

# meetingIO Series

CONFERENCING MADE SIMPLE



AMIO LENUBIO

## **AMIO**

## Real-time Steering Array Microphone with DSP

The AMIO Real-time Steering Array Microphone is the newly upgraded premier flagship conferencing microphone in TOA's meetingIO Series. AMIO delivers the most natural kind of speaking and conversation experience for corporate speeches, company meetings, and team collaborations between remote locations. That same benefit can be extended to executive offices, houses of worship, court rooms, higher education classrooms, and even theatrical venues. With a completely controllable area of acceptance, AMIO offers solutions to many challenges such as a presenter's limited range of motion, speech volume drop-offs, acoustical anomalies, background chatter, and many others. Because AMIO knows exactly where the presenters are at all times it can literally dial out unwanted sound while maximizing the fidelity and intelligibility of the speakers' voices.

#### **KEY BENEFITS**

- Natural conversation without concern for speaker location or proper mic technique
- Natural reproduction of sound without accentuating ambient noises
- Unobtrusive profile favorable for architectural interior design requirements
- Uninterrupted line of sight for video
- "Plays nicely with others" compatible with all codecs and audio processors



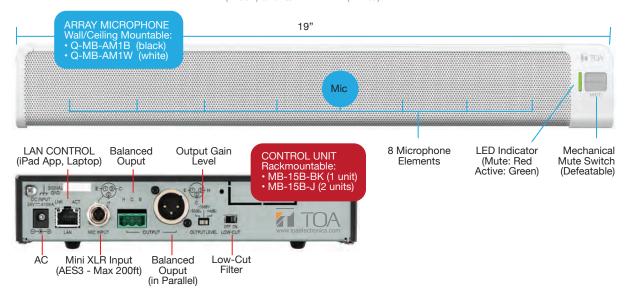
#### **KEY FEATURES**

#### Array Microphone

- 8-element mic array provides an extremely narrow (50°) polar pattern for tight pickup and maximum gain before feedback
- Digital algorithmic processing locates the sound source within a user definable range (30°-180°) and "steers" the beam instantaneously towards it. The microphone rejects sound sources outside of the area of acceptance
- Voice capture up to 20ft and tracking ranges up to 180 degrees.
- Mechanical mute switch with LED indicator (green for "ON" and red for "MUTE") which can be disabled via iPad app or browser where necessary
- Free iPad app allows real-time, remote control of beam steering parameters with visual feedback of mic and sound source position
- Available in black and white
- Optional mounting bracket for ceiling, wall, and tabletop: Q-MB-AM1B (Black) and Q-MB-AM1B (White)

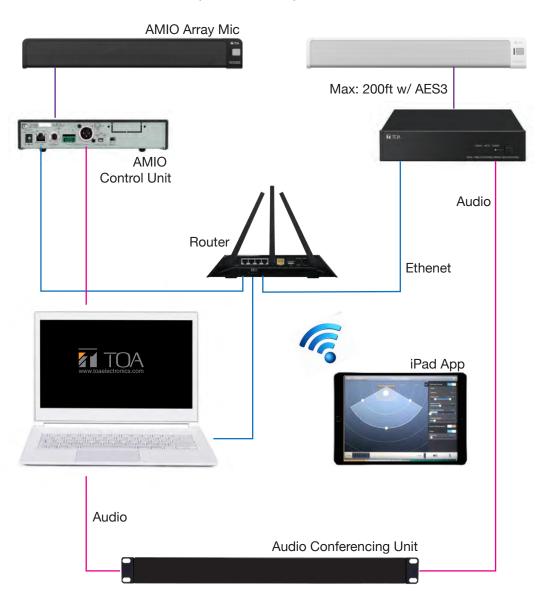
#### Control Unit

- Mic controller features Power and Signal LED indicators, low-frequency cutoff switch, analog line output (terminal block/XLR), output level switch (-50dB; -10dB; +4dB), microphone input (mini XLR: TA-3 connector). Chassis single space, half rack
- Built-in web server also provides remote parameter settings via web browser
- Optional rackmountingv brackets: MB-15B-BK (for single unit) and MB-15B-J (for two units side by side)





#### AMIO SYSTEM DIAGRAM (2 MIC SETUP)



## **LENUBIO**

### Integrated Audio Collaboration System with DSP

The LENUBIO Integrated Audio Collaboration System is the latest cutting edge meetingIO Series product by TOA Electronics. As a professional steerable microphone array system with integrated stereo soundbar LENUBIO is the perfect all-in-one conferencing solution for small to medium size conference spaces with great return on investment. Built-in AEC (Acoustic Echo Cancellation), ANC (Ambient Noise Cancellation), and EQ maximize performance making collaboration between remote sites a very natural experience. Connectivity includes USB ports for direct integration with computers and webcams, Bluetooth, codec input/output, stereo audio inputs/outputs, and contact inputs/outputs. LED indicators identify and track the presenters location in addition to showing mute status, and microphone gain level. It is truly real-time beam steering illuminated. Easy installation is made possible with included mounting hardware. Available in black and white, the unit is powered via Ultra PoE or regular power supply.



