Desono™
EX-S Loudspeaker Accessories
Installation & Operation Guide

biamp.

CMX
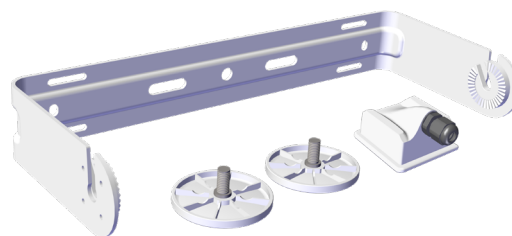
EXUB

Models
CMX-SM, CMX-LG
EXUB-S6, EXUB-S8
EXUB-S10

RIGGING AND ELECTRICAL SAFETY

⚠ **IMPORTANT:** The loudspeakers described in this manual are designed and intended to be mounted to differing building surfaces using a variety of rigging hardware, means and methods. Installation of loudspeakers should only be performed by trained and qualified personnel. All electrical connections must conform to applicable city, county, state, and national (NEC) electrical codes.

⚠ **IMPORTANT:** Refer to the sections on installation and connections in the EX-S Installation and Operation Guide for additional information on rigging and electrical safety.

⚠ **IMPORTANT:** When installing loudspeakers outdoors, use a support system with enough wind-load strength to comply with applicable codes and standards.

⚠ **IMPORTANT:** Please review the safety guide accompanying this product and the installation instructions prior to to installing this loudspeaker.

⚠ **CAUTION:** Installation of Biamp loudspeakers should only be performed by trained and qualified personnel. It is strongly recommended that a licensed and certified professional structural engineer approve the mounting. Severe injury and/or loss of life may occur if this product is improperly installed.

⚠ **DANGER:** It is advised that a safety cable be secured to a suitable load-bearing point separate from the primary loudspeaker mounting point, with as little slack as possible so as not to develop undue kinetic force if the primary mount were to fail.
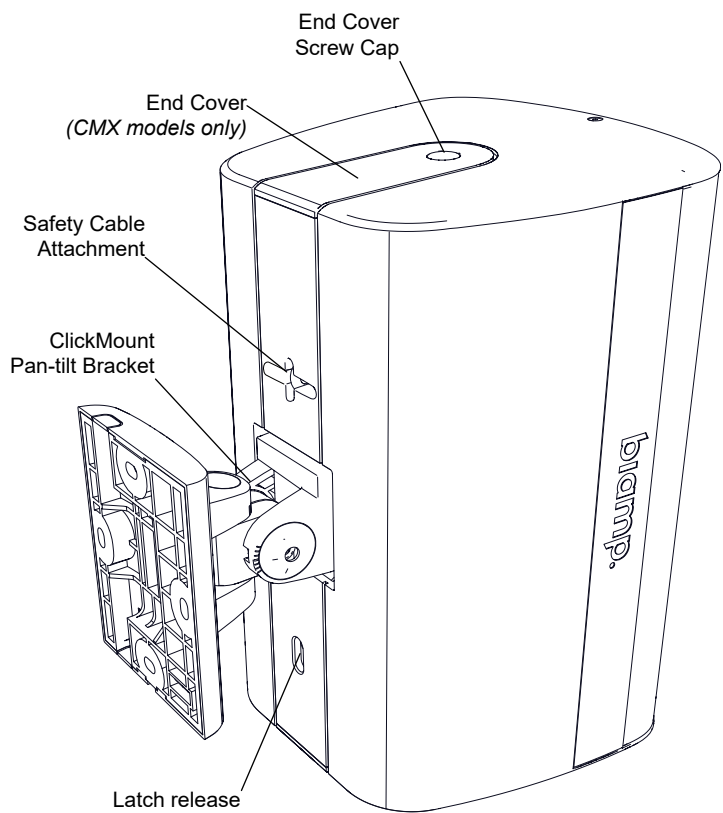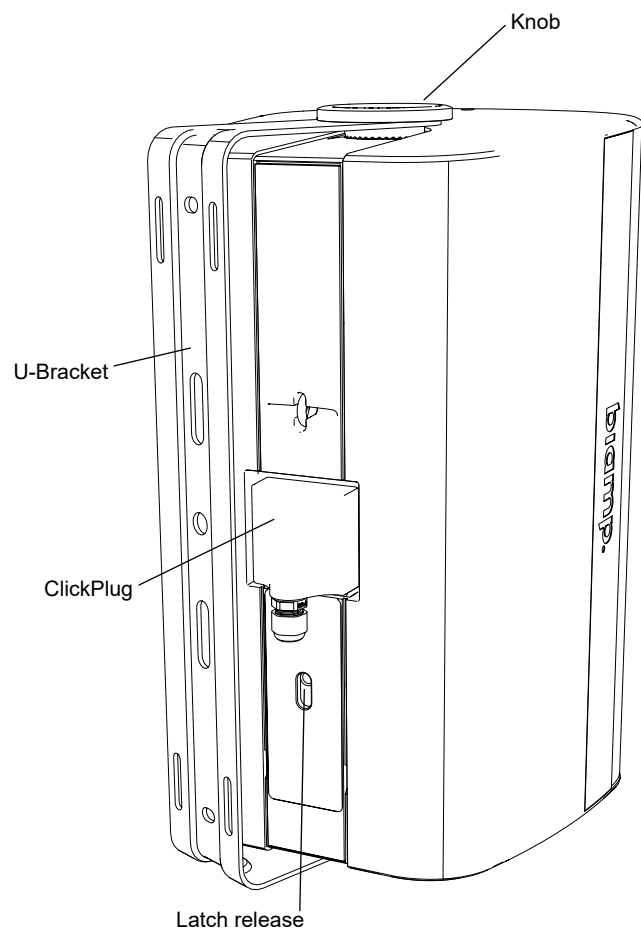
⚠ **ENVIRONMENTAL:**
1) This device is not intended for water immersion in applications requiring UL1480A Certification.
2) This device is not intended for direct exposure to sunlight in applications requiring UL1480A Certification.

