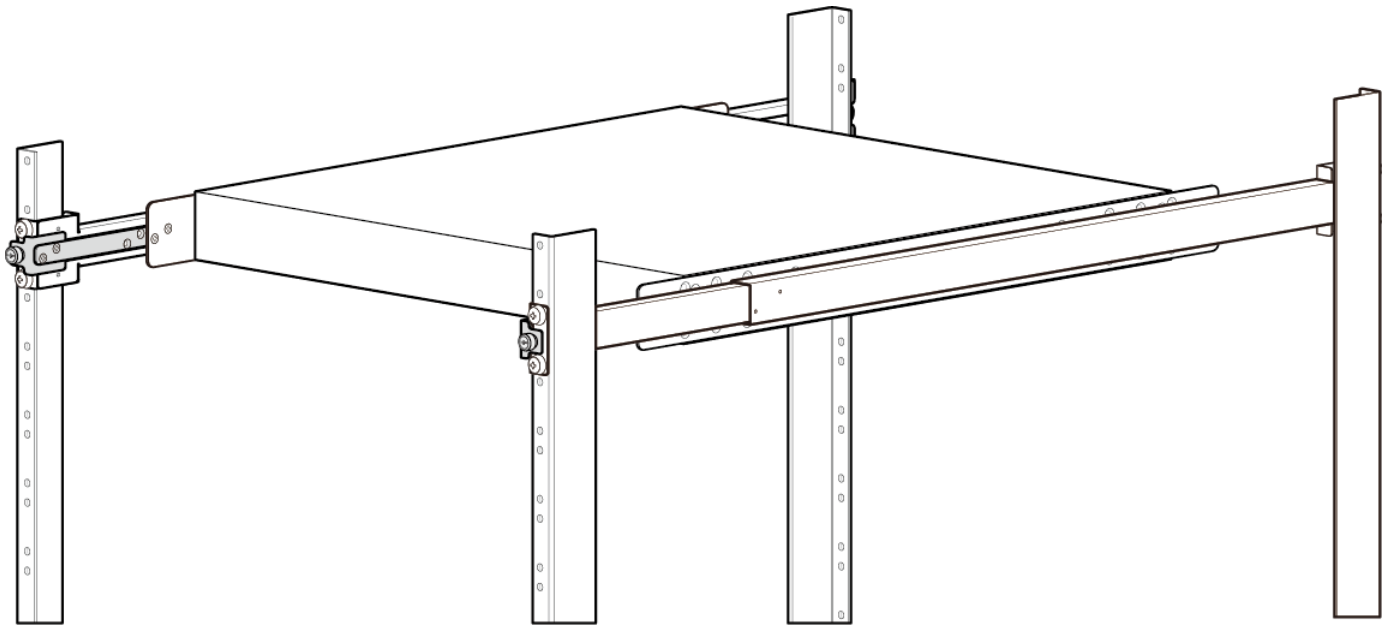


AT-RKMT-SL01

Rack Mount Kit



Installation Guide

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Contents

Preface	7
Symbol Conventions	8
Translated Safety Statements	9
Contacting Allied Telesis	10
Chapter 1: Overview	11
Introduction	12
Switch Compatibility	13
Rack Mount Kit Rack Dimension Requirements	14
Adjustment Brackets	15
Chapter 2: Installation	17
Installation Overview	18
Reviewing Safety Precautions	19
Unpacking the Contents	22
Inner Rail Screw Positions	24
AT-DC2552XS	24
AT-x900-24XT/AT-x900-24XS	24
AT-x900-12XT/S	24
AT-x510DP-52GTX/AT-IX5-28GPX	25
AT-x930	25
Mounting the Rack Mount Kit	26

Figures

- Figure 1: Factory-Shipped Adjustment Bracket 15
- Figure 2: Shipping Package Contents 23
- Figure 3: AT-DC2552XS Screw Positions 24
- Figure 4: AT-x900-24XT/AT-x900-24XS Screw Positions 24
- Figure 5: AT-x900-12XT/S Screw Positions 24
- Figure 6: AT-x510DP-52GTX/AT-IX5-28GPX Screw Positions 25
- Figure 7: AT-x930 Screw Positions 25
- Figure 8: Attach Outer Rails to Rack Post 27
- Figure 9: Determine Adjustment Bracket Length 27
- Figure 10: Example: Combination #1 (Fixing Bracket Only) 28
- Figure 11: Example: Combination #4 (Fixing & Extension Brackets) 28
- Figure 12: Attach Adjustment Bracket to Inner Rail: Combinations #1, 2, 4 29
- Figure 13: Check Inner Rail Position 29
- Figure 14: Attach AT-DC2552XS to Inner Rail 29
- Figure 15: Attach AT-x900-24XT/AT-x900-24XS to Inner Rail 30
- Figure 16: Attach AT-x900-12XT/S to Inner Rail 30
- Figure 17: Attach AT-x510DP-52GTX/AT-IX5-28GPX to Inner Rail 30
- Figure 18: Attach AT-x930 to Inner Rail 31
- Figure 19: Slide Inner Rails into Outer Rails 31
- Figure 20: Attach Inner Rails to Outer Rails 32
- Figure 21: Secure Outer Rails to Rack Posts 33

