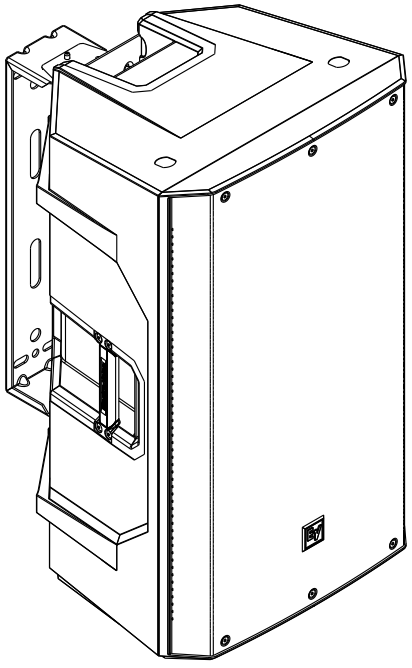
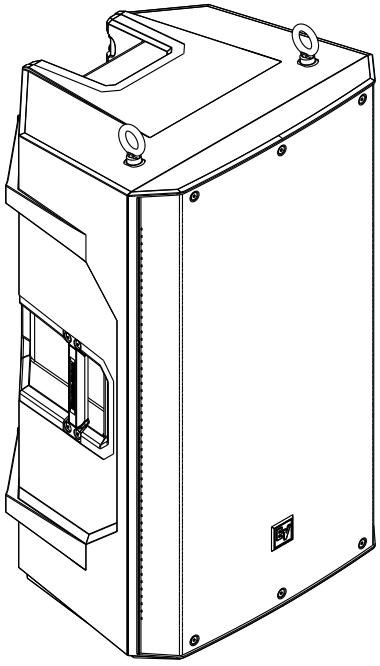
ELX200 Full-Range Loudspeaker Accessories

ELX200-BRKT | EBK1-M10-3PACK

en | Installation note





Electro-Voice

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1 Safety

The ELX200 loudspeakers and rigging accessories in this manual have a minimum structural safety factor of 8:1 when used as intended. The safety factor is defined as the ratio of the ultimate-break strength divided by the working-load limit. The ultimate-break strength represents the force at which a part will structurally fail. The working-load limit is the maximum load that the user shall apply. The safety factor provides a margin of safety above the working-load limit to accommodate normal dynamic loading and normal wear.

When ELX200 loudspeaker systems are suspended using the ELX200 rigging accessories as illustrated in this manual, the resulting loads will be within the working-load limits of both the loudspeaker systems and the rigging accessories, and a safety factor of at least 8:1 will be maintained. The use of rigging configurations other than recommended by Electro-Voice in this manual for either the ELX200 loudspeaker systems or ELX200 rigging accessories are at the risk of the user.

Warning!

Suspending any object is potentially dangerous and should only be attempted by individuals who have a thorough knowledge of the techniques and regulations of suspending objects overhead. Electro-Voice strongly recommends all loudspeakers be suspended taking into account all current national, federal, state, and local laws and regulations. It is the responsibility of the installer to ensure all loudspeakers are safely installed in accordance with all such requirements. When loudspeakers are suspended, Electro-Voice strongly recommends the system be inspected at least once per year or as laws and regulations require. If any sign of weakness or damage is detected, remedial action should be taken immediately. The user is responsible for making sure the wall, ceiling, or structure is capable of supporting all objects suspended overhead. Any hardware used to suspend a loudspeaker not associated with Electro-Voice is the responsibility of others.

Prior to use, inspect the suspension points and associated hardware for any cracks, deformations, broken welds, corrosion, missing or damaged components which could reduce the suspension points strength. Replace any damaged hardware. Never exceed the limitations or maximum recommended load intended for the suspension points. As an added safety measure, it is suggested the user install an extra suspension point back to the building structural supports. This redundant safety point should have as little slack as possible (less than one inch is preferable). Prior to each use, inspect the loudspeaker enclosures for any cracks, deformations, missing or damaged components, which could reduce enclosure strength. Replace any loudspeaker systems that are damaged or missing hardware.

Warning!

Eyebolts must be fully seated and oriented in the plane of pull. Always use washers under the eyebolt to distribute the load on the enclosure.