PRODUCT REPRESENTATION

End Cover
Screw Cap

End Cover
(CMX models only)

Knob

Safety Cable
Attachment

ClickMount
Pan-tilt Bracket

U-Bracket

ClickPlug

Latch release

Latch release

CMX-SM on EX-S6 shown

EXUB-S8 on EX-S8 shown

Tools Needed
- Hex wrenches: 5mm, 5.5mm (or 7/32"), 6mm
- Small flat screwdriver

INSTALLATION

The loudspeaker can be mounted to a variety of surfaces, but <u>must</u> be mounted to structural load bearing surfaces or substrates (not electrical gang boxes). There are two mounting options provided for the Desono EX family of loudspeakers: a ClickMount pan-tilt bracket and an indexing U-Bracket with included waterproof ClickPlug wiring insert. Wiring can be run to the mounting locations for each of the mounting options. When installing EX models outdoors, do not aim them upwards. Doing so will void the warranty and reduce the life of the loudspeaker.

Since the loudspeakers are sold with a mounting option, this installation guide will describe the method of changing one mounting method to the other. Please review the EX Surface Mount Loudspeaker [Installation guide](#) for complete information about installation, wiring, and aiming.

Attach End Caps for Conversion to ClickMount Pan-tilt Bracket

Remove the U-Bracket, ClickPlug and end knobs from the loudspeaker if they were previously installed or attached.

End Cap Cover Attachment

1. Slide cover on and seat over the threaded insert (Figure 1).

2. Screw on the cover retention nut with a 6mm hex wrench.

3. Cover the nut with the small cap - insert the rear tabs first, then push down the front to fully seat.
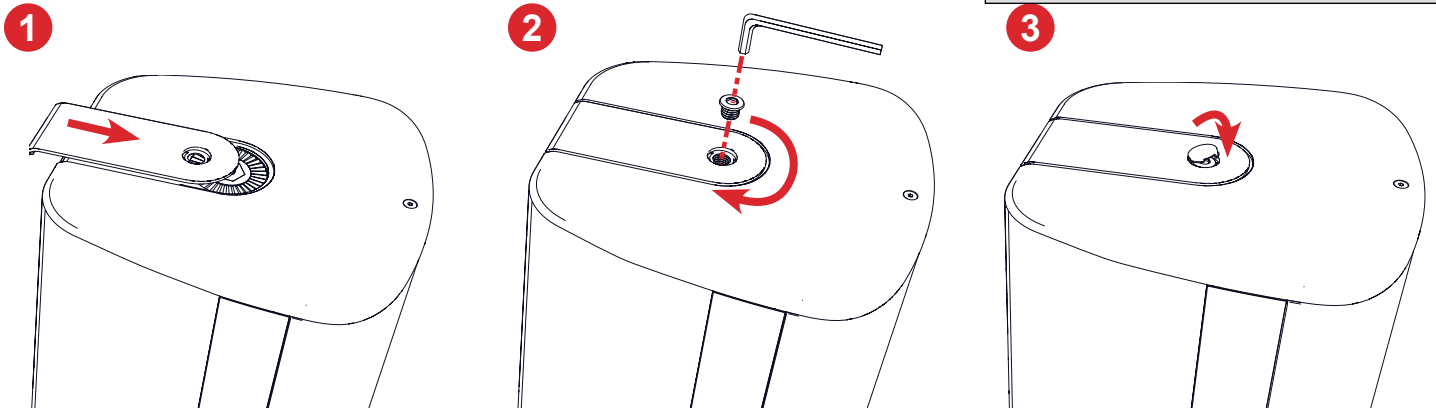
> ⚠️ **Mounting Considerations:**
> *The loudspeaker must be tilted away from the ClickMount plate when attaching it to the bracket. Adequate space must be allowed around the ClickMount bracket to accommodate this, so locating the bracket in or close to a corner is not advised. Refer to the documentation accompanying the accessory for spacing for both vertical and horizontal orientations.*

Figure 1. End cover attachment

Install the ClickMount Pan-tilt Bracket

Refer to the EX-S installation guide (manual) by scanning the QR code at right or clicking on the link. Install the ClickMount bracket per the instructions.

