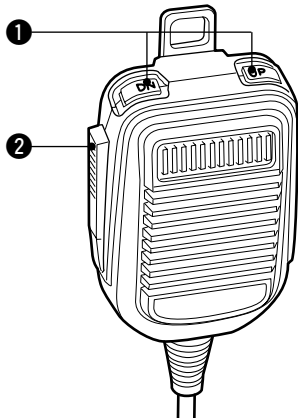# ■ Microphone (HM-36)

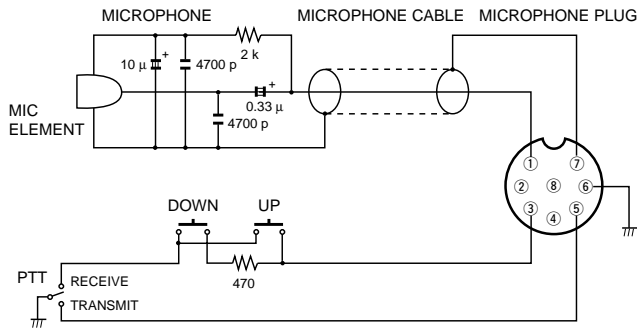## •DESCRIPTION

❶ **UP/DOWN SWITCHES [UP]/[DN]**
Change the selected readout frequency or memory channel.
•Continuous pushing changes the frequency or memory channel number continuously.
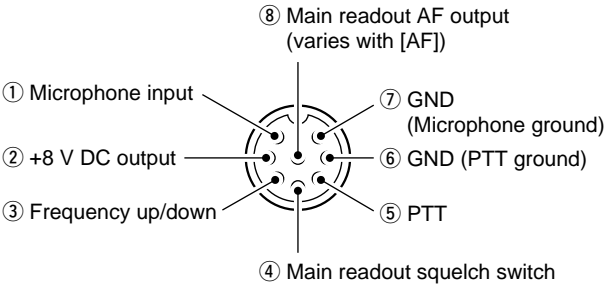•The [UP]/[DN] switch can simulate a key paddle. Preset in the CW PADDL in initial set mode. (p. 32)

❷ **PTT SWITCH**
Push and hold to transmit; release to receive.

•MICROPHONE CONNECTOR

(Front view)

⑧ Main readout AF output (varies with [AF])
① Microphone input
② +8 V DC output
③ Frequency up/down
④ Main readout squelch switch
⑦ GND (Microphone ground)
⑥ GND (PTT ground)
⑤ PTT

[MIC] Pin No.	FUNCTION	DESCRIPTION
②	+8 V DC output	Max. 10 mA
③	Frequency up	Ground
	Frequency down	Ground through 470 Ω
④	Squelch open	"Low" level
	Squelch closed	"High" level

CAUTION: DO NOT short pin 2 to ground as this can damage the internal 8 V regulator.

•HM-36 SCHEMATIC DIAGRAM

Modification of the new ICOM HM-36 Microphone

Delivered with IC-7200 and other transceivers

The first step is to figure out what type you have, the old or the new one.

The old version of the HM-36 has always sound good and has an electret microphone with three connections.

It is recognized by the three wires, red, black and shield. If it looks this way you got the old version and no modification is needed.

