## **K60XV MANUAL ERRATA**

#### Rev. A-5, July 31, 2009

#### PLEASE MAKE THE FOLLOWING CHANGES TO THE MANUAL BEFORE PROCEDING TO ENSURE THAT THE K60XV FUNCTIONS CORRECTLY

- 1. **Page 3, Parts Inventory, Ref D1-D2:** Change the description to read "SMT1B: SMC PIN diodes on pc daughterboard". Change the part number to "E120014".
- 2. Page 3, Parts Inventory, Ref D19-D20: Change "MV209" to "MV2109".
- 3. **Page 4, step 1:** Add, "After cutting the soldered leads flush with the board, save several excess leads that are at least 1/2 inch long. They will be used later."
- 4. Page 4, step 2 (begins "Install D1 and D1...": Delete this step (the diodes will be installed later in the procedure).
- 5. **Page 4, step 3, Install D3 and D4 (1N5711):** Add, "Orient the banded end (cathode) of each cathode as indicated by its component outline."
- 6. Page 5, insert the following steps at the bottom of the page:

**Note:** A new RoHS compliant surface mount version of the PIN diodes used at D1 and D2 is supplied pre-installed on tiny printed circuit. Install the new part as follows.

Select three of the resistor leads you saved and solder them in the pads for D1 and D2 as shown below. Lead 3 goes into the solder pad for the banded end of D1. The solder pad at the banded end of D2 is not used. Trim any excess flush on the opposite (top) side of the board.

# **<u>i</u>** ESD-Sensitive! Wear a wrist strap grounded through a 1-meghom resistor or touch an unpainted metal ground before handling the SMT1B part in the following steps.

- □ Thread leads 2 and 3 through the respective pads on the SMT1B board and position it close to the K60XV board as shown. Be sure the leads go through the like-numbered solder pads. When installed correctly, the lettering on the SMT1B board will be upside down compared to the lettering on the K60XV board as shown. Solder leads 2 and 3 and trim them flush.
- □ Bend lead 1 over to pad 1 on the SMT1B board and solder. It is not necessary to insert this lead into the pad. If you want to bend the end so it goes into the pad, be sure it is short enough that it won't pass completely through the SMT1B where it might short to a pad underneath.



SMT1B in place



- 7. Page 8, third step: Change "MV209" to "MV2109".
- 8. **Page 13:** Delete the third assembly step from the bottom, which begins "Switch to 40 meters...."
- 9. **Page 16:** At the end of the first paragraph, add the sentence: "Leave **D19** set for **PA60=40**, even when using KPA100 kit revision C." (See detailed information below.)
- 10. **Page 20:** On the schematic diagram, locate D1 and D2 near the upper right corner. Cross out "5082-3081" below D1 and D2 and write "SMPT1B". Indicate the pads on the SMPT1B board where the connections are made as follows. At the anode (arrow) end of D2 write "2". At the anode end of D1 write "1". Where the cathode (line) ends of the diodes join write "3".

### **IMPORTANT OPERATING NOTES:**

**1. Using the KPA100 on 60 meters:** Recent KPA100 kit modifications (revision C) allow high-power operation on 60 meters. However, these changes **do not** include a revised 80-meter low-pass filter. For 60 meters, you'll still use the KPA100's 30/40-meter low-pass filter. For this reason, you must leave the K2's **D19** menu parameter set for **PA60=40** (see K60XV manual).

**2. Using TUNE mode with the K60XV and an ATU:** If the ATU is in either of its autotune modes (**AUTO** or **ALT**), and you're on a transverter band configured for LP mode (Low Power, 0 dBm), holding TUNE drops power to 0.2 milliwatts maximum. You can override this behavior by holding **DISPLAY** along with TUNE, or by selecting any ATU mode other than **AUTO** or **ALT** in the menu.

**3. KAT2 modification for use with K60XV LP mode:** In some cases the LM358 op-amp on the KAT2 can load down the K60XV's low-power RF detector (at the emitter of Q2), preventing the K60XV from developing a full 0 dBm (1 milliwatt) signal at the transverter OUT jack. To correct this, change R6 on the KAT2 from 47 ohms to 470 ohms. This resistor is supplied with the K60XV kit. R6 is on the bottom of the KAT2 control board, and can be changed without removing the KAT2 module.