

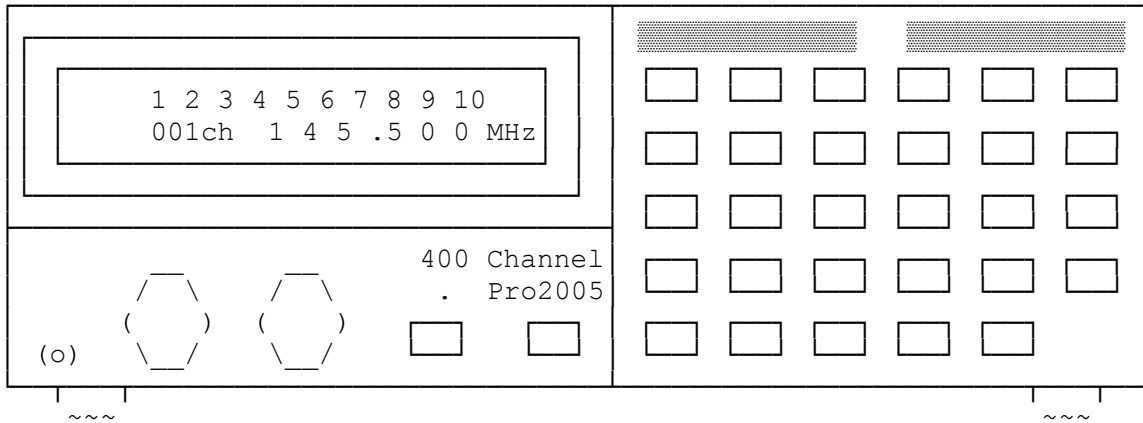
Realistic Pro2005/6 mods

By G8MNY

(New Oct 18)

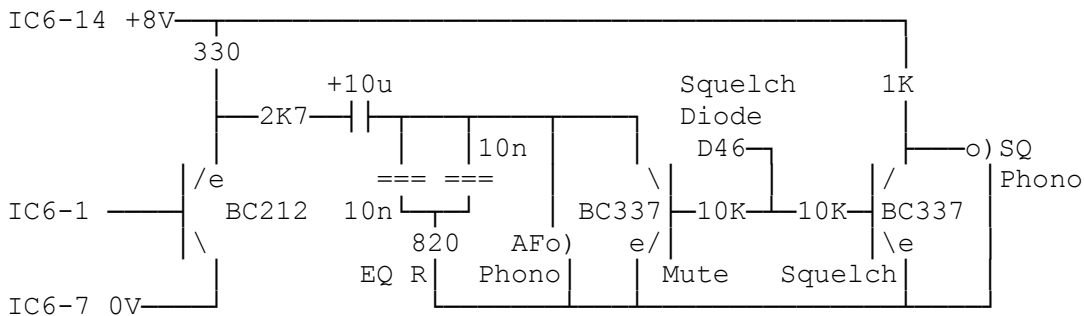
(8 Bit ASCII graphics use code page 437 or 850, Terminal Font)

Here is a collection of mods I have done to these identical scanners, so they can be used as unmanned single channel broadcast link Rx, but still leave full functionality as a scanner if needed.



A/ Mod to give Squelch line & WBFM HiFi audio outputs. (Tape out is not HiFi!)

1. Drill 2 holes for 2 additional bolt Phono in sockets, located above the DC in connector.
2. Place PNP emitter follower above IC6.



3. Add 50uS de-emphasis components 2x 10n, EQ R, series 2K7, 10uF, 100K, & Mute NPN on to the AF phono socket.
4. Add squelch NPN to SQ phono socket. Connect both base 10Ks to top of the nearby diode D46.
5. Test functionality, SQ O/P is +8V on good WBFM, & AF is good, & is muted with the internal comms squelch. No Op on other modes.

B/ Mod to improve Squelch control action. (all one end & huge hystersis!)

1. Improve zero end action. Put a 10K from Squelch control slider to pot ground.



- 2. Reduce hysteresis by reducing stfunction. Weak signal squelch threshold more easily set, & snap on & off action much closer in level.

C/ Mod to set manual mode not "scan mode" on power up. (Default is scan!)

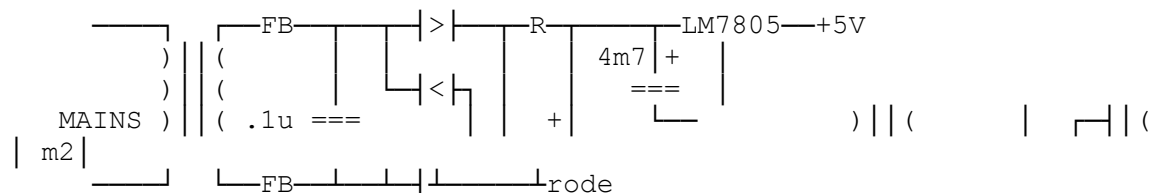
- 1. Connect wire from +5V on LM7805 regulator to a 100K & a 1N4148 diode near the front panel upper PCB connector keyboard matrix plug.

LM7805 +5V ———— |< ———— 's base & push emitter & collector into 5 & 7, hot glue.

- 4. Wire up 3 components to the +ve cap lead.
- 5. Test functionality. On power up the PNP conducts for ~200ms & check the scanner always goes into manual mode.

D/ Mod to improve PSU, & RFI. (reduce bad mains crashing?)

- 1. Add 2 small ferrite rings (FB) on 14V AC PCB input leads from transformer.



my community stati'pls without the cost of 2 bespoke dedicated Rx.

My choice of 2x 50kHz identical mono links channels, for the station's uplink, are not only cheaper to rent than a single 200kHz wide stereo link channel, but are 2x more reliable (surviving on 1), & can give about 20dB better signal to noise than a stereo link can do!

Other precautions taken were, a series a fed widistant shared dband & a backup AF source, is controlled from the 2 Squelch lines.

They have given fairly trouble free hifi broadcast Principles" & "SUSY +5 more".

Why Don't U send an interesting bul?

73 De John, G8MNY @ GB7CIP