## **Practical Wireless Magazine**

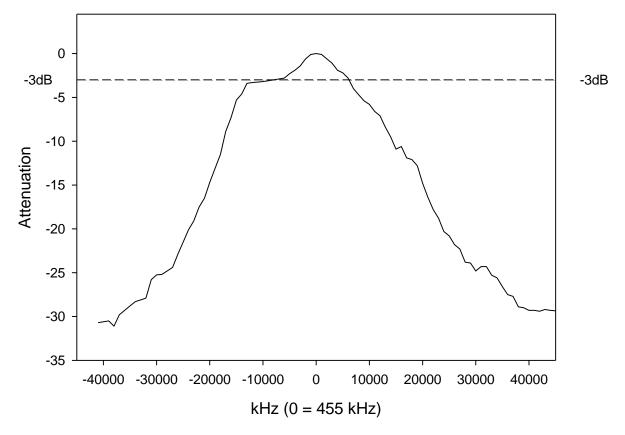
## **Rejuvenating the Yaesu FR-50B Receiver**

Dr. Samuel Ritchie EI9FZB

I published a three part article dealing with rejuvenating a Yaesu FR-50B receiver in the November 2017, December 2017 and January 2018 editions of PW Magazine.

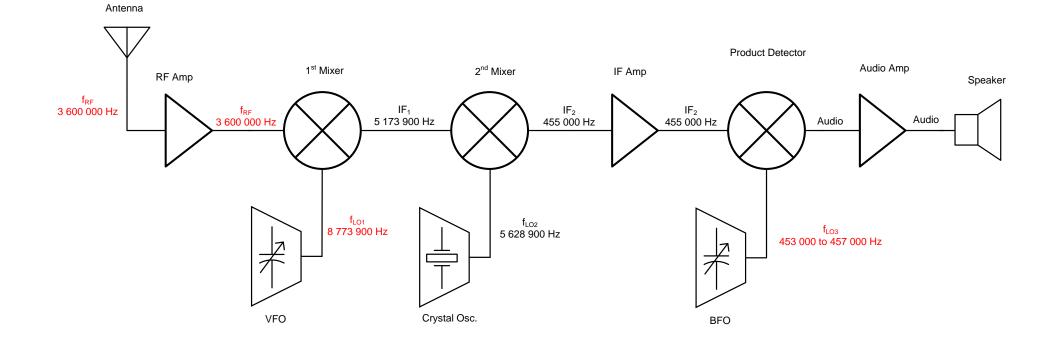
Some of the circuit diagrams and other graphics were a little small for some people to read.

This document is a compilation of all these images to help you get these old receivers running again.

