CONFERENCE UNIT ARCHITECT AND ENGINEER SPECIFICATIONS

The conference unit shall provide fully digital audio transmission for the Shure Microflex Complete (MXC) Digital Conference System. The unit shall be a flush-mounted conference unit configurable as chairman or delegate. It shall feature a microphone speak button, a configurable function button, a high quality loudspeaker, a lockable microphone connector, a 3.5 mm female stereo headphone jack and a NFC card reader.

The unit shall connect to the MXC System using the proprietary DCS-LAN protocol in a daisy-chain topology with redundant loop option using shielded CAT 5e (or higher) F/UTP, or U/FTP cables. The DCS-LAN protocol shall transport power, audio, and control data across a chain of conference units including a proprietary codec algorithm to prevent unauthorized listening to the audio signal.

The conference unit shall support all speak modes in the MXC system: Automatic, FIFO, Manual (request queue) and VOX (voice activation - available with forthcoming firmware update). The unit shall operate with reply option that allows brief questions or comments to a speaker without losing place in the request queue. The unit shall support three speak interrupt modes.

The speak button shall enable the participant to activate/deactivate the microphone or depending on the speak mode *request to speak*. An LED ring shall be provided around the speak button. The unit shall support gooseneck microphones in the Shure MXC4xx series. The speak button LED ring and the gooseneck microphone LED ring shall illuminate red to indicate that the microphone is on, and illuminate green to indicate that the participant is in the request queue.

The function button shall change functionality depending on the configuration. The delegate configuration shall offer "Mute" or "Reply" functionality. The chairman configuration shall in addition offer "All delegates off", "Exclusive", "Mute All" or "Next On" functionality.

A 10-pin socket shall provide connection to the Shure MXC4xx series gooseneck microphones. The socket shall have a lock that is accessible from a small hole beside the socket and locked with a 1.5 mm hex key.

A loudspeaker shall be integrated into the unit to listen to the floor audio. When the microphone is activated, the loudspeaker shall turn off to avoid feedback. It shall have a frequency response of 200 Hz-15 kHz.

The unit shall provide access to any interpretation channel in the MXC system. The unit shall provide monitoring for one participant by providing channel selection and volume controls for the headphone jack. The headphone frequency response shall be 100 Hz-15 kHz.

The unit shall provide a NFC card reader for participant identification.

The conference unit shall measure 90 mm in height, 235 mm in width and 76 mm in depth. The panel cut-out shall be 82 mm in height x 215 mm in width. The unit shall be made of black anodized aluminum and weigh 650 g, Temperature range of 5° to 40° C. The units power requirements shall be supplied from the central unit or an additional MXC power supply.

The conference unit shall be a Shure MXC620-F