DATA SHEET
PARLÉ™ TCM-X
AVB BEAMTRACKING™ CEILING MICROPHONE



The Parlé™ TCM-X is an AVB low-profile ceiling microphone for use in Tesira® systems. Comprising a network box and a ceiling microphone, each microphone includes Beamtracking™ technology with four 90-degree zones, providing full 360-degree coverage of the meeting space. The TCM-X microphone delivers the same level of performance as our other Beamtracking microphones in a sleek, unobtrusive design that mounts to the ceiling. The TCM-X actively tracks and intelligently mixes conversations from around the table, allowing far-end participants to experience the conversation as they would a face-to-face meeting. Each network box has its own digital signal processing module and comes with an additional RJ-45 connector to add an optional TCM-XEX to the network box. A maximum of two microphones are permitted per network box (one TCM-X or TCM-XA with TCM-XEX). The TCM-X is well suited for a variety of room types and sizes with 10 foot (3 meter) ceilings or lower that require high-quality audio solutions and low profile or unobtrusive microphones.

PRELIMINARY

FEATURES

- Low profile circular ceiling microphone that measures 5.75 inches (146 mm) in diameter
- Mounts directly to the ceiling to virtually disappear in room
- Beamtracking technology actively tracks and intelligently mixes conversations
- Four 90-degree zones for full 360-degree room coverage
- Network box includes DSP for Beamtracking
- Single cable connection via category cable
- Beamtracking technology works out-of-box without any lobe aiming or room mapping
- Uses only one channel of AEC per microphone
- LED mute status indicator
- Available in either black or white
- Evaluated to the requirements of UL 2043 and is suitable for use in air handling spaces
- Additional RJ-45 on network box for connection to a TCM-XEX microphone
- CE marked, UL listed, and RoHS compliant
- Covered by Biamp Systems' five-year warranty

ARCHITECTS & ENGINEERS SPECIFICATIONS

The Beamtracking™ ceiling microphone shall be designed exclusively for use with Biamp® Tesira® systems. The Beamtracking ceiling microphone shall be comprised of a ceiling mount microphone and a network box. The Beamtracking ceiling microphone shall utilize an AVB/TSN network via an RJ-45 connector for audio networking as well as software configuration and control. The Beamtracking ceiling mount microphone shall contain sixteen-element microphones, and shall provide four 90-degree zones for 360 degrees of coverage. The Beamtracking ceiling 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 ceiling 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 ceiling microphone shall offer simple installation and shall be mountable directly to the ceiling. The Beamtracking ceiling microphone shall be powered by PoE (IEEE 802.3at Class 3, 15.4W). The Beamtracking ceiling microphone shall be suitable for use in air handling spaces in accordance with UL 2043, and shall provide an additional RJ-45 connector to allow connection of one expander TCM-XEX microphone. The Beamtracking ceiling microphone shall be CE marked, UL listed, and compliant with the RoHS directive. Warranty shall be five years. The Beamtracking ceiling microphone shall be Parlé™ TCM-X.

biamp.
A: 9300 S.W. Gemini Drive Beaverton, OR 97008 USA T: +1 503.641.7287 W: www.biamp.com

PARLÉ TCM-X SPECIFICATIONS

CEILING MOUNT MICROPHONE

Microphone Technology:	16-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:	RJ-45 (cable length 10 feet [3 meters])
Overall Dimensions	
Height:	0.6 inches (15 mm)
Diameter:	5.75 inches (146 mm)
Weight:	TBD

NETWORK BOX

Connectors:	Three RJ-45: one between TCM-X network box and switch, one between the network box and microphone, the other between TCM-X network box and TCM-XEX
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-X network box; 33 feet (10 meters) between TCM-X network box and TCM-XEX
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

PRELIMINARY

Biamp, Tesira, Parlé, and Beamtracking are either trademarks or registered trademarks of Biamp Systems, LLC in the United States and other countries. Other product names referenced may be trademarks or registered marks of their respective owners and Biamp Systems is not affiliated with or sponsored by these companies.

biamp.

A: 9300 S.W. Gemini Drive Beaverton, OR 97008 USA T: +1 503.641.7287 W: www.biamp.com