The microphone shall be a ceiling array microphone designed for AV conferencing, camera tracking, voice lift, and sound reinforcement applications.

Coverage

The ceiling array microphone shall feature the ability to limit coverage to specific areas while rejecting pickup of sounds in other areas. As shipped, the microphone shall provide Automatic CoverageTM of a single 30 by 30 foot (9 by 9 meter) area. The microphone shall allow up to eight Automatic Coverage areas to be placed at different locations in the room to capture sound from those areas while rejecting unwanted sound from other areas. The Automatic Coverage areas shall be selectable as either Dynamic or Dedicated. In Dynamic Coverage areas, the microphone shall intelligently adapt its audio capture to where talkers are located within the area; in Dedicated Coverage areas, the microphone shall fix audio capture at a specific location. With Automatic Coverage, the microphone shall provide one automix audio output that includes all talkers in the coverage areas.

The microphone shall allow Automatic Coverage to be turned off and Steerable CoverageTM to be used, enabling up to eight pickup lobes to be aimed at desired locations. The width of each pickup lobe shall be adjustable to be narrow, medium, or wide. With Steerable Coverage, the microphone shall provide individual audio outputs for each pickup lobe, plus an automix output.

The microphone shall include AutoFocus™ technology that automatically fine-tunes the audio pickup in real time for consistent sound even if participants lean back or stand up. The microphone shall be capable of capturing multiple simultaneous talkers in different locations in the room.

DSP

The microphone shall feature onboard IntelliMix® digital signal processing which includes automatic mixing, acoustic echo cancellation, noise reduction, automatic gain control, compression/limiting, delay, and parametric equalization. All DSP blocks shall allow adjustment of selected parameters.

Connectivity

The microphone shall provide an RJ-45 connection for audio, control data, and PoE power. Audio shall utilize either Dante or AES67 digital audio networking over a single network cable, and shall be compatible with Dante Domain Manager and Dante Device Lock.

The audio content between the microphone and connected Shure devices (such as the IntelliMix P300 Audio Conferencing Processor or Shure Audio Network Interfaces) shall be encrypted using AES-256 encryption.

The microphone shall be capable of sending and receiving command strings that enable integration with third-party camera control or room control systems. The microphone shall provide enhanced talker localization data that allows camera control systems to be directed to the precise location of an individual talker.

Physical Characteristics & Mounting

The microphone shall be available in square or round form factors to accommodate a variety of ceiling designs.

The microphone shall be paintable to match interior designs.

The microphone shall be compatible with in-ceiling, on-ceiling, pole, and wire-rope mounting configurations using available accessories.

The microphone shall be IP5X rated.

The microphone shall be the Shure MXA920 ceiling array microphone.