The new HM-36 entered the market at the end of 2007 and beginning of 2008. This new type has too less of the higher frequencies and too much of the low ones.
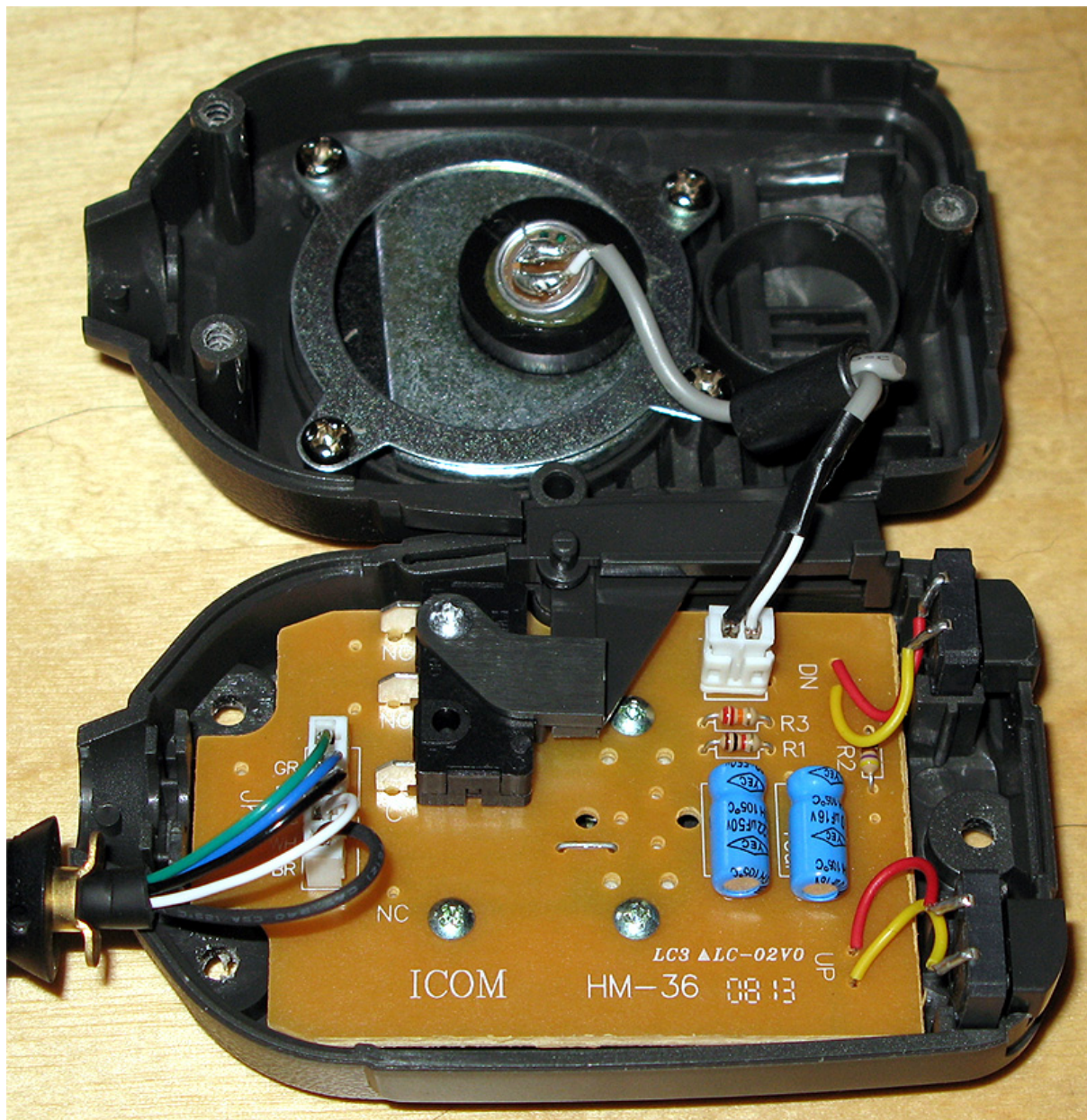
The new type only have too wires connected to the element. It is simple to modify the new type to sound as the old one.

1. **Remove** R1, 1 kOhm and C2, 10 uF.
2. **Change** C1 from 0.22 uF to 0.01 uF (equal to 10 nF or 10 000 pF)

These components are marked on the circuit board and easy to locate.

The C1 can be replaced with a tantalum or ceramic capacitor.

This is a picture of the newer <u>unmodified</u> HM-36.

January 14, 2009
Lennart Deimert SE5X

http://deimert.se/icom_hm36/