

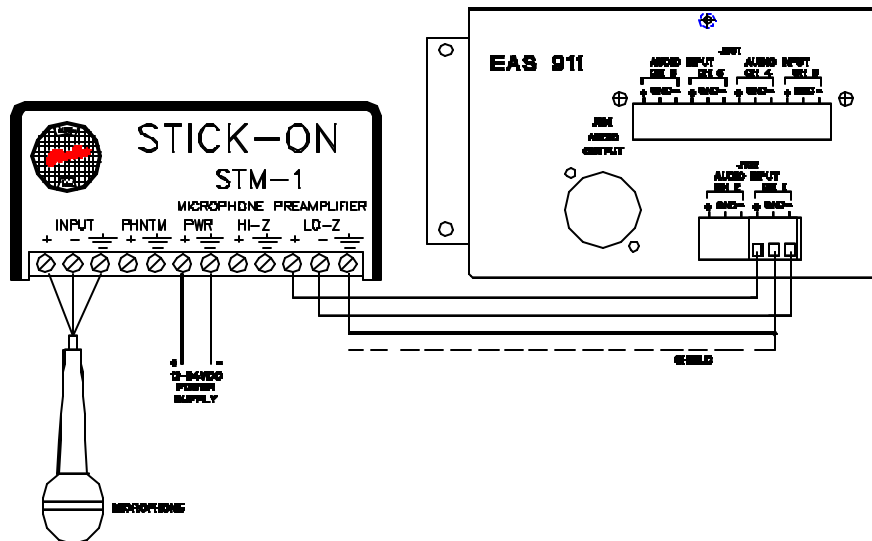


EAS APPLICATION NOTE No. 1009

Interfacing a Standard Dynamic Microphone to the TFT EAS 911

Version 0.79 of the EAS 911's software includes provisions for pre-recording alert messages from an external audio source.

The EAS 911's audio inputs expect to see line level (approximately 0 dBm) signals. Standard dynamic microphones have output levels about 50 dB below that, so they will not work properly if directly connected to the EAS 911. An external microphone amplifier such as the Radio Design Labs STM-1 can be used to raise the mic's output to line level. The illustration below shows the connections to the microphone and the EAS 911.



1. Connect the mic's shield and ground wires to the STM-1 Input Ground.
2. Connect the two balanced signal wires from the microphone to the (+) and (-) inputs of the STM-1.
3. Connect the (+) and (-) Lo-Z outputs of the STM-1 to the (+) and (-) inputs of Channel 1 of the EAS 911 Encoder/Decoder.
4. Connect the output Ground to Channel 1's Ground
5. Connect a 12 to 24V external power supply to the PWR (+) and (-) terminals.

If Channel 1 is dedicated to a monitor receiver, a DPDT switch can be inserted into the STM-1's output leads to switch to the mic amplifier only during message pre-record.

Sources:

The STM-1 Microphone Amplifier is available from Radio Design Labs, P.O. Box 1286, Carpinteria, CA 93014, (800) 281-2683. They also provide a 24 VDC power supply, model PS-24A.

Many types of low impedance dynamic microphones are available from electronics and audio distributors such as Radio Shack. Representative Radio Shack part numbers are: 33-3002 and 33-3004.