

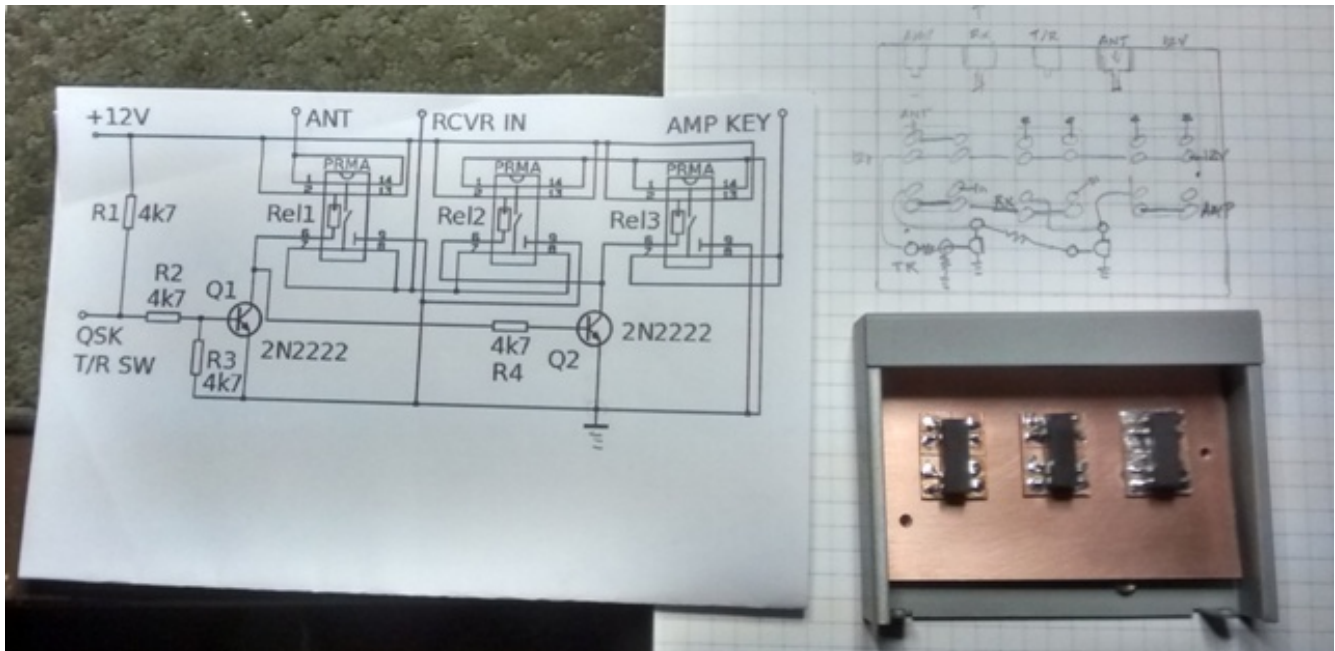
## KD9SV Front End Saver - with OK1RR recommended 12V PRMA Relays

A diode-based RF Limiter / Receiver Front End Protector can be 'good enough', but under very high signal conditions, simply won't be very good. If the Tx and Rx antennas are just too close to each other clicks can occur and wide band rectification from excessive RF can flood an external antenna port.

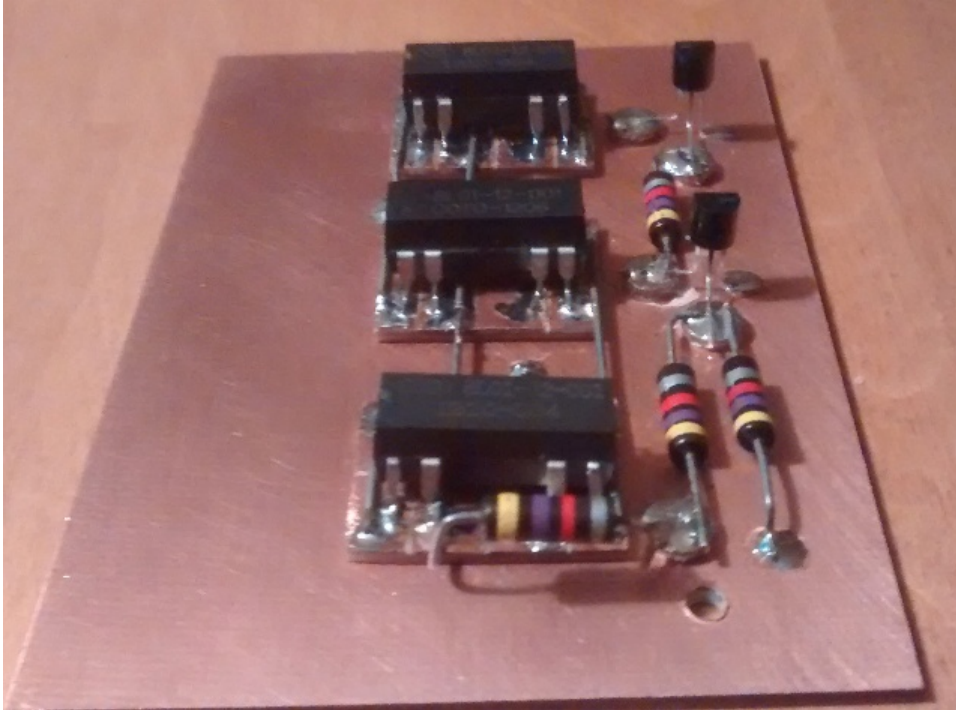
Using an active device, such as the KD9SV Front-End Saver as revised by OK1RR, grounds the RX antenna whenever the TX went "key-down".



