

### Modifying UC4 for use with an Echo Canceller/Mixer

The UC4 with the MX692 wireless boundary microphone is an excellent combination for teleconferencing applications. The echo cancellers/mixers used in these applications require that:

- 1) The microphone always supplies audio. The echo canceller/mixer requires a constant audio signal to properly process the audio signal paths.
- 2) A separate switch contact be supplied for muting the microphone signal. This muting occurs inside the echo canceller/mixer, not locally at the microphone.

To provide this functionality with the UC4 receiver and MX692 wireless microphone, perform a simple modification to the receiver. With this modification, the membrane switch on the MX692 will provide a TTL logic output on the UC4 receiver, but the switch will not mute the audio output of the receiver.

To make this modification, a circuit board trace must be cut. Use an X-acto knife to carefully cut through the copper trace on the top of the printed circuit board. Cut the trace anywhere along the red line in figure 2. Do NOT cut through the trace that is highlighted in blue.

Before the modification, the green A/B lights on the receiver indicate the mute status of the microphone. After the modification, the A/B lights will be on whenever the transmitter power is on.

The tone key switch normally feeds both the audio mute circuit as well as the TTL logic output. The trace going from the tone key switch to the audio mute circuit is cut.



Figure 1

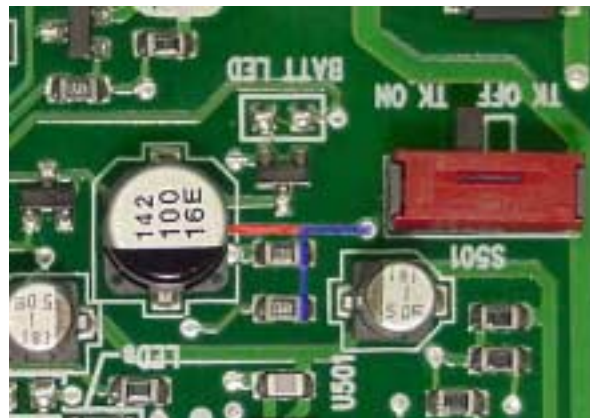


Figure 2a

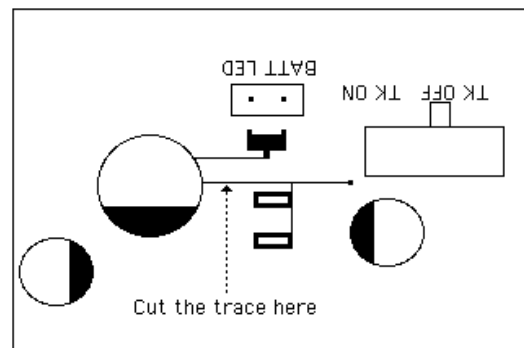


Figure 2b