Preface

This guide contains the installation instructions for the AT-RKMT-SL01 19 Inch Sliding Rack Mount Kit. This preface contains the following sections:

- “Symbol Conventions” on page 8
- “Translated Safety Statements” on page 9
- “Contacting Allied Telesis” on page 10

Symbol Conventions

This document uses the following conventions:

Note

Notes provide additional information.

**Caution**

Cautions inform you that performing or omitting a specific action may result in equipment damage or loss of data.

**Warning**

Warnings inform you that performing or omitting a specific action may result in bodily injury.

Translated Safety Statements

Important: The  indicates that a translation of the safety statement is available in a PDF document titled ***Translated Safety Statements*** posted on the Allied Telesis website at www.alliedtelesis.com/support.

Contacting Allied Telesis

If you need assistance with this product, you may contact Allied Telesis technical support by going to the Support & Services section of the Allied Telesis web site at www.alliedtelesis.com/support. You can find links for the following services on this page:

- 24/7 Online Support - Enter our interactive support center to search for answers to your questions in our knowledge database, check support tickets, learn about Return Merchandise Authorizations (RMAs), and contact Allied Telesis technical experts.
- USA and EMEA phone support - Select the phone number that best fits your location and customer type.
- Hardware warranty information - Learn about Allied Telesis warranties and register your product online.
- Replacement Services - Submit an RMA request via our interactive support center.
- Documentation - View the most recent installation guides, user guides, software release notes, white papers and data sheets for your product.
- Software Updates - Download the latest software releases for your product.

For sales or corporate contact information, go to www.alliedtelesis.com/purchase and select your region.

Chapter 1

Overview

This chapter contains the following sections:

- “Introduction” on page 12
- “Switch Compatibility” on page 13
- “Rack Mount Kit Rack Dimension Requirements” on page 14
- “Adjustment Brackets” on page 15

Introduction

The AT-RKMT-SL01 19 Inch Sliding Rack Mount Kit is a slide-rail type rack-mount kit for mounting an Allied Telesis, Inc. switch in an EIA standard 19 inch rack. You can easily slide the ATI switch in and out of a rack for maintenance without removing it from the rack. This is particularly useful when your switch is installed in a server rack with deep dimensions.

The AT-RKMT-SL01 Rack Mount Kit has a sliding rail design for mounting a switch chassis within the rack. The switch chassis can be positioned even with, or recessed back, from the front vertical rack supports.

The Rack Mount Kit consists of three main components which come in pairs:

- Outer rails: these rails are adjustable in length and are installed on the front and rear vertical rack supports.
- Inner rails: these rails are attached to each side of the switch chassis and slide in and out of the rack while mounted on the outer rails.
- Adjustment brackets: these brackets are attached to the front end of each inner rail and serve as spacers between the rack's front vertical supports and the front of the switch chassis.

Switch Compatibility

This product is compatible with the following ATI switches:

- AT-DC2552XS
- AT-x900-24XT
- AT-x900-24XS
- AT-x900-12XT / S
- AT-x510DP-52GTX
- AT-IX5-28GPX
- AT-x930

Rack Mount Kit Rack Dimension Requirements

The Rack Mount Kit is designed to be installed in a rack that meets the following requirements:

- The length between the front and back rack posts should be between 600 mm (23.6 in) and 900 mm (35.4 in).
- The length between the left and right rack posts should be a minimum of 452 mm (17.8 in).
- There should be 35 mm (1.4 in) depth within the rack post for the outer rail mounting.
- The distance between the left and right wall (for the outer rail mounting) should be a minimum of 10 mm (0.4 in) from the screw hole center of the rack posts.

Adjustment Brackets

The adjustment brackets are spacers that position the switch chassis behind the front vertical rack supports.

The adjustment bracket is composed of one fixing bracket, two long extension brackets, one short extension bracket, and six screws.

The adjustment bracket fittings are factory-shipped assembled in the combination shown in Figure 1 and Table 1.

