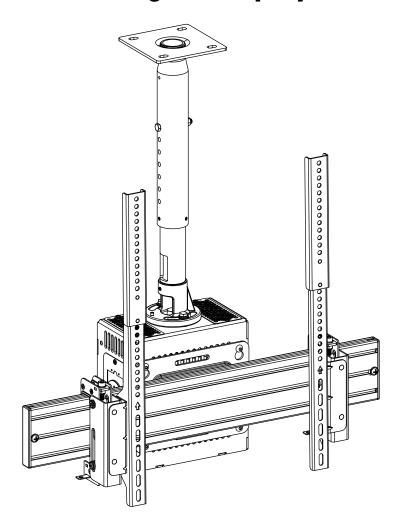


# DIGITAL DISPLAY Modular Digital Display Mount



**Install Guide** 

# Warning

- Please do not begin installation until you have thoroughly read and understood these instructions.
- Failure to read, thoroughly understand, and follow all instructions may result in serious personal injury, property damage, or death. It is the installer's responsibility to ensure all mounting systems are properly assembled and installed using the instructions provided.
- Installation by a qualified professional is highly recommend for this product. Do not install if you have doubts regarding the effectiveness or safety of an installation method.
- This product is intended for indoor use only. Use of this product outdoors may lead to product failure or personal injury. For support please call Customer Care at 866.424.4489.
- Do not install if any parts are missing or defective. Do not attempt to replace with unapproved parts or materials or install without all required parts.
- Before installing, ensure the supporting surface will support the combined load of the equipment and hardware, including ensuring that the wall that you plan to use will safely support four times the combined weight of the mount and your chosen display configuration.
- Use of a suitable safety cables is recommended as a redundant safety measure, and may be required under local building codes.
- Always use an assistant or mechanical lifting equipment to safely lift and position the equipment.
- Screws must be tightly secured. Do not overtighten screws or damage may occur and product may fail.
- Under no circumstance should this product be mounted to metal studs.
- The manufacturer does not accept responsibility for incorrect installation.
- Do not exceed the maximum load (see next page).



# **Preparation Is Key**

Every installation is different, so the modular digital display mount provides a system that is entirely customizable to your needs. Because your install is unique, this manual addresses assembly instructions, but does not address how to select the hardware you need.

To plan the install, visit the Snap One website and visit the Modular Digital Display Mount product page. There you'll find an online planning tool. You tell us how many TVs you have, what their sizes and weights are, and a few other key details, and we'll provide you with a plan for your install.

Ensure that you purchase enough gear to hold your displays safely and securely!

#### **Tools Required**

- Concrete anchors (if needed)
- Masonry bit per anchor bolt instructions
- Power drill
- Drill bit, 3/16" (5mm)
- Hex wrench / bit, 3mm
- Hex wrench / bit, 6mm
- Phillips screwdriver



# **Maximum Load**

Never exceed the Maximum Load Capacity. Do not exceed any individual component's maximum load when used as part of the system.

#### **Utility Boxes**

SM-CB-CM-S, SM-CB-CM-D = 226.8 kg / 500 lb

#### **Display Mounting Arms**

```
SM-CB-CM-LARM-55, SM-CB-CM-PARM-55 = 56.7 kg / 125 lb
SM-CB-CM-LARM-80, SM-CB-CM-PARM-80 = 68.0 kg / 150 lb
SM-CB-CM-LARM-100, SM-CB-CM-PARM-100 = 90.7 kg / 200 lb
```

#### **Rails**

```
SM-CB-CM-ST-30 = 181.8 kg / 400 lb
SM-CB-CM-ST-50 = 181.8 kg / 400 lb
SM-CB-CM-ST-100 = 181.8 kg / 400 lb
```

#### **Poles**

```
SM-FIXPOLE-60-xx, SM-ADJPOLE-9-xx, SM-ADJPOLE-12-xx, SM-ADJPOLE-18-xx, SM-ADJPOLE-24-xx, SM-ADJPOLE-36-xx, SM-ADJPOLE-48-xx = 226.8 kg / 500 lb
```

#### **Wall Mount**

```
SM-CB-CM-WPLT-BRKT = 90.7 kg / 200 lb
```

#### **Ceiling Mounts**

```
SM-CB-CM-CPLT-6-xxx, SM-CB-CM-SPLT-xxx, SM-CB-CM-VIB-xxx, SM-CB-CM-DJ-xxx, SM-CB-CM-IBEAM-xxx = 226.8 kg / 500 lb
```



