GCX
Mounting Solutions

Installation Guide

Dual-Channel Ceiling Mount (Channels Available in 12", 18", or 24" Lengths)

The purpose of this guide is to:

1. *Provide reference material regarding installation of down pipe and ceiling mount.*
2. *Describe mounting of Dual Channel Ceiling Mount.*

⚠ **WARNING:**

Do not position mount or mounted instrument over a patient.

Do not position the mounted instrument low or in a hall or walkway. Impact with users or other equipment may create a safety hazard.

Do not hang from the mount. It is not intended to support the weight of a user.

Load capacity of the Dual Channel Ceiling Mount is dependent upon the strength of the structure to which the 1-1/2" down pipe is mounted. See "WARNING" at top of page 2.

The Dual Channel Ceiling Mount has a maximum load capacity of 100 lbs. [45.4 kg] when the load is mounted at or near the Channels. Load capacity decreases as the load is extended laterally from the Mount. Maximum load capacity is 50 lbs. [22.7 kg] at 24" [61cm] from the Channels. These limits apply to all lengths of Mounts (12", 18", or 24"). Do not exceed the weight limits shown below.

100 lbs. [45.4 kg]
at Channel

50 lbs. [22.7 kg]
24 in. [61 cm] from Channel

24" [61 cm]
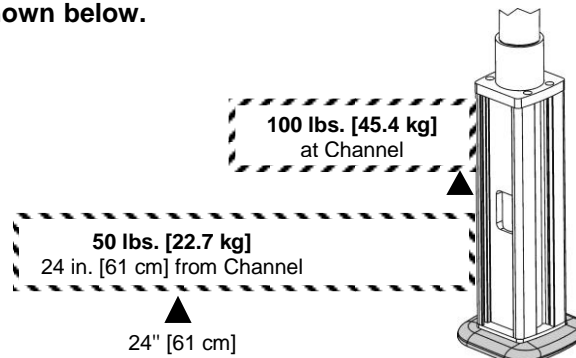
Parts Reference

The parts list below includes the parts and hardware that will be used in this installation procedure (see photos for parts; hardware not shown).

Item #	Description	Qty
1	Flange (not shown)	1
2	Escutcheon Ring (not shown)	1
3	Ceiling Mount, Dual-Channel	1
4	Bumper Assembly	1
5	1/4-20 x 3/4" Button Head Socket Cap Screw (BHSCS)	4
6	1/4-20 x 3" Socket Head Cap Screw (SHCS)	1
7	1/4-20 x 2-3/4" SHCS	1
8	1/4-20 Lock Nut with Nylon Insert	2
9	5/32" Hex Key	1
10	3/16" Hex Key	1

