

Overview

Tabletop array microphone provides a comfortable conference sound environment with no configuration needed.



Features

- Auto Voice Tracking allows for flexible room layout and participant positioning
- 6 types of microphone directivity to choose from, depending on your environment and audio needs
- Achieves comfortable sound quality using the integrated Adaptive Echo Canceller, Auto Gain Control, Noise Reduction, and Dereverberation
- When using Auto Voice tracking, RM-CR automatically selects the microphone element that provides the best audio signal of the voice
- Standard network audio support for “Dante”
- Utilizes one PoE+ network cable connection avoiding wiring problems and enabling audio control via Dante
- The included accessory allows for fixed installations of the microphones on tables

Specifications

General Specifications

Description	Boundary Microphone	
Colour	Black, White	
Dimensions (W x D x H)	140 mm x 140 mm x 41.5 mm	
Weight	310 g	
Power Requirements	PoE (IEEE 802.3af)	
Maximum Power Consumption	4.5 W	
In Operation	Temperature	0°C - 40°C
	Humidity	30% - 90% (No condensation)
Storage	Temperature	-20°C - 60°C
	Humidity	20% - 90% (No condensation)
Indicators	Mute indicator (Mute/Unmute), Status indicator, Network port indicator	
Maximum Device Number with RM-CR	14 (without VXL1-16P, up to 16)	
Accessories	Installation manual, Tabletop mounting adapter, Screw for mounting x 3, Spacer x 3	

Network Specifications

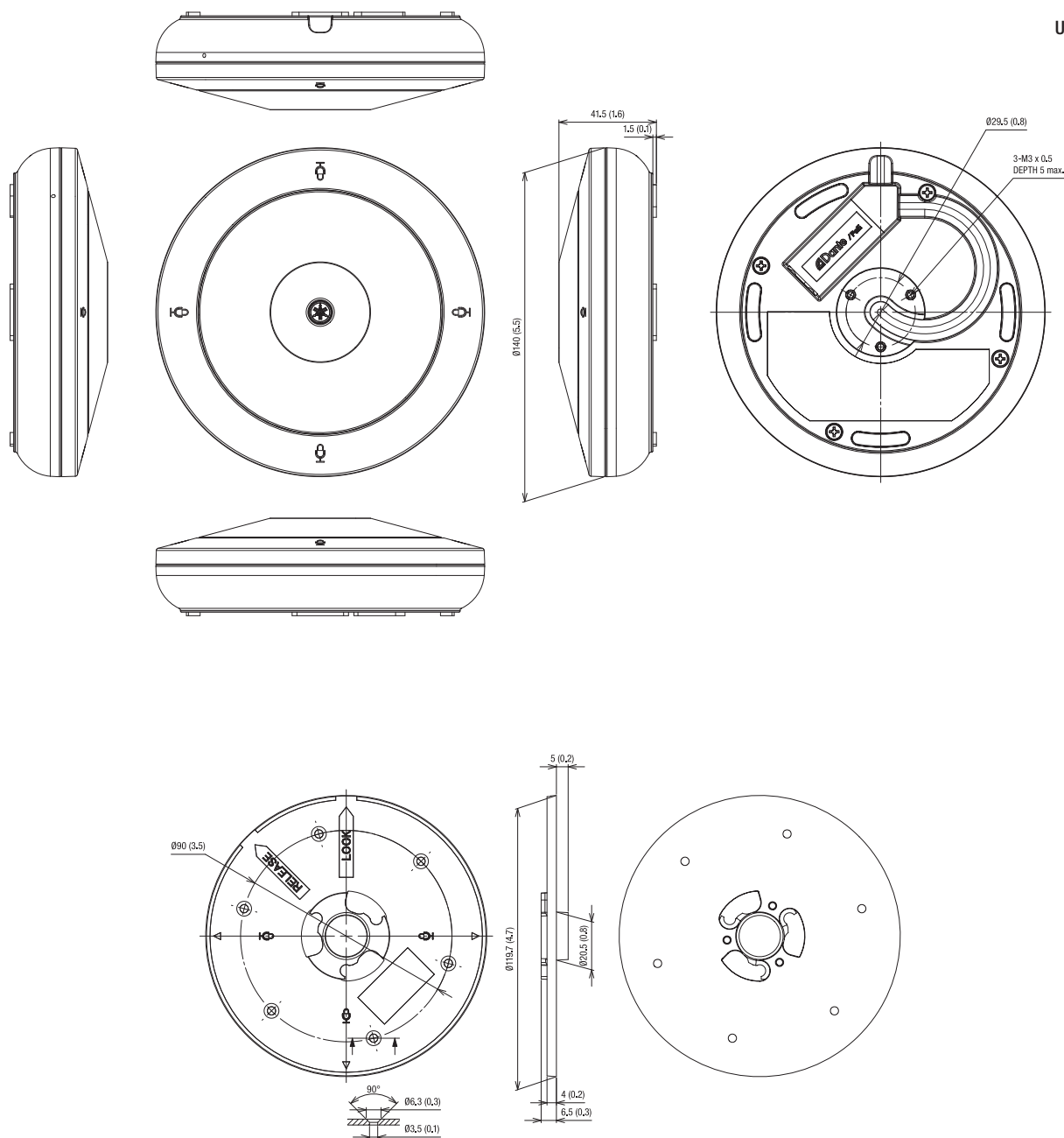
Ethernet	Dante, Remote Control, Web UI, PoE
Cable Requirements	CAT5e or higher (STP)

