

short circuits

simple computing vswr indicator

Several errors crept into the WB9CYY article on the simple computing vswr indicator, in January, 1977, *ham radio*. In fig. 2 (page 60), C9, .001 μ F, should be inserted between the junction of R17 and R19. U3 is an

LM301 (748), as noted in the text, while CR5 is a 1N914. The formula for calibrating the front of a junk-box meter should read:

$$SWR = \frac{I_{fs} + I}{I_{fs} - I}$$

where I_{fs} is the full-scale meter deflection and I is the indicated meter reading. A new printed-circuit board layout is shown in fig. 1. As with all parts placement diagrams from *ham radio*, the board is shown from the component side.

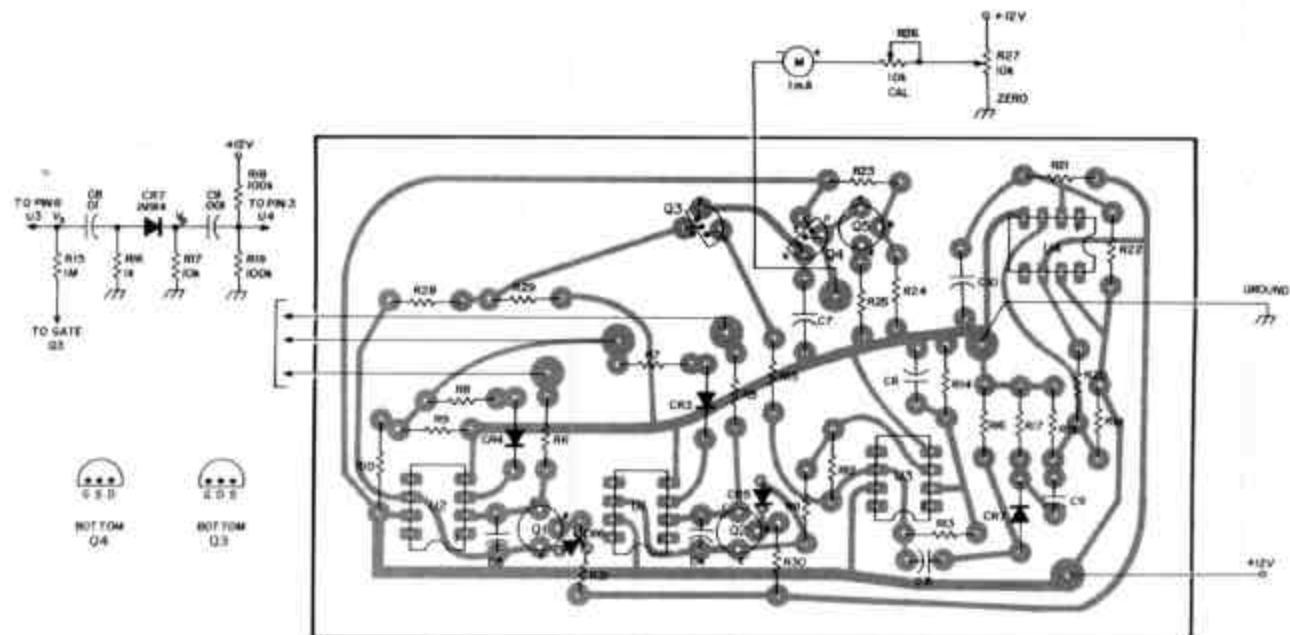


fig. 1. Parts placement and corrected board layout for the simple computing vswr indicator by WB9CYY.

table 1. Changes required to the schematic for operating frequencies other than standard mark and space.

jumper	afsk use	Y1 (MHz)	Y2 (MHz)	R5 (ohms)	R6 (ohms)	R7 (ohms)	mark (Hz)	space (Hz)
15-A	RTTY	4.352	4.700	47k	228	91k	2125	2295
15-A	ASCII comp	4.557	4.147	47k	228	91k	2225	2025
1-A	ASCII term	5.202	4.383	47k	228	91k	1270	1070

$$R7 = \frac{2Q}{f_o C3} \quad R5 = \frac{R7}{2A} \quad R6 = \frac{R5R7}{4Q^2R5 - R7} \quad f_o = \frac{f_{mark} + f_{space}}{2}$$

Where, $f_o > 1800$ Hz and f_o = desired center frequency, $Q = 10$ and $f_o < 1800$ Hz, $Q = 5$. The actual value used for R6 should be chosen to allow variation over the desired range. Gain (A) is normally set to be = 1 (unity gain). Values in the table above were selected using these parameters.

milliwatt portable counter

In the schematic diagram (fig. 2) of the portable milliwatt counter, *ham radio*, February, 1977, page 24, the coil shown between the output of the 40673 transistor and the input of U1 should be deleted. The network is a 330-ohm resistor in parallel with the 100-pF capacitor.

vestigial sideband transmitter for ATV

In fig. 6 of the vestigial sideband transmitter (*ham radio*, February 1976, page 24) the input has been incorrectly shown going to pin 7 instead of pin 8. For normal operation, pin 7 is open and the video information goes to pin 8. All other connections remain the same.

digital afsk

In the improved digital afsk (March, 1977, *ham radio*) several design changes were inadvertently overlooked by the author. Table 1 reflects these additions. The parts list should be changed as follows: C3 and C4 are .1 μ F mylar or polystyrene capacitors while R6 is a 500-ohm trimpot (CTS X201-R501B).

repeater up/down mode circuit

In the PC-board layout for the up-down repeater-mode control circuit, January, 1977, *ham radio*, page 41, the interconnection between pins 3 and 4 of each IC was inadvertently left out.

i-f amplifier design

The noise blanker for high-performance operation (fig. 2) shown in *ham radio*, March, 1977, page 11, was suggested by Siemens and developed by Michael Martin, DJ7VY.