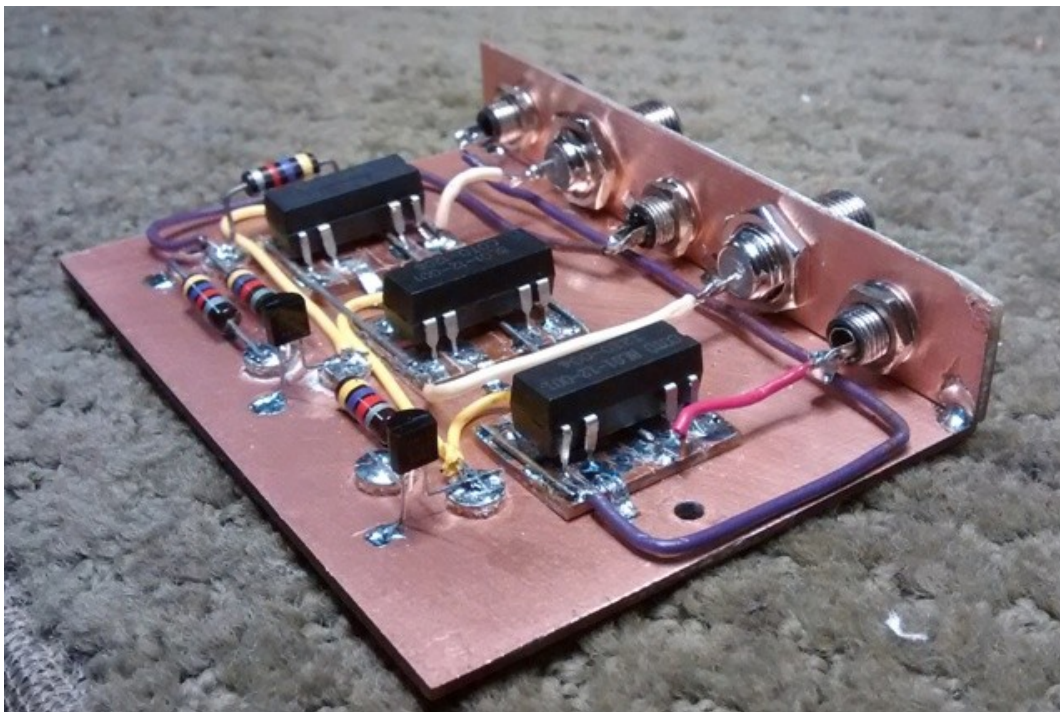
A small metal box, such as an old 5-Port Ethernet Switch would be just about the right size. Cut 3 rectangles of copper clad board and scribe lines with a hobby knife to create 8 properly spaced solder "islands". Glue them to main board. First, a little planning.



Add in the (2) 2N222A (or 2N3904) transistors and 4.7k $\Omega$  resistors



Make a back panel, solder it to the main board and add the connectors and other wiring.





Create labels in Word, print on plain paper, add masking tape to back and clear tape to front.



Glue in place.



IT WORKS!

The Front End Saver is a money saver too. Compared to prices for the commercial unit, this home-brew version needs the relays (Mouser 8L01-12-001 [Coto Technology – 8L/Spartan series]<sup>1</sup>) and not much more for the connectors (very inexpensive from vendors on eBay).

You can get 3 lbs of all double-sided copper clad laminate for something like \$8 from this eBay seller.

Bill Patton, WY3A West Chester, PA

**1) [Mouser 8L01-12-001](#) on colossal back-order (2017-12-17 for delivery 2018-05-??) \$2.11  
Same Part at [DigiKey](#) (their part number [306-1023-ND](#)) on back order. Also \$2.11.  
[Newark 8L01-12-001](#) on colossal back-order – price \$5.33(!)**