AM-CF1B 3CU

INTEGRATED AUDIO COLLABORATION SYSTEM

The AM-CF1 is an Audio Collaboration System that will change your perception of web conferences.Imagine you are in a team conference and everyone gets clearly heard across different locations - no matter how passionately you discuss your ideas. The AM-CF1 with its integrated microphone array and soundbar turns any web conference in a natural conversation - clear as face-to-face.The integrated array of 8 steerable microphones automatically focuses on whoever is talking in real-time, allowing a natural conversation in web conferences.

Key features

- TOA's original beam forming array microphone technology offers ideal sound recording
- High quality audio supports natural conversation in huddle rooms
- Easily connectable via USB for a PC-based web conference and for USB web-camera
- Bluetooth® interface allows attendees on the public phone line
- LED light tells your voice is now being surely collected and delivered to remote partner
- Built-in DSP function such as Automatic Echo Cancellation and Automatic Noise Reduction
- Wall-mount installation gives more free space
- Black or white colored according to interior design
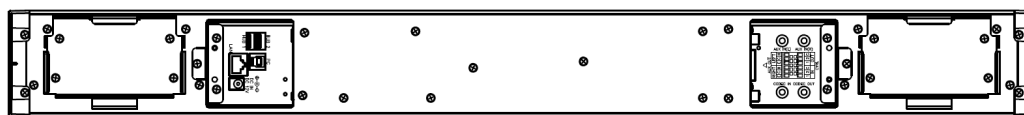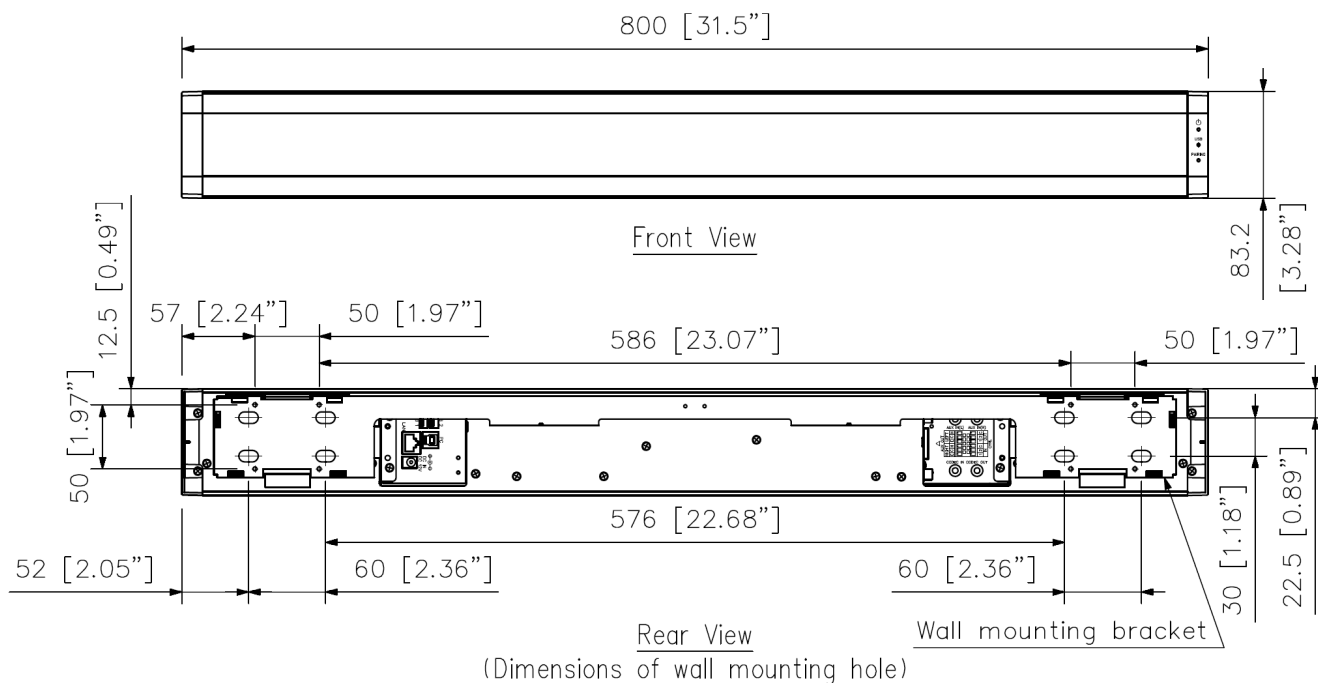- Compatible for PoE plus and power supply

