

## TMAA02-06 Support Kit for Concealed and Dynamic Microphones Installation Instructions

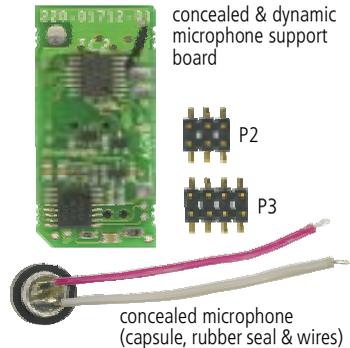


### Introduction

The support kit for concealed and dynamic microphones can be used in two main applications:

- to monitor activity around the radio if the radio is placed in emergency mode, and
- to support the use of a dynamic microphone, such as that used in the TMAA10-02 handset.

The concealed and dynamic microphone support board plugs onto the radio's control head PCB and contains circuitry for a pre-amplifier and a microphone switch circuit. The concealed electret microphone is installed inside the speaker grille of the control head.



### Installation



**Important:** This equipment contains devices that are susceptible to static charges.

The procedures outlined in this installation guide should therefore be carried out in a static-safe environment. You can obtain information on antistatic precautions and the dangers of electrostatic discharge (ESD) from standards such as ESD S4.1-1997 (revised) or BS EN 100015-4 1994. The Electrostatic Discharge Association website is <http://www.esda.org/>.

### Disassembling the Radio Control Head

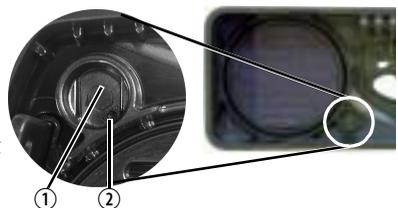
To install the concealed-microphone capsule and concealed and dynamic microphone support board, the control head must be removed from the radio and disassembled. For detailed disassembly instructions, refer to the disassembly procedure in the service manual.

### Installing the Microphone Capsule and Dynamic Microphone Board

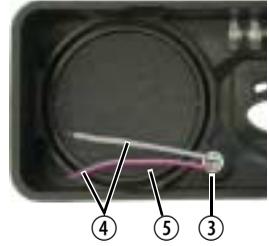
1. Disassemble the control head in order to gain access to the speaker grille. This will mean removing the control head PCB, the space frame, and the speaker.
2. Drill a 1 mm diameter hole in the concealed-microphone cavity ① in the position indicated by the small 'dimple' ②.



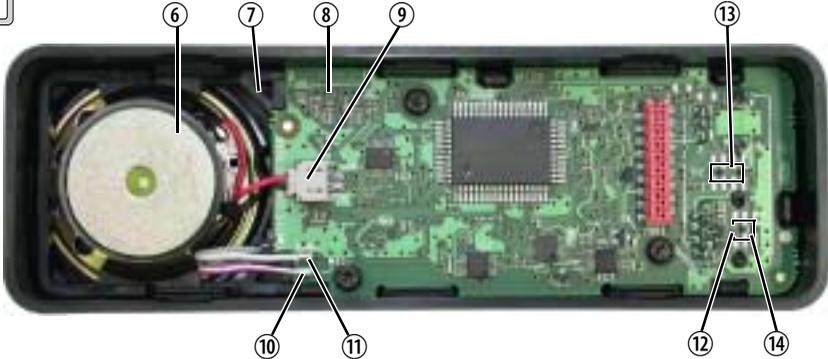
**Important:** To maintain the IP54 protection class, great care must be taken when installing the microphone capsule and seal ③ into the concealed-microphone cavity.



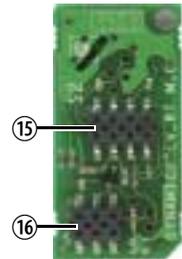
3. Push the microphone capsule and seal ③ into the concealed-microphone cavity, with the capsule wires ④ towards the speaker grille ⑤.
4. Reassemble the control head. This includes reinstalling the speaker ⑥, the space frame ⑦ and the control head PCB ⑧. Plug the speaker lead into the speaker connector ⑨.
5. On the control head PCB, solder the positive concealed-microphone wire to the MIC+ pad ⑩ and the negative wire to AGND ⑪.



**Note:** The positive wire on the microphone capsule is identified by a red stripe.



6. On the control head PCB, remove R11 ⑫ and solder P2 ⑬ and P3 ⑭ in the positions shown.
7. Plug S2 ⑮ and S3 ⑯ on the concealed and dynamic microphone support board onto P2 and P3 on the control head PCB.
8. Re-install the control head on the radio body.



## Radio Programming

When the support kit for concealed and dynamic microphones is installed in a radio, two fields in the UI Preferences form of the programming application may need to be selected.

- **Enable Options Board Preamp:** select this field if a dynamic microphone is installed. An example of an accessory that uses a dynamic microphone is the TMAA10-02 handset.
  - **Emergency Mic:** select **Concealed** if a concealed microphone is installed.
- Refer to the online help of the programming application for more information.

## More Information

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