#### **Hardware Packs**

#### **Plates**

#### SM-CB-CM-CPLT / SM-CB-CM-SPLT / SM-CB-CM-VIB









Expansion bolt M8×70

Hex key 3mm×53mm

Tapping screws ST8×90

Washer 8.5×16×1.5

SM-CB-CM-WPLT









Expansion bolt M8×70

Hex key 5mm×80mm

Tapping screws ST8×90

Washer 8.5×16×1.5

SM-CB-CM-DJ





Hexagon socket head screw M8×25

Set screw M6×6

#### SM-CB-CM-IBEAM





Hex key 3mm×53mm

Hex key 6mm×120mm

#### **Poles**

#### **SM-ADJPOLE**



Hex key 3mm×53mm

#### **SM-FIXPOLE**

No hardware pack



# **Utility Boxes**

SM-CB-CM-D



Hex key 3mm×53mm

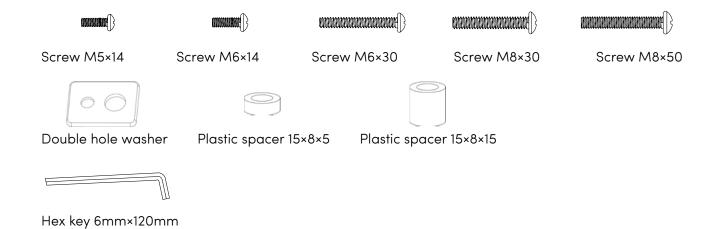
SM-CB-CM-S



Hex key 3mm×53mm

#### **Arms**

#### SM-CB-LARM / SM-CB-PARM





# **Section 1**

# **Ceiling Mount**

## **Install Ceiling Plates**

These instructions apply for square, circular, and vibration reduction plates alike.

**Warning:** Tighten screws or bolts only until the ceiling plate is firmly attached. Do not overtighten. Overtightening can damage the hardware, greatly reducing its holding strength.

#### **Mounting with Wood Joists or Beams**

#### Using Square, Ceiling Mount, Dual Joist

Studs and joists must be a minimum of  $2'' \times 4''$  and covered with no more than  $\frac{1}{2}$  of plasterboard. Ceiling plates include ST8×90 lag bolts for wood joist installation.

Align the drill template to the center of the joist. Drill pilot holes into the joist using a 3/16" drill bit.

Insert four lag screws through each ceiling plate and tighten securely.

#### Using a Vibration Reduction Plate

Beams must be a minimum of 8" in width. Ceiling plates include ST8×90 lag bolts for wood beam installation.

Align the drill template to the center of the beam. Drill pilot holes into the joist using a 3/16" drill bit.

Insert six lag screws through each ceiling plate and tighten securely.

#### **Mounting on a Concrete Ceiling**

Use the provided concrete anchors (M8×70 expansion bolts) for installation. We recommend an outdoor-rated  $\frac{5}{16}$ " ×  $\frac{2}{2}$ " wedge or sleeve anchor for concrete installation.

**Warning:** The ceiling must be solid concrete or concrete block. Verify first that the concrete is at least 13/8" thick, and at least 2000 psi concrete strength. Do not drill into concrete seams!

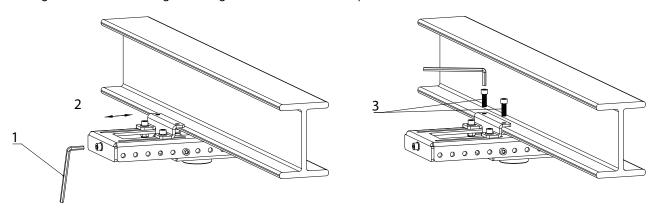
Drill anchor holes into the concrete and insert concrete anchors per their instructions.

Remove the washer and nut from the anchor bolts. Place the ceiling plate over the bolts. Secure the ceiling plate with the washer and nut. Tighten the nut until secure, per the instructions included with the wall anchors.

#### **Mounting on I-Beams**

Use a hex wrench to loosen the flanges on the I-beam bracket ①.

Slide the flanges apart, place the bracket under the I-beam, and push the flanges together to grip the I-beam ②. Tighten the I-beam flanges ① so the bracket grips the I-beam securely. Insert the locking bolts into the flange and tighten for extra security ③.



#### **Attach Drop Poles**

If you are using fixed-length poles, skip down to Inserting the Poles.