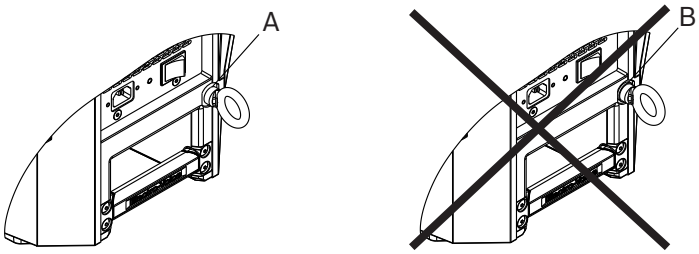


Figure 1.1: Eyebolt shown with and without washer; (left Correct A: Washer used; right Incorrect B: No washer used)

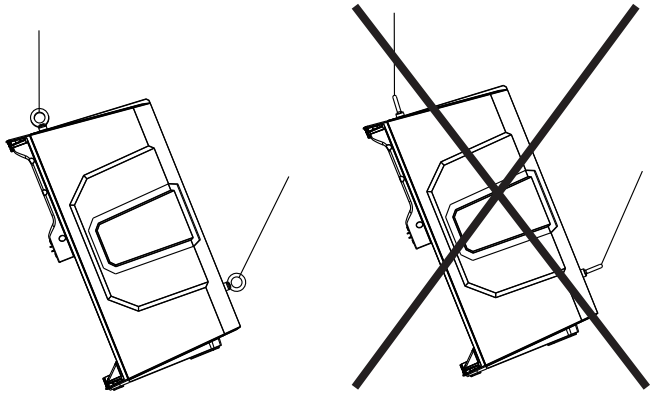


Figure 1.2: Eyebolts shown oriented in the plane of pull (left Correct; right Incorrect)

Warning!
Never exceed the limitations or maximum recommended working load for Electro-Voice loudspeakers.
Disregarding this warning could result in serious injury or death.

50 lb per suspension point

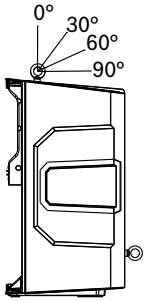


Figure 1.3: Maximum working load - vertical orientation

Warning!
Never suspend an ELX200 loudspeaker in a vertical column array.
Disregarding this warning could result in serious injury or death.

REFERENCE: For more information, see ELX200 Powered Loudspeaker Installation manual (F.01U.326.891) or ELX200 Passive Loudspeaker Installation manual (F.01U.326.890).

1.1 Safety point

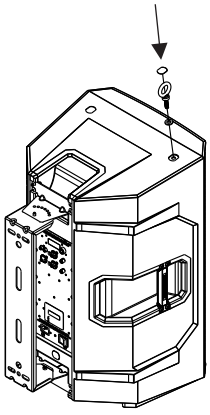
Safety point

As an added safety measure, it is suggested the user install an extra suspension point back to the building structural supports. This safety point should have as little slack as possible (less than 1-inch is preferable).

Adding a safety point

To **add a safety point**, do the following:

1. Remove **one of the screws** from the top of the loudspeaker.
2. Replace the **screw** with one eyebolt and one washer.



3. Tether the **safety point** back to the building structural supports.
   An added safety point is established back to the structural supports.

2 Installation

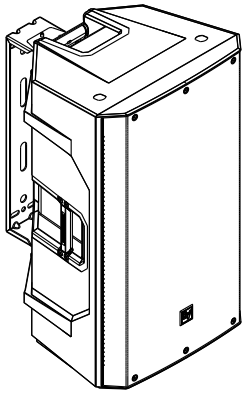
Thank you for choosing an ELX200 loudspeaker accessory. This installation note describes how to install the wall mount brackets and M10 eyebolt kit used with ELX200 full-range loudspeaker systems.

ELX200 Full-Range Loudspeaker Accessory Installation Note

Loudspeaker	Wall Mount Bracket	M10 Eyebolt Kit
ELX200-10, ELX200-10P, ELX200-12, ELX200-12P, ELX200-15, and ELX200-15P	ELX200-BRKT	EBK1-M10-3PACK

2.1 Wall mount bracket

The wall mount bracket is used to mount an ELX200-10, ELX200-10P, ELX200-12, ELX200-12P, ELX200-15, or ELX200-15P full-range loudspeaker to the wall or ceiling.



The wall mount bracket kit contains the following:

Quantity	Component
1	Upper bracket
1	Lower bracket
1	U-bracket
2	M6 x 20 screws
1	Installation note

Table 2.1: Wall mount bracket components

Installing the mounts

The ELX200 wall mount bracket is designed for use with all of the ELX200 full-range loudspeakers.