1. Adjust the tap switch to the desired setting.

2. Mount the loudspeaker to the bracket (Figure 2).

3. Secure the loudspeaker with a safety cable attached to the loop on the rear.

4. Aim the loudspeaker, then fully tighten the bracket with the hex wrench. Do **not** overtighten.
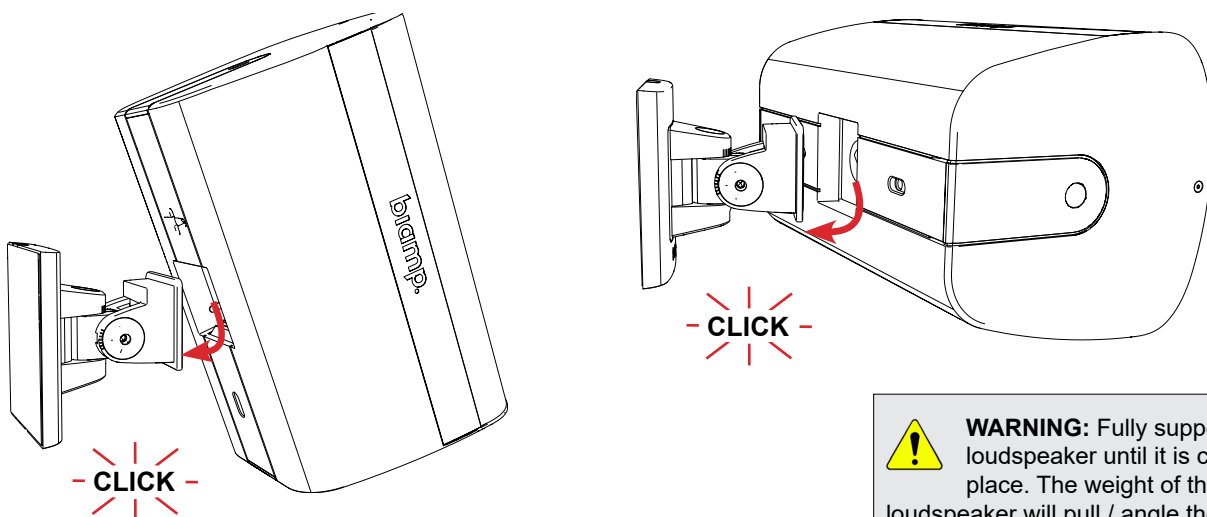
bia.mp/EX-S_pubs

Figure 2. Mount loudspeaker on bracket

> ⚠️ **WARNING:** Fully support the loudspeaker until it is clicked in place. The weight of the loudspeaker will pull / angle the ClickMount arm down if it isn't tight.

Installation - ClickMount Pan-tilt Bracket (continued)

To remove loudspeaker from the bracket

The loudspeaker can be removed from the ClickMount pan-tilt bracket as follows:

1. Insert a 5mm hex wrench into the hole within the slot in the middle of the label on the rear panel (Figure 3a).

2. Pull down (or toward the base) and the latch will release and remain in the "unlocked" position until the speaker is removed from the bracket. The loudspeaker must be fully supported as you release the latch. See Warning at right.

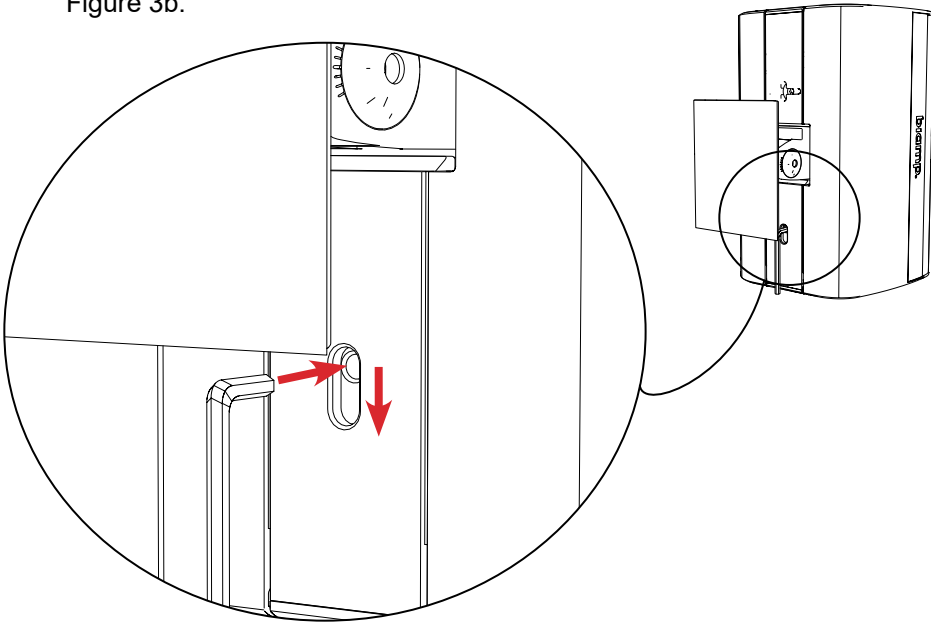3. Rotate the bottom of the speaker away from the ClickMount Bracket. See Figure 3b.

