## **TAPR Versatile WSPR Bias Current Adjustment**

The VW's are shipped as a kit. This requires the user to adjust the bias current after the kit is assembled. It's best to defer this operation until after the rest of the Setup and Adjustment process has been performed.

## What you'll need to complete the assembly

- DVM (digital voltmeter)
- Small flat blade or phillips screwdriver

## Procedure to set the bias current is:

- Measure the voltage between the *Current* and *Vcc* testpoints as shown in the figure below.
  There is a 1 ohm resistor between the testpoints, so the voltage between the testpoints
  corresponds to the current flowing through the resistor (10 mV equals 10 mA). The DVM
  positive/red lead goes to the Vcc testpoint. The DVM negative/black lead goes to the Current
  testpoint.
- The bias current is different for each band. Find the appropriate bias current from Table below.
- Start up the transmitter and wait until it's transmitting (LED is on).
- Set the bias current using R11 (see figure below) using a small blade screwdriver (clockwise increases the current). For example, the bias voltage for an 80m WSPR transmitter would be set to 85 mV, which corresponds to 85 mA.
- Do not let the bias current exceed 90 mA (90 mV on the DVM).

Band	Bias Current
160m	75 mA
80m	85 mA
40m	80 mA
30m	80 mA
20m	80 mA
17m/15m	80 mA
12m,10m	70 mA

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