Notice!

When mounting a loudspeaker horizontally, the lower mount needs to be installed with the slot opening on the bottom. This may require the upper/lower mounts to be switched between the top and bottom of the loudspeaker.

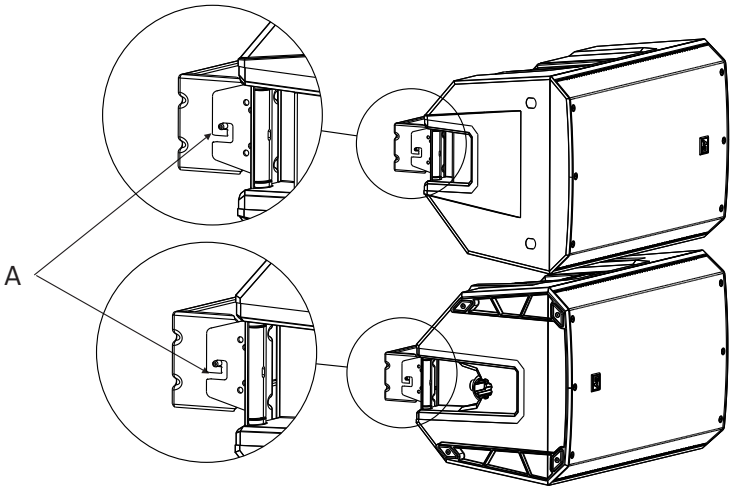
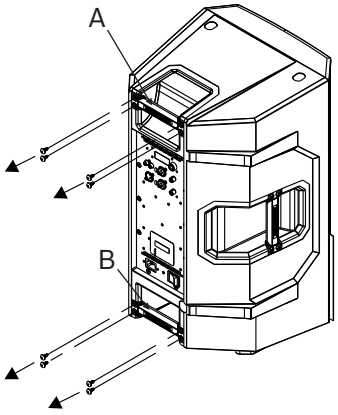


Figure 2.1: Horizontal mounting slot orientation with the lower mount slot opening on the bottom (A)

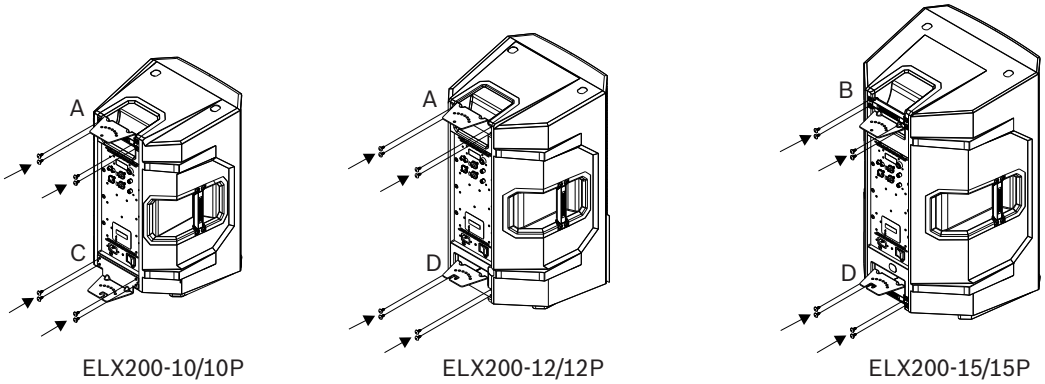
To **attach the mounts to a loudspeaker**, do the following:

1. Using a screwdriver, remove the **four screws** holding the top (A) handle to the chassis. *Keep these screws to assemble the upper mount.*



2. Remove the **four screws** holding the bottom handle (B) (where applicable) to the chassis. *Keep these screws to assemble the lower mount.*
3. Using the four screws you removed from the top handle, attach the **upper mount (A)** to a 10 inch or 12 inch loudspeaker where the top handle was located in the up position.
   OR

Using the four screws you removed from the top handle, attach the **upper mount (B)** to a 15 inch loudspeaker where the top handle was located in the down position.



ELX200-10/10P ELX200-12/12P ELX200-15/15P

4. Using the four screws you removed from the bottom handle, attach the **lower mount (D)** to a 12-inch or 15-inch loudspeaker where the bottom handle was located in the up position.
   OR
   Using the four screws you removed from the bottom handle, attach the **lower mount (C)** to a 10 inch loudspeaker where the bottom handle was located in the down position.