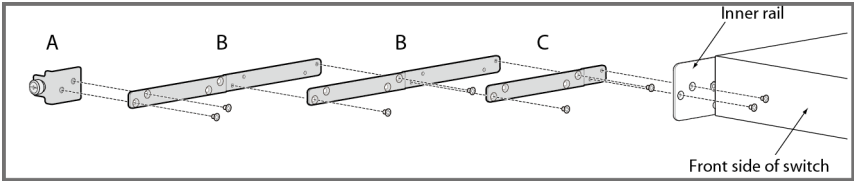


Figure 1. Factory-Shipped Adjustment Bracket

Table 1. Adjustment Bracket Fittings

A	Fixing Bracket	1 ea
B	Long Extension Brackets	2 ea
C	Short Extension Bracket	1 ea


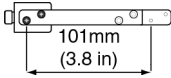
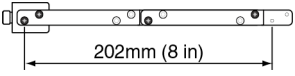
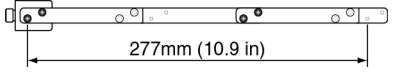
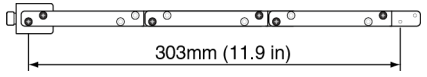
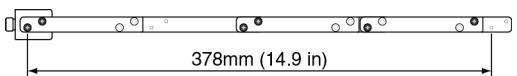
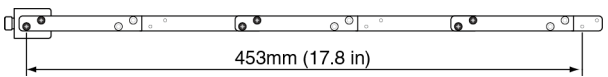
The fixing bracket and short extension bracket can be mounted directly to the inner rail.

Caution

If using long extension bracket(s), secure between the fixing bracket and short extension bracket - the long extension bracket(s) cannot be attached directly to the inner rail. ⚠ E61

The adjustment bracket fittings can be attached in any of the seven combinations shown in Table 2 on page 16. Fittings are shipped in Combination 5.

Table 2. Adjustment Bracket Fitting Combinations

Combo No.	Fixing Bracket	Extension Bracket	No. Screws	Screw Positions & Fitting Combo
1	A	-	0	
2	A	C	2 ea	
3	A	B+C	4 ea	
4	A	B+C	4 ea	
5	A	B+B+C	6 ea	(Factory combination) 
6	A	B+B+C	6 ea	
7	A	B+B+C	6 ea	

Chapter 2

Installation

This chapter contains the following sections:

- “Installation Overview” on page 18
- “Reviewing Safety Precautions” on page 19
- “Unpacking the Contents” on page 22
- “Inner Rail Screw Positions” on page 24
- “Mounting the Rack Mount Kit” on page 26

Installation Overview

The following summarizes the AT-RKMT-SL01 Rack Mount Kit installation sequence.

1. Attach the outer rails to the rack posts.
2. Adjust the length of the adjustment brackets and attach the adjustment brackets to the inner rails.
3. Attach the inner rail to the switch.
4. Slide the inner rails (attached to the switch) into the outer rails.

Reviewing Safety Precautions

Please review the following safety precautions before you begin to install the rack or any of its components.

Note

The ⚡ indicates that a translation of the safety statement is available in a PDF document titled ***Translated Safety Statements*** posted on the Allied Telesis website at **www.alliedtelesis.com/support**.



Warning

Mounting of the equipment in the rack should be such that a hazardous condition is not created due to uneven mechanical loading. ⚡ E25



Warning

Do not pull the rear of the switch out past the front rack posts. If you need to position the rear of the switch out past the front of the rack, you should remove it completely from the rack. ⚡ E58



Warning

Pull the switch out slowly if you must remove it from the rack for maintenance. If you pull the switch out past the front of the rack posts, or if you pull it out too quickly, there is a risk that the weight of the switch will cause the sliding rail assemblies to fail and cause the switch to fall out. ⚡ E59



Caution

Avoid applying excessive force to the cables. ⚡ E60



Caution

If using long extension bracket(s), secure between the fixing bracket and short extension bracket - the long extension bracket(s) cannot be attached directly to the inner rail. ⚡ E61



Caution

Use the adjustment bracket screws supplied with the inner rail. Using screws other than those supplied may result in equipment damage. *↻* E62



Warning

When installing the outer and inner rails, and adjustment bracket, ensure the components are securely attached with the appropriate screws. If not securely attached, a serious accident may occur due to falling equipment. *↻* E63



Warning

When installing and removing the switch from the rack, disconnect the media and power cables. *↻* E64



Warning

A built-in stopper prevents the outer rail from extending beyond its maximum length of 960 mm (37.8 in). Do not extend the rail by force beyond this point, otherwise, the outer bracket will be weakened, and the switch may fall from the rack; equipment could be damaged. *↻* E65