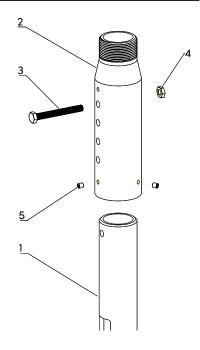
**Warning:** Tighten screws only until firmly secured. Overtightening can damage the screws, greatly reducing their strength.

#### Set Adjustable Pole Length

Adjustable poles range from 9–12" in 1-inch increments, up to 34–48" in 2-inch increments. Ensure you use the same length for all poles for each mounting system.

Slide the inner pole sleeve ① into the outer pole sleeve ②. Line up the holes at your desired length.

Insert the bolt ③ all the way through the aligned holes, and secure it with the locking nut ④.





Insert the three set screws ⑤ into the holes at the bottom of the outer sleeve. Using the hex wrench, tighten them fully and evenly to stabilize the pole.

#### **Insert the Poles**

Thread the poles into the ceiling plates and screw them in until they are firmly seated.

Insert the set screw and tighten firmly.

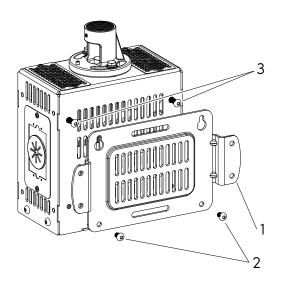
# Connect the Utility Box to the Drop Poles

Some preparation makes installation much easier.

#### Remove the Plates

There are four screws that secure each adapter plate ①. Remove the bottom two ②, and loosen the top two ③ (leaving them still in place), so that you can remove the adapter plate.

If you have a double-sided utility box, repeat this for the other side.

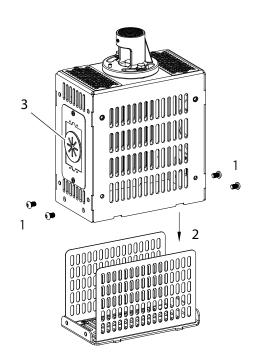


#### **Insert Equipment into the Cage (Optional)**

If you have additional equipment to be placed inside the utility box (for example, a WattBox compact power conditioner), undo the screws at the bottom of the ends ①.

Remove the cage from inside the utility box ②. Place your gear inside the cage, and secure it with a wire tie (not included).

If you have wiring, either slit the grommets on the sides of the utility box in an X shape, or else remove the grommet entirely ③. Thread any wiring through the cable access ports on the sides of the utility box, then reinsert the cage and secure it with the screws.





## Attach the Utility Box to the Pole

**Warning:** Tighten screws only until firmly secured. Do not overtighten. Overtightening can damage the screws, greatly reducing their holding strength.

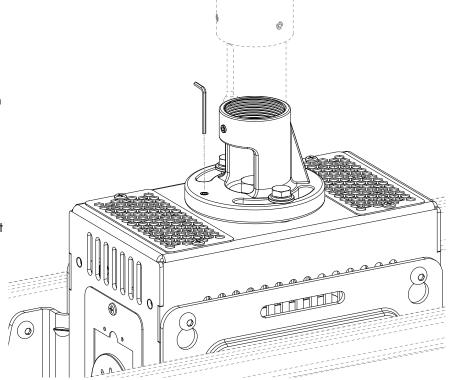
Thread the utility box onto the pole and screw it in until it is firmly seated. Ensure the long side of the utility box is aligned with the direction of the rail.

Insert the set screw and tighten firmly.

# Adjust Utility Box Alignment

If the utility boxes are not perfectly straight, loosen the set screw at the top, and align the utility box manually. You can adjust a box's alignment by up to 45° in either direction.

Tighten the set screw when finished.



Proceed to Section 3 on page 11.





# **Section 2**

# **Wall Mount**

## **Install Wall Plates**

**Warning:** Tighten screws only until the ceiling plate is firmly attached. Do not overtighten. Overtightening can damage the screws, greatly reducing their holding strength.

#### Mounting on Wood Studs/Pillar

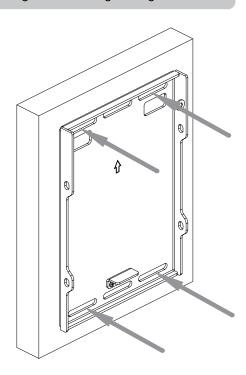
If mounting on a single wood pillar, it must be at least 5.5" wide. Otherwise, frame out two 2" × 4" studs spaced 8" apart. The studs or pillar must be covered with no more than  $\frac{1}{2}$ " of plasterboard. Wall brackets include ST8×90 lag bolts for wood joist installation.