Mounting a U-Bracket to the wall or ceiling

The U-Bracket is used to mount a loudspeaker to the wall or ceiling.

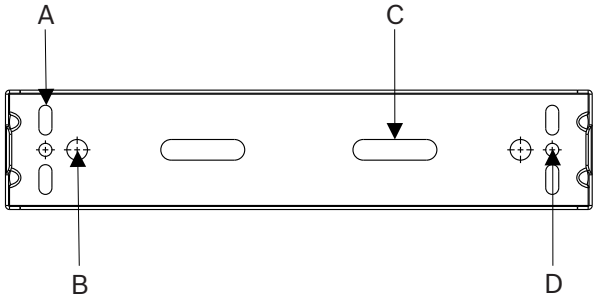
Caution!

Due to the weight of the Electro-Voice loudspeaker system, it is imperative the bracket is properly secured to the wall. The choice of fastener (not supplied) will be determined by the material and construction of the mounting surface. The user is responsible to ensure the mounting surface and fasteners are capable of supporting the weight of the loudspeaker.

Caution!

Two person lift and placement is recommended for the heavier loudspeakers. Single person lift and placement of heavier loudspeakers could cause injury.

U-Bracket mounting options



A: For wall mounting with bolts (3/8" or M10 bolts) OR pole/truss mounting with U-bolts (2" or M10 U-bolt) (4 PLS)

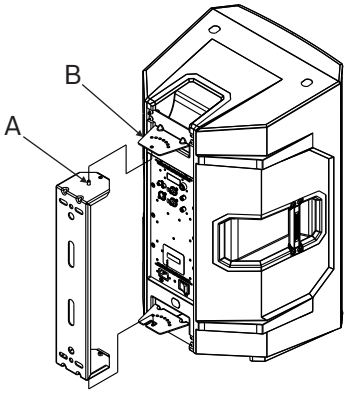
B: For ceiling mounting with threaded rods (1/2" or M16 threaded rods) (2 PLS)

C: For ceiling mounting with U-bolt (4" or M16 U-bolt) (2 PLS)

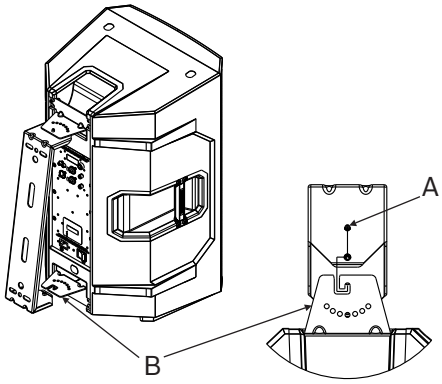
D: For ceiling mounting with threaded rods (3/8" or M10 threaded rods) (2 PLS)

To **mount a U-Bracket to the wall or ceiling**, do the following:

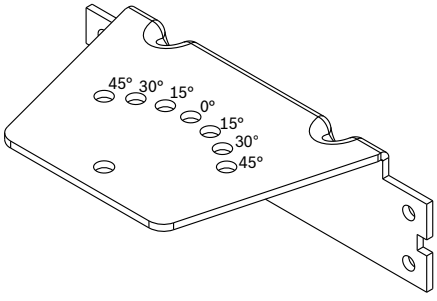
1. Using the fasteners suitable for the wall material (not supplied), attach the **U-Bracket** to the wall or ceiling in a vertical or horizontal position.
2. Using two hands lift the **loudspeaker**.
3. Place the **upper mount (B)** onto the pivot pin (A) on top of the U-Bracket.



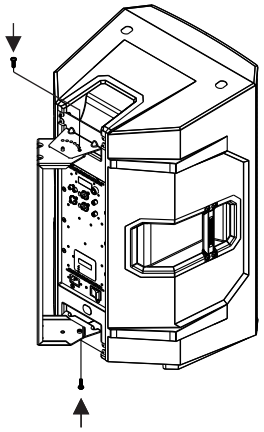
4. Ensuring the lower U-Bracket pivot pin (A) is securely placed in the notch; guide the **lower mount with hook (B)** into position.
   The loudspeaker is loosely hung and allows you to position the loudspeaker.



