

From: Steve Lawrence, WB6RSE

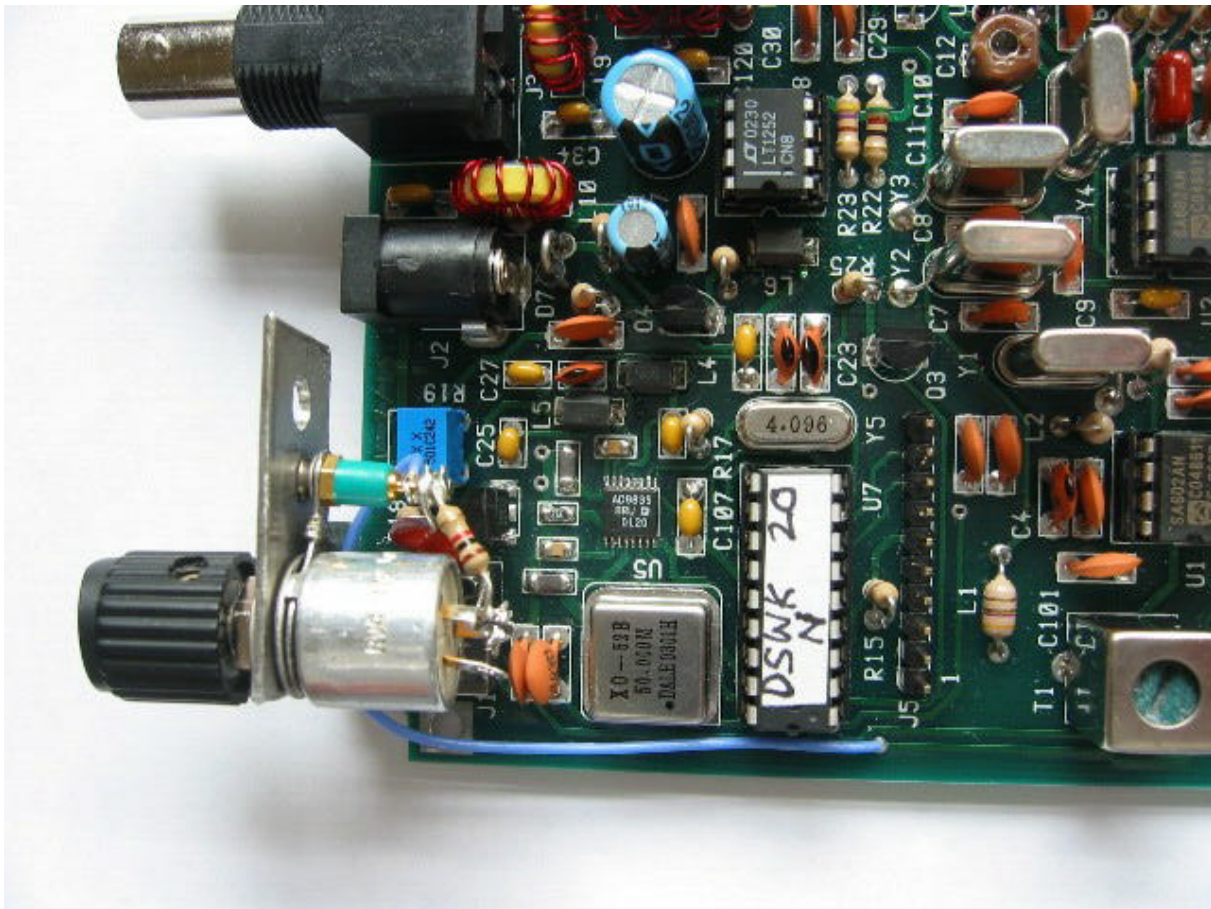
Subject: DSWK: documented installation of mods in DSW-II-20

Date: Wed, 1 Oct 2003

### Speed control

I mounted a mini 100K pot on a small piece of aluminum with a hole below the pot to attach to the paddle connector. There is a plated through hole - between the board edge and the "J5" label - that is PIC Pin 2. #26 wire fits perfectly and I ran this wire (blue) along the board edge to the speed pot at the rear. A 1/4" meter lug fits over the pot bushing and the lug's solder tab has a small hole that accepts a 2-56 screw which holds a standoff for the fixed resistor and timing cap. Ground is made via the nut holding the bracket to the paddle connector.