Dual-Channel
Ceiling Mount

Bumper Assembly
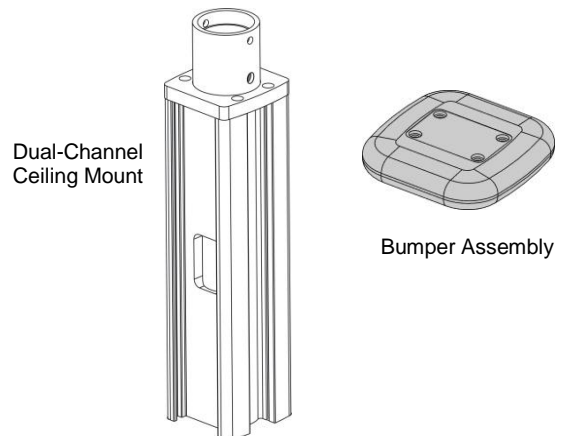
Tools required: Drill and 1/4" drill bit, Phillips screwdriver, 5/32" and 3/16" hex keys (provided), and 7/16" wrench.
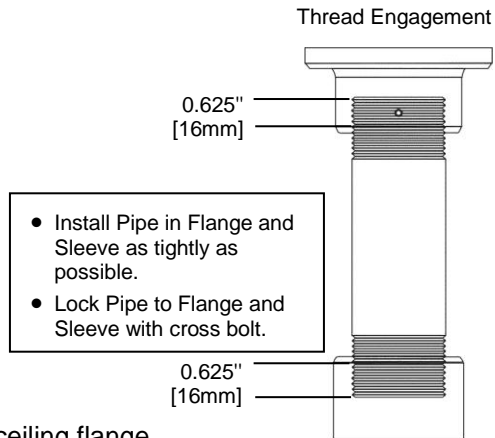Tools required for installation of down pipe must be specified by the installer.
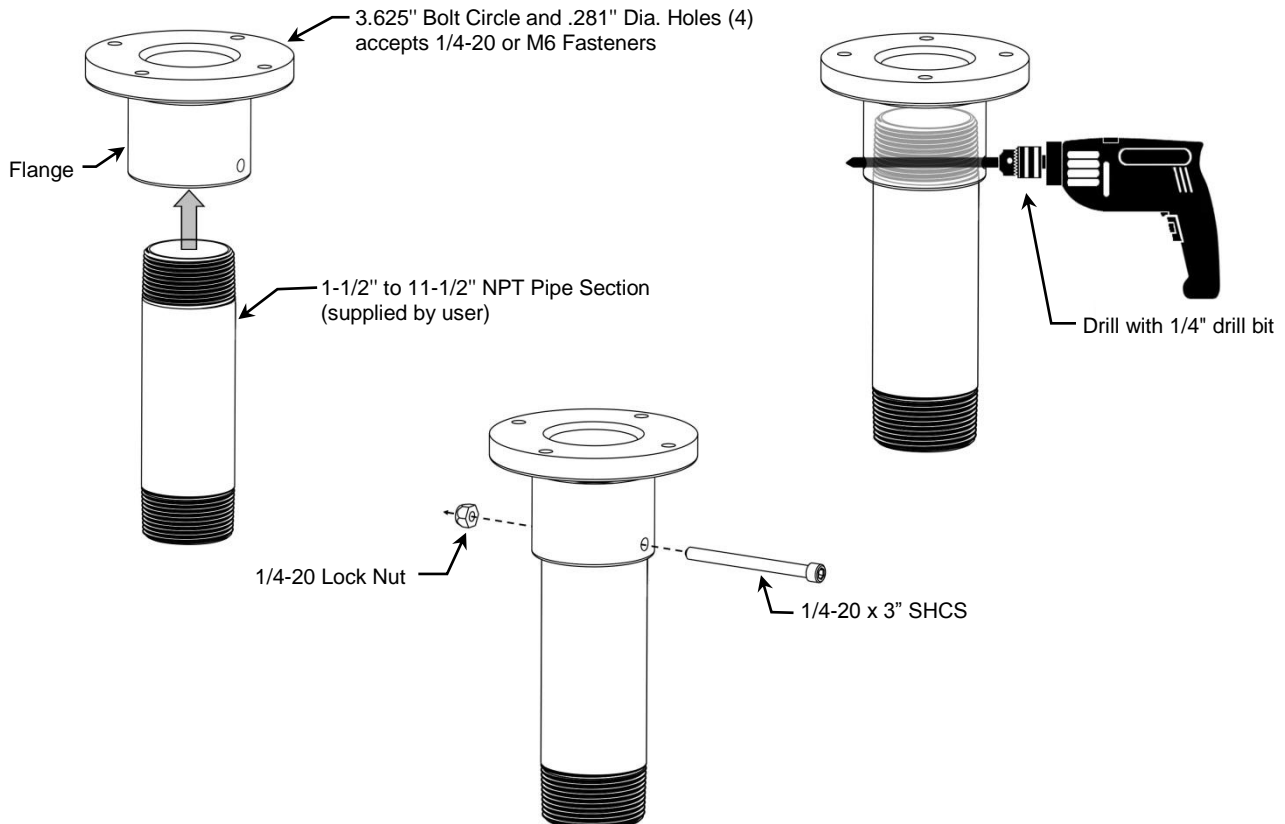
Installing the Ceiling Mount Down Pipe

