

AM-CF1

Integrated Audio Collaboration System

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 algorithms 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 white aluminum body with a white punched net front cover with white 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