



Tech Note

#118 Psych Mini-Mixers



[11/16/00]

Psychologist Mini-Mixer Enhanced Grounding Technique

Problem: Psychologist mini-mixer will stop working and display a single blinking LED when static discharge has been applied to the mixer. Power cycling seems to bring the remotes back!

Cause: The mini-mixers are connected to the Psychologist matrix by a digital data bus (ReO). This data bus communicates status changes of the mini mixers' controls to the matrix via digital messages. The ReO port receives these status changes and instantly makes the audio level changes! The ReO port circuitry on the matrix is sensitive to static discharge and may lose communication with the remotes when a surge is applied. The only fix is to reboot or power cycle the matrix which forces the matrix to rediscover any remotes on the ReO bus.

Resolution: In high static environments, it may be necessary to connect a stronger local ground to Psychologist minimixers. Most permanently installed systems have the bulk of the ReO cabling from the matrix under the stage to floor boxes. The min-mixers then use short on stage cables to go between the mini-mixer and floor pocket. The floor pocket is likely to have a good grounding point. Local grounding is accomplished by connecting pin 8 of the minimixer cable to the nearest local ground.