⚠️ **WARNING: It shall be the responsibility of the hospital, its consultants or contractors to determine that the ceiling and/or structure is adequate to safely support the mounting of monitoring equipment. Load capacity is dependent upon the strength of the structure to which the 1-1/2" NPT pipe is mounted. This includes the selection of appropriate fasteners and the proper installation of same. The following installation reference is provided as guideline material.**

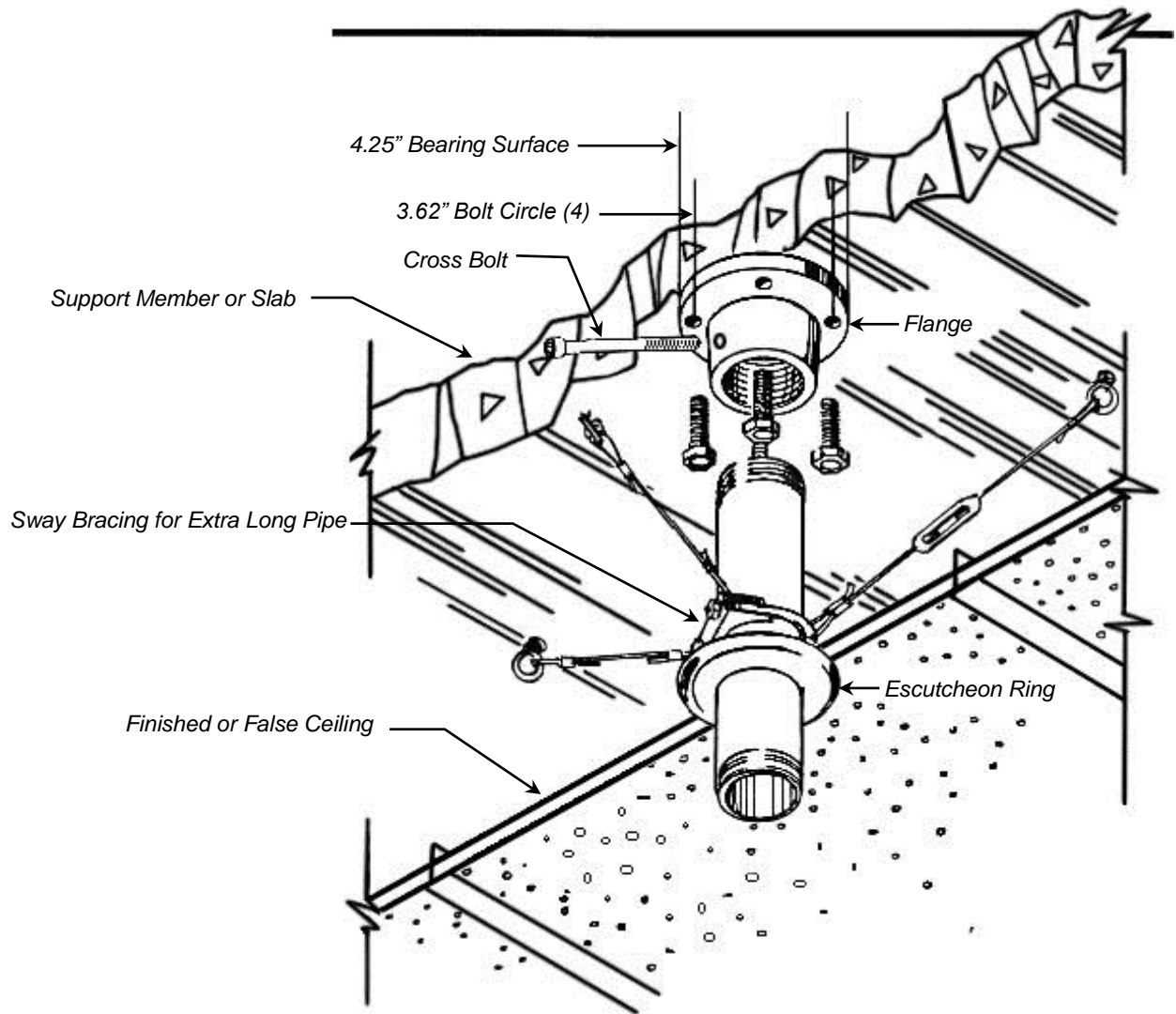**Installation Reference:**

Thread Engagement

IMPORTANT: Minimum thread engagement is 0.625" [16mm] in both upper and lower fittings (flange or sleeve) to allow set screws and other locking mechanism to lock against pipe threads. In addition to achieving minimum thread engagement, it is important that the installer tighten the pipe until the threads are seated firmly inside the flange or sleeve. This can be accomplished using a pipe wrench. Wrap duct tape or other protection around the jaws of the wrench to prevent damage to the finish.

0.625" [16mm]

- Install Pipe in Flange and Sleeve as tightly as possible.
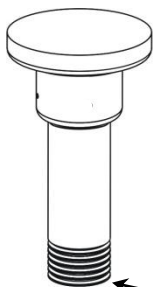- Lock Pipe to Flange and Sleeve with cross bolt.

0.625" [16mm]

- Ceiling Mount assembly (with flange), escutcheon ring, and ceiling flange are supplied with this installation kit. All other hardware and the 1-1/2" to 11-1/2" pipe section must be supplied by the user.

- Install pipe to flange with minimum .625" thread engagement. Use a pipe wrench with taped jaws or a padded chain wrench to screw the pipe section into the ceiling flange. Screw the mount flange (attached to top of mount) onto the pipe section.