⚠️ **WARNING:** When you release the clickmount latch - the loudspeaker **will fall** off the ClickMount bracket! Fully support the cabinet while releasing the latch. This is especially important with horizontally-mounted EX loudspeakers! The safety cable should be in place to take the strain but the loudspeaker will be dangling.
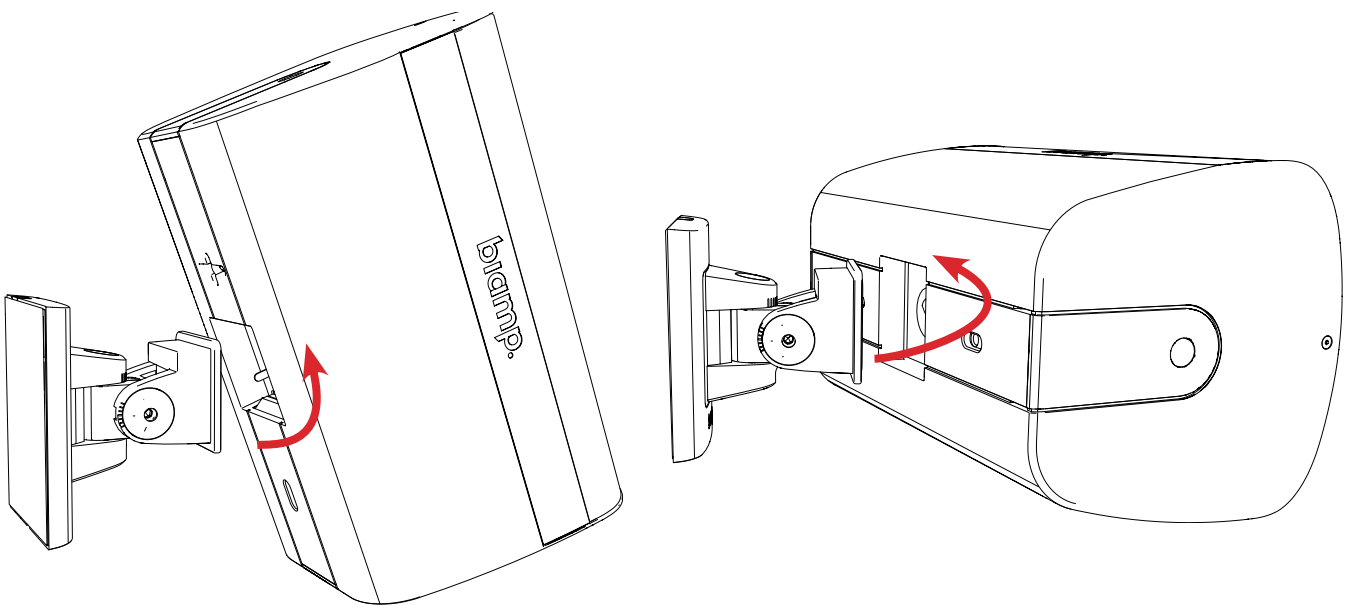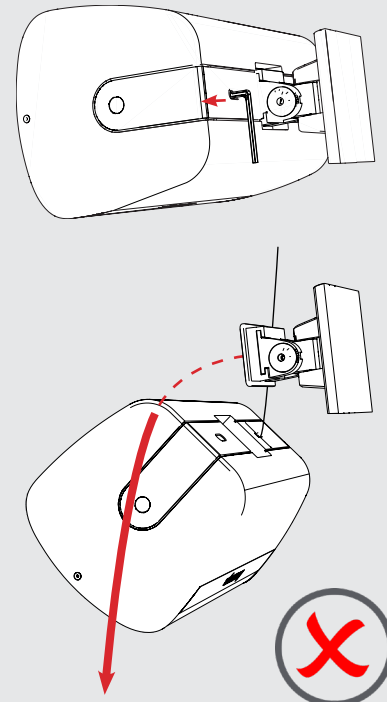
Figure 3. Insert hex wrench into hole and pull down to release latch

Figure 3b. Lift and rotate bottom of speaker away from the ClickMount bracket

End Cap Cover Removal for U-Bracket Installation

The end cap covers can be removed if you purchased a unit with a ClickMount pan-tilt bracket and need to change it to a U-Bracket mount with the appropriate accessory EXUB-S kit.
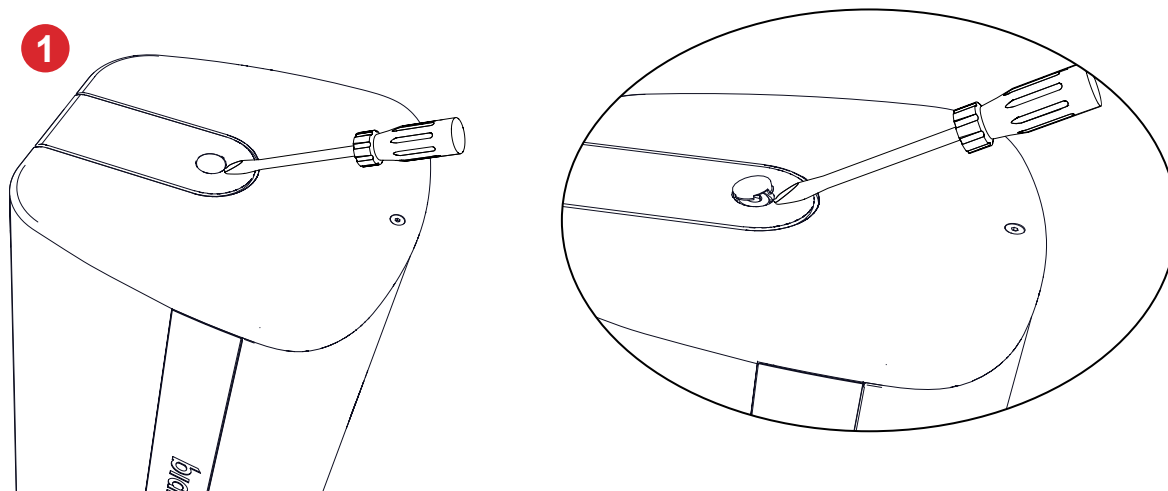
They are sized for each loudspeaker model (S6, S8, S10/S10SUB).