5. Position the **loudspeaker** to the desired angle.



6. Insert **one M6 screw (supplied)** into each mount at the desired angle.



7. Tighten the **two M6 screws (supplied)** sufficiently so the loudspeaker does not rotate.
   The loudspeaker is set to the desired angle.

2.2 Eyebolt kit

The EBK1-M10 Eyebolt Attachment Kit from Electro-Voice is designed exclusively for ELX200 full-range loudspeakers, for ease of installation. It contains three short shank shoulder eyebolts, along with four washers for load distribution, which attach to Electro-Voice loudspeakers that have integrated M10 suspension points. The eyebolt attachment points can be used to suspend Electro-Voice loudspeakers using hardware rated for overhead lifting. The loudspeaker is suspended using two main suspension points with one pull-up point in the back for aiming. Rigging hardware (shackles, etc.) attaching to the eyebolt must fit through the 25 mm (1 in) opening.

The eyebolt kit contains the following:

Quantity	Component
3	M10 x 20 mm (0.787 in) short shank shoulder eyebolts
4	M10 (10.5 mm ID x 20.0 mm OD) washers
1	Datasheet

Table 2.2: Eyebolt kit components

Notice!
Extra washer provided for leveling of uneven surfaces. ELX200-10/10P may require additional washer.

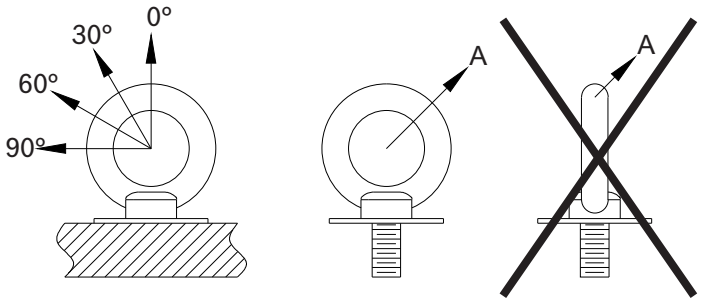
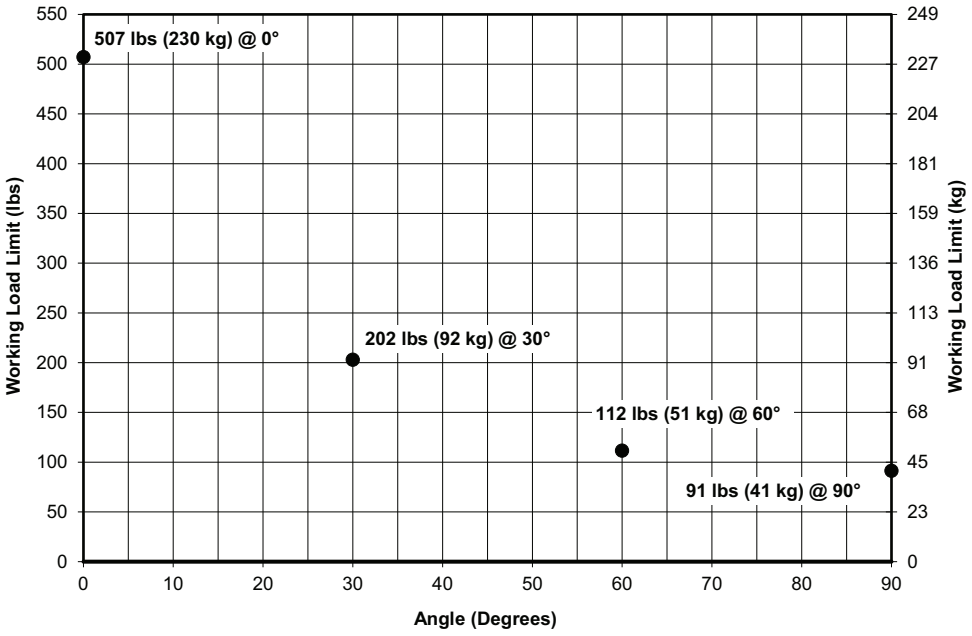


Figure 2.2: Load angles and suspension point (Left load angles, center Correct and right Incorrect); A: Direction of load

Working-Load vs angle of a *single* eyebolt (6:1 safety factor)



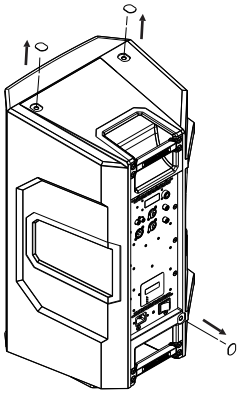
Installing an eyebolt

Warning!