- Using a 1/4" drill bit, drill holes through pipe wall on opposite sides of pipe (use exisiting holes on flange as pilots).

- Insert 1/4-20 x 3" SHCS through holes, thread 1/4-20 Lock Nut onto screw. Tighten screw/nut with 3/16 hex key and 7/16 wrench.

3.625" Bolt Circle and .281" Dia. Holes (4) accepts 1/4-20 or M6 Fasteners

Flange

1-1/2" to 11-1/2" NPT Pipe Section (supplied by user)

Drill with 1/4" drill bit

1/4-20 Lock Nut

1/4-20 x 3" SHCS

- Mount the faced 1-1/2" NPT pipe flange (provided) to a supporting member or slab above the finished ceiling. It is up to the installer to provide a section of 1-1/2" to 11-1/2" NPT threaded plumbing pipe cut to the length needed. We recommend using schedule 80 black pipe for heavy monitors. The surface may be dressed by turning on a lathe, using a hand-held #80 sanding belt, primed and painted. The flanges provided are locked onto the pipe section with cone-point socket set screws.

- If your application requires a longer pipe section (12" or longer), it may be necessary with heavy monitors to sway brace the pipe just above the finished ceiling. Any specific method of attachment is the responsibility of the user. One suggested method is to use 2" U-bolts around the pipe, four (4) 1/4-20 eye bolts in the slab, four (4) 1/4-20 x 1" red head expansion anchors, four (4) turnbuckles, wire retension clamps and guy wire.

- The pipe must extend through the finished ceiling a minimum of 5" to allow room for installation of the ceiling mount flange. Use a pipe wrench with taped jaws or a padded chain wrench to screw the pipe section to the ceiling flange. Screw the mount flange (attached to top of mount) onto pipe section.


4.25" Bearing Surface

3.62" Bolt Circle (4)