Cover Removal

1. Insert a small screwdriver under the front end of the circular cap. Pry up and remove the cap.

Tools Needed
• Small flat screwdriver • 6 mm hex wrench

2. Use a 6mm hex wrench to remove the cover retention nut.
3. Use a small screwdriver to lift the front end of the cover.
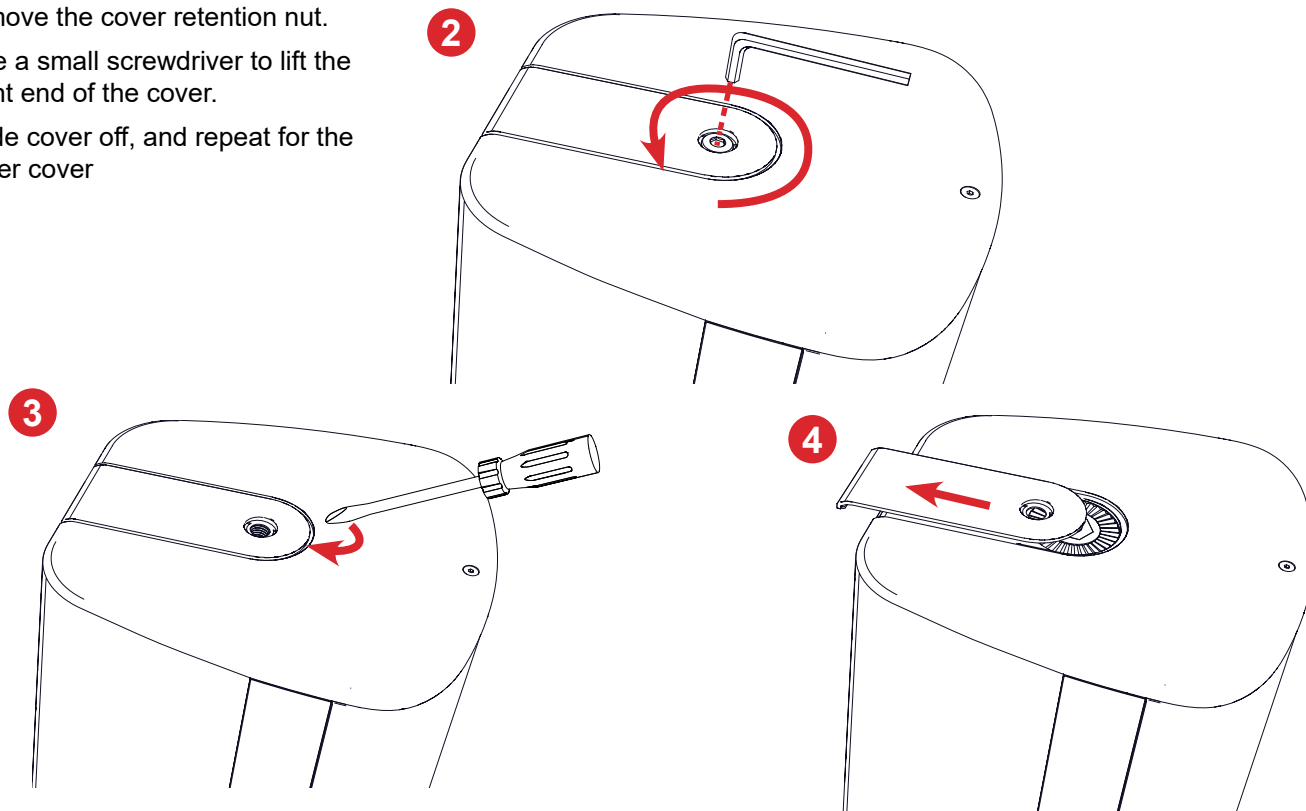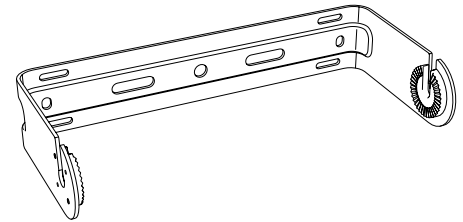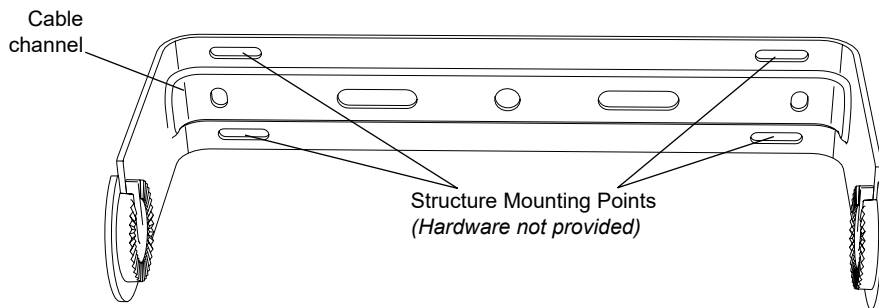4. Slide cover off, and repeat for the other cover

Figure 4. Remove end cap covers

Installation - U-Bracket

The U-Bracket can be connected to a center suspension post or against the wall, ceiling or other flat surface. It can also be mounted to a variety of third party stand and pole adapters. Refer to the EX-S Installation guide for full instructions.

1. Mount U-Bracket to wall prior to loudspeaker installation. If mounting in a horizontal orientation on a wall, the slots should face up - see image at right.

2. Sufficient cable should be pulled through the bracket holes to create a drip loop (damp/wet applications) with enough extra to connect to the ClickPlug.

⚠ **Mounting Considerations:** Leave appropriate spacing on either side of the U-Bracket to be able to access the knobs with hands and tools. Refer to the manual for assembly and spacing for both horizontal and vertical orientations.