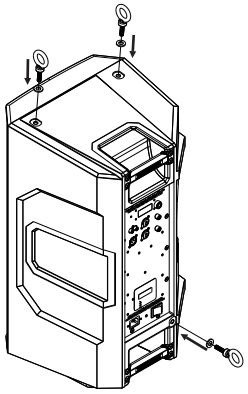
Suspending any object is potentially dangerous and should only be attempted by individuals who have a thorough knowledge of the techniques and regulations of suspending objects overhead. Electro-Voice strongly recommends all loudspeakers be suspended taking into account all current national, federal, state, and local laws and regulations. It is the responsibility of the installer to ensure all loudspeakers are safely installed in accordance with all such requirements. When loudspeakers are suspended, Electro-Voice strongly recommends the system be inspected at least once per year or as laws and regulations require. If any sign of weakness or damage is detected, remedial action should be taken immediately. The user is responsible for making sure the wall, ceiling, or structure is capable of supporting all objects suspended overhead. Any hardware used to suspend a loudspeaker not associated with Electro-Voice is the responsibility of others.

To **install an eyebolt**, do the following:

1. Remove the **fly point cover** from the loudspeaker.
   Repeat this step for all three fly point covers.



2. Screw the lifting **eyebolt** and **M10 washer** into the insert until the washer has contacted the exposed surface.
   Repeat this step until all three eyebolts and three washers are inserted.



3. Using your fingers, tighten the **eyebolt** until correct alignment position is obtained, a maximum of one complete turn.
   Repeat this step until all three eyebolts are tightened.

Notice!
Use certified hardware rated for overhead lifting to suspend the loudspeaker.

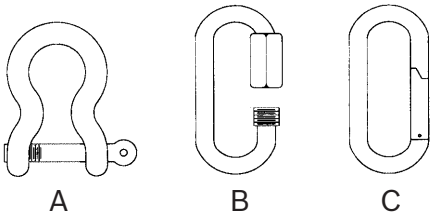


Figure 2.3: Examples of useful suspension hardware

A: Anchor shackle
B: Threaded chain connector
C: Carabiner-type snap hook

Warning!

Eyebolts must be fully seated and oriented in the plane of pull. Always use the washers to distribute the load on the enclosure. Over tightening the eyebolt with a wrench, screwdriver, etc. can result in system failure and injury. Consult the loudspeaker installation manual for the loudspeaker load ratings and specific requirements.

3 Technical data

Color:	Black
Dimensions (H x W X D):	603 mm x 150 mm x 127 mm (23.74 in x 5.91 in x 5.00 in)
Shipping dimensions (H x W x D):	530 mm x 165 mm x 145 mm (20.87 in x 6.50 in x 5.71 in)
Net weight:	2.09 kg (4.60 lb)
Shipping weight:	2.65 kg (5.85 lb)

Table 3.1: ELX200-BRKT wall mount bracket specifications

Dimensions:

