BMA 360

The patented BMA 360 is the world’s most technologically advanced ceiling tile beamforming mic array, delivering unrivaled audio performance and deployment ease.

The world’s first truly wideband, frequency invariant beamforming mic array with uniform gain response across all frequency bands. FiBeam™ technology gives users the ultimate in natural and full fidelity audio across all beams and within a single beam.

- Further advancements in adaptive steering (think of it as smart switching) provide impeccable coverage of each conference participant as well as support for camera tracking.
- 6G Acoustic Echo Cancellation (AEC) delivers unparalleled per-beam full-duplex audio performance.
- On-board audio algorithms, like noise reduction, filtering, and Automatic Level Control, eliminate the need for per-beam processing in a DSP mixer - requiring fewer DSP mixer resources.
- Built-in, robust power amplifiers, configurable as 4 x 15 Watt or 2 x 30 Watt, provide flexibility for driving loudspeakers.
- ClearOne’s breakthrough technologies, FiBeam, DsBeam, and 6G AEC combine to create VividVoice™, a significant advancement for professional conferencing.

APPLICATONS
- Audio conferencing
- Video conferencing

WORKSPACES
- Conference rooms
- Boardrooms
- Courtrooms
- Classrooms
- Telemedicine theaters

You’re not beamforming unless you’re beamforming with ClearOne!™
BMA 360

Connections

System Diagram

Three daisy-chained BMA 360 microphone arrays, with 2x30W and 4x15W speaker configurations, connected to a CONVERGE Pro 2.

Room Coverage

<table>
<thead>
<tr>
<th>Room size</th>
<th>Beams</th>
</tr>
</thead>
<tbody>
<tr>
<td>10’ x 10’ to 18’ x 18’</td>
<td>6</td>
</tr>
<tr>
<td>12’ x 12’ to 20’ x 20’</td>
<td>8</td>
</tr>
<tr>
<td>22’ x 22’ to 24’ x 24’</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Room size</th>
<th>Beams</th>
</tr>
</thead>
<tbody>
<tr>
<td>10’ x 14’ to 18’ x 22’</td>
<td>6</td>
</tr>
<tr>
<td>10’ x 16’ to 18’ x 24’</td>
<td>8</td>
</tr>
<tr>
<td>12’ x 22’ to 20’ x 36’</td>
<td>12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Room size</th>
<th>Beams</th>
</tr>
</thead>
<tbody>
<tr>
<td>16’ x 8’ to 22’ x 16’</td>
<td>6</td>
</tr>
<tr>
<td>24’ x 18’</td>
<td>11</td>
</tr>
</tbody>
</table>

Note: The example room sizes are based on a 10 ft. ceiling.
Polar Plots (Broadside)

Typical Far Field Performance

Narrow Beam, HPBW = 35°

Gain response is frequency invariant for all beamwidths.

Medium Beam, HPBW = 45°

Frequency Response (Broadside)

Typical Frequency Response

Frequency response measured directly on-axis from a distance of 2 meters.
BMA 360

BEAMFORMING FEATURES
- True Frequency Invariant Beamformer: Gain response is unvarying across frequency
- Beamwidths: 35°, 45° and 55° with Frequency Invariance
- Beamforming Range: 100 Hz to 20 KHz
- Deep Sidelobes: Down to 45 dB of depth
- Beam Pointing Accuracy: 0.2 dB
- Dynamic Range: 100 Hz to 20 KHz, > 70 dB
- Number of Beams: 6, 8, 10, 11, or 12
- Room Patterns: Full Circle/Square, Rectangular, Semi-Circle/Classroom
- Coverage Sizes: 24 sizes from small 10 ft x 10 ft up to extra large 36 ft x 20 ft
- Ceiling Height: Configurable with CONSOLE AI from 7 ft to 20 ft

AMPLIFIER OUTPUT
- Type: 5.08mm Header, Phoenix-type Euroblock
- Audio: 4 channels
- Output Power: 4x15W Max, 8 Ω load, or 2x30W, 4Ω load, Bridged
- Frequency Response: 20Hz – 22kHz, +/- 0.5dB

SOFTWARE
- CONSOLE® AI

DIMENSION & WEIGHT
- 24 in:
  - 23.72 x 23.72 x 2.13 in (602.5 x 602.5 x 54.1 mm)
- 600 mm:
  - 592.5 x 592.5 x 54.1 mm (23.33 x 23.33 x 2.13 in)
- Product Weight: 9 lbs, 4.1 kg
- Shipping Weight: 12.85 lbs, 5.83 kg

MOUNTING
- Ceiling Mount: 24 in, 600 & 625 mm drop-ceiling grid
- VESA© Mount ready: 100 mm hole pattern, M4x10 mm

P-LINK PERIPHERAL BUS PORT
- Ports Type: RJ-45
- P-Link In and Out: Proprietary peripheral bus
- P-Link Power
  - 56V 36W IEEE 802.3at compliant devices or equivalent, Mode B

SALES AND INQUIRIES

ClearOne recommends the following PoE power supply kits:
1. 36W: ClearOne part number: 910-3200-202
2. 90W: ClearOne part number: 910-3200-208

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