

## Elecraft K2 Preselector Mod

The elecraft K2 is an excellent transceiver, but in Europe its receiver benefits significantly, especially on 40m, from an external Preselector.

Although most Preselectors are designed with an internal T/R relay, theoretically enabling direct insertion between the transceiver and the antenna, there is a problem when running CW, especially when running full QSK. The switching time of the internal relay is too slow to follow full QSK.

The best way to avoid this problem altogether is to insert the Preselector directly into the transceiver's RX antenna line, thus avoiding entirely the need to switch the Preselector in and out.

This feature has emerging as standard on a few of the more recent transceivers (e.g., Yaesu FT-2000, Ten-Tec OMNI-VII), but for older rigs, a very simple modification is necessary.

The following is a step-by-step description of how to install this mod:

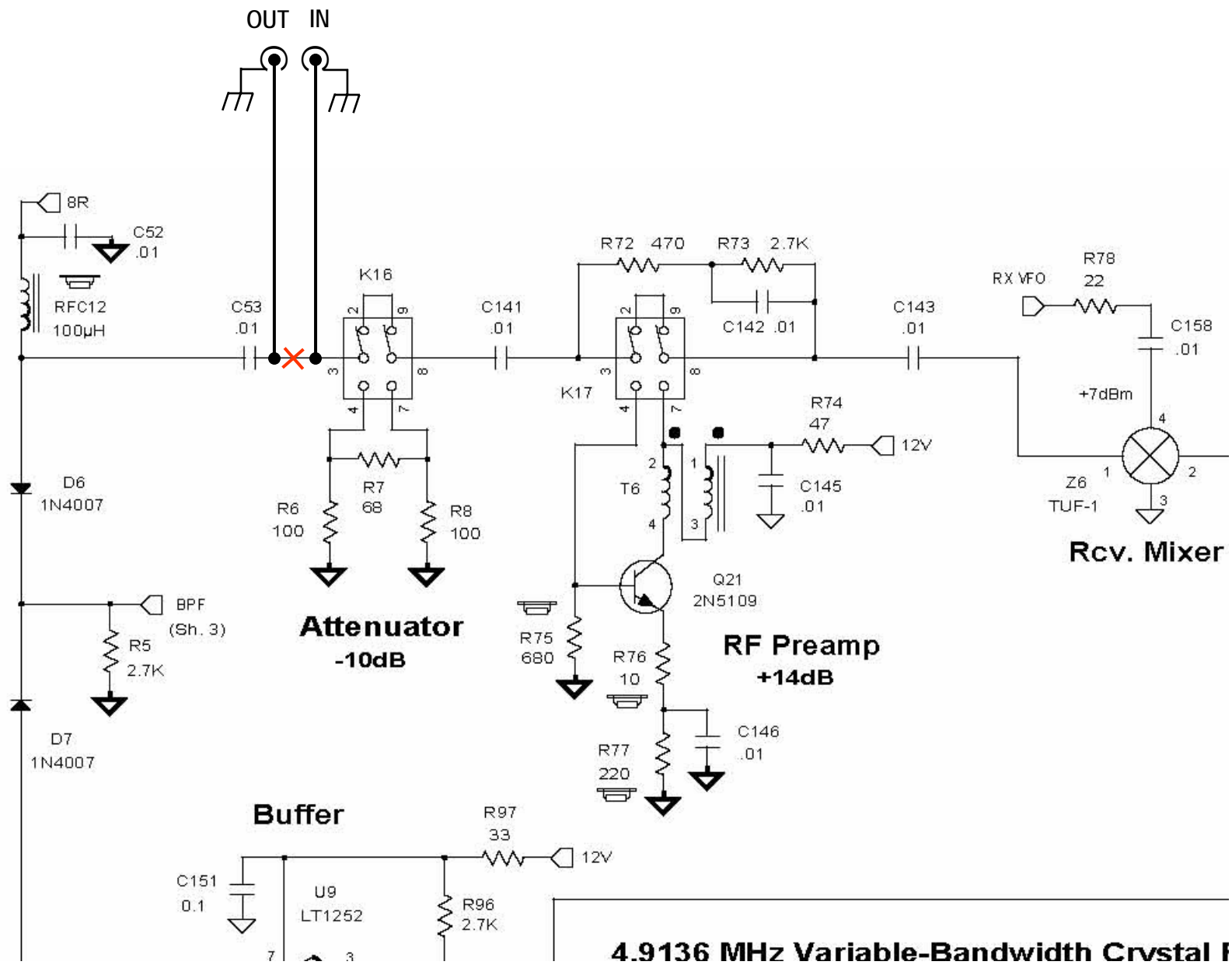
1. Install 2 RCA Phono (Cinch) jacks on the back panel of the K2. These should be installed in the existing holes for "XVTR OUT" and "XVTR IN". If your radio is an older version, you will have to << CAREFULLY >> drill two small holes for this. You can identify the position for the holes from current pictures posted on the elecraft web site.
2. The preselector must be inserted just before the antenna is applied to the first RF stage of the RX. This is easiest accomplished (physically) by interrupting the RX antenna line just BEFORE "K16" (Attenuator Relay) on the main printed circuit board. The antenna signal is normally applied to this relay through