Warning

Ensure the front and rear of both outer rails are attached at the same distance from the floor, otherwise the switch may fall from the rack. *↻* E66



Warning

Be careful to not drop the switch when lifting and not to pinch your fingers when inserting the switch into the rack. *↻* E67



Warning

Other than maintenance work, secure the switch to the outer rail (via the adjustment bracket): If the switch is not secured properly, there is a risk of the switch falling out during movement caused by an earthquake. *↻* E68



Warning

Do not pull the switch out past the front rack posts. ⚡ E69

Unpacking the Contents

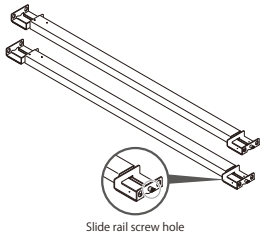
To unpack the Rack Mount Kit, perform the following procedure:

1. Remove all of the components from the shipping package.

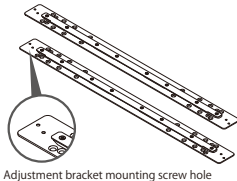
Note

Store the packaging material in a safe location. You must use the original shipping material if you need to return the kit to Allied Telesis.

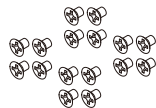
2. Verify that the shipping container includes the following items shown in Figure 2 on page 23.



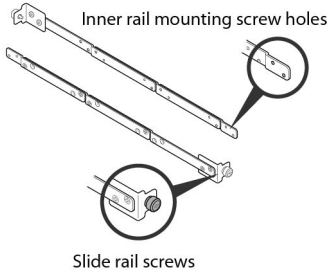
- ❑ 2 outer rails
These rails attach to the rack posts and are adjustable in depth between 600 - 960 mm (23.6 - 37.8 in).



- ❑ 2 inner rails
These rails attach to the sides of the switch.



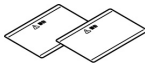
- ❑ 16 inner rail screws (M4 x 8 countersunk)
These screws attach the switch to the inner rails. Screw holes and number of screws will vary depending on the switch.



- ❑ 2 adjustment brackets
These brackets attach to the inner rail and are fixed to the outer rail, and prevent back-and-forth movement of the switch.



- ❑ 4 bracket adjustment screws (M3 x 4 countersunk)
These screws attach the adjustment brackets to the inner rails.



- ❑ 2 warning labels
These labels warn not to pull the switch out past the rack posts.

Figure 2. Shipping Package Contents

Inner Rail Screw Positions

The screw holes and number of screws used for attaching the inner rails to the switch varies, depending on the switch model. Before beginning the installation, refer to the appropriate figure (Figure 3 through Figure 7 on page 25) to identify the correct screw-hole pattern when attaching the inner rail to your switch.

AT-DC2552XS Use eight screws on each side.

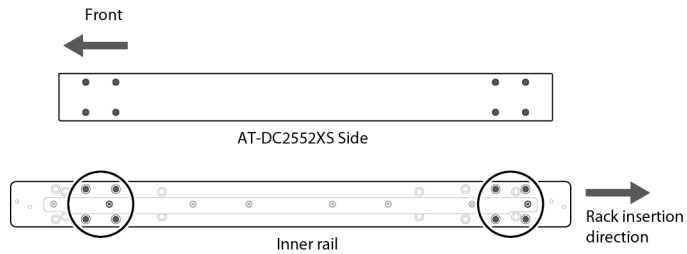


Figure 3. AT-DC2552XS Screw Positions

**AT-x900-24XT/
AT-x900-24XS** Use four screws on each side.

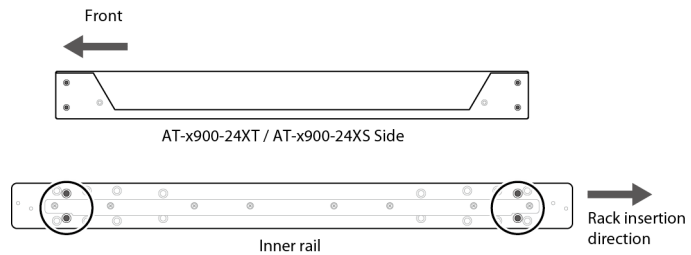


Figure 4. AT-x900-24XT/AT-x900-24XS Screw Positions

AT-x900-12XT/S Use three screws on each side.

