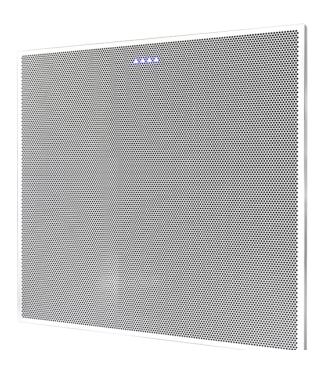


# **BMA 360**



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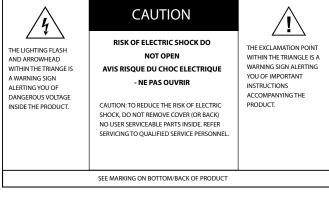
Information in this document is subject to change without notice.

Document: QSG-0086-001v1.1 March 2021

# **Important Safety Information**

- 1. Read, follow, and keep all instructions.
- 2. Do not use these devices near water.
- 3. Clean only with dry cloth.
- 4. Do not block any ventilation openings. Install in accordance with manufacturer instructions.
- 5. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 6. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 7. Protect the PoE injector's power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 8. Only use attachments/accessories specified by the manufacturer.
- 9. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 11. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 12. Disconnect the apparatus from the AC mains with the mains plug. This plug shall remain readily operable.
- 13. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in fire or electric shock.
- 14. This product can interfere with electrical equipment such as tape recorders, TV sets, radios, computers and microwave ovens if placed in close proximity.
- 15. Class 2 Wiring IS REQUIRED. Only qualified personnel should wire and install.
- 16. Underwriters Laboratories (UL) requires these safety notifications:

WARNING: TO PREVENT FIRE OR ELECTRICAL SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE







Use only at altitudes of 2000 meters or less.

# **Operating Requirements**

## **System Power and Thermal**

- · Power Source: PoE injector
- · Power Consumption:
- 100-240VAC, 50/60 Hz
- 23 Watt typical without speaker amp

- 55W at 1/3 power x 4 @ 1kHz
- Thermal: 270 BTU/hr at max power
- Operating Temperature: 14 °F/-10 °C to 104 °F/40 °C ambient temperature.

## **System Part Number**

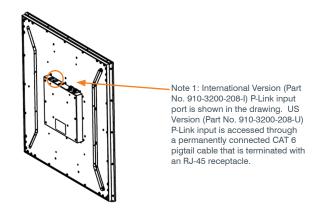
BMA 360: 910-3200-208-U

BMA 360 INTERNATIONAL: 910-3200-208-I

# **Packing List**

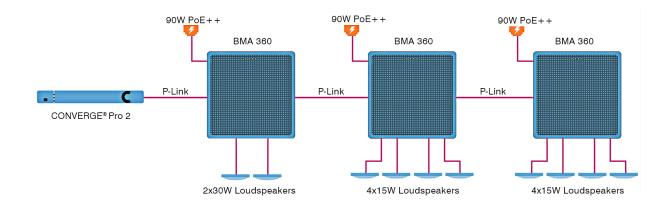
#### **BMA 360**

Inspect it carefully. If the shipment shows obvious signs of damage, retain the original box and packing material for inspection by the carrier. Contact the carrier immediately. ClearOne is not responsible for product damage incurred during shipment.



# **System Diagram**

Three daisy-chained BMA 360 microphone arrays, with 2x30 W and 4x15 W speaker configurations, connected to a CONVERGE Pro 2.



#### Mount the BMA 360

## **Mount Options**

- · Dropped (suspended) ceiling
- · Hard ceiling, both recessed and surface
- VESA

This quick-start guide provides instructions to mount the BMA 360 to a dropped ceiling. Information for optional mounting is available at ClearOne's Resource Library.

## **Connect Speakers**

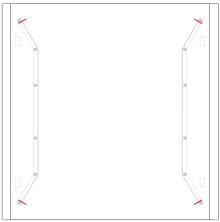
A good time to connect external speakers is before you mount the BMA 360 in the ceiling.

With speaker wire (not included), connect external speakers to the Phoenix Euroblock connectors.

# **Dropped Ceiling Mount**

ClearOne recommends the use of 1/8 inch seismic cables (not included) as described here. To install the plenum shield, complete steps 1 & 2. If you do not plan to install the shield, start at step 3.

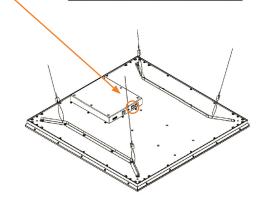
1. Cut four 1-inch slots in the shield at the indicated locations.



2. Remove the liner from the adhesive in four places on the underside of the shield, then thread the cables through the cut slots.

Note 1: International Version (Part No. 910-3200-208-I)
P-Link input port is shown in the drawings. US Version (Part No. 910-3200-208-U) P-Link input is accessed through a permanently connected CAT 6 pigtail cable that is terminated with an RJ-45 receptacle.

3. Attach the cables to the BMA 360 at four points as shown.



4. Lift the BMA 360 into place and attach the cables to structure.

## **Hard Ceiling**

For hard ceilings, ClearOne offers both a recessed-mount kit and a surface mount kit. Installation information is available in the following two guides:

- · BMA Recessed-Mount Kit Installation Guide
- BMA Surface-Mount Kit Installation Guide

#### **VESA**

The BMA 360 incorporates a VESA-mount hole pattern that supports pole mounting.

## **Connect the BMA 360**

Connect the BMA 360 to the CONVERGE Pro 2 unit via P-Link connections CAT6-23AWG solid core RJ45 cables.



#### Warning:

- Power over Ethernet (PoE) equipment used with a BMA 360 must meet the IEEE 802.3af, 802.3at or 802.3bt standards.
- When speakers are connected, you must provide power via the PoE++ port on the BMA 360.



### Important: Please note the following PoE requirements:

- No speakers: 36W PoE, connected via P-Link or PoE++
- Speakers: Requires 90W PoE or 70W PoE. Must be connected via direct PoE++ port on the BMA 360.

ClearOne recommends the following PoE power supply kits:

- 36W: ClearOne part number: 910-3200-202
- 70W: ClearOne part number: 910-3200-207
- 90W: ClearOne part number: 910-3200-209

#### On the BMA 360 back plane, make the following connections:

- 1. If you have not already done so, connect the external speakers to the BMA 360.
- 2. With a CAT6 cable, connect the BMA 360 P-Link In connector to the CP2 P-Link Out connector.
- 3. With a CAT6 cable, connect the BMA 360 PoE++ connector to the PoE injector.