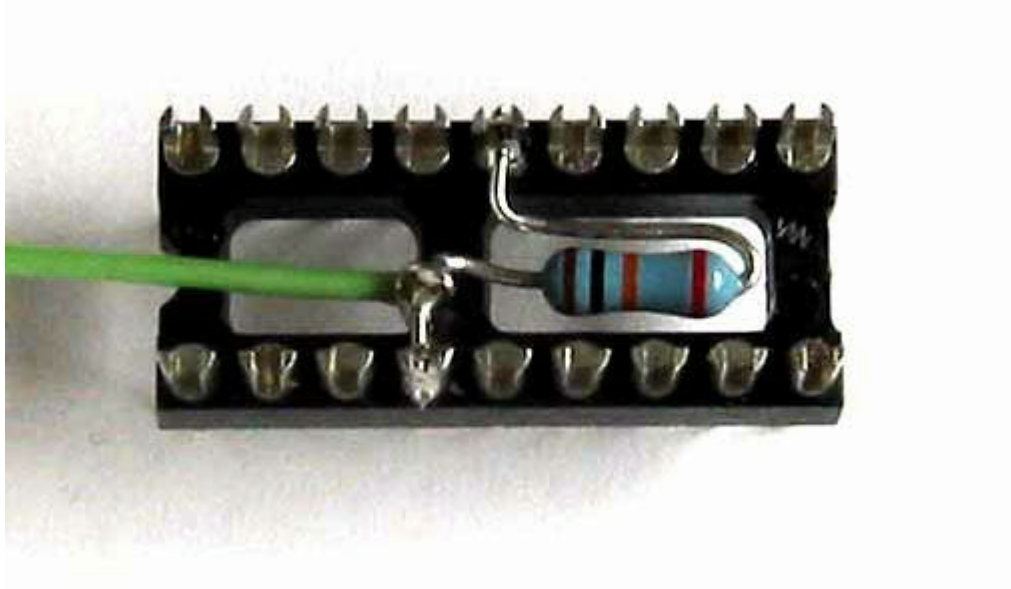
Picture 1: Pin 4 + R15.jpg (image/jpeg)



## MEMory switch

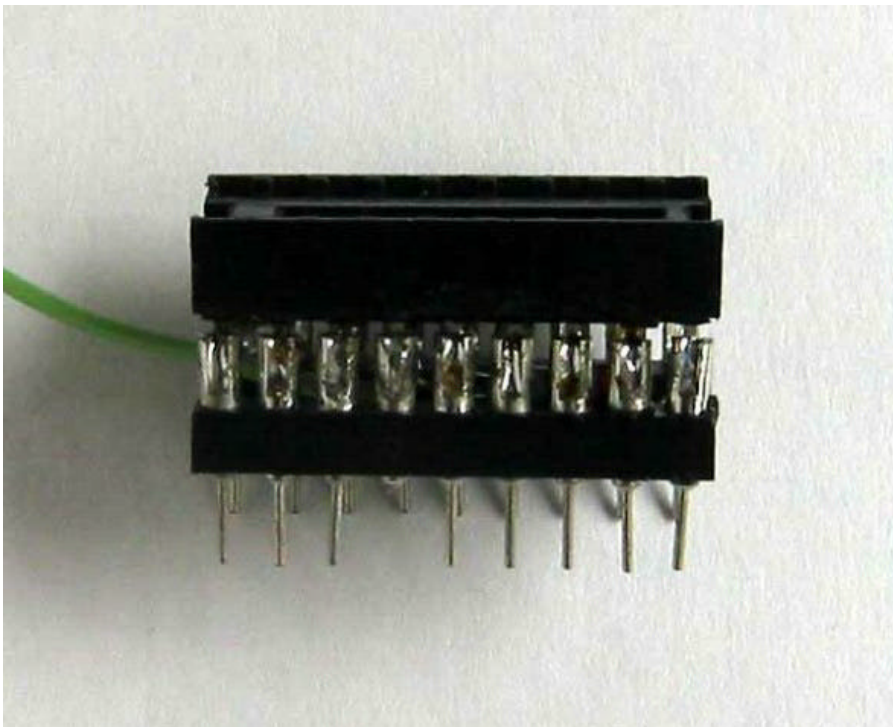
As you can see in the previous picture, there isn't sufficient clearance for PIC pin 4 in an external socket to fit without interfering with R15 that is also attached to pin 4 via a board trace.