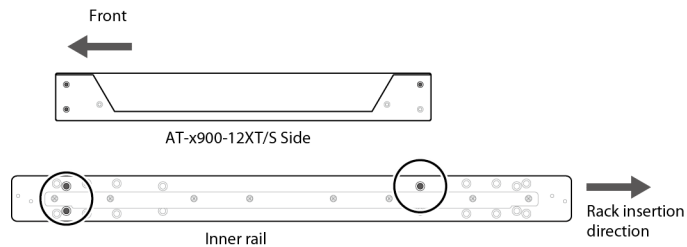


Figure 5. AT-x900-12XT/S Screw Positions

AT-x510DP-52GTX/AT-IX5-28GPX

Use six screws on each side.

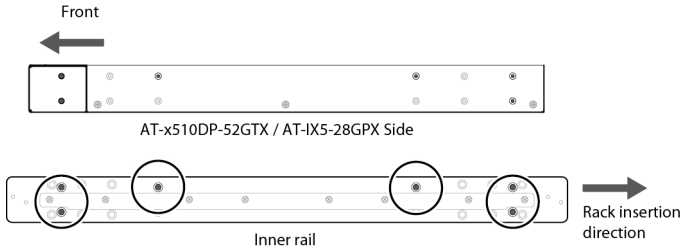


Figure 6. AT-x510DP-52GTX/AT-IX5-28GPX Screw Positions

AT-x930

Use four screws on each side. It is recommended to mount the switch flush with the rack or 25.4 mm (1 in) from the front of the rack.

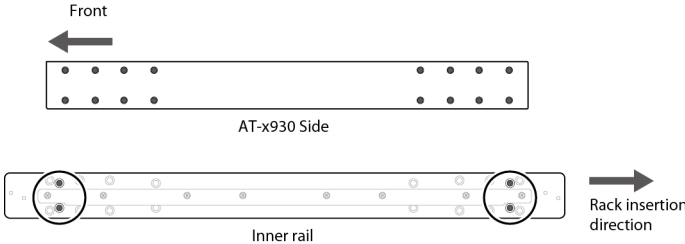


Figure 7. AT-x930 Screw Positions

Mounting the Rack Mount Kit



Caution

Use the adjustment bracket screws supplied with the inner rail. Using screws other than those supplied may result in equipment damage. *↪* E62



Warning

When installing the outer and inner rails, and adjustment bracket, ensure the components are securely attached with the appropriate screws. If not securely attached, a serious accident may occur due to falling equipment. *↪* E63



Warning

When installing and removing the switch from the rack, disconnect the media and power cables. *↪* E64

To mount the Rack Mount Kit, perform the following procedure.

1. Using the provided screws, attach the outer rails to the rack posts. Use four screws per rail.
 - The screws do not have to be completely tightened yet - they should be tightened completely when the switch is being installed.
 - Check the direction prior to installation: see “FRONT” and “REAR” indicated on the rails, as shown in Figure 8 on page 27.



Warning

A built-in stopper prevents the outer rail from extending beyond its maximum length of 960 mm (37.8 in). Do not extend the rail by force beyond this point, otherwise, the outer bracket will be weakened, and the switch may fall from the rack; equipment could be damaged. *↪* E65



Warning

Ensure the front and rear of both outer rails are attached at the same distance from the floor, otherwise the switch may fall from the rack. *↪* E66

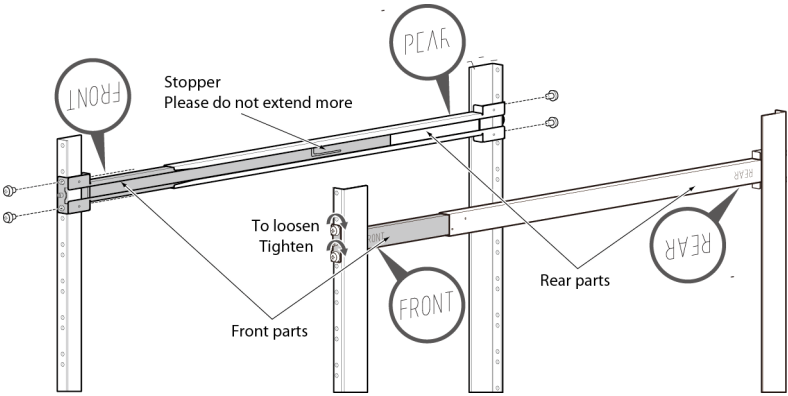


Figure 8. Attach Outer Rails to Rack Post

2. Determine the required length of the adjustment bracket and adjust the length of the adjustment bracket as needed. Refer to “Adjustment Brackets” on page 15.
 - Determine the length of the adjustment bracket according to where you want to position the switch relative to the front of the rack: Measure the approximate length from the front of the rack to where the inner rail is to be mounted, as shown in Figure 9, then select one of the combinations from Table 2 on page 16 that most closely matches the appropriate length.
 - The depth of the switch from the front of the rack is determined by the adjustment combination and where the adjustment bracket is secured to the inner rail.