Audio Specifications

Frequency Response	160 Hz - 16 kHz (-10 dB)	
Sampling Rate	48 kHz	
Bit Depth	24 bit	
Latency (including signal processing)	20 ms (low-latency mode except for toroidal directivity) 23 ms (low-latency mode for toroidal directivity) 46 ms (except for toroidal directivity) 50 ms (for toroidal directivity)	
Audio I/O	Dante	1 in/2 out In1=AEC reference signal/Out1=output of beam mix, Out2= output of beam mix (simple processed)
Maximum Input Level of SPL (0 dBFS)	106.8 dB SPL	
Self Noise	6.3 dBA SPL	
SNR (Ref. 94 dB SPL at 1 kHz)	87.7 dBA	
Sensitivity	-12.8 dBFS/Pa	
Dynamic Range	100.5 dBA	
Signal Processing	Auto Voice Tracking, Selectable Polar Pattern (Cardioid, Hyper-cardioid, Super-cardioid, Omnidirectional, Bidirectional, Toroid), Adaptive Echo Canceller, Noise Reduction, Dereverberation, Auto Mixer, Auto Gain Control, Parametric EQ, Output Gain Adjustment	

Dimensions

Unit: mm (inch)

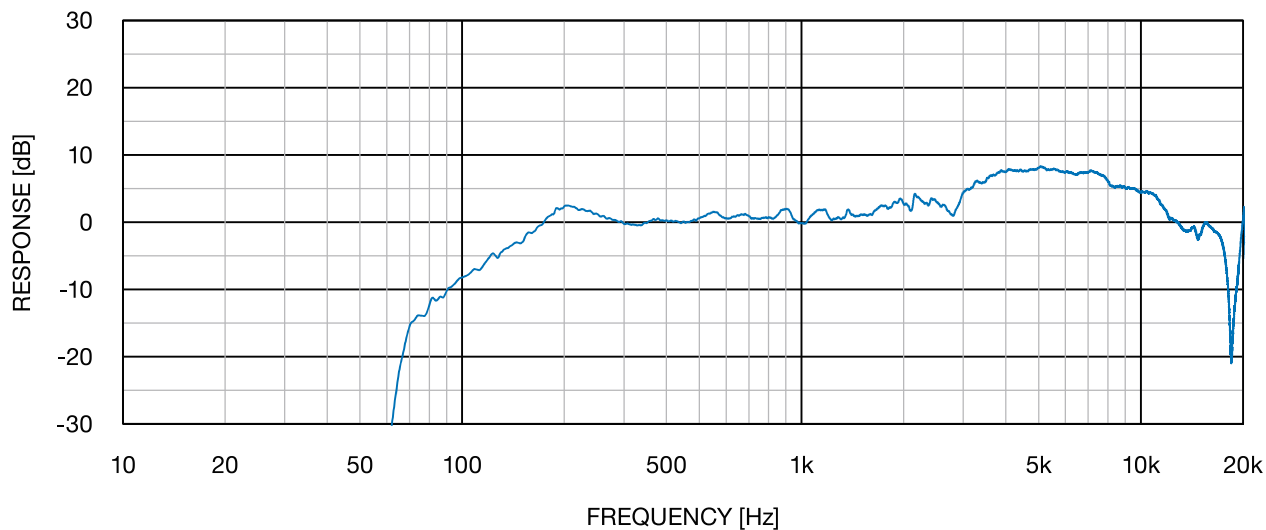


Architectural and Engineering Specifications

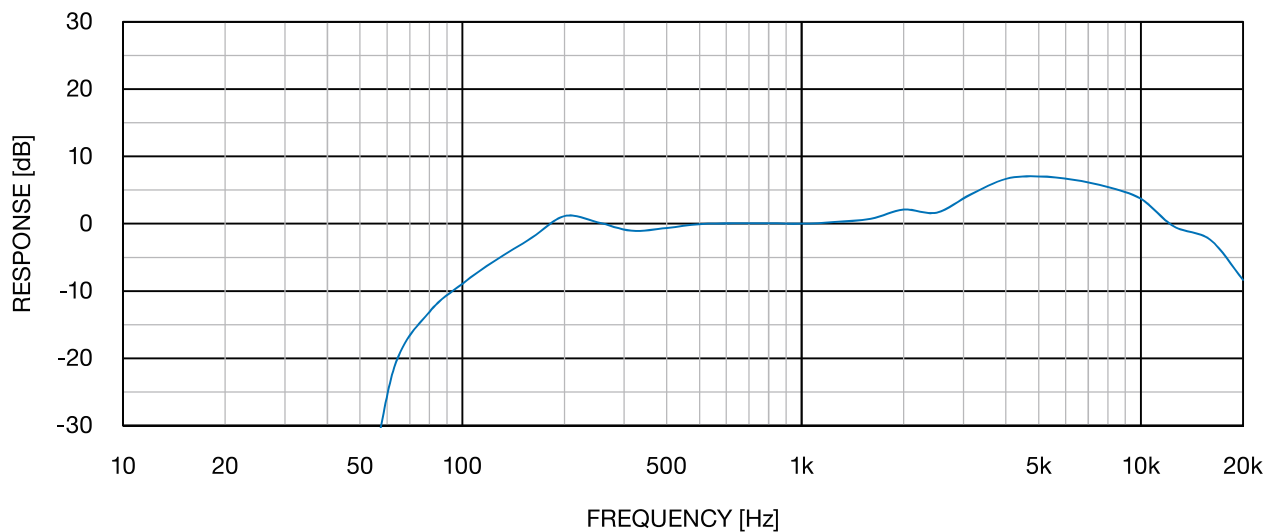
The solution shall be an intelligent tabletop microphone. The tabletop microphone system shall be Dante enabled and PoE powered, requiring only one CAT5e or Cat6 cable for both power and data/audio transmission. The tabletop microphones shall support programmability for several audio pick-up patterns. Audio pick-up patterns shall include omni-directional and a toroid pattern to capture 360 degree around the microphone with toroid reducing sounds from above the microphone. The microphone shall also allow for cardioid, super cardioid, and hyper cardioid pick-up pattern. When selecting any of the cardioid pick-up patterns, up to four independent directions ("channels") shall be available to define per microphone and all four will be active. A predefined bi-directional cardioid pick-up pattern with two lobes opposite to each other shall be available, with free selection of the direction of that pattern. When selecting several active channels, different mixing options shall be offered, including gain-sharing options and all-mix. The tabletop solution shall also offer an Active Voice Tracking setting in which the microphone elements that provide the best audio capture are automatically selected and mixed into the audio output of the microphone. The microphone shall include audio post-processing. This shall include Adaptive Acoustic Echo Cancellation, Noise Reduction, Human Voice Activity Detection, Automatic Gain Control, Automatic mixing of audio signals, dereverberation, and others. An installation mechanism shall be provided to install microphones in a fixed location on surfaces like tables. Each tabletop microphone shall provide an audio signal that was only post-processed using linear algorithms allowing for technology like speech recognition to use the signal without loss of performance. The product shall provide connectivity for third party control systems, allowing to manage microphone and audio behavior from the room control system. The Yamaha RM-TT is specified.