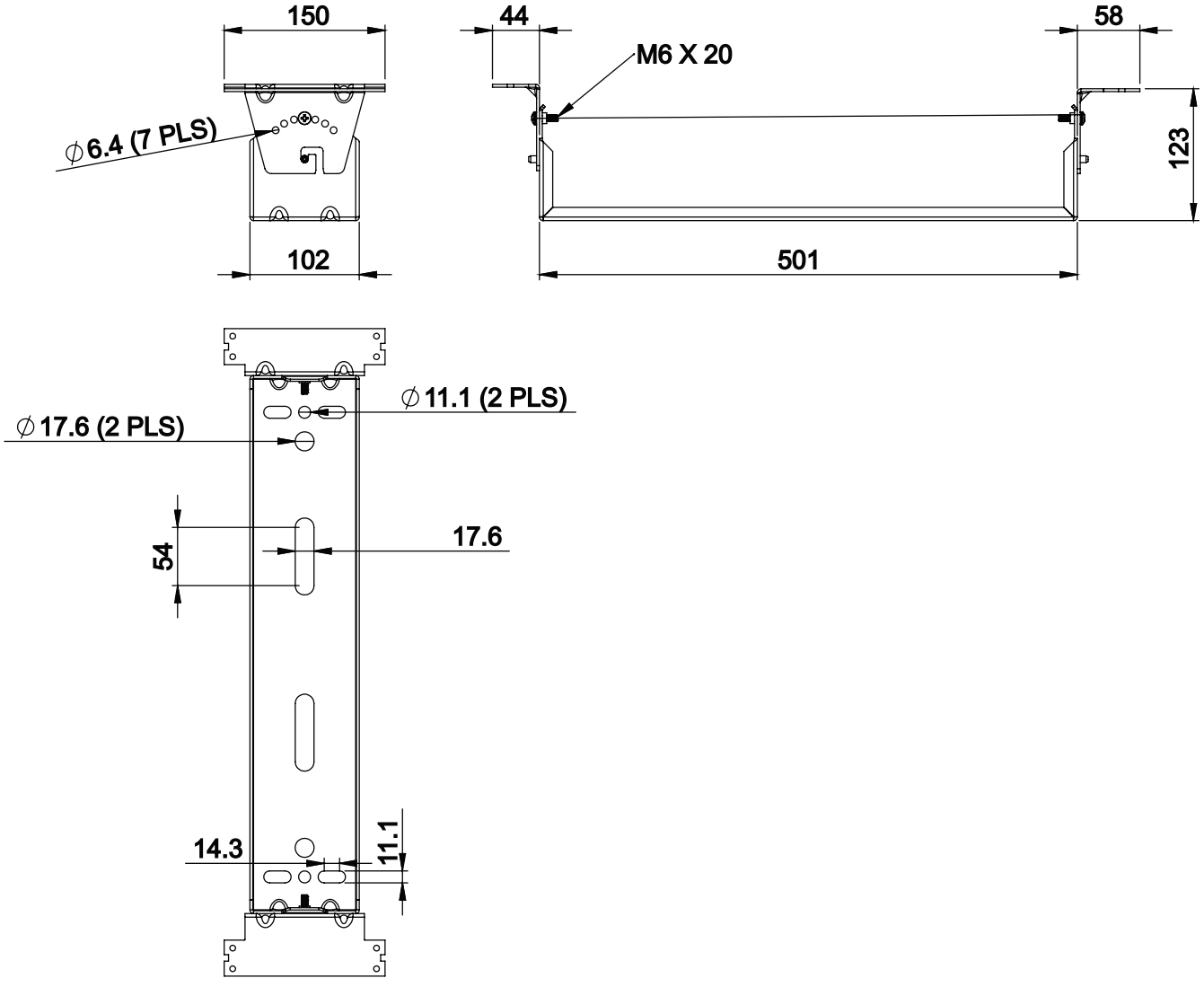


Figure 3.1: ZLX200-BRKT dimensions

Color:	Silver
Eyebolt material:	Drop forged steel
Washer material:	Zinc-plated steel
Thread diameter:	10 mm
Thread length:	20 mm
Shipping dimensions (H x W x D):	127 mm x 127 mm x 76 mm (5.0 in x 5.0 in x 3.0 in)
Net weight:	0.31 kg (0.68 lb)
Shipping weight:	0.37 kg (0.82 lb)

Table 3.2: EBK1-M10-3PACK specifications

4 Product labels

Electro-Voice

ELX200-BRKT

Wall mount bracket, ELX200 2-way models

Mat/N: F01U326072

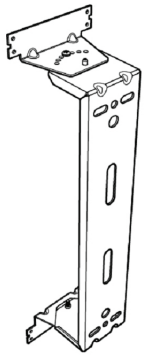
S/N: 405297500000000000

8 717332 781935

8 00549 82701 0

QTY: 1

Bosch Security Systems Inc.
130 Perinton Pkwy, Fairport, NY, 14450 USA
Made in USA of Domestic & Foreign Content



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EU Importer:
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Electro-Voice

EBK1-M10-3PACK

Forged M10 3Pack Short Shank Eyebolt Kit

Mat/N: F01U327889

S/N: 405297600000000000

8 717332 583294

8 00549 83188 8

QTY: 1

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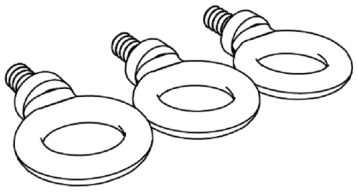

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Bosch Security Systems, Inc
12000 Portland Avenue South
Burnsville MN 55337
USA
www.electrovoice.com