Cross Bolt

Support Member or Slab

Flange

Sway Bracing for Extra Long Pipe

Escutcheon Ring

*Finished or False Ceiling*

Installing the Ceiling Mount

1 – Thread Mount onto Pipe. **Note:** Minimum thread engagement is 0.625"
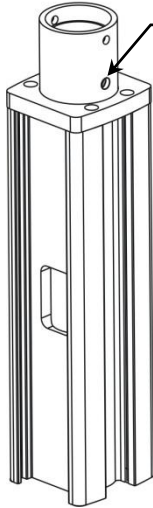
Installation Note: A hole is provide through the lower Sleeve to allow insertion of a Phillips screwdriver for tightening Mount onto pipe (see photo below).
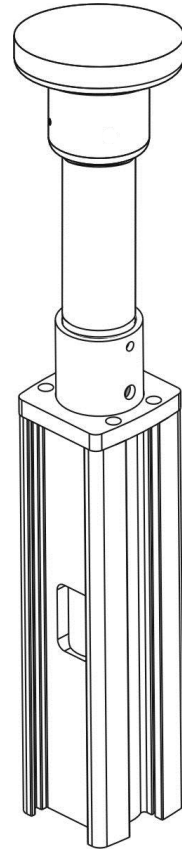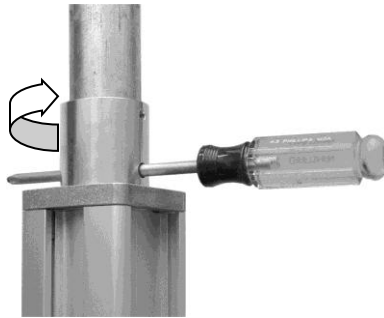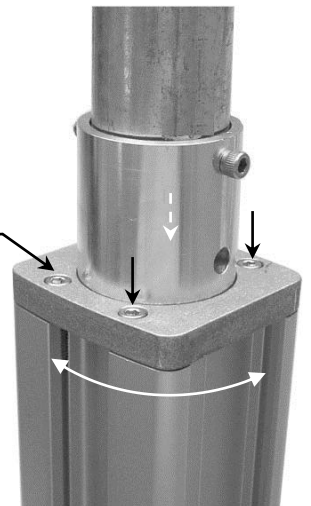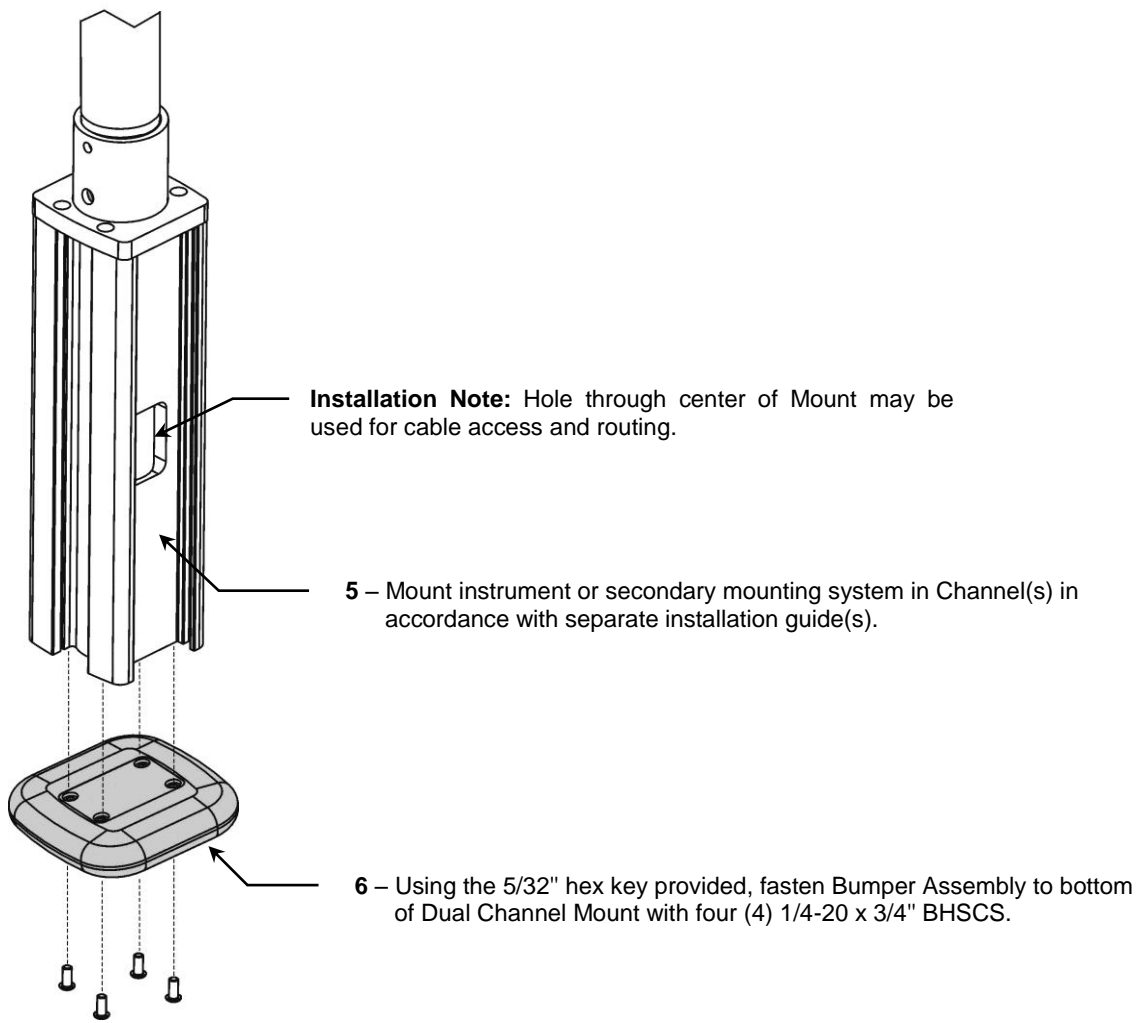
2 – Using 1/4" drill bit, drill holes through pipe wall on opposite sides of pipe.
Note: Use existing holes as pilots.
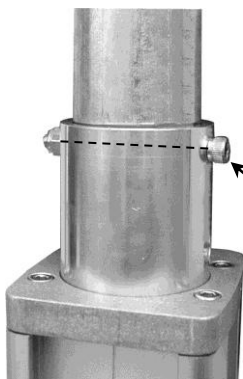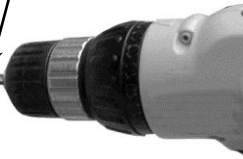
3 – Insert 1/4-20 x 2-3/4" SHCS through upper holes and thread 1/4-20 lock nut onto screw. Tighten screw/nut with 3/16" hex key (provided) and 7/16" wrench.