Note

The inner rail position is stamped with “UP” and an upward pointing arrow on the inner rail panel, as shown in Figure 9. When the inner rail is installed, make sure it is pointing up.

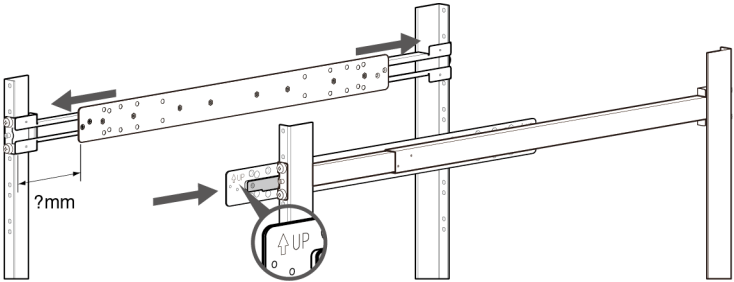


Figure 9. Determine Adjustment Bracket Length

The following are two examples of how the switch can be mounted (referencing the combinations listed in Table 2 on page 16).

Figure 10 shows Combination #1 from Table 2 on page 16. In this position, only the fixing bracket is used. In turn, the switch is mounted near the front of the rack.

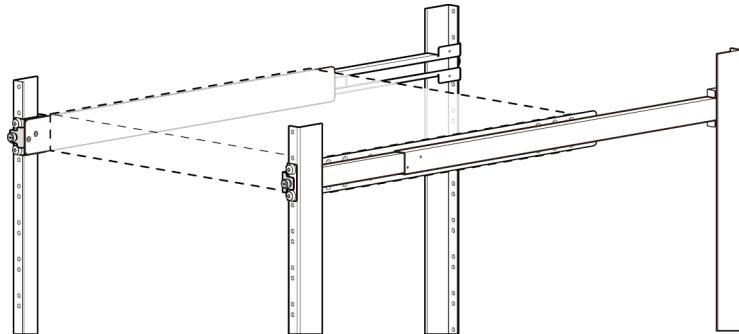


Figure 10. Example: Combination #1 (Fixing Bracket Only)

Figure 11 shows Combination #4 from Table 2 on page 16. In this position, the fixing bracket, a long extension bracket, and a short extension bracket are used. In turn, the switch is mounted 277 mm (10.9 in) deep from the front of the rack.

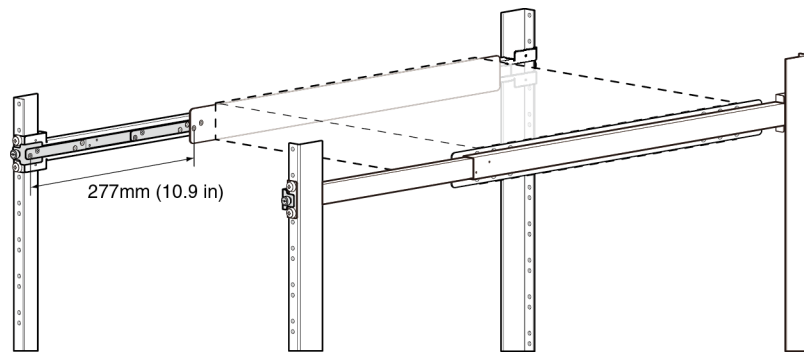


Figure 11. Example: Combination #4 (Fixing & Extension Brackets)

3. Assemble the adjustment bracket. Refer to Table 2 on page 16 for screw positions.
4. Position the adjustment bracket on the side of the inner rail with the UP arrow and attach the adjustment bracket to the inner rail using the supplied adjustment screws. Attach the screws through the holes from the side of the inner rail without the UP arrow. Figure 12 on page 29 shows examples of Combinations #1, 2 and 4 from Table 2 on page 16.

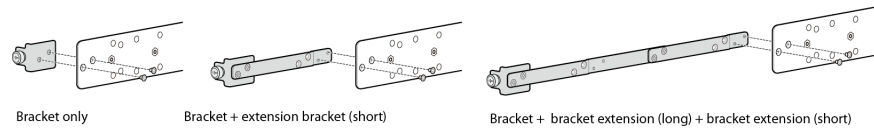


Figure 12. Attach Adjustment Bracket to Inner Rail: Combinations #1, 2, 4

5. Test the inner rail position: With the adjustment bracket attached to the inner rail, slide the inner rail through the outer rail until it reaches the outer rail stopper and check that the inner rail is in the correct position for where you want the switch to be positioned (see Figure 13).