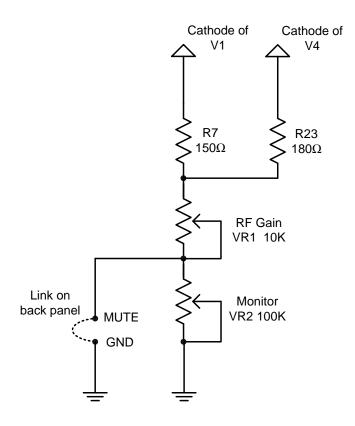


455 kHz IF Filter Shape

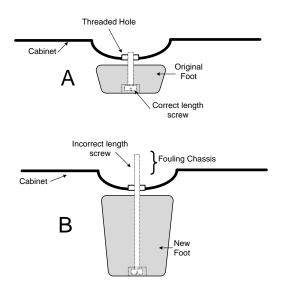
455 kHz IF filter shape



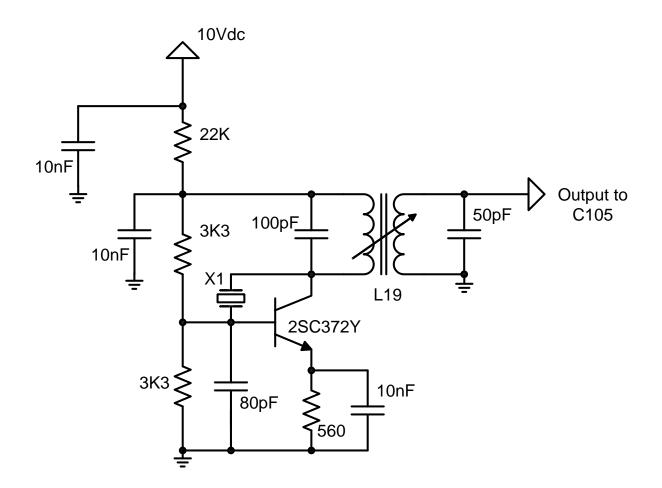
Basic block diagram of the FR-50B



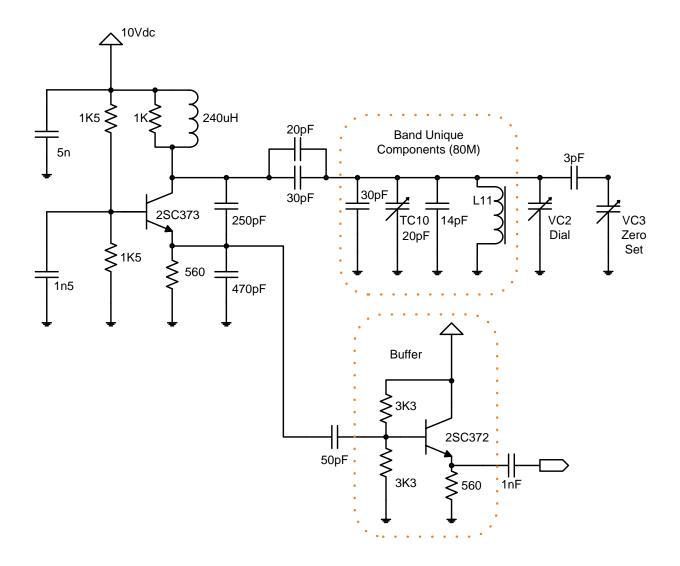




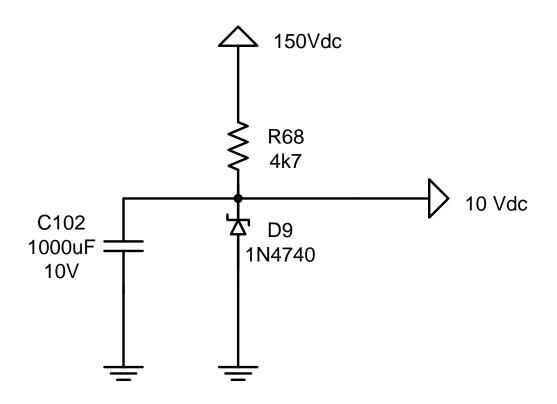
Correct and incorrect screw length.



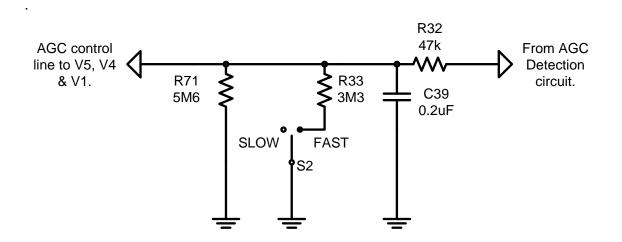
Redrawn crystal oscillator schematic.



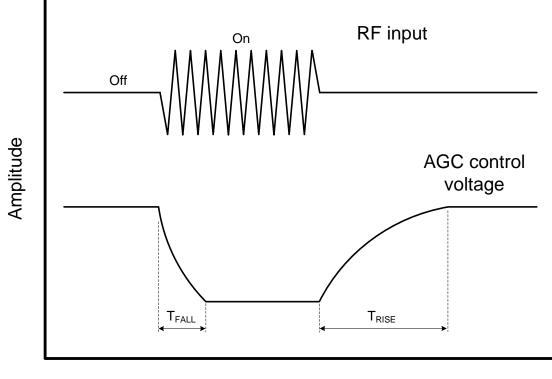
**VFO schematic** 



Schematic of low voltage generation

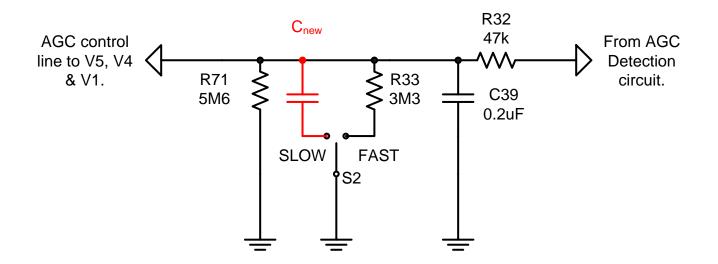


AGC circuit schematic – original.

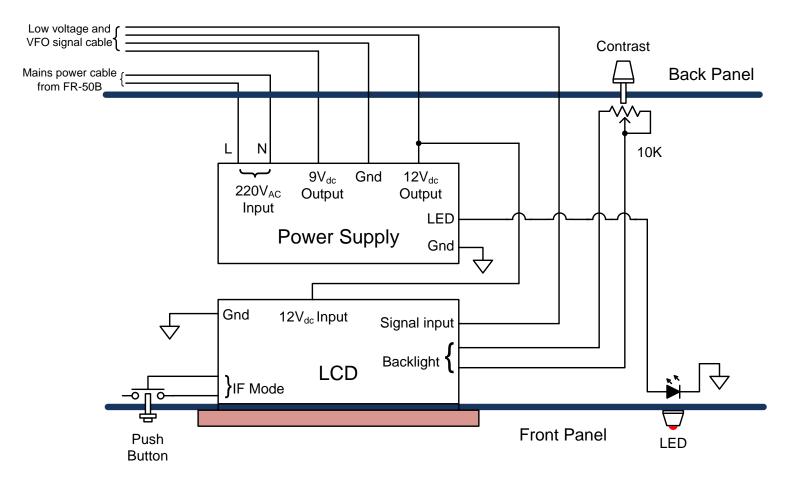


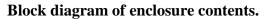
Time

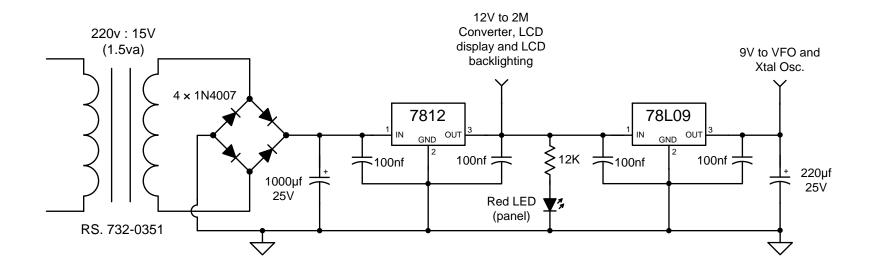
**Receiver AGC characteristic** 



Modified AGC circuit schematic







**PSU schematic**