# AUDIO CONFERENCING

### **MICROPHONES**

# **BMA CT**

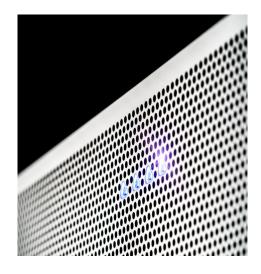


The BMA CT is a patented ceiling tile beamforming microphone array that blends in perfectly with today's drop ceilings. Built-in acoustic echo cancellation, noise cancellation, and beam selection eliminate the need for per-beam processing in a DSP mixer - requiring fewer DSP mixer resources.

- Integrated features can significantly reduce system design complexity, simplify installation, consume less rack space, and lower cost.
- > Daisy-chain up to three ceiling tiles via P-Link for larger conference setups – for simpler wiring and longer distances compared to networked "home run" connections.
- Each ceiling tile microphone array supports long distance P-Link mode with 200 m / 650 ft between tiles, for a total cable reach of 600 m / 1950 ft
- > Single workflow for configuration using Pro Console® software. No need to program separate components: Ethernet switch, BMA CT, Dante® controller, and DSP mixer.
- ClearOne's BMA technology is protected by at least a dozen patents and pending patent applications.
- > Supports three different ceiling grid types: 24-inch, 600 mm, and 625 mm; as well as hard-ceiling mounts.
- > It's all about the ClearOne architecture!



More Power Inside
Built-in 2 x 10 Watt into 8-ohm
power amplifier conveniently drives
loudspeakers.



#### Free to Move Around the Room

Adaptive steering (think of it as smart switching) - no need to adjust individual beams - for impeccable room coverage.

#### **APPLICATIONS**

- Audio conferencing
- · Video conferencing

#### **WORKSPACES**

- Boardrooms
- Conference rooms
- Training centers
- Lecture halls
- Courtrooms



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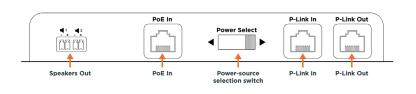
# **BMA CT**

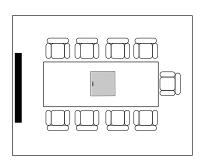
### **Connections**

BMA CT I/O CONNECTIONS

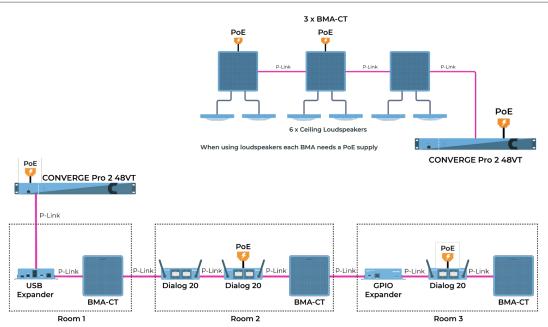
### **Orientation**

ORIENT LEDS TOWARDS EITHER END OF THE TABLE

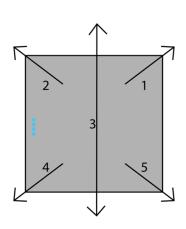


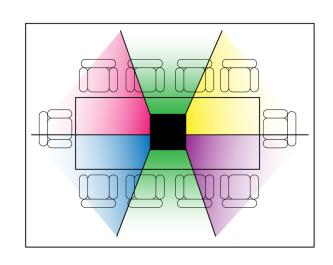


## **Connection Diagrams**



# P-Link carries up to 16x16 audio channels Standard Operating Mode



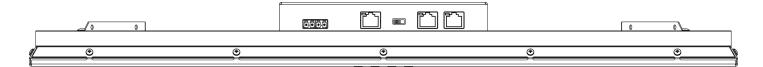


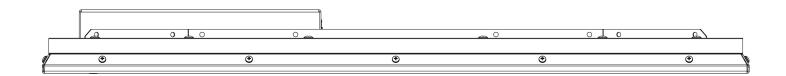


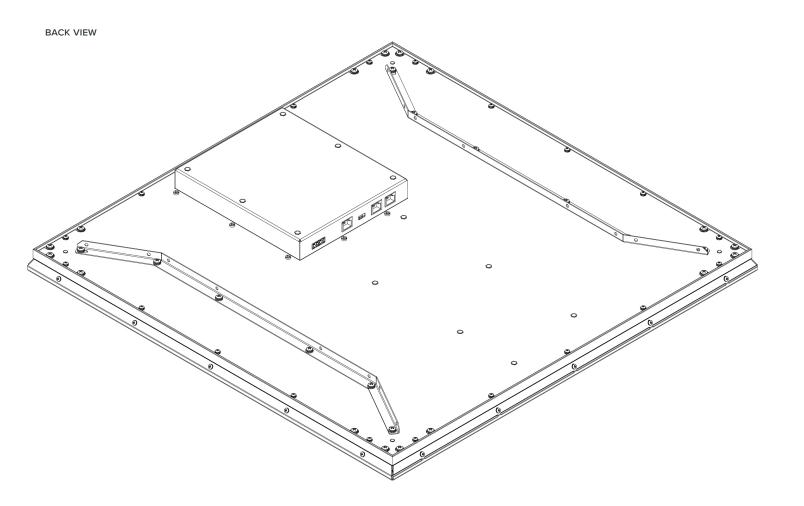
# **BMA CT**

## **Diagrams**

SIDE VIEWS









# AUDIO CONFERENCING

# **BMA CT**

#### 24 MICROPHONES

- Number of Beams: Two patterns, either 5 or 6 beams
- Polar Pattern: Custom
- Frequency Response: 150Hz 16kHz, +/- 3dB
- Dynamic Range: 150Hz 16kHz, > 70dB

