

Recommended Microphone Gain Settings for the XAP

Description

ClearOne test engineers have tested several microphones that can be used with a XAP system. This document details recommended initial course and fine gain settings for these microphones.

Method for determining Gain

For the Gain test a pink noise source was introduced into the mic so that a 65 dBSPL level was measured at the mic element. In G-Ware, the course and fine gain levels were adjusted until the Post Gain meter peaked at 0 dB. When voice audio was present from 2.5 feet away from the mic, the mic the level at the Post Gain meter peaked at 8 dB. Tweak adjustments may be required based on the distance from the talker to the mic.

Shure MX393C

The Shure MX393C is a cardioid, tabletop boundary mic with a push to talk membrane which mutes the audio at the mic element. The power module is built into the mic element. The cable connects to the mic element with a mini XLR and end with a regular XLR. Due to echo cancellation issues with this type of push to talk microphone ClearOne recommends the Shure MX392C with the same settings rather than the Shure MX393C. The MX392C has logic wire connections which allow it to connect to the GPIO port on the XAP product for push to talk functions.

<u>Course Gain</u>	<u>Fine Gain</u>
55 dB	1 dB

Shure MX391C

The Shure MX391C is a cardioid, table top boundary mic in a mini mic element profile. A detachable, inline power module is used. The cable is attached to the Mic element and end with a min I XLR which then connects to the power module and end with a regular XLR.

<u>Course Gain</u>	<u>Fine Gain</u>
55 dB	2 dB

AKG C 680 BL

The AKG C 680 BL is a cardioid, table top boundary mic. The power module is built into the mic element. The cable is attached to the mic element and ends with a regular XLR. The mic and cable are one piece, non-detachable.

<u>Course Gain</u>	<u>Fine Gain</u>
55 dB	-2 dB

ClearOne Tabletop Mic

The ClearOne mic is a cardioid, tabletop boundary mic. A detachable, inline power module is used. The cable is attached to the Mic element and end with a mini XLR which connects to the power module and end with a regular XLR.

<u>Course Gain</u>	<u>Fine Gain</u>
55 dB	15 dB