My solution is to use an 18-pin header. The 10K resistor is mounted between pins 14 and 4 with a wire (green) from pin 4 that goes to the momentary switch on the rear panel.



Picture 2:  
Header +  
10K.jpg  
(image/jpeg)

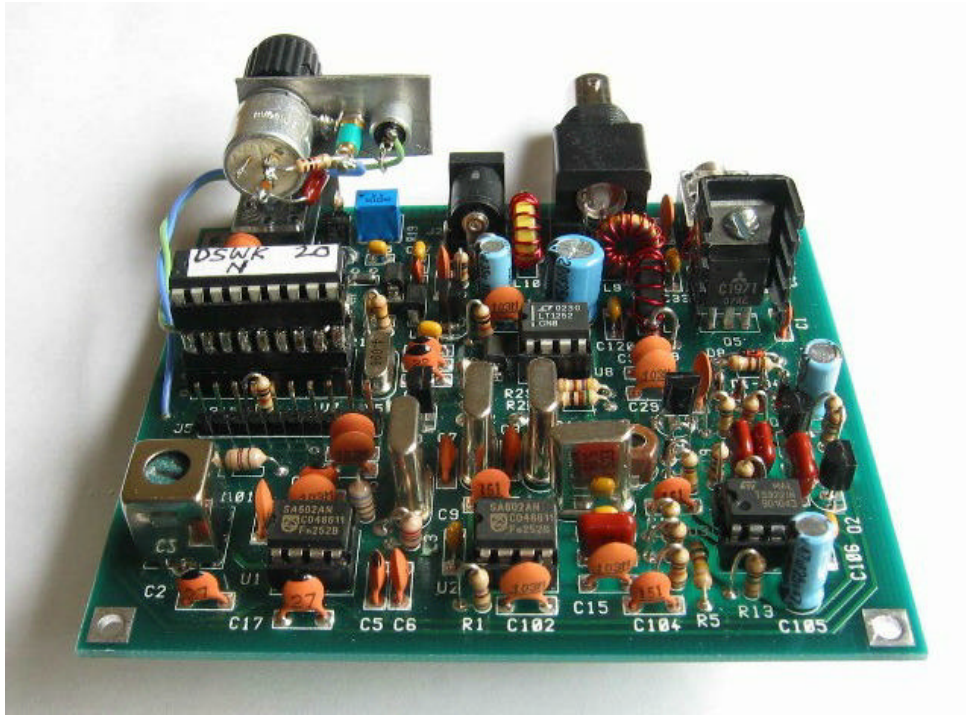
An 18-pin socket is then solder to the header. The insertion side of pin 4 is clipped flush. This isolates pin 4 and eliminates any need to cut the board trace or use an external single pin socket. **CAUTION:** This assembly needs to be checked carefully for solder bridges!!!! Here's the header and IC socket "adaptor." Note the clipped pin 4.



Picture 3: Header  
& socket.jpg  
(image/jpeg)



