

Beamforming Microphone Array | BMA CT



The BMA CT is a patented ceiling tile beamforming mic 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.

Built in 2x10 Watt into 8-ohm power amplifier conveniently drives loudspeakers.

Convenient Ceiling-Tile Form Factor

- + Drops easily into standard ceiling-tile grid systems
- + Integrated features significantly reduce system design complexity
- + Simple installation
- + Consumes less rack space
- + Lower cost
- + Three sizes available to fit US and international ceiling-grid tile sizes

Flexible, Scalable, and Cost-Effective

- Built-in processing eliminates the need for per-beam processing in a DSP mixer — requiring fewer DSP mixer resources
- + Daisy-chain ceiling tiles via P-Link for larger conference set-ups — for simpler wiring and longer distances compared to networked "home run" connections
- + Daisy-chain P-Link devices such as the DIALOG® 20 Wireless Mic System
- + Long distance P-Link mode allows 650 ft (200 m) between tiles for a total cable reach of 1950 ft (600 m)
- + Single cable for power, audio, and control
- + Zero consumption of DSP mixer analog inputs

Advanced Audio Processing

- + Most advanced Acoustic Echo Cancellation
- + Noise Cancellation
- + Adaptive steering (think of it as smart switching)
 no need to adjust individual beams
- Advanced gating with adaptive ambient for seamless combining of multiple BMA CT units
- + Replaces 9 to 12 traditional microphones

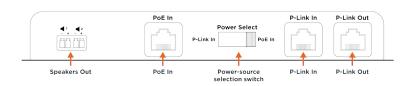
Configuration & Management

- + Pro CONSOLE® software
- + Auto-discovery of devices
- + System monitoring and troubleshooting

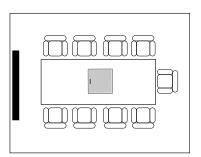


Connections Orientation

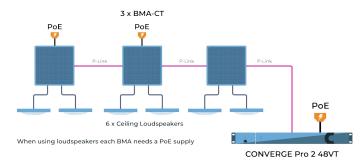
BMA CT I/O CONNECTIONS

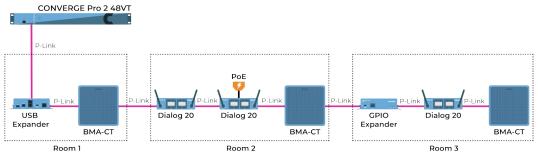


ORIENT LEDS TOWARDS EITHER END OF THE TABLE



Connection Diagrams

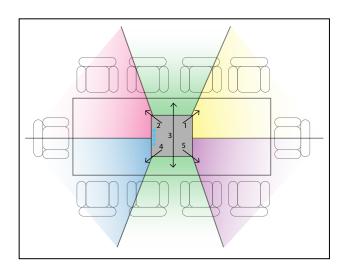




P-Link carries up to 16x16 audio channels

Operating Modes

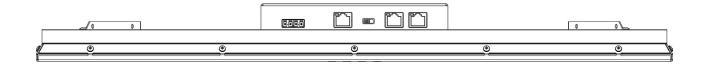
STANDARD MODE





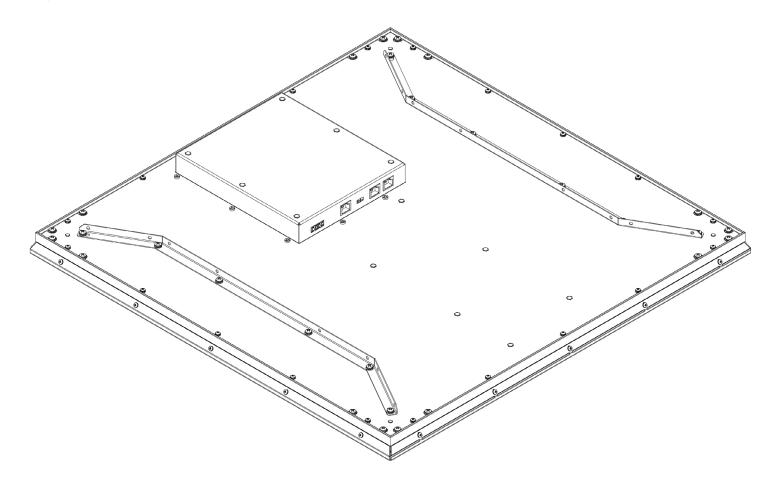
Diagrams

SIDE VIEWS





BACK VIEW





Beamforming Microphone Array | BMA CT

PRODUCT SPECIFICATIONS

24 microphones

Uses P-Llink channels and C-Link channels based on

configuration

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

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 to

receptor 10W output 8Ω load, 20Hz - 22kHz, < 60dB

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

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 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 or

Dante PoF

Configuration & Administration Software

CONVERGE® 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

IEEE 802.3at compliant devices providing 56V and

640 mA (36 W). P-Link In - Mode B

PoF 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

Dimension & Weight (WxHxD)

23.72 x 23.72 x 2.13" (602.5 x 602.5 x 54.1mm)

600 mm BMA CT:

23.33 x 23.33 x 2.13" (592.5 x 592.5 x 54.1 mm)

Unit Weight: 7.7lbs (3.5kg)

Shipping Weight: 11.5lbs (5.2kg)

Part Numbers

910-3200-205: 24" White BMA CT

910-3200-205-I: 600 mm White BMA CT

Supported CONVERGE Pro 2

Part Number	Product	
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	
910-3200-005	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	

Accessories

Part Number	Product	
910-3200-202	PoE Power supply kit for BMA CT and BMA CTD	
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	
910-3200-205-01	Brackets to convert 600 to 625 mm	

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