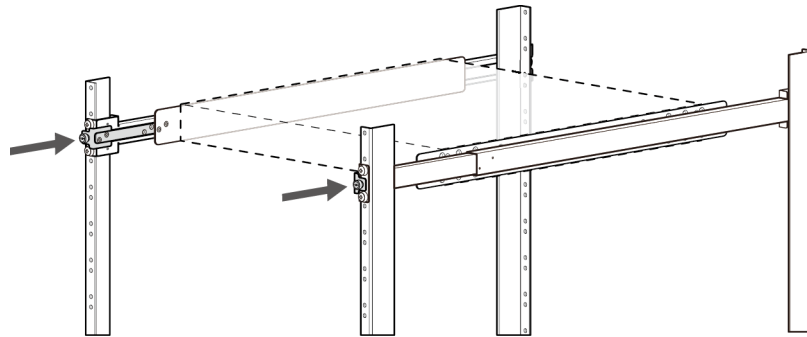


Figure 13. Check Inner Rail Position

If the position is correct, slide the inner rail out from the outer rail. If not, make changes to the adjustment bracket and/or where the adjustment bracket is secured to the inner rail, re-check, and slide the inner rail out from the outer rail.

6. Attach the inner rails to the switch using the provided screws.

The screw holes and number of screws used for attaching the inner rails to the switch varies, depending on the switch model. Refer to “Inner Rail Screw Positions” on page 24.

Make sure the upward pointing arrow and “UP” stamped on the inner rails are pointing up when attaching the inner rails to the switch.

- AT-DC2552XS

Use eight screws on each side.

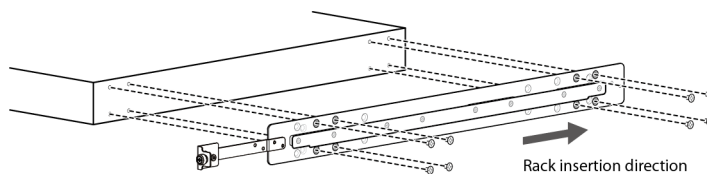


Figure 14. Attach AT-DC2552XS to Inner Rail

- AT-x900-24XT/AT-x900-24XS

Use four screws on each side.

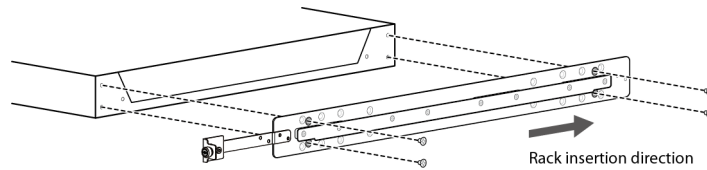


Figure 15. Attach AT-x900-24XT/AT-x900-24XS to Inner Rail

- AT-x900-12XT/S

Use three screws on each side.

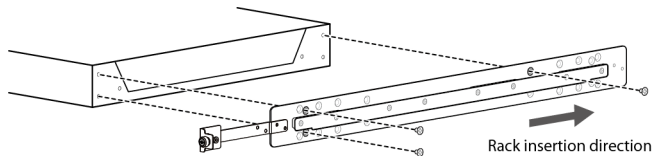


Figure 16. Attach AT-x900-12XT/S to Inner Rail

- AT-x510DP-52GTX/AT-IX5-28GPX

Use six screws on each side.

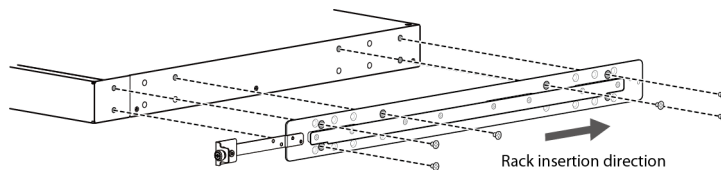


Figure 17. Attach AT-x510DP-52GTX/AT-IX5-28GPX to Inner Rail

- AT-x930

Use four screws on each side. It is recommended to mount the switch flush with the rack or 25.4 mm (1 in) from the front of the rack.