Place the wall bracket drill template on the wall in the desired location, with the arrow pointing up. Ensure that it is level, then mark the locations to drill pilot holes for mounting.

Drill four holes into the joist(s) using a 3/16" drill bit. Use a stud finder to ensure that you drill into the center of the joists.

Place the wall plate in place, ensuring that the arrow points up.

Insert four lag bolts into holes through the wall plate to secure plate to the wall. Tighten the lag bolts to secure the wall plate.



#### **Mounting on a Concrete Wall**

Use the provided concrete anchors (M8×70 expansion bolts) for installation.

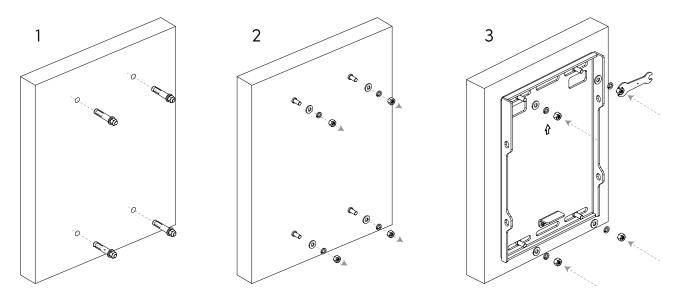
**Pro Tip:** Concrete anchors **not** provided. We recommend an outdoor-rated 5/16" × 2½" wedge or sleeve anchor for concrete installation.

**Warning:** The ceiling must be solid concrete or concrete block. Verify first that the concrete is at least 13/8" thick, and at least 2000 psi concrete strength. Do not drill into concrete seams!

Place the wall bracket drill template on the wall in the desired location, at least 1" from any seams in the concrete. Ensure that it is level and that the arrow is pointing up. Mark the locations to drill pilot holes for mounting.

Insert hex sleeve anchors and insert per instructions included with wall anchors ①.

Remove washer and nut from end of bolt from all four anchor studs ②.



Place the wall plate in place over the bolts, ensuring that the arrow points up.

Replace the washers and nuts onto ends of the bolts and tighten until secure ③.



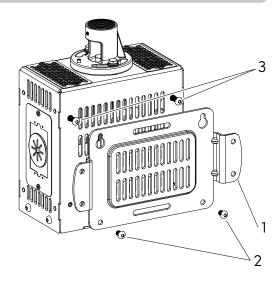
# Connect the Utility Box to the Wall

Some preparation makes installation much easier.

**Warning:** Tighten screws only until firmly secured. Do not overtighten. Overtightening can damage the screws, greatly reducing their holding strength.

#### **Remove the Adapter Plate**

There are four screws that secure each adapter plate ①. Remove the bottom two ②, and loosen the top two ③ (leaving them still in place), so that you can remove the adapter plate.

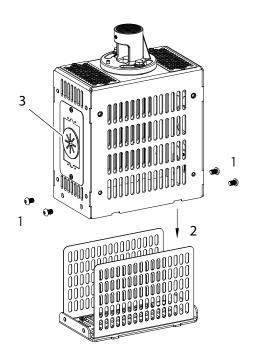


#### **Insert Equipment into the Cage (Optional)**

If you have additional equipment to be placed inside the utility box (for example, a WattBox compact power conditioner), undo the screws at the bottom of the ends.

Remove the cage from inside the utility box. Place your gear inside the cage, and secure it with a wire tie (not included).

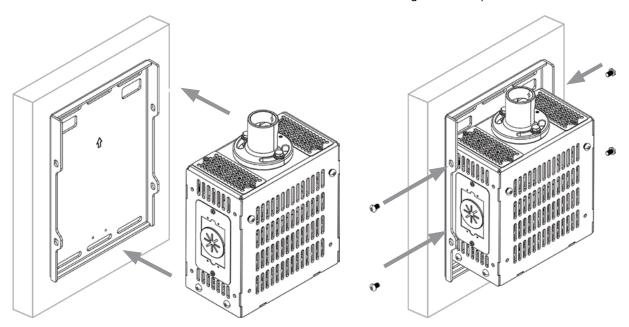
If you have wiring, either slit the grommets on the sides of the utility box in an X shape, or else remove the grommet entirely. Thread any wiring through the cable access ports on the sides of the utility box, then reinsert the cage and secure it with the screws.