#### **AMPLIFIER OUTPUT**

- Uses P-Llink channels and C-Link channels based on configuration
- Type: 5.08mm Black Header, Male, Phoenix type Euroblock
- Audio: 2 channels
- •Output Power: 2x10W Max, 8Ω load\*
- Frequency Response: 20Hz 22kHz @ +10dBu, +/ 0.5dB
- •THD + Noise: 20Hz 22kHz @ +10dBu, 1W, < 0.2%
- Dynamic Range: 20Hz 22kHz @ +20dB, > 102dB, with 20kHz digital low pass filter
- Crosstalk: Channel to Channel, stimulus at +20dBu receptor 10W output 8Ω load, 20Hz 22kHz, < -60dB

#### LED

- •4 LED indicators on one end of unit:
- Mute/Un-mute configuration with 8 color options, two blink patterns and warning indications

#### CONFIGURATION

- •Beam enable/disable
- · Acoustic Echo Cancellation (AEC) on/off
- Noise Cancellation (NC) on/off
- Filters:

All Pass

Low Pass

High Pass

Notch

**PEQ** 

- Automatic Level Control (ALC) on/off
- Gain adjust
- Mute on/off
- Auto gate/Manual gate

#### P-LINK PERIPHERAL BUS

- •P-Link In & Out: Proprietary Network
- Ports Type: RJ-45
- Cable: RJ45 Cat5e, Cat6, Expandable
- Distance: Up to 650 ft.
- Daisy-Chain:
  - Up to 3 Array units and additional P-Link compatible devices with each supported CONVERGE Pro 2 unit in the same chain
  - Up to 6 array units in the same P-Link chain with 2 supported CONVERGE Pro 2 units connected through C-Link
- Long Distance P-Link:
  - Increases P-Link distance from 200 ft. to 650 ft.; (200M) max cable distance between any two units; Cat6, 550 MHz, 23 AWG, solid conductor cable;
  - •Do not use Copper Clad Aluminum (CCA) cable

#### **POWER SELECTION SWITCH**

- Type: Slide Switch
- Slide toward P-Link to power device by P-Link
- Slide toward PoE to power device by PoE Injector

#### **CONFIGURATION & ADMINISTRATION SOFTWARE**

• Pro CONSOLE® Software

#### **MOUNTING**

• Ceiling mount (24" or 600mm drop-ceiling grid)

#### **POWER & THERMAL**

- Power Type: PoE
- •Port Type: RJ-45
- Power Source: PoE Injector or equivalent
- PoE: IEEE 802.3at compliant devices providing 56V and 640 mA (36 W).
- •P-Link In Mode B
- PoE In Mode A and Mode B
- \*BMA CT requires its own PoE (IEEE 802.3 at compliant) if 2x10W speakers are driven
- Power Consumption:
  - •100-240VAC, 50/60Hz
  - 9.1 Watt typical without speaker amp
  - •38W at max power 1kHz (2 x 10W)
  - •Thermal: 130 BTU/Hr at max power
  - Operating Temperature: 14° F/-10° C to 104° F/40° C ambient temperature



# **AUDIO CONFERENCING**

# **BMA CT**

#### **DIMENSION & WEIGHT (WxHxD)**

- •24" BMA CT:
- 23.72 x 23.72 x 2.13" (602.5 x 602.5 x 54.1mm)
- •600 mm BMA CT:
  - 592.5 x 592.5 x 54.1 mm (23.33 x 23.33 x 2.13")
- Unit Weight: 7.7lbs (3.5kg)
- Shipping Weight: 11.5lbs (5.2kg)

### SUPPORTED CONVERGE® PRO 2

- •910-3200-001 CONVERGE Pro 2 128
- •910-3200-001-D CONVERGE Pro 2 128D
- •910-3200-002 CONVERGE Pro 2 128T
- •910-3200-002-D CONVERGE Pro 2 128TD
- •910-3200-003 CONVERGE Pro 2 128V
- •910-3200-003-D CONVERGE Pro 2 128VD
- •910-3200-009-D CONVERGE Pro 2 128VTD
- •910-3200-005 CONVERGE Pro 2 48T
- •910-3200-006 CONVERGE Pro 2 48V
- •910-3200-008 CONVERGE Pro 2 48VT
- •910-3200-008-D CONVERGE Pro 2 48VTD
- •910-3200-004 CONVERGE Pro 2 120

#### **ACCCESSORIES**

- •910-3200-202 PoE Power supply kit for BMA CT
- •910-3200-204-50 50 ft RJ45 CAT6 Cable
- •910-3200-204-100 100 ft RJ45 CAT6 Cable
- •910-3200-204-150 150 ft RJ45 CAT6 Cable
- •910-3200-204-200 200 ft RJ45 CAT6 Cable
- •910-3200-205-Al Brackets, convert 600 to 625 mm
- •910-3200-205-CB BMA CT Conduit Box

#### MOUNTS FOR NON-TILE CEILINGS

- •910-3200-210 BMA Surface-Mount Kits 24in
- •910-3200-210-I BMA Surface-Mount Kits 600mm
- •910-3200-211 BMA Recessed-Mount Kits 24in
- •910-3200-211-I BMA Recessed-Mount Kits 600MM

#### **PART NUMBERS**

- •910-3200-205: 24" White BMA CT
- •910-3200-205-I: 600 mm White BMA CT

<sup>2</sup>Ceiling Tile Beamforming Mic Arrays can be painted to match any space. An instructional video showing how to paint the BMA 360 can be found at clearone.com/paintmybma

#### **SALES AND INQUIRIES**

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