#### REAL-TIME BEAM STEERING ILLUMINATED

Seven LED indicators behind the front grille illuminate to visually track presenter location, display microphone gain level, and show microphone mute status.

#### GUI FOR EASY SETUP AND CONTROL

The browser interface is available to make adjustments to parameter settings such as mixer volume controls, audio processing, LED indicator management, control I/O, presets, and voice tracking field adjustments for coverage within a 20 foot range.

#### **KEY BENEFITS**

- LENUBIO creates the most natural communication vavailable for team collaboration between remote locations. With the integrated array mic and soundbar positioned below the display participants actually talk with each other just as they would in normal conversation.
- For impromptu meetings, a smartphone can be quickly paired with LENUBIO via bluetooth connectivity for exceptionally clear communication.
- Presentations become impactful with the professional grade high-quality audio delivered via stereo soundbar with subwoofer output.



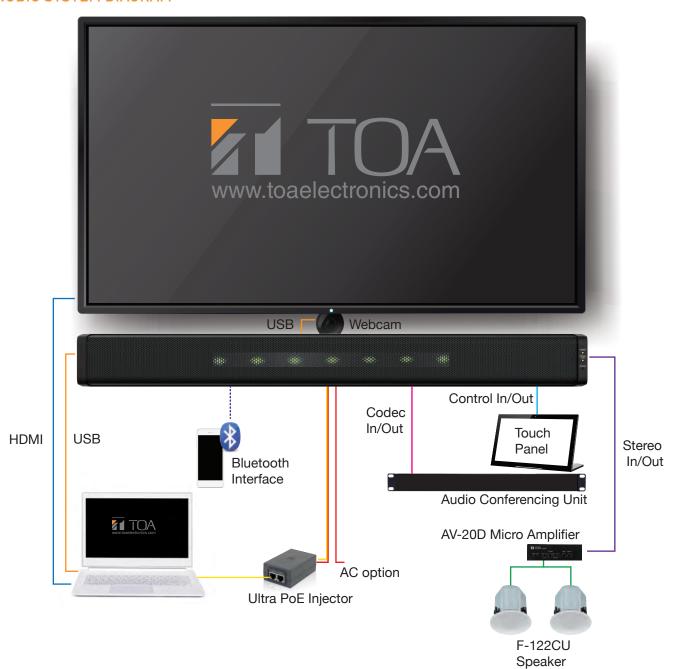
#### **KEY FEATURES**

- TOA's beam steering array microphone technology
- Integrated DSP functions including Acoustic Echo Cancellation and Ambient Noise Control
- Bluetooth interface for smartphones
- Built-in USB Hub for webcam integration
- Stereo soundbar with stereo inputs/outputs
- Codec input/output and Contact Closure inputs/outputs
- GUI provides intuitive control via browser
- Included mounting hardware for easy installation





#### LENUBIO SYSTEM DIAGRAM



# **AMIO**

#### AMIO Array Microphone Specifications

	AM-1BMK2 (Black)	AM-1WMK2 (White)	
Power Source	24V DC (supplied from the Control Unit)		
Microphone	Unidirectional electret condenser microphones		
Directivity Angle	Horizontal 50° (800 Hz - 18 kHz, Array mode), 180° (Cardioid mode) Vertical: 90°		
Frequency Response	150 Hz - 18k Hz		
Maximum Input Sound Pressure	100 dB SPL		
Operation	Mechanical mute switch		
Indicator	Microphone status indicator (output: green, mute: red)		
Microphone Cable	Low-capacitance (AES-EBU) shielded twisted pair cable 10m (32.81 ft) with connector equivalent to TA-3		
Maximum Cable Length	70 m (229.66 ft) (use of the AES\EBU cable)		
Finish	Body, punched net: Surface-treated steel plate, black, 30% gloss Side cover: ABS resin black	Body, punched net: Surface-treated steel plate, white(RAL9016 equivalent), 30% gloss Side cover: ABS resin white (RAL9016 equivalent)	
Dimensions	483.9 (W) x 22.1(H) x 64.9 (D) mm (19.05" x 0.87" x 2.56") excluding cable		
Weight	1.2 kg (2.65 lbs.)		