# Attach the Utility Box to the Bracket

Place the utility box into the wall bracket. Secure each side with two screws as shown. Secure the top two screws first, then insert and secure the bottom screws to align the utility box.



Proceed to Section 3, next page.





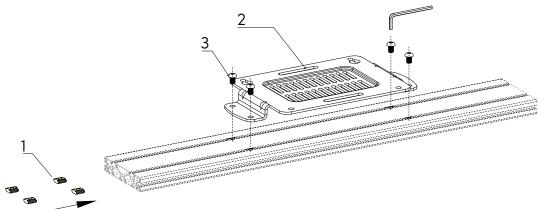
# Section 3 Mount the Displays

# **Build the Rails**

Rails have a two-track side (the front) and a three-track side (the rear). Your rails may be very long; ensure you have everything organized to match rail alignment and measurements accurately.

## Attach the Adapter Plates to the Rail

For each adapter plate, insert four slide nuts into the rail front side, two in each track ①. Position the slide nuts to align to the desired position of the adapter plate.



Align the adapter plate with the screws, ensuring that the flange side is toward the rail, and top of the adapter plate is aligned correctly for your install plan ②.

Tighten the screws into the slide nuts to secure the adapter plate to the rail 3.

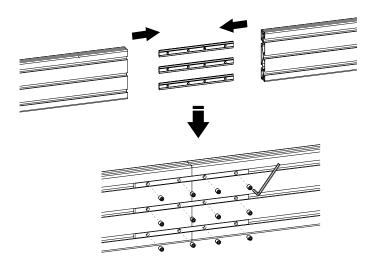
## Connect the Rails (If Needed)

If you have a lengthy series of displays in your install plan, you may need to gang together several rails.

Once all of your support hardware is installed (brackets or drop poles, boxes), piece together your long rail.

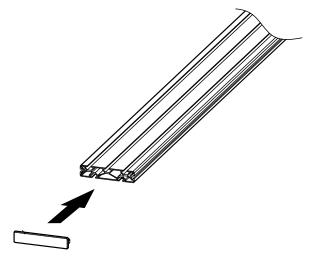
To attach two rail pieces together, insert connector bars into each of the three tracks in the back side of the rail.

Double-check that the rails are properly aligned, then secure the connector bars with four screws each.



## **Attach Rail End Caps**

For a clean, finished look, insert the end cap into each end of the finished rail.

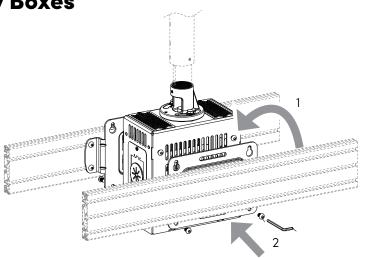




Hang the Rails on the Utility Boxes

The utility boxes should still have the top screws in them. If they don't, insert those screws, leaving 5–6mm of space for the adapter plate.

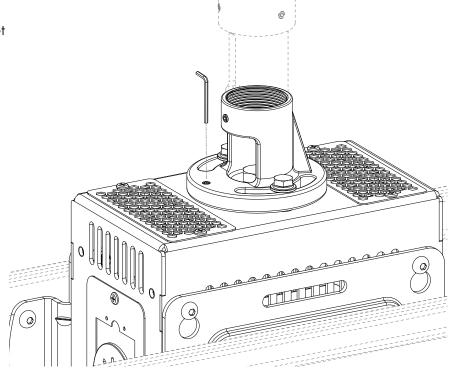
Hang the top of the adapter plates onto the utility boxes, and let them slide down to seat properly ①. Insert the screws into the bottom holes of the adapter plate and tighten them ②. Then tighten the screws at the top of the adapter plate.



# **Adjust Utility Box Alignment**

If the utility boxes are not perfectly straight, loosen the set screw at the top, and align the utility box manually. You can adjust a box's alignment by up to 45° in either direction.

Tighten the set screw when finished.





# **Attach Arms to the Displays**

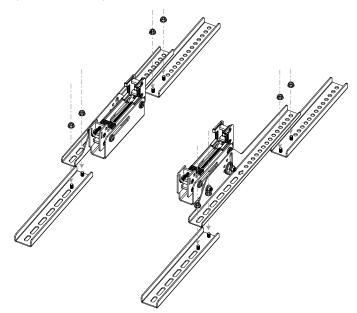
The arms come in two pieces. Since they are not connected, they can handle any VESA pattern width. The VESA height each arm can accommodate depends on the part number.

#### **Fix Arm Length**

Align the arms with the display to see how long the arms need to be.

