DATA SHEET
PARLÉ™ TCM-1
AVB BEAMTRACKING™ PENDANT MICROPHONE

The Parlé™ TCM-1 is an AVB pendant microphone for use in Tesira® systems. Comprising a pendant microphone and plenum box, each microphone includes Beamtracking™ technology with three 120-degree zones, providing full 360-degree coverage of the meeting space. The TCM-1 microphone actively tracks and intelligently mixes conversations from around the table, allowing far-end conference participants to experience the conversation naturally. The Parlé TCM-1 comes with its own digital signal processing module for Beamtracking, and each plenum box comes with an additional RJ-45 connector for daisy-chain connections. A maximum of three microphones are permitted per daisy chain (one TCM-1 or TCM-1A required, plus up to two TCM-1EX). The TCM-1 is well suited for a variety of room types and sizes that require high-quality audio solutions, such as conference rooms or council chambers.

FEATURES

- Beamtracking technology actively tracks and intelligently mixes conversations
- Three 120-degree zones for 360 degrees of coverage
- Plenum box includes DSP for Beamtracking
- LED mute status indicator
- Pendant microphone available in either white or black
- User-adjustable mic height
- Easy single-cable installation process
- Optional tile bridge mounting accessory available
- Evaluated to the requirements of UL 2043 and is suitable for use in air handling spaces
- Additional RJ-45 for daisy-chain connection to a TCM-1EX microphone (maximum of three mics per daisy chain; one TCM-1 or TCM-1A and two TCM-1EX)
- CE marked, UL listed, and RoHS compliant
- Covered by Biamp Systems' five-year warranty

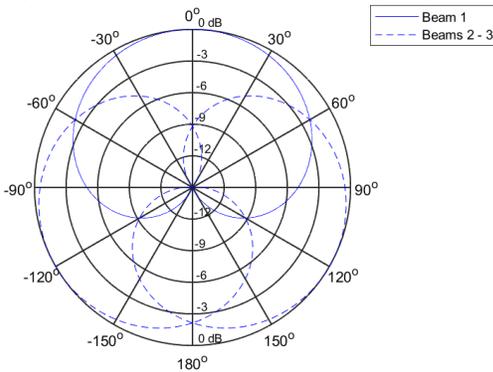## ARCHITECTS & ENGINEERS SPECIFICATIONS

The Beamtracking™ pendant microphone shall be designed exclusively for use with Biamp® Tesira® systems. The Beamtracking pendant microphone shall be comprised of a pendant microphone and plenum box. The Beamtracking pendant microphone shall utilize an AVB/TSN network via an RJ-45 connector for audio networking as well as software configuration and control. The Beamtracking pendant microphone shall contain an eight-element digital microphone array, and shall provide three 120-degree zones for 360 degrees of coverage. The Beamtracking pendant microphone shall offer multidirectional beamforming and automatic signal tracking capabilities. The Beamtracking technology shall operate in conjunction with acoustic echo cancellation technology (AEC) in accordance with U.S. Patent 9659576. The signal processing of the Beamtracking pendant microphone shall be configurable via the Tesira design software, including but not limited to: signal routing and mixing, equalization, filtering, dynamics, and delay, as well as control, monitoring, and diagnostic tools. The Beamtracking pendant microphone shall offer simple installation and microphone height adjustment, and shall be mountable on a ceiling tile or in open-ceiling environments. The Beamtracking pendant microphone shall be powered by PoE (IEEE 802.3at Class 3). The Beamtracking pendant microphone shall be suitable for use in air handling spaces in accordance with UL 2043, and shall provide a second RJ-45 connector to allow up to two additional expander TCM-1EX microphones to be daisy-chained together. The Beamtracking pendant microphone shall be CE marked, UL listed, and compliant with the RoHS directive. Warranty shall be five years. The Beamtracking pendant microphone shall be Parlé™ TCM-1.
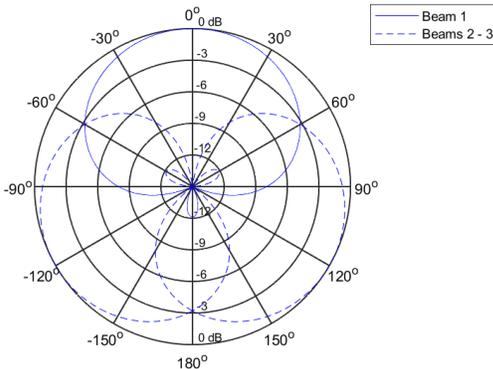
PARLÉ TCM-1 SPECIFICATIONS

PENDANT MICROPHONE

Microphone Technology:	8-Element Digital Array
Frequency Response (150 Hz - 16 kHz):	± 3dB
Polar Pattern:	Beamformed
Sensitivity (94dB SPL, 1kHz):	> 70dB
Maximum SPL (at 0.5% THD):	106dB
Dynamic Range (THD+N < 10%):	92dB, A-Weighted
Indicators:	Mute Indicator (Green/Red LED)
Digital Interface:	Custom/Proprietary
Connector:	Custom 2-pin (cable length 10 feet [3 meters])

Overall Dimensions

Height:	2 inches (51 mm)
Width:	2.5 inches (63 mm)
Depth:	2.5 inches (63 mm)
Weight:	0.4 lbs (0.2 kg)

PLENUM BOX

Connectors:	Two RJ-45: one between TCM-1 plenum box and switch, the other between TCM-1 plenum box and additional TCM-1EX plenum box; 2-pin 3.5 mm Phoenix connector to TCM-1 microphone
Power:	PoE (IEEE 802.3at Class 3, 15.4W)
Indicators:	Power Indicator (Green/Yellow/Red LED)
Digital Interface:	Custom/Proprietary
Max Distance Between Devices:	330 feet (100 meters) from switch to TCM-1 plenum box; 33 feet (10 meters) for daisy-chained connections between TCM plenum boxes

Overall Dimensions

Height:	2 inches (51 mm)
Width:	7 inches (178 mm)
Depth:	7.125 inches (181 mm)
Weight:	2.4 lbs (1.1 kg)

Environmental

Ambient Operating Temperature Range:	32 - 104° F (0 - 40° C)
Humidity:	0-95% relative humidity (non-condensing)
Altitude:	0-10,000 ft (0-3000m) MSL

Compliance:

FCC Part 15B (USA)
CE marked (Europe)
UL and C-UL listed (USA and Canada)
RoHS Directive (Europe)
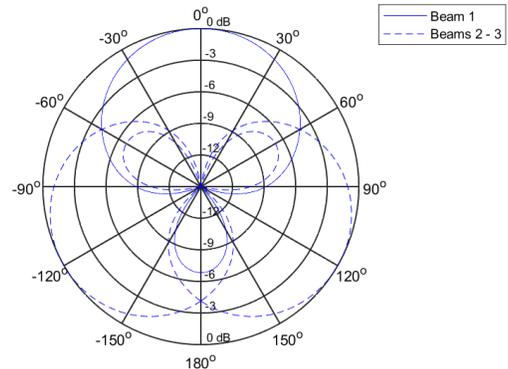Evaluated to the requirements of UL 2043 and is suitable for use in air handling spaces

TCM-1 Polar Responses at Center of Tracking Zones
Patterns Shown at 1000Hz at an elevation of 30° down from mic

TCM-1 Polar Responses at Center of Tracking Zones
Patterns Shown at 2000Hz at an elevation of 30° down from mic

TCM-1 Polar Responses at Center of Tracking Zones
Patterns Shown at 4000Hz at an elevation of 30° down from mic