4 – After installing the Mount, it may be necessary to swivel the Channels to a more desirable mounting orientation. Locate four (4) socket head cap screws on top of Mount. Using the 3/16" hex key provided, loosen each screw approximately 1/2 turn. Swivel Channel assembly to desired position and tighten socket head screws.

Installation Note: Hole through center of Mount may be used for cable access and routing.

5 – Mount instrument or secondary mounting system in Channel(s) in accordance with separate installation guide(s).

6 – Using the 5/32" hex key provided, fasten Bumper Assembly to bottom of Dual Channel Mount with four (4) 1/4-20 x 3/4" BHSCS.

⚠ **Warning: Once installed, do not place any additional weight or strain on the mount or mounted instrument. Doing so may adversely affect the performance and safety of the mount.**

Routine Maintenance

All fasteners associated with the mounting system should be inspected periodically and tightened as necessary.

Cleaning the Mounting Assembly

1. The mounting assembly may be cleaned with most mild, non-abrasive solutions commonly used in the hospital environment (e.g. diluted bleach, ammonia, or alcohol solutions).

2. The surface finish will be permanently damaged by strong chemicals and solvents such as acetone or trichloroethylene.

3. Steel wool or other abrasive material should never be used.

4. Damage caused by the use of unapproved substances or processes will not be warranted. We recommend testing of any cleaning solution on a small area of the mounting assembly that is not visible to verify compatibility.

5. Never submerge or allow liquids to enter the mounting assembly. Wipe any cleaning agents off the mounting assembly immediately using a water-dampened cloth. Dry the mounting assembly thoroughly after cleaning.

CAUTION: GCX makes no claims regarding the efficacy of the listed chemicals or processes as a means for controlling infection. Consult your hospital's infection control officer or epidemiologist. To clean or sterilize mounted devices or accessory equipment, refer to the specific instructions delivered with those products.