

NetShelter[®] SX to VX or VS External Joining Kit

Overview

The External Joining Kit contains hardware to join NetShelter SX 600-mm and 750-mm enclosures to either NetShelter VX or VS enclosures.

Use the AR7601 hardware kit to join:

- NetShelter SX and NetShelter VX enclosures with 600-mm centers
- NetShelter SX and NetShelter VS enclosures with 600-mm centers

Use the AR7602 hardware kit to join:

- NetShelter SX and NetShelter VX enclosures with 24-in centers
- NetShelter SX and NetShelter VS enclosures with 24-in centers
- NetShelter SX 750-mm and NetShelter VX or VS enclosures.



The NetShelter SX enclosure doors must be removed before it is joined to another enclosure. See the "Installation" chapter of the *NetShelter SX Enclosure—Unpacking, Installation, and Customization* manual for detailed instructions on removing the enclosure doors from the NetShelter SX enclosure. This manual is available at the APC Web site at **www.apc.com** and also comes with the NetShelter SX enclosure.



The NetShelter VX or VS enclosure side panels must be removed before being joined to another enclosure. See the "How to Remove and Install the Side Panels" section of the NetShelter VX Enclosure—Unpacking, Installation, and Customization manual for detailed instructions on removing the enclosure side panels from the NetShelter VX or VS enclosure. This manual is available at the APC Web site at www.apc.com and also comes with the NetShelter VX or VS enclosure.



Note. The NetShelter SX 48U enclosure cannot be joined to a NetShelter VX or VS enclosure using AR7601 and AR7602.

The NetShelter SX enclosure cannot be joined to a VX or VS 47 U enclosure.

The number corresponding with each hardware piece appears in the procedures on the following pages. For reference, the quantities are listed in parentheses.

- 5-mm hex wrench: AR7601, AR7602 (1)
- M5×12 screw: AR7601, AR7602 (4)
- M6×12 pan-head socket screw: AR7601, AR7602 (8)
- 4 M6 flanged hex nut: AR7601, AR7602 (8)









- 600-mm front top joining bracket: AR7601 (1)
- 600-mm front bottom joining bracket: AR7601 (1)
- **2**4-in front top joining bracket: AR7602 (1)
- 3 24-in front bottom joining bracket: AR7602 (1)









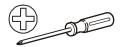
9 600-mm rear joining bracket: AR7601 (2)



• 24-in rear joining bracket: AR7602 (2)



Tools required (not provided)



Phillips screwdriver

When joining enclosures together

These illustrations show connections for a NetShelter SX to a NetShelter VX enclosure with 600-mm centers. The steps are identical whether you are joining together enclosures with 600-mm or 24-in centers.

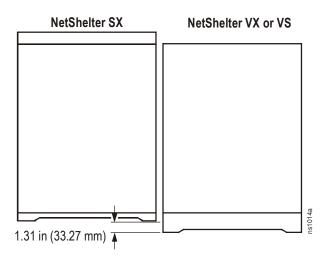


Caution. Joining enclosures together does not provide additional stability.



 $\textbf{Note.} \ \ \text{NetShelter SX enclosures can be joined with or without side panels installed}.$

Top View





Note. The NetShelter SX enclosure will be inset by 1.3 in (33.2 mm) from the NetShelter VX or VS when joined with 600-mm centers using AR7601.

Joining Enclosures with 600-mm Centers

Install the front joining brackets

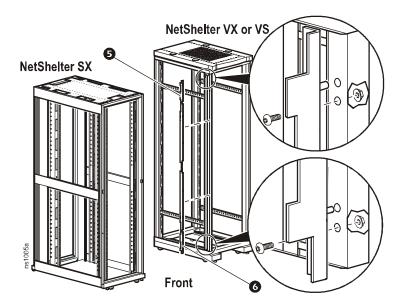


Note. The NetShelter SX enclosure can be joined to either side of a NetShelter VX or VS enclosure. These directions assume the NetShelter VX or VS is located on the right side. Reverse this procedure if you are joining the enclosure on the left side.

Attach the top and bottom joining brackets to the NetShelter VX or VS enclosure on the right.

Install the top joining bracket.

- 1. Locate the first hole from the top of the left vertical frame.
- 2. Align the highest pin on the front top joining bracket **5** with the hole located in step 1.
- 3. Insert the pin and ensure that the other two pins on the bracket are also inserted.
- 4. Insert three pan-head socket screws 3 into the holes below the pins and fasten using three flanged hex nuts **4**. Tighten using a 5-mm hex wrench • (provided).



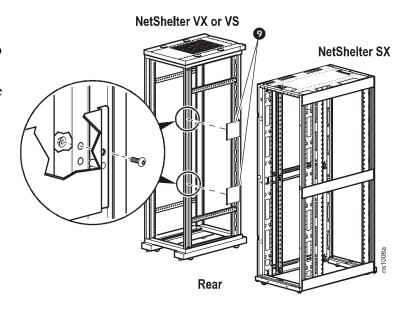
Install the bottom joining bracket.

- 1. Locate the second hole from the bottom of the left vertical frame.
- 2. Insert the lowest pin on the front bottom joining bracket 6 into the hole.
- 3. Ensure the other two pins are inserted and secure as in step 4 of "Install the top joining" bracket".

Install the rear joining brackets

Attach the rear joining brackets to the NetShelter VX or VS enclosure on the left.