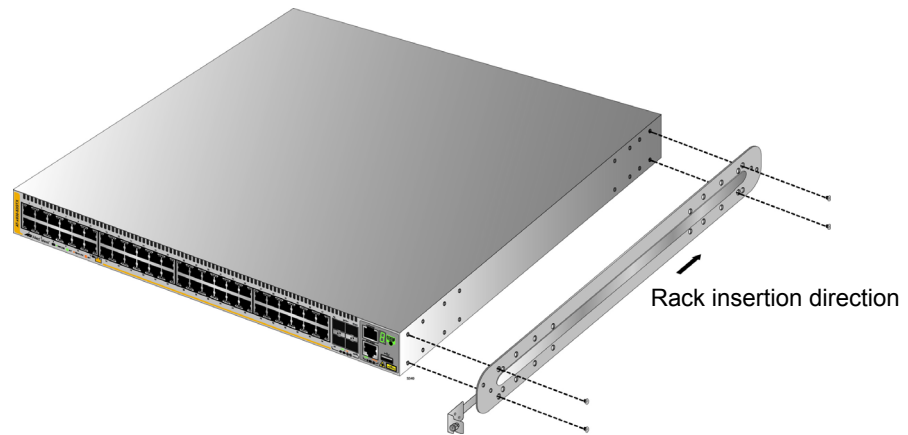


Figure 18. Attach AT-x930 to Inner Rail

7. With the inner rails attached to the switch, slide the inner rails into the outer rails. Ensure the inner rails are securely in the outer rail grooves when sliding in the inner rails. See Figure 19.

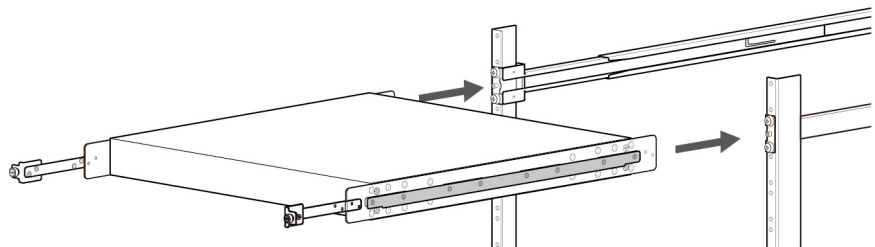


Figure 19. Slide Inner Rails into Outer Rails



Warning

Be careful to not drop the switch when lifting and not to pinch your fingers when inserting the switch into the rack. ⚡ E67

8. Affix the provided warning labels on the switch, one on the top and one on the bottom, in locations immediately visible when removing the switch from the rack.

- Slide the switch back in the desired position in the rack and screw in the fastening screws on the adjustment brackets through the threaded holes on the outer rails. See Figure 20.

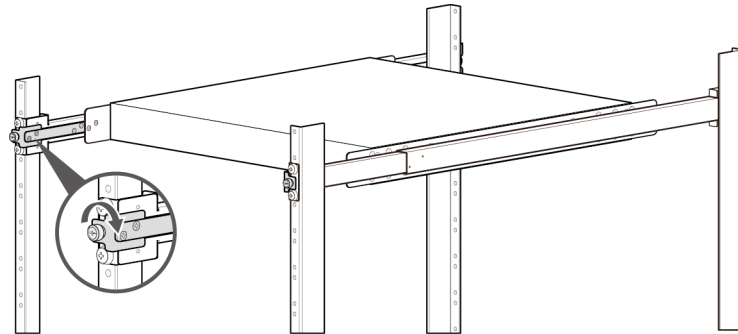


Figure 20. Attach Inner Rails to Outer Rails



Warning

Other than maintenance work, secure the switch to the outer rail (via the adjustment bracket): If the switch is not secured properly, there is a risk of the switch falling out during movement caused by an earthquake. ⚡ E68



Warning

Do not pull the switch out past the front rack posts. ⚡ E69



Warning

Pull the switch out slowly if you must remove it from the rack for maintenance. If you pull the switch out past the front of the rack posts, or if you pull it out too quickly, there is a risk that the weight of the switch will cause the sliding rail assemblies to fail and cause the switch to fall out. ⚡ E59

10. Completely tighten the screws that secure the outer rails to the rack posts. See Figure 21. (These are the same screws used to attach the outer rails to the rack posts in Step 1.)

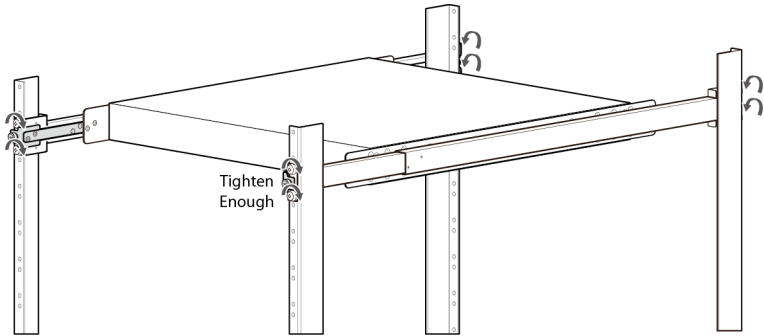


Figure 21. Secure Outer Rails to Rack Posts