Cable channel

Structure Mounting Points
(Hardware not provided)

3. Wire ClickPlug as shown (Figure 5) and in the EX-S Install Guide leaving enough for the likely mounting angle and a drip loop for damp/wet applications.
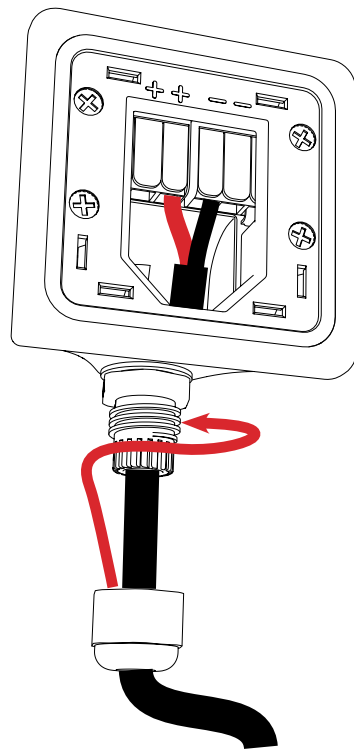
4. Adjust the tap switch to the desired setting.

Cable / Wire Size
ClickPlug Cable gland nut will accept a 4-8mm (0.15-.3 in) diameter cable or 2 pairs 1.5mm² (16 ga) or 1 pair 2.5mm² (14 ga). For outside or moisture-rich environments - round SJOW cable or equivalent is advised to provide a weather-resistant seal in the tightened gland nut. Forming the cable into a drip loop will also prevent any moisture migrating into the gland nut.

Tools Needed
- 5.5mm (or 7/32") Hex wrench

Figure 5. Wire the ClickPlug

Installation - U-Bracket (continued)

Attach the Loudspeaker to the U-Bracket

Refer to the EX-S Install guide (manual) by clicking on this link: bia.mp/EX-S_pubs.

5. Mount the loudspeaker to the U-bracket per the instructions since the loudspeaker must be mounted in a specific way to correctly engage and use the indexing aiming feature. The loudspeaker will rotate 200° on the bracket in 10° increments.

6. Secure the loudspeaker with a safety cable attached to the loop on the rear.

7. Aim the loudspeaker, then fully tighten the end knobs with the hex wrench. Do **not** overtighten.

8. Insert the wired ClickPlug into the opening with the plug top (or side) into the indent under the safety cable loop first, then "click" it into place by pushing it against the latch (Figure 6).

> **IMPORTANT:** The cabinet is finished with a light coat of paint. Take care to avoid scratching or marring the finish when sliding the loudspeaker onto the U-Bracket.
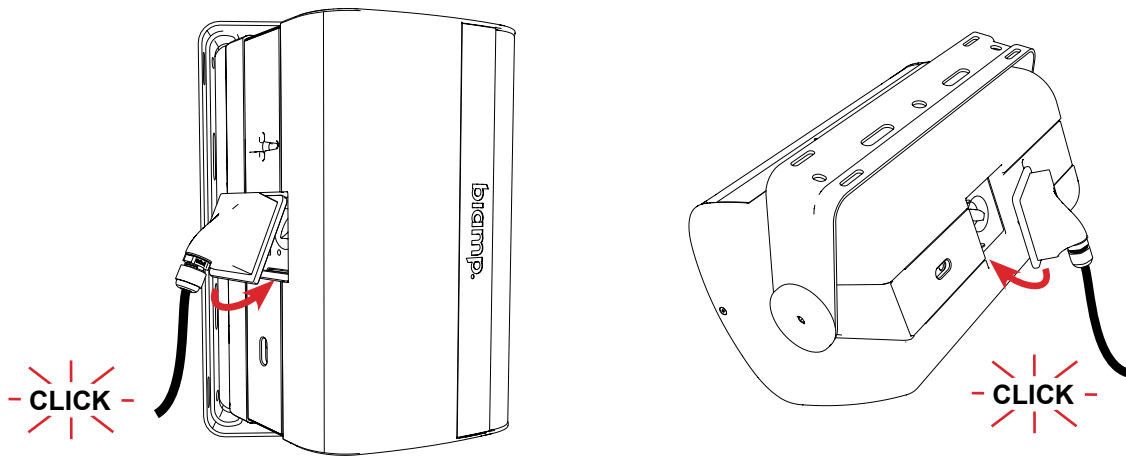

Figure 6. Install the ClickPlug

9. The ClickPlug can be removed by inserting a 5mm hex wrench in the hole in the slot (middle of long rear label), and pulling toward the base of the loudspeaker to release the latch.

10. The ClickPlug must be pulled away from the latch side first. Do **NOT** use a tool to remove it as you will mar and/or deform the plastic.

