900MK2 SERIES *FREQUENTLY ASKED QUESTIONS*

1 What is the "MUTE FUNCTION" in the 900MK2 Series?

Sound systems often require a signal source to **OVERRIDE**, or **MUTE**, another signal source. For example, a common requirement is for background music (BGM) to turn OFF whenever telephone paging occurs.

There are two main types of 900MK2 muting modules, **MUTE-RECEIVE** and **MUTE-SEND**.

These modules have mute function circuitry that connects to <u>two</u> common "**MUTE**" buses, and <u>one</u> common **"GROUND"** bus when installed in an A-900MK2 mixer/amplifier or M-900MK2 mixer/pre-amplifier. A "**BUS**" is simply an internal wire that connects from module-slot to module-slot. You can access these buses via rear-panel screw terminals, labeled, "**MUTE 1** ", "**MUTE 2**" and "**GND**".

Mute-type modules connect to both mute buses "out-of-the-box". You can disconnect the module's mute function circuitry from each mute bus by cutting jumper wires on the modules. This allows you to configure systems with multiple levels of priority.

MUTE-RECEIVE modules <u>respond</u> to mute bus activation in either of two ways:

1. SWITCH ACTIVATION
Connecting a switch closure between the "**MUTE (1 or 2)**" and "**GND**" screw terminals on the rear of the mixer/amplifier activates the mute function circuitry of **MUTE-RECEIVE** modules connected to the same bus. This is also referred to as "*manual muting*".

2. AUTO-MUTE
When input signal level to a **MUTE-SEND** module exceeds a user-adjustable threshold, the module's mute function circuitry activates the mute function circuitry of all **MUTE-RECEIVE** modules connected to the same bus. This is also referred to as "*signal-activated muting*".

2 Which module should I use for a MICROPHONE?

For a basic microphone input, use the **M-01 STANDARD.** Other microphone input modules include the **M-11 MUTE-RECEIVE**, **M-41 MUTE-SEND**, **M-21 REMOTE VOLUME**, **M-51 VOICE GATE** and **M-61 COMPRESSOR**. Most "M" modules also have high/low-cut filters for EQ adjustment and +22vdc phantom power for condensor-type mics. See the "**900 Series Input Module Selection Chart**" for details on connector options.

3 Which module should I use for a BGM SOURCE such as a CD player, tape deck, or AM/FM tuner?

For most applications, use the **U-03R STANDARD** or, if muting is required, the **U-13R MUTE-RECEIVE**. Both modules have dual RCA jacks for quick connection of stereo sources and high/low-cut filters for EQ adjustment. If the BGM source is further than 15 feet, use the **B-01 STANDARD** or the **B-11 MUTE-RECEIVE**, which accept balanced lines and offer transformer isolation. See the "**900 Series Input Module Selection Chart**" for details on connector options.

4 Which module should I use for a WIRELESS MICROPHONE RECEIVER?

If the receiver has a *line-level* output, use the **B-01 STANDARD**, **B-11 MUTE-RECEIVE**, **B-21 REMOTE VOLUME**, or **B-41 MUTE-SEND**. If the receiver has a *mic-level* output, use the **M-01 STANDARD, M-11 MUTE-RECEIVE**, **M-21 REMOTE VOLUME**, **M-41 MUTE-SEND**, **M-51 VOICE GATE** or **M-61 COMPRESSOR**. Both types give you the flexibility to locate the receiver remote from the module, if necessary. See the "**900 Series Input Module Selection Chart**" for details on connector options.

5 Which modules should I use if TELEPHONE OR MICROPHONE PAGING must MUTE a BGM source?

Use the **B-41 MUTE-SEND** for most telephone paging outputs or the **M-41 MUTE-SEND** for most paging microphones. For the BGM source, use the **U-13 MUTE-RECEIVE**. If the BGM source is further than 15 feet, use the **B-01 STANDARD** or the **B-11 MUTE-RECEIVE** which accept balanced lines and offer transformer isolation. See the "**900 Series Input Module Selection Chart**" for details on connector options.

6 Which module should I use for MUSIC-ON-HOLD (MOH)? My BGM source must feed both the telephone system's MOH input and the main 900MK2 speaker system.

Use the **T-12S MOH OUTPUT AND INPUT MUTE-RECEIVE FUNCTION**. The module has a **MUTE-RECEIVE BGM INPUT** plus an adjustable, transformer-isolated **MOH OUTPUT** to feed the telephone system's MOH input. The module routes the input signal to both the main 900MK2 speaker system and the **MOH OUTPUT**, each with independent level adjustment. The module's **MUTE-RECEIVE FUNCTION** also responds to the mute bus activation without interrupting the **MOH OUTPUT**.

7 What type of potentiometer do I need for a REMOTE VOLUME module?

Use a commonly available, **10k Ω, LINEAR TAPER** potentiometer for the **B-21**, **M-21**, or **U-21 REMOTE VOLUME**. Also, use the same type for the rear-panel **REMOTE MASTER VOLUME** screw-terminals on A-900MK2 mixer/amplifiers or the M-900MK2 mixer/pre-amplifier.

Note: The above information is for general reference only. TOA 900MK2 modules offer many possibilities for unique job-site requirements. Please contact TOA Product Support at 1-800-733-4748 if you have any questions on 900MK2 module selection for specific applications.