

I have had numerous inquiries regarding this modification. The inability to turn off the internal software timer that limits reception while in crossband and skycommand modes can be defeated by this minor modification. The reset pulse that it provides is of such a short duration that it is difficult to detect unless you are specifically watching for it to occur.

This circuit resets the internal software timer when in crossband repeat or skycommand modes by breaking the ground connection of the Main Band squelch control for a few milliseconds about every 2.75 minutes. . The change shown to the PC board and associated schematic will overcome the limit on reception of signals on the Main Band.

To defeat the limit for signals being received on the Sub Band, the ground connection of the squelch control for the Sub Band must be momentarily broken in the same manner. The squelch control for the Sub Band is on the PC board with the Multi-CH and RIT controls, which is mounted adjacent to the PC board shown in this document. As with the board shown, the squelch section of the Sub Band dual pot assembly is the one closest to the shaft end of the control assembly.

The instructions for removing the front panel of the radio have previously been posted for use in replacing the backlight of the front panel display.

The entire circuit is built using through-hole components on a small board that can be mounted in several locations within the rig. If the 1.2 GHz module is not present, this area is convenient and provides easy access to the 12 Vdc as it enters the rear apron of the radio.

The hardware circuit should be checked for proper timing prior to finishing the modification. Changing the resistor connected between pins 8 and 7 of the 555 IC makes adjustments to the short pulse. Changing the resistor connected between pins 7 and 6 of the 555 IC makes adjustments to the 2.75 minute time. These adjustments may be necessary depending on the exact value of the electrolytic cap connected between pin 6 of the 555 IC and ground.

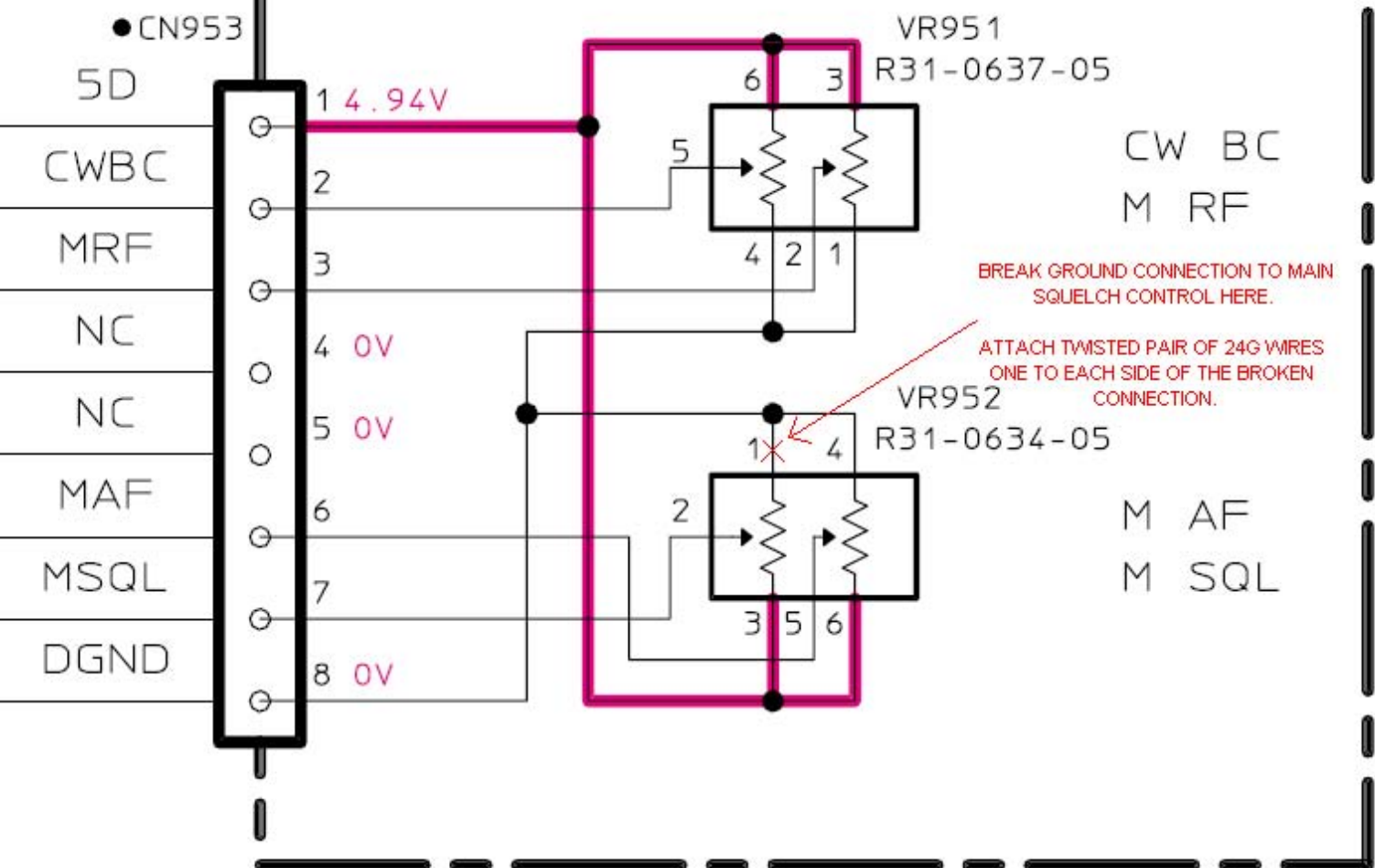
The IRFD110 FET shown in the drawing is not a critical item. Most any N-channel FET will be satisfactory. The drain only sees 5 volts DC and the current is only a few milliamps.

If you are not comfortable doing this type of tech work, enlist a local Elmer with the necessary experience provide any assistance needed.

73

WA5VRL
Willis

X57-605X-XX(C/9)



REMOVE VR952 FROM PCB AND CUT
THE COPPER TRACE THAT CONNECTS
THE MAIN SQUELCH CONTROL TO THE
GROUND PLANE AT THE THREE PLACES
SHOWN IN RED BELOW

MOUNT AND SOLDER VR952 ON THE PCB
ATTACH TWISTED PAIR OF 24G WIRES
ONE TO THE GROUND PIN OF THE MAIN
SQUELCH CONTROL AND THE OTHER TO
THE COPPER GROUND PLANE OF THE PCB

THREE
TRACE
CUTS

J72-0698-01 C/9

VR952
M AF/M SQL

VR951
CW BC/M RF

8 DGND
MSQL
MAF NC
MRE NC
CWBC
5D
CN953
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