> ⚠ **CAUTION:** The ClickPlug fit is tight and is difficult to remove, especially if it is oriented toward the side of the unit. Avoid attaching the ClickPlug until the speaker is fully installed. If the unit is installed outdoors or in a damp location make sure a cable drip loop is utilized to prevent any moisture from migrating into the gland nut.
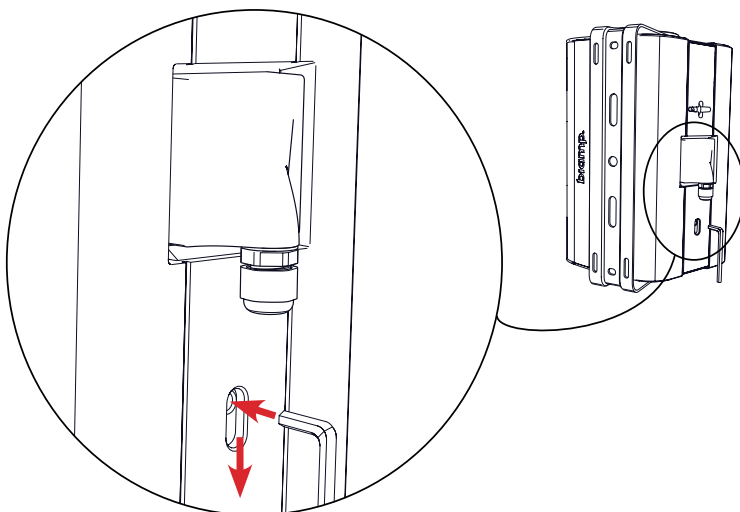

Figure 7. Latch release for ClickPlug removal

TECHNICAL DRAWINGS - CLICKMOUNT PAN-TILT BRACKET

CMX-SM
(fits EX-S6)

46.18 [1.818]

106.1 [4.18]

11.0 [0.43] TYP
SLOT LENGTH

CL

110.0 [4.33]

138.3 [5.45]

CL

112.7 [4.44]

Ø7.0 [Ø0.28] TYP SLOT DIAMETER

84.0 [3.31]

Hardware: 1/4-20 or 6mm screw for attachment,
Backplate will accept typical 1/2" or 13mm socket (18mm OD)
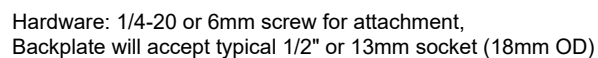
CMX-LG
(fits EX-S8, EX-S10 & EX-S10SUB)

[2.60]
66.2

[4.41]
112.0

4X [0.43] 11.0 X [0.28] 7.0
SLOT R ENDS

[5.12]
130.0

[6.30]
160.0

[3.15]
80.0

[3.45]
87.8

[3.31]
84.0

[5.25]
133.4

Hardware: 1/4-20 or 6mm screw for attachment,
Backplate will accept typical 1/2" or 13mm socket (18mm OD)
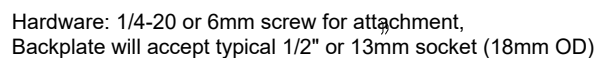
TECHNICAL DRAWINGS - U-BRACKETS

EXUB-S6
(fits EX-S6)

4.0 [0.16]
25.0 [0.98]
66 [2.60]
25.5 [1.00]
349.0 [13.74]

48.0 [1.89]
4X 6.5 [0.26]
2X 11.0 [0.43]
4X 26.5 [1.04]
R TYP
2X 41.0 [1.61]
2X 138.0 [5.43]
2X 66.7 [2.63]
Ø13.0 [Ø0.51] THRU
182.5 [7.19]
2X 148.0 [5.83]
2X 8.5 [0.33]
2X 11.5 [0.45]

EXUB-S8
(fits EX-S8)

4 [0.157]
21 [0.841]
66 [2.598]
24 [0.932]
456 [17.956]
440 [17.326]
151 [5.929]

220 [8.663]
330 [12.992]
Ø13 [Ø0.512]
133 [5.250]
360 [14.173]
67 [2.625]
180 [7.087]
165 [6.496]
2X [1.6] 41 X [0.4] 11
R ENDS SLOT
4X [1.4] 37 X [0.3] 7
R ENDS SLOT
2X [0.3] 9 X [0.5] 12
R ENDS SLOT
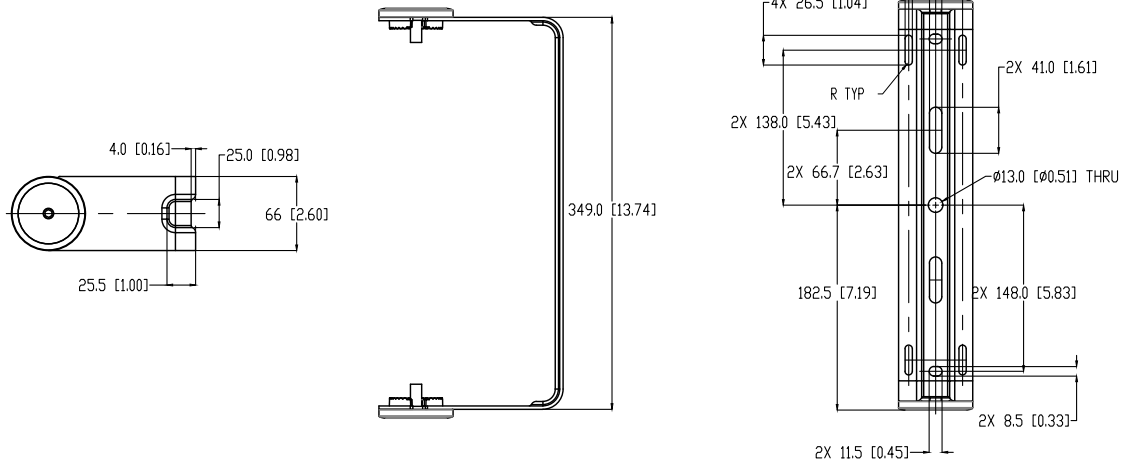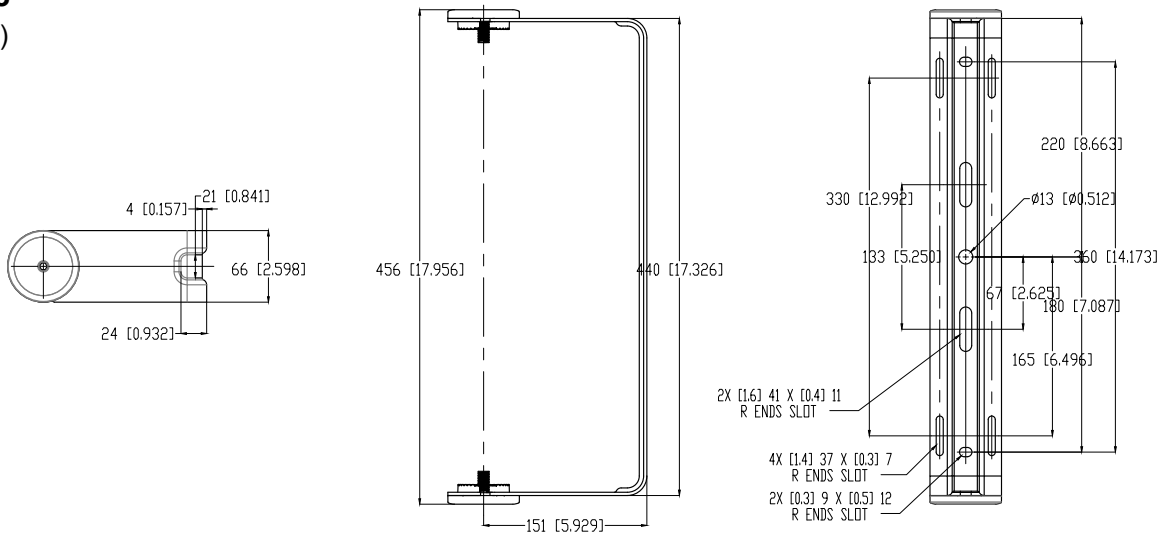
EXUB-S10
(fits EX-S10 & EX-S10SUB)