Nest the clamp section with the extenders if necessary.

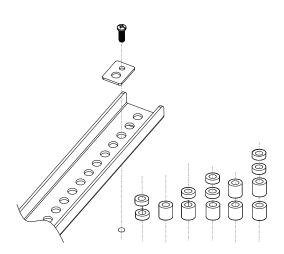
Attach nuts to the extended bolts and tighten securely.



#### **Select Spacers and Attach Arms**

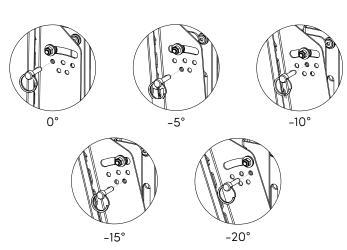
Select the appropriate hardware (screws, washers, and spacers) necessary to secure the arms to the display. Hardware requirements vary by TV brand.

Attach the arms to the displays. Ensure that the arrows etched into the arms both point up. This means the edges of the display arms bend away from the display casing, and the clamps are toward the center and bottom of the display.



# **Set Angles**

The arms can be set to tilt the displays up to 20° down, in increments of 5°. Select the angle by inserting the pin into the proper hole. Adjust all arms to the same angle to ensure the displays are consistent.

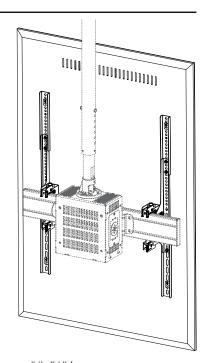




# Hang the Displays on the Rails

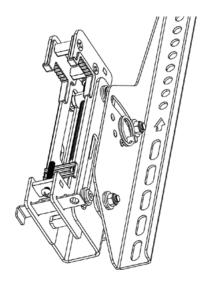
Hang the display on the vertical struts. Hook the top of the arms over the top of the rail, then swing the bottom of the display so the lower prong of the clamps rest on the rail.

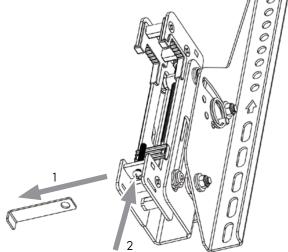
If you are using a single pole, be sure to balance the system by distributing the weight evenly along the mounting rail.



## **Secure the Clamps**

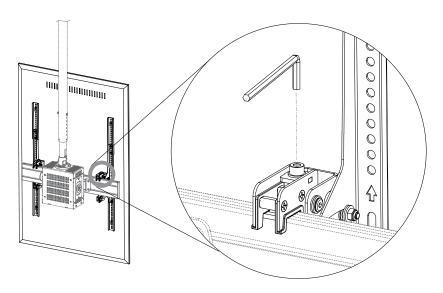
At the bottom of the clamp, remove the anti-theft bar ①. Use a screwdriver to tighten the long set screw at the bottom of the clamp to secure the arm to the bottom of the rails ②.





#### **Adjust Height and Level**

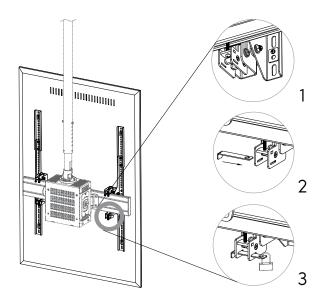
Use the hex wrench to adjust the exact height of each arm. You can raise or lower the display to make it level and even with the displays next to it. The adjustment limit is 3".





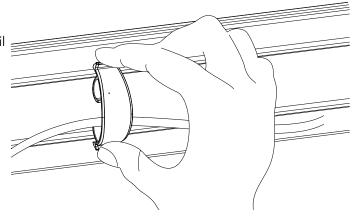
#### **Affix Anti-Theft Lock**

Once the bottom clamps are secure ①, insert the anti-theft bar into the slots shown ② and affix a lock ③ (not included).



#### Wire Management

To keep your wires contained, bend the wire management clip and slip the ends into the rail tracks.



#### **Technical Support**

For chat and telephone, visit https://tech.control4.com/s/contactsupport • Email: TechSupport@SnapOne.com Visit tech.control4.com/technician for discussions, instructional videos, news, and more.

#### **Warranty and Legal Notices**

Find details of the product's Limited Warranty and other resources such as regulatory notices and patent and safety information, at at **snapone.com/legal** or request a paper copy from Customer Service at 866.424.4489.

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Part # 200-00756-E