Frequency Response

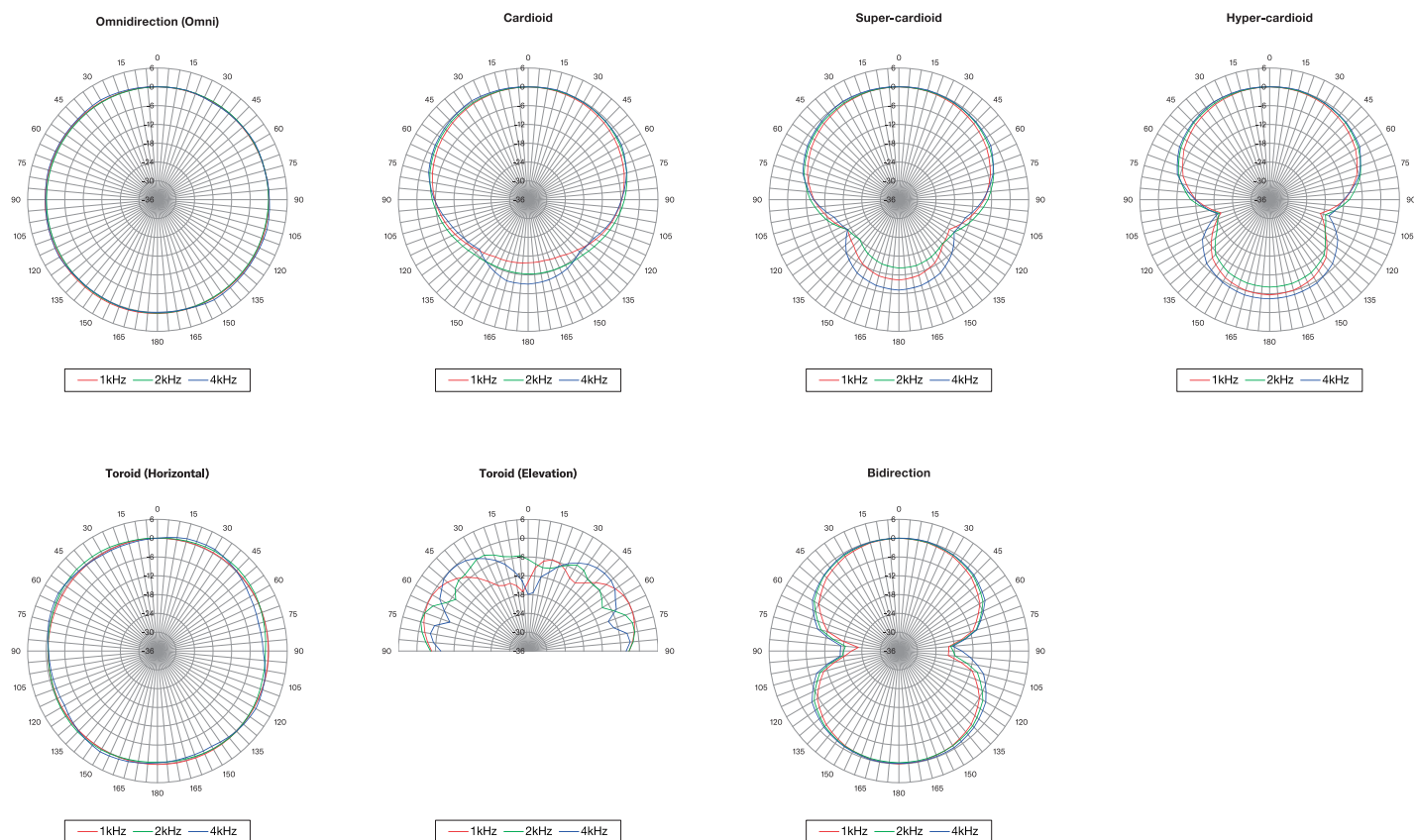
LINEAR



1/3 octave band



Directional Characteristics



*All information subject to change without notice.

*All trademarks and registered trademarks are property of their respective owners.

Created in June, 2023

YAMAHA CORPORATION
P.O.BOX 1, Hamamatsu Japan