Specifications

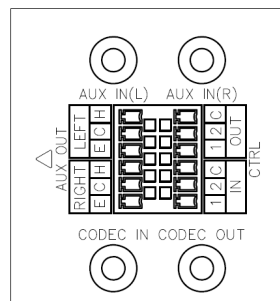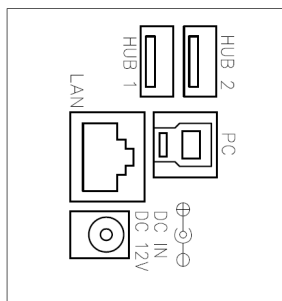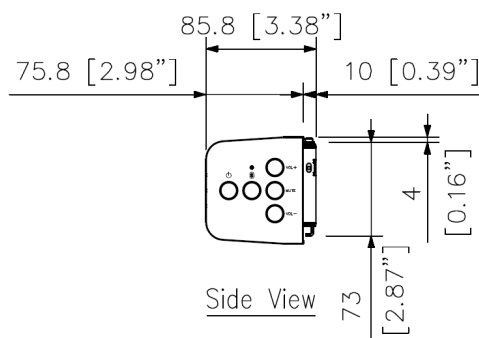|	
Power Source	12 V DC (supplied from the specified AC adapter) or 52 V DC (supplied from the specified PoE extender)
Current Consumption	3.5 A or less
Input	USB Audio: 2 channels, USB 3.0/USB 2.0/USB 1.1, 3.0 type-B port Bluetooth: 2 channels (A2DP1.3 (stereo), HPF1.6) Codec: 1 channel, −10 dB*1, 10 kΩ, unbalanced, RCA pin jack AUX: Stereo 1 channel, −10 dB*1, 10 kΩ, unbalanced, RCA pin jack
Output	USB Audio: 2 channels, USB 3.0/USB 2.0/USB 1.1, 3.0 type-B port Bluetooth: 1 channel (HPF1.6) Codec: 1 channel, −10 dB*1, 600 Ω, unbalanced, RCA pin jack AUX: Stereo 1 channel, 4 dB*2, 600 Ω, electronically-balanced, removable terminal block (6 pins) Internal speaker: 2-way (woofer × 2, tweeter × 1) x 2, 10 W x 2
USB Hub Port	USB 3.0/USB 2.0/USB 1.1, type-A port
Control Input	2 channels, no-voltage make contact input, open voltage: 12 V DC, short-circuit current: 2 mA or less, removable terminal block (6 pins)
Control Output	2 channels, relay contact output, withstand voltage: 30 V DC, control current: max. 300 mA, removable terminal block (6 pins)
Network I/F	10BASE-T/100BASE-TX, RJ-45
Microphone	Unidirectional electret condenser microphone
Frequency Response	20 Hz – 20 kHz (AUX IN – AUX OUT)
User Controls	Power switch, Bluetooth pairing switch, Mute switch, Volume Up/Down switch
Indicators	Power indicator (blue/green/yellow/red), USB connection indicator (green/blue), Bluetooth indicator (blue), Multifunction indicator (green/red)
Operating Temperature	0 – 40℃ (32 – 104℉)
Operating Humidity	90% RH or less (no condensation)
Finish	Body: Aluminum, black (RAL 9005 equivalent), 30% glossy Punched net: Surface-treated steel plate, black (RAL 9005 equivalent), 30% glossy Side cover: ABS resin, black (RAL 9005 equivalent)
Dimensions	800 (w) x 83.2 (h) x 85.8 (d) mm (31.5" x 3.28" x 3.38")
Weight	4.6 kg (10.14 lb)
Included Accessories	AC adapter (DC cord length: 1 m or 3.28 ft) … 1 AC Power cord (2 m or 6.56 ft) … 1 USB cable (3 m or 9.84 ft) … 1 Removable terminal plug (6 pins) … 2 Wall mounting bracket (preinstalled on the unit) … 1 Hex wrench (M3) …1

(*1) 0 dB = 1 V
(*2) 0 dB = 0.775 V
*The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by TOA corporation is under license. Other trademarks and trade names are those of their respective owners.