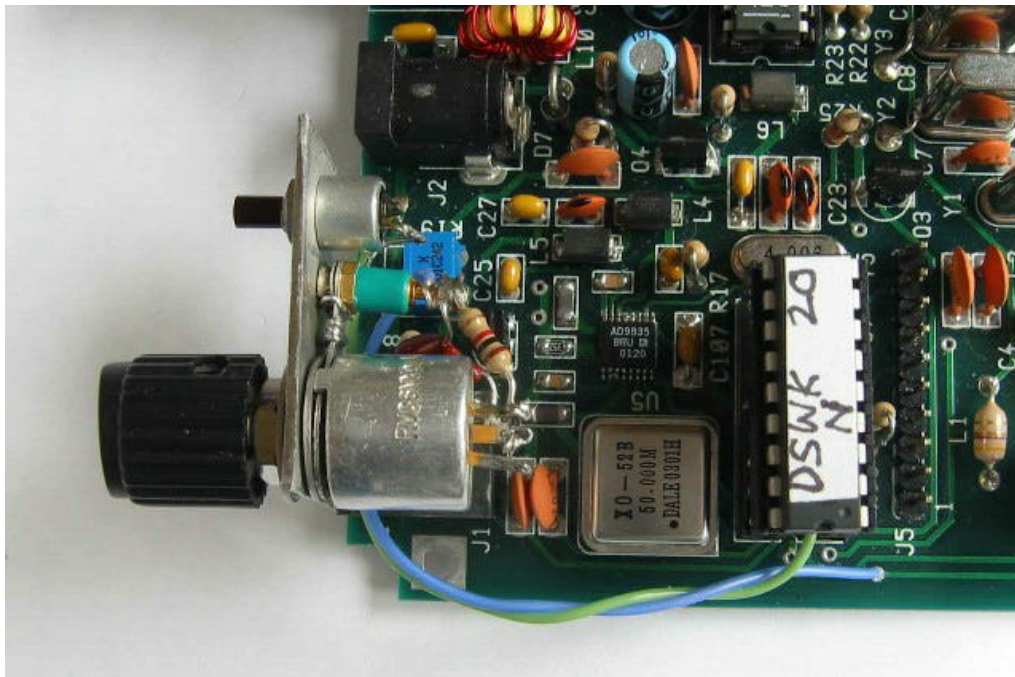
The Speed and MEM mod installed.



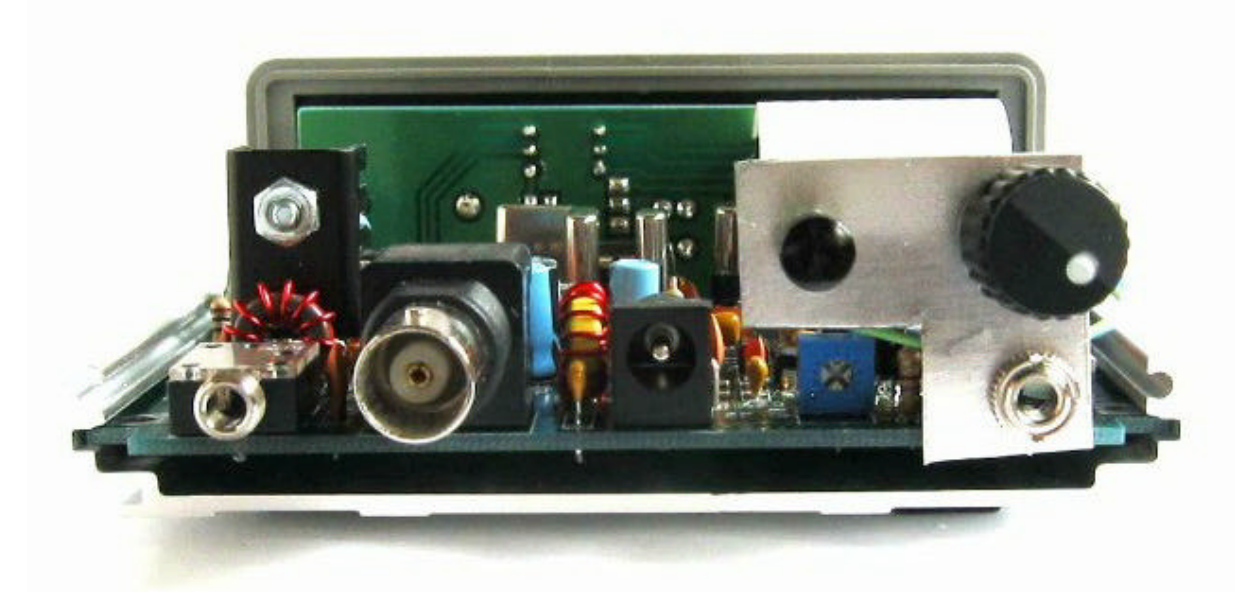
Picture 4:  
Mods  
installed.jpg  
(image/jpeg)

Close up.

Picture 5: Mods installed close up.jpg (image/jpeg)



Rear bracket held in place by the paddle connector nut.



Picture 6: Back panel.jpg (image/jpeg)

Note the notch to allow access to the power level pot.

All that remains is to match drill the rear panel, label, and select washers/spacers so that the back panel will be in a flat plane when attached. Or mount the speed pot and MEM switch directly to the back panel.