Rack Mounting Components

This chapter describes the installation procedures for Cisco Video Surveillance Storage System components. The CPS-SS-4RU and CPS-SS-4RU-EX components follow a similar set of install steps.

- Rack Mounting the CPS-SS-4RU and CPS-SS-4RU-EX

Rack Mounting the CPS-SS-4RU and CPS-SS-4RU-EX

The CPS-SS-4RU and CPS-SS-4RU-EX components follow a similar set of installation steps.

Preparing the Mounting Rails

The rack-mount system consists of left and right rail assemblies.

**Caution**

Ensure that your rack can support the total weight of all mounted components and that your floor is sufficiently strong. Since the unit is a fixed-in-rack design, rear cable management arms are not required.

**Step 1**

Adjust the rail length by loosening the four screws holding the rear mount in place and sliding the mount out until it is the correct length. Do not retighten the screws yet.

*Figure 3-1  Adjusting the Rack-Mount Rails*
Step 2  Hook the front bracket hooks on each rail into the square holes in the rack at the proper level, then *loosely* attach the two front screws to hold each rail in place.

*Figure 3-2  Attaching the Mounting Rails in Front*

Step 3  Connect the back end of each rail to the rack by *loosely* attaching the two rear screws holding each rail in place.

*Figure 3-3  Attaching the Mounting Rails in Back*

Step 4  Retighten the screws that you loosened in Step 1 to hold the rear mount in place on each rail.

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**Caution**

Be sure to fully tighten the screws holding each rail together. Failure to do so may result in the rail coming apart during the mounting procedure, which may damage the unit or cause injury to personnel.

The mounting rails are now ready to receive the unit.
Mounting the Chassis into the Rack

The main chassis has large, keyed grooves in the extruded side plates. These are designed so that the rack-mount assemblies attached to the rack (in the previous procedures) can slide into these grooves and support the chassis.

**Caution**

Computer components and disk drives are sensitive to electrostatic discharge (ESD). Be sure to ground any electrostatic charge from your person before touching components with your hands or with any tools. While installing the unit, use the anti-static wrist-strap shipped with the unit.

**Caution**

The units are heavy and require two people to lift them and slide them onto the mounting rails. *Do not attempt to mount the units onto the mounting rails by yourself.*

**Step 1**
Ground any electrostatic charge from your person by touching a metal part of the rack.

**Step 2**
Attach one end of the disposable anti-static wrist-strap to a metal part of the rack. Wrap the other end around your wrist. Both people lifting the unit should do this.

**Step 3**
With the help of a second person, carefully lift the unit so that the grooves in the side of the chassis line up with the mounting rails on the rack.
**Step 4** Carefully slide the unit onto the mounting rails, leaving a few inches between the front of the unit and the front of the rack.

*Figure 3-5 Sliding the Unit Onto the Mounting Rails*

**Step 5** While still supporting the unit from below, tighten the mounting rail screws at the front of each rail.

*Figure 3-6 Tightening the Front Mounting Rail Screws*

**Step 6** Slide the unit the rest of the way into the rack so that the mounting ears sit against the rack.

**Step 7** Tightly bolt the front of the unit to the rack.

*Figure 3-7 Bolting the CPS-SS-4RU (Left) or CPS-SS-4RU-EX (Right) in Place*
Step 8  
Tighten the mounting rail screws at the back of each rail.

Figure 3-8  
Tightening the Rear Mounting Rail Screws

Restoring the Rear Modules

Step 1  
Insert the two Power Supply Units (PSUs) into the back of the unit:

a. Make sure that the PSU is right-side up. The yellow spring lock tab should be on the right side.

b. Insert the PSU into the slot and carefully slide it back until the spring lock tab clicks into place.

Figure 3-9  
Inserting the PSU

c. Repeat Step 1 a and b for the second PSU.

Note  
Do not connect the power cords to the PSUs at this time.

Step 2  
Insert the RAID Controllers or Expansion Controllers into the back of the unit.

a. Make sure that the RAID Controller or Expansion Controller is right side up. The yellow spring lock tab should be on the right side.
b. Insert the RAID Controller or Expansion Controller into the slot and slide it back until the spring lock tab clicks into place.

*Figure 3-10 Inserting the RAID Controller*

![Inserting the RAID Controller](image)

*Figure 3-11 Inserting the Expansion Controller on the CPS-SS-4RU-EX*

![Inserting the Expansion Controller on the CPS-SS-4RU-EX](image)

c. Repeat Step 2 a and b for the second RAID Controller/Expansion Controller.
Loading Disk Drives

⚠️ **Caution**

Before opening any of the drive drawers on the unit, be sure that the internal temperature is 10°C (50°F) or above. If the unit has been shipped or stored in very low temperatures, allow the unit to come to room temperature. Failure to do so may result in internal cable damage.

**Step 1**

Turn the drawer lock counter-clockwise to unlock the left drive drawer.

*Figure 3-12  Unlocking the Drive Drawer*

⚠️ **Caution**

Only open ONE drawer at a time. Fully close and lock each drawer before opening another one. Failure to do so may overbalance the rack, causing equipment damage or injury to personnel.

**Step 2**

Carefully slide the drawer all the way out until the side rail locking tab clicks into place.

*Figure 3-13  Sliding the Drive Drawer Out*

⚠️ **Caution**

Do not lean on or place any heavy object on an open drive drawer. Doing so may damage the drawer slide mechanism or overbalance the rack.
Step 3 For CPS-SS-4RU or CPS-SS-4RU-EX units, open the drive drawer lid.

Figure 3-14 Opening the Drive Drawer Lid

Caution Disk drives are shock sensitive. Perform all actions involving disk drives carefully to avoid damage and data loss.

Step 4 Using the drive guides to help you orient the disks, carefully load each disk drive into a drive slot. Make sure that each disk is fully seated and that the drive ejection handles are flat against each drive.

Figure 3-15 Loading a Disk Drive Into a Unit

Caution Always load disk drives in rows of four across the width of the drive drawer. Leaving large gaps between disk drives decreases cooling efficiency and may result in some disk drives overheating.

Note You can mix SAS and SATA drives in the same drive drawer, but it is recommended that all SAS drives are loaded towards the front of the drawer, with the SATA drives behind the SAS drives.

Step 5 Close the drive drawer lid.
Step 6  Press the latches on either side of the drive drawer to disengage the drawer, then carefully slide the drawer back into the unit, making sure that it is flush with the rest of the front panel.

Figure 3-16  Disengaging the Drawer Side Rail Latches

Step 7  Turn the drawer lock clockwise to lock the drawer into place.

Step 8  Repeat Step 1 through Step 7 for the other drive drawers.