Dimensions

800 [31.5"]

Front View

12.5 [0.49"]

83.2 [3.28"]

57 [2.24"]　50 [1.97"]　586 [23.07"]　50 [1.97"]

50 [1.97"]

576 [22.68"]

52 [2.05"]　60 [2.36"]　60 [2.36"]

30 [1.18"]　22.5 [0.89"]

Rear View
(Dimensions of wall mounting hole)

Wall mounting bracket

Rear View without wall mounting bracket

85.8 [3.38"]

75.8 [2.98"]　10 [0.39"]

4 [0.16"]

73 [2.87"]

Side View

HUB 1　HUB 2

LAN

PC

DC IN
DC 12V

AUX IN(L)　AUX IN(R)

AUX OUT　RIGHT LEFT　ECH ECH　12C 12C　12C 12C　IN OUT　CTRL

CODEC IN CODEC OUT

Enlarged view of Terminal

TOA

A&E specifications

The integrated audio collaboration system shall consist of a steerable microphone array system with an integrated stereo soundbar for the purpose of simple, easy to use video conference collaboration between remote locations and shall achieve high levels of intelligibility. The integrated audio collaboration system shall consist of eight unidirectional electret condenser type microphone elements arranged in a linear array with a polar pattern of 50° horizontally and shall utilize beam steering algorisms to efficiently locate particular speech location within the programmed conference area whether it is near or far, left or right. A visual indication shall be made possible from the front panel via seven LED's monitoring presenter's location, microphone gain level and microphone mute status. The MUTE function shall be an on/off button, which shall turn the LED's Green or Red depending on the microphone's mute status. The integrated audio collaboration system shall have a built-in USB Hub for webcam integration and a USB output for a personal computer. Network shall be made possible using an RJ-45 connection and network interface shall be 10BASE-T/100BASE-TX. Bluetooth connectivity shall be achieved via smartphone for audio conferencing from another remote smartphone. The integrated audio collaboration system shall have built-in DSP functions that will include AEC (Acoustic Echo Cancellation), NC (Noise Cancellation) and EQ (Equalization). System settings and control functions shall be accessible from a GUI (Graphic User Interface) using any PC or device using an onboard web browser interface. System parameters shall include, but not be limited to, width and depth of the area of acceptance, level, mute on/off, mute disable and presets. For system expansion the integrated audio collaboration system shall be able to integrate to external amplifiers, control devices by using two control inputs and two control outputs. The input section shall consist of the following: 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 kΩ, unbalanced, AUX: 2 channels, RCA pin jack, −10 dB*1, 10 kΩ, unbalanced and the output section shall consist of, USB Audio: 2 channels, USB 3.0/USB 2.0/ USB 1.1 micro-B port, Bluetooth: 1 channel, Codec: 1 channel RCA pin jack −10 dB, 600 Ω, unbalanced type, AUX: 2 channels, 4 dB, 600 Ω, balanced (electronically-balanced) type, Internal speaker: 2-way x 2 (woofer x 2, tweeter x 1). Power requirements shall be from a supplied 12 V DC AC adapter or via a 52 V DC PoE extender. The integrated audio collaboration system shall be housed in a black aluminum body with a black punched net front cover with black ABS resin sides panels measuring 800 (w) x 83.2 (h) x 85.8 (d) mm (31.50" x 3.28" x 3.38") weighing 4.6 kg (10.14 lb.) and shall be mounted with the supplied metal wall mount bracket. *1 0 dB = 1 V