

TMAA02-02 DTMF Microphone Installation Instructions



Introduction

The TMAA02-02 DTMF microphone plugs into the microphone socket on the radio control head, and enables users to make calls to a PABX or PSTN.

To make a call, enter the required number using the DTMF keypad and the DTMF microphone generates audible DTMF tones as the microphone keys are pressed. Press the PTT key and speak clearly into the microphone then release the PTT key when you have finished speaking.

The microphone button operates a hookswitch, which is closed when the microphone is connected to the microphone clip and open when the microphone is removed from the microphone clip. The function of the hookswitch is determined by the radio programming.



Installation

Installing the Microphone



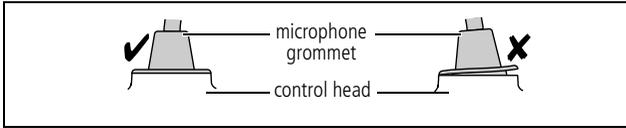
Important: The DTMF microphone grommet must be installed whenever the microphone is plugged into the microphone socket. When installed, the grommet has two functions:

- to prevent damage to the microphone socket when there is movement of the microphone cord, and
- to ensure that the control head is sealed against water, dust and other environmental hazards.

1. Plug the DTMF microphone cord into the microphone socket on the radio control head.
2. Slide the microphone grommet along the microphone cord and push two adjacent corners of the grommet into the microphone socket cavity.

3. Squeeze the grommet and push the remaining corners into position.
4. Check that the grommet is seated correctly in the cavity.

Correct DTMF microphone grommet seating



Installing the Microphone Clip

Install the microphone clip in the most convenient location for the radio user. It must be within easy reach of the user, but in such a position that the microphone PTT key cannot be inadvertently activated or jammed on.

Connect the microphone clip to the negative supply if hookswitch operation is required.

Adjustment

Remove the DTMF microphone back cover and set the DTMF tone level to approximately 60% deviation ($\pm 3\text{kHz}$ for wide bandwidth radios and $\pm 1.5\text{kHz}$ for narrow bandwidth radios).

Radio Programming

The following table shows the settings required for CH_GPIO1 in the Programmable I/O form of the programming application. When CH_GPIO1 is set to **Send Mic Audio To Spkr**, then DTMF tones are fed into the radio’s speaker at a reduced volume whenever a key on the DTMF microphone is pressed. This gives the radio user confidence that the tones are being transmitted. Refer to the online help of the programming application for more information.

DTMF microphone settings in the Programmable I/O form, Digital tab

Pin	Direction	Label	Action	Active	Debounce	Signal State	Mirrored To
CH_GPIO1	Input	None	Send Mic Audio To Spkr	High	None	None	None

More Information

Refer to your radio provider for more information about this product.