

ONE BIG PUNCH™

HM-103 INSTALLATION MANUAL

GENERAL

One BIG Punch (OBP) is a custom add-on accessory for the ICOM HM-103 microphone commonly used with many ICOM amateur radios. The One BIG Punch is an AF-based speech compressor specifically configured to provide remarkable increase in talk power while maintaining good audio quality. The unit is mounted inside the HM-103 and requires no additional electrical power. Performance of the One BIG Punch will vary from user to user because of variations in the individual's voice power spectrum. As with any device used to increase the average output/talk power, some users will realize more or less increase than other users. Explanation of speech processing (compression) theory can be found in many places and, consequently, isn't provided herein. As with any audio device, you may experience interference when it is placed in an RF field environment. The W4RT Electronics design and implementation effectively mitigate RFI feedback issues. See the *One BIG Punch Installation Manual - Advanced Technique* and the *One BIG Punch Installation Supplement* for alternative installation instructions.

WARNING - WARNING - WARNING

READ CAREFULLY BEFORE PURCHASING THIS PRODUCT.

Installation of the OBP into the HM-103 requires reasonable skill with a soldering iron and simple tools typically found in most amateur radio operators' ham shack. W4RT Electronics DOES NOT Provide ANY Technical Support to Those that Install the One BIG Punch Themselves. If you don't feel that you have the necessary skills to install the OBP after reading this instruction sheet thoroughly, then DON'T purchase this product. Instead, please consider having W4RT Electronics install the OBP for you for an additional fee.

INSTALLATION

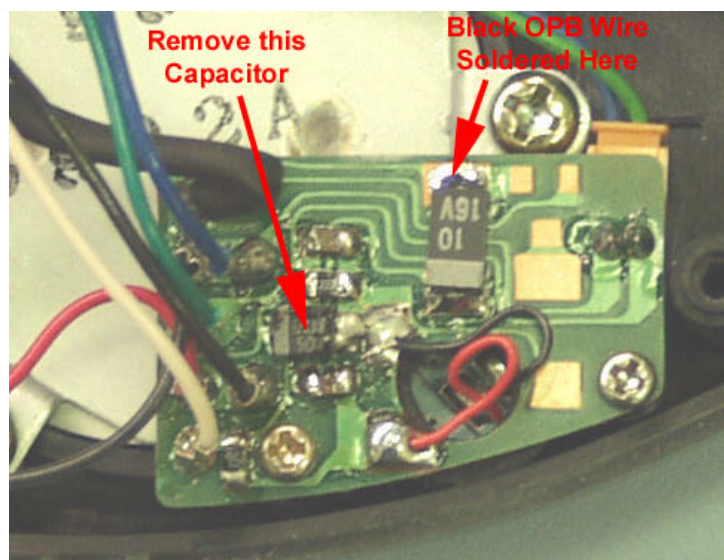


Figure 1.

1. Remove the rear cover of the HM-103 microphone and observe the internal PCB as shown in Fig. 1

- 2. Carefully remove the capacitor identified in Fig. 1.

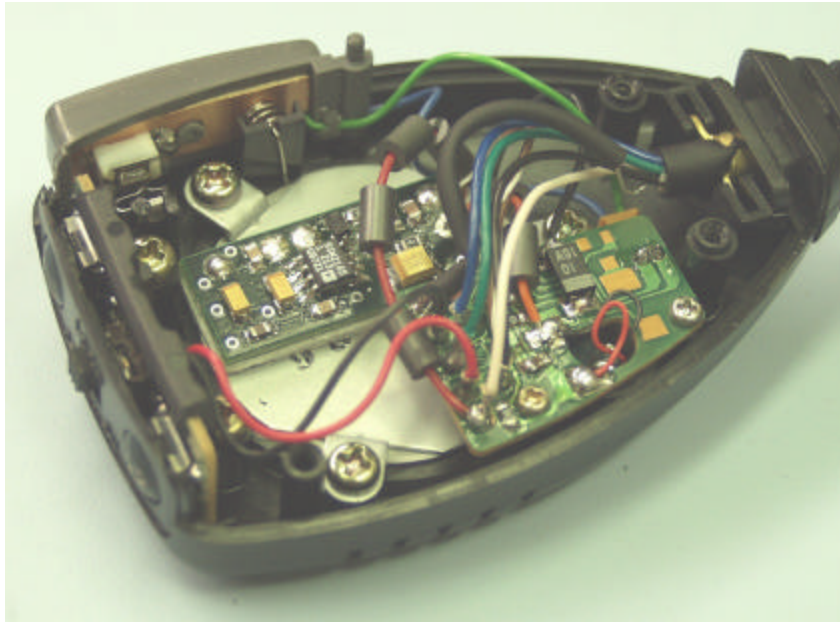


Figure 2.

- 3. Mount the One BIG Punch in the position shown in Fig. 2. This figure illustrates how the finished installation should appear prior to attachment of the rear cover.

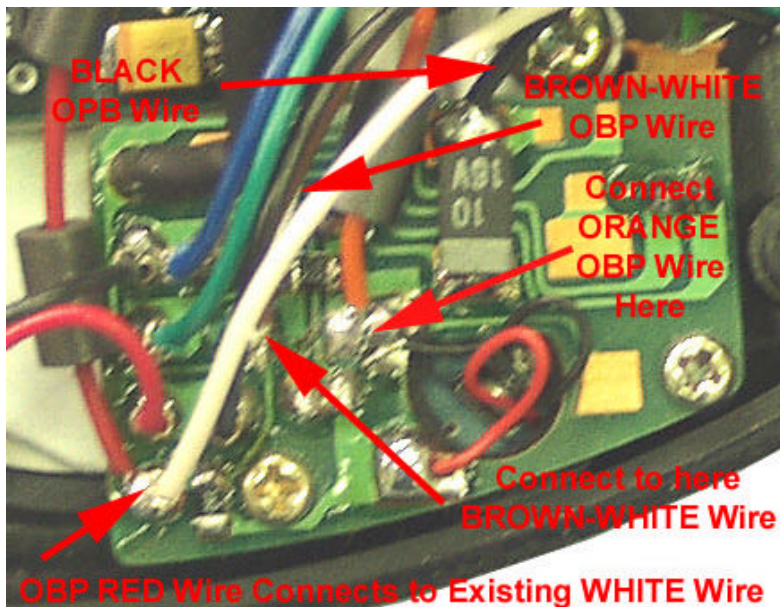


Figure 3.

- 4. Attach the wires from the One BIG Punch to the IM-103 PCB as shown in Figs. 1 and 3. BEFORE soldering the several OBP wires to the HM-103 PCB, be certain to place two pairs of ferrite beads on the red OBP wire and one pair of beads on the orange OBP wire.

WARRANTY: One BIG Punch is warranted for a period of one year from the date of purchase to be free of electrical defects in materials and workmanship. If the One BIG Punch module is determined to be defective, the defective item(s) will be repaired or replaced, at the sole option of W4RT Electronics, provided that the purchaser returns said item, postage prepaid, with proof of purchase to W4RT Electronics, ATTN: Technical Support, 3077-K Leeman Ferry Rd, Huntsville, AL 35801. Include a description of the problem, daytime phone number, email address, and return mailing information. Any modification to the One BIG Punch by purchaser voids the warranty. W4RT assumes no liability with respect to the purchaser's IM-103 or other equipment that it may be used with in any manner whatsoever. Any damage to the One BIG Punch or IM-103 due to installation by the purchaser is completely and solely the responsibility of the purchaser. The warranty applies only to the original purchaser and is not transferable. 23 October 2002