\*1) 0 dB= 0.775 V; \*2) 0 dB= 1 V

#### AMIO Control Unit Specifications

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	AM-1CMK2		
Power Source	24V DC (supplied from an optional AD-246 AC adapter) Usable DC power supply plug: 5.5 mm (0.22") outer diameter 2.1 mm (0.08") inner diameter 9.5 mm (0.37") long, and non-polarity type		
Current Consumption	410 mA or less		
Signal to Noise Ratio	90 dB or more		
Input	Combined type of TA-3 (dedicated to the array microphone)		
Output	Combined type of XLR-3-32, Removable terminal block (3 pins)		
Network	Network I/F: 10 BASE-T/100BASE-TX, RJ-45 conncector Network protocol: TCP/IP, HTTP		
Level Control	Output level selection (+4 dB*1, -10 dB*2, -50dB*1) LOW CUT ON/OFF		
Operation	Power switch		
Indicators	Power indicator (blue), Mute indicator (red), signal indicator (green)		
Finish	Pre-coated steel plate, back, 30% gloss		
Dimensions	210 (W) x 45.7 (H) x 271.5 (D) mm (8.27" x 1.8" x 10.69")		
Weight	1.5 kg (3.31 lbs.)		
Dedicated Software	iPad app, PC browser software (for setting of tracking distance/range, sensitivity/speed, mute ON/OFF)		
Operating Temperature Range	0 °C to +40 °C (32 °F to 104 °F)		
Operating Humidity Range	90 % RH (no condensation)		
Accessory	Removable terminal plug (3 pins)		
Option	AC Adapter: AD-246 Rack mounting bracket: MB-15B-BK (for rack mounting one control unit), MB-15B-J (for rack mounting two control units) Wall mounting bracket: YC-850 (for one control unit) Wall/Ceiling mounting bracket: WB-AM1BWC/WB-AM1WWC		

# **LENUBIO**

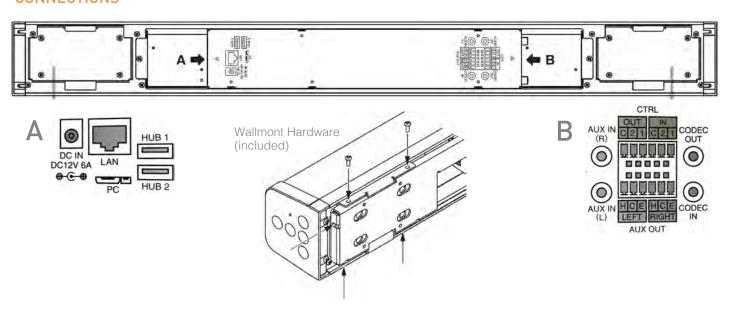




#### **LENUBIO Specifications**

		AM-CF1B (Black)	AM-CF1W (White)	
Power Source		12 V DC (supplied from the specified AC adapter) or 52 V DC (supplied rom the specified PoE extender)		
Current Consumption		Under 3.5 A		
Inputs		USB Audio: 2 channels, USB 3.0/USB 2.0/USB 1.1 micro-B port Bluetooth: 2 channels, Codec: 1 channel, RCA pin jack, $-10$ dB*1, $10$ k $\Omega$ , unbalanced type AUX: 2 channels, RCA pin jack, $-10$ dB*1, $10$ k $\Omega$ , unbalanced type		
Outputs  USB Audio: 2 channels, USB 3.0/USI Bluetooth: 2 cha Codec: 1 channel, RCA pin jack, -10 d AUX: 2 channels, removable termir 600 Ω, balanced (electronics Internal speaker: 2-way × 2 (wo		Blueto Codec: 1 channel, RCA pin ja AUX: 2 channels, remova 600 Ω, balanced (e	h: 2 channels , =10 dB*1, 600 Ω, unbalanced type e terminal block (6 pins), 4 dB*2, ctronically-balanced) type	
Control Inputs		2 inputs, removable terminal block (6 pins), no-voltage make contact		
Control Outputs	Outputs 2 outputs, removable terminal block (6 pins), no-voltage make contact, relay contact output		ns), no-voltage make contact, relay contact output	
Network I/F		10BASE-T/,100BASE-TX, RJ-45		
Array Microphone		Unidirectional electret condenser type		
Frequency Characteristics		20 Hz – 20 kHz (AUX IN – AUX OUT)		
Operation Section		Power switch, Bluetooth pairing, Mute, Volume Up/Down		
Indicators		Power (blue/green/orange/red), USB connection (green), Bluetooth (blue), Multifunction (green/red)		
Operating Temperature Range		0 – 40°C		
Operating Humidity Range		90% RH or less (no condensation)		
Finish	Body	Surface-treated aluminium plate, black, 30 % gloss	Surface-treated aluminium plate, white (RAL 9003 equivalent), 30 % gloss	
	Punched Net	Surface-treated steel plate, black, 30 % gloss	Surface-treated steel plate, white (RAL 9003 equivalent), 30 % gloss	
	Side Cover	ABS resin, black	ABS resin, white	
Dimensions		799 (w) x 83.2 (h) x 85.5 (d) mm (31.46" x 3.28" x 3.37")		
Weight		4.6 kg (10.14 lb)		

#### **CONNECTIONS**



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