

## MC-60A Pin Connections, Before and After Modifications, for Use with ICOM Radios

### Original, 8-pin Connector that connects to radio

Pin-#	Color Wire	Original Kenwood Function
1	Blue-Center Wire	MIC Center Cable
2	Black	PTT
3	Blue	DOWN of Up/Dn Switch
4	Red	UP of Up/Dn Switch
5	Yellow	BIAS Voltage Input
6	--- NONE ---	--- NONE ---
7	Blue-Shield	Mic Shielded Cable
8	Green	Up/Dn & PTT Return Wire

### New, 8-Pin Connections for ICOM Radios (IC-746Pro/IC-756Pro-III)

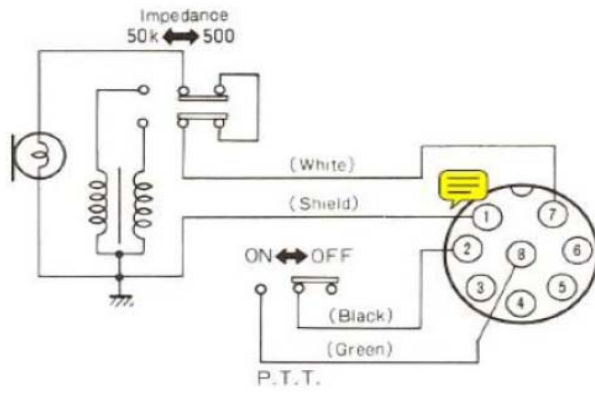
Pin-#	SAME?	Color Wire	ICOM Radio Function
1		C1 Capacitor Below	Microphone input
2		Yellow	+8 V DC Ouput
3		Red and R1 Below	Frequency up/down
4		--- NONE ---	Main Readout Squelch Switch
5		Black	PTT
6		Green	GND (PTT GND)
7	SAME	Blue-Shield	GND (Microhone ground)
8		--- NONE ---	Main readout AF ouput

Blue Wire Attach Here <> ----- **R1** ----- <> Attach to Pin-3 in Parallel with Red Wire  
 470 Ohm, 5%, 1/8 W Resistor

Blue-Center Wire Attach Here <> ----- **- C1 +** ----- <> Attach to Pin-1  
 25 to 50 uF at 10 VDC Capacitor  
 DC Block in Case Radio Provides DC Voltage to Preamps in ICOM Microphone Units

Field Note: Capacitor, C1, Calculations			
Impedance	Capacitor		Calculation Answer is=
600	$= 1/(2 * \pi * F * C)$	$= 1/(2 * \pi * 100 * 600)$	2.65258E-06
<i>Use Fo of 100 Hz &amp; 600 Z mic</i>			<i>Make the Capacitor X 10 to put the roll off at 1/10 the frequency</i>

### MIC unit connection



**UP/DOWN switch** 9/22/2014 8:25:48 AM

**Sticky Note**  
Gene The UP/DOWN switch Options

There is an error in the schematic. FACTORY WIRE POSITIONS SHOULD BE SWITCHED IN THE SCHEMATIC BETWEEN PINS 1 AND 7. THIS WAS AS MEASURED ON MY FACTORY MIC. The shield is actually connected to Pin-7. The White is connected to Pin-1. Pin-1 to Case DC resistance while switch is in 500 impedance position is 500 ohms or while switch is in the 50K switch position DC resistance is about 1K ohm.

This makes sense due to the ground needs to connect through to the ground in the stand unit and follow through to the MIC cable Pin-7.

NOTE: To conserve battery power when not in use. (Theately 1 ma.)

**PIN-1**                      **PIN-7**

