

## Crown MB-100 Wiring Information

### Introduction

This document describes using the Crown MB100 and MB microphones with the XAP, AP and GT 1524 audio conferencing systems.

### Description

The Crown MB-100 is an electronics interface that supplies power and logic/control connections for up to four MB-1, MB-2, MB 3 or MB-4/E type microphones and requires 16 to 48 volts DC phantom power to function. The ClearOne AP, XAP, PSR, and GT1524 unit supplies 24 volts DC phantom power.

### Installation

The Crown MB-100 requires special wiring due to the negative audio and shield cross over inside the MB100 interface. If the cables are not wired properly, there will be equipment failure and possible damage.

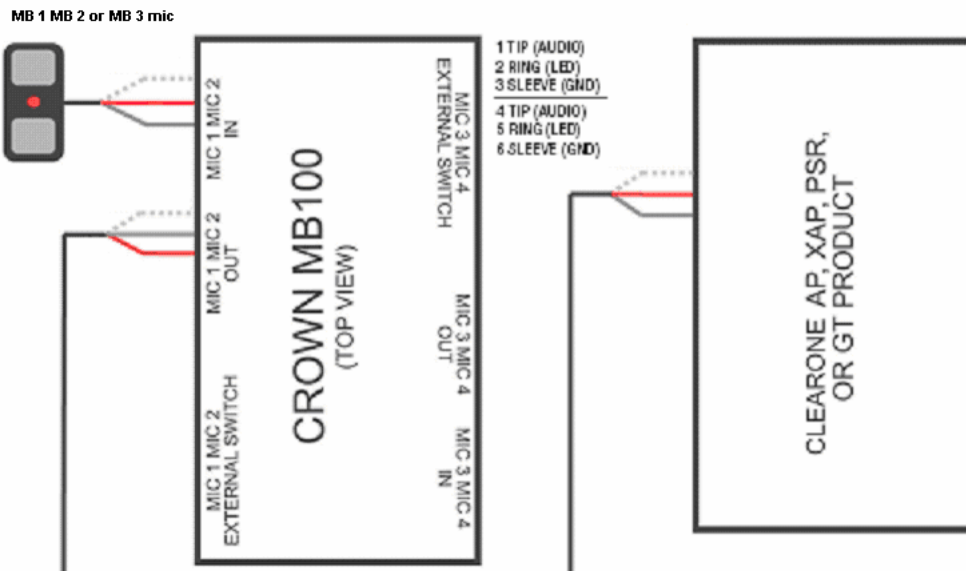
Crown microphones are wired for an unbalanced connection into the MB 100 using shield/sleeve to ground and tip/positive for audio plus a red/ring wire that is available for LED.

If the microphones are not working, or the level is very low, disconnect them and check the wiring. If you are checking the voltage on the output of the MB100 and there is a drop in voltage, it is possible that a miss-wired input on the MB100 is the source.

See the diagrams below for correct wiring.

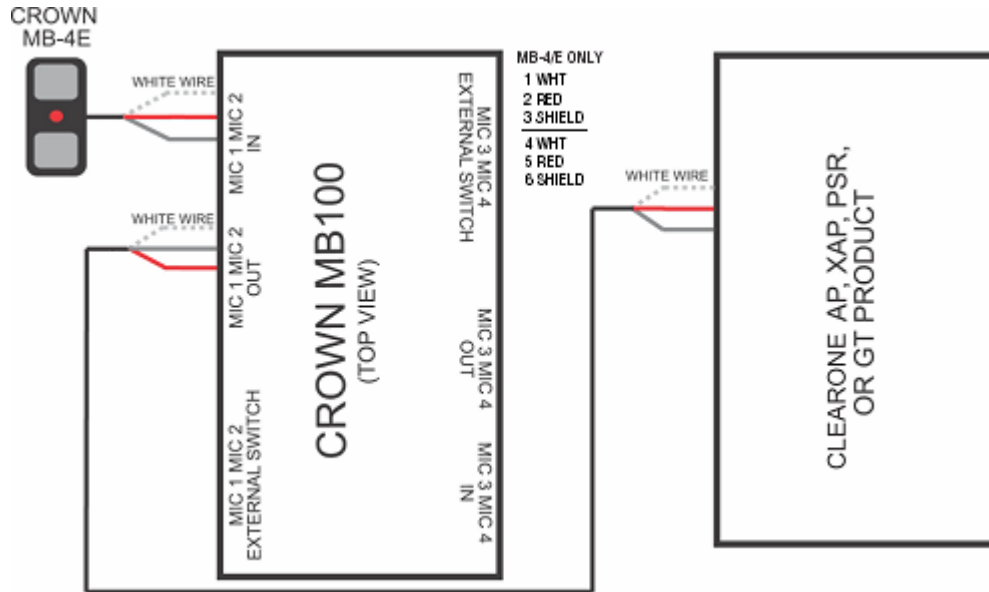
### Wiring Diagram

MB1, MB2 and MB3 microphones to MB100 interface.



**Wiring Diagram**

MB 4/E microphone to MB100 interface. The wire colors in this diagram are for the Crown MB 4/E series of microphones. The white wire is audio plus, the red is LED.



**Control / Status Functions**

The Crown MB series of microphones all have an LED available for mute status information, however the logic port of the MB 100 is designed to switch phantom power on or off to activate the LED on the microphone. When the LED is lit the microphone is on, when the LED is off the microphone is muted (off). Shutting the microphone off in an echo cancellation circuit can cause the echo canceller to diverge from the reference and when the microphone is activated again there will be echo until the echo canceller converges to the reference again.