4.0 [0.16]
100.0 [3.94]
25.0 [0.98]
80.0 [3.15]
548.2 [21.58]
532.2 [20.95]
182.0 [7.17]

70.0 [2.76]
2x 11.5 [0.45] X 8.5 [.33] SLOT R ENDS
266.1 [10.48]
Ø13.0 [Ø0.51]
(471.2 [18.55])
2X 66.7 [2.62]
2X 220.6 [8.68]
2x 11.0 [0.43] X 41.0 [1.61] SLOT R ENDS
2X 235.6 [9.28]
4x 8.5 [0.33] X 38.5 [1.52] SLOT R ENDS
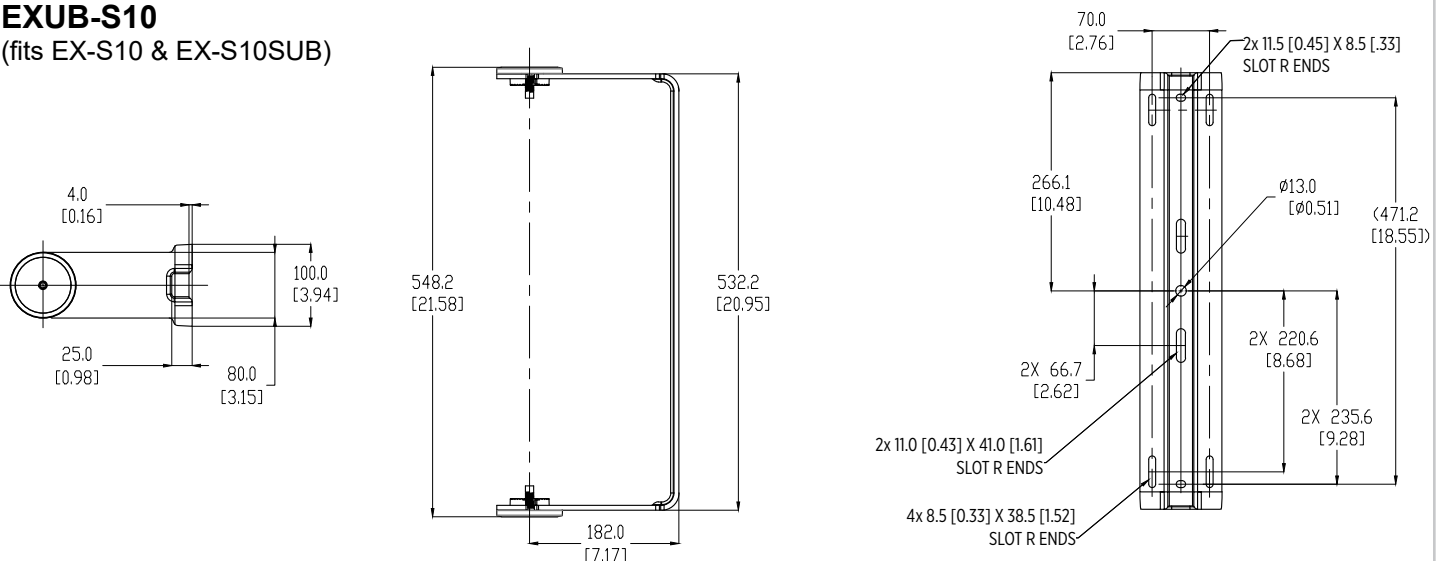
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