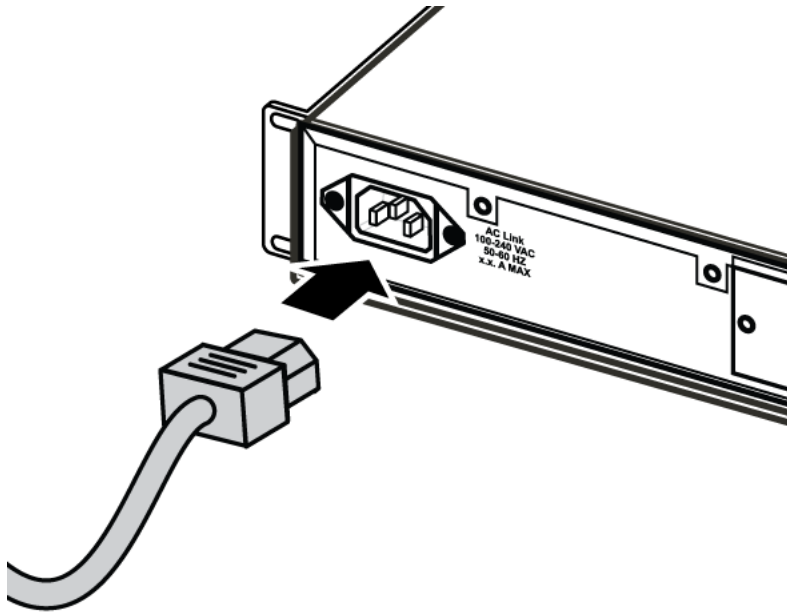
Required cable: AC power cord that meets the requirements of your local electrical code. Refer to the following table for plug specifications.

**Table 1: International power cord specifications**

Country and plug description	Specifications	Typical plug
Continental Europe <ul style="list-style-type: none"> <li>• CEE7 standard VII male plug</li> <li>• Harmonized cord (HAR marking on the outside of the cord jacket to comply with the CENELEC Harmonized Document HD-21)</li> </ul>	220 or 230 VAC 50 Hz Single phase	 <p style="text-align: center;">228FA</p>
U.S./Canada/Japan <ul style="list-style-type: none"> <li>• NEMA5-15P male plug</li> <li>• UL-recognized (UL stamped on cord jacket)</li> <li>• CSA-certified (CSA label secured to the cord)</li> </ul>	100 or 120 VAC 50-60 Hz Single phase	 <p style="text-align: center;">227FA</p>
United Kingdom <ul style="list-style-type: none"> <li>• BS1363 male plug with fuse</li> <li>• Harmonized cord</li> </ul>	240 VAC 50 Hz Single phase	 <p style="text-align: center;">229FA</p>
Australia AS3112-1981 male plug	240 VAC 50 Hz Single phase	 <p style="text-align: center;">230FA</p>

The Ethernet Routing Switch 4000 Series does not have a power switch. When you connect the AC power cord to a suitable AC power outlet, the switch powers up immediately.

Connect the AC power cord to the back of the switch, and then connect the cord to a power outlet.



**Figure 1: Connecting the AC power cord to the Ethernet Routing Switch 4000 Series**

Connect the AC power cord to the back of the switch, and then connect the cord to a power outlet.

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## Installing the power supply

You must install at least one power supply before using the switch. Some ERS 4000 Series models can support an optional second power supply for redundancy and load sharing.

To install the power supplies into your switch, perform the following procedure.

1. Insert each power supply into a rear power supply slot. If a blanking plate covers the required power supply slot, remove the plate before inserting the power supply.
2. Verify that each power supply is fully seated in the slot. Secure the power supply with the two thumb screws.
3. Once you have installed at least one power supply, you can connect the power cord to a power outlet.