

Discriminator Modification Addendum

ICOM R7000

The board of the R7000 referred to in this diagram is the IF Unit board. The discriminator tap point is on the left side of R97.

ICOM R7100

The discriminator tap is soldered to the leg that is standing up after R228 on the IF Unit board.

ICOM R9000

1. Locate W133 jumper. Solder one end of 47k resistor to jumper.
2. Solder one leg of 100uF capacitor and one leg of 1meg resistor to other leg of 47k resistor.
3. Solder wire onto the two remaining legs of the 100uF capacitor and 1 meg resistor.
4. Locate R105. Lift the end that is feeding pin 5 of the accessory socket via J12. Solder other end of wire to this hole.
5. Solder wire from ground on jack to ground on board.

ICOM R10

While it is recommended that you send the IC R10 to a qualified radio technician for modification, the following instructions should help if you choose to perform the modification yourself. Open the unit and set the boards down with the bottom facing you.

1. Install a new mono jack on the left hand board. The jack can be mounted just below the flexible/cable.
2. Mount a 47k ohm resistor on the center pin of the CI-V jack marked Q5 on the right hand board. Solder a wire off one end of that resistor to the bottom end of the 47k resistor (R77), which is located just above and to the right of the letters QM.
3. Solder a small gauge wire (3 to 4 inches long) to test point QM. Test point QM is indicated by a line that goes to the right of the letters QM. Then solder the other end of that wire to the TIP of the new mono jack.
4. Solder a wire from the ground lug to any point on the ground plane.

Radio Shack Pro 2005/2006

The two 1000pF capacitors should be soldered directly at the new jack, not close as stated on page 23. Also, the resistors should be mounted directly to the points shown on the schematic on page 23, and a length of small wire is used to connect the other end to the jack.

Radio Shack Pro 2035/2042

The 1000pF capacitor should be soldered directly at the new jack and a length of small gauge wire is used to connect the other end to the jack.

AR3000A

1. With the unit upside down and back facing you, locate C70 on the far left middle of the board.
2. Locate L28 trimmer just down and to the right of C70.
3. Locate the via hole directly between the two above components.
4. Solder a piece of wire to the via hole and take it over and through back portion of board and up to the 8 pin din connector on the top side.
5. Locate leg off connector that is just to the right of the leg with the brown wire soldered to it.
6. Solder the negative side of a 10mF electrolytic capacitor or larger to that connector. Solder other end of capacitor to wire from via hole.
7. Take a 3.5mm mono cable and cut one end off. Wire center conductor to the correct pin on your connector, and wire shield to ground.

AR5000

This supersedes all AR5000 information on Pg. 29 of the manual.

1. CB232 cable connects to PC Data RS232 jack on back of the Optotrakker to the Com Port of computer.
2. Another cable just like CB232 will connect from Radio Data RS232 jack on back of the Optotrakker to the AR5000 serial port. If you don't purchase another CB232 for this connection and elect to manufacture your own cable, the pin outs for this cable are as follows.

<u>Stereo cable</u>	<u>DB9</u>
TIP	3
RING	2
SHIELD	5

There is a short between Pins 7 & 8, and also a short between Pins 1, 4, and 6.

3. A special cable is required for discriminator audio connection. A stereo cable will need to hook to an 8 Pin Din connector for the front of the AR5000. Cut off one end of a 3.5mm stereo cable and wire the TIP to Pin 2 of the 8 Pin Din connector, and wire GROUND to Pin 8. Plug one end into the Discriminator jack on back of the Optotrakker and the other end into the front 8 Pin Din jack on the AR5000.