- 1. On the right vertical frame, locate the second hole on the third set of holes from the top of the enclosure.
- 2. Align and insert the pin on the rear joining bracket **9** with the hole located in step 1.
- 3. Insert one pan-head screw 3 into the first hole above the pin and fasten using one flanged hex nut 4. Tighten using a 5-mm hex wrench 1 (provided).
- 4. On the right vertical frame, locate the second hole on the third set of holes from the bottom of the enclosure.



- 5. Align and insert the pin on the rear joining bracket **9** into the hole.
- 6. Secure as in step 3.

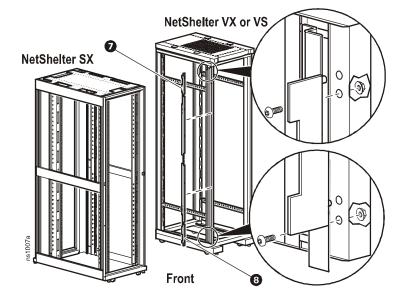
Joining Enclosures with 24-in Centers

Install the front joining brackets

Attach the top and bottom joining brackets to the NetShelter VX or VS enclosure on the right.

Install the top joining bracket

- 1. Locate the first hole from the top of the left vertical frame.
- 2. Align the highest pin on the front top joining bracket **5** with the first hole near the top of the left vertical frame.
- 3. Insert the pin and ensure that the other two pins on the bracket are also inserted.
- 4. Insert three pan-head socket screws 2 into the second holes below the pins and fasten using three flanged hex nuts 3.



Tighten using the 5-mm hex wrench **1** (provided).

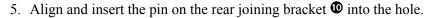
Install the bottom joining bracket.

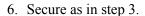
- 1. Locate the second hole from the bottom of the left vertical frame.
- 2. Insert the lowest pin on the front bottom joining bracket **6** into the hole.
- 3. Ensure the other two pins are inserted and secure as in step 4 of "Install the top joining bracket".

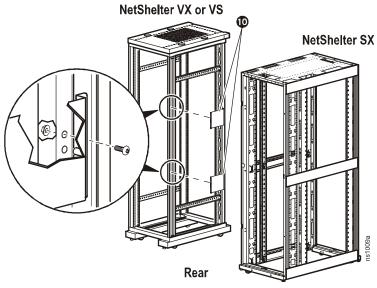
Install the rear joining bracket

Attach the rear joining brackets to the NetShelter VX or VS enclosure on the left.

- 1. On the right vertical frame, locate the second hole on the third set of holes from the top of the enclosure.
- 2. Align and insert the pin on the rear joining bracket **©** with the hole located in step 1.
- 3. Insert one pan-head screw into the first hole above the pin and fasten using one flanged hex nut 4. Tighten using the 5-mm hex wrench (provided).
- 4. On the right vertical frame, locate the second hole on the third set of holes from the bottom of the enclosure.



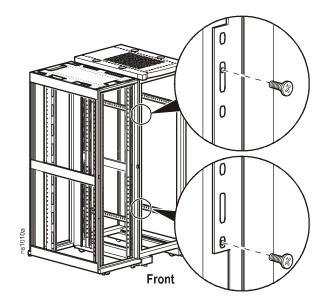




Joining the Enclosures

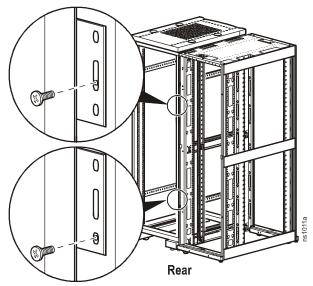
Make the front connections

- 1. Align the middle hole on the front top joining bracket with the top hole of the NetShelter SX frame. Align the bottom hole on the front bottom joining bracket with the bottom hole of the frame.
- 2. Insert and tighten low-profile socket screws 2 into each of the holes using a Phillips or slotted screwdriver (not provided).



Make the rear connections

- 1. Align the middle hole on the rear top joining bracket with the top hole of the NetShelter SX frame. Align the bottom hole on the rear bottom joining bracket with the bottom hole of the frame.
- 2. Insert and tighten low-profile socket screws 2 into each of the holes using a Phillips or slotted screwdriver (not provided).



Leveling the Enclosures

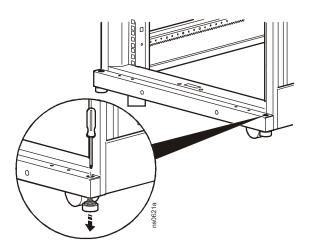
Leveling feet are attached under the enclosure at each corner. The leveling feet can help provide a stable base if the selected floor space is uneven, but they are not intended to compensate for a badly sloped surface. You can remove the casters and leveling feet to allow the base of the enclosure to rest directly on the floor.



Note. Move the joined enclosures to a level location.

NetShelter SX enclosures.

- 1. For each leveling foot, insert a Phillips or slotted screwdriver (not provided) into the screw above the leveling foot. Turn the screw clockwise to extend the leveling foot until it makes firm contact with the floor.
- 2. Use a level to determine which feet need further adjustment.

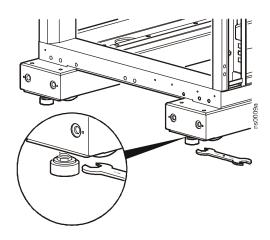




Warning. The enclosure cannot be stabilized using the bolt-down bracket or stabilization plate if the casters or leveling feet are removed.

NetShelter VX and VS enclosures.

- 1. Fit the 14-mm end of the open-ended wrench to the hex head just above the round pad on the bottom of the leveling foot. Turn the wrench clockwise to extend the leveling foot until it makes firm contact with the floor.
- 2. Repeat step 1 for each of the remaining leveling feet.
- 3. Use a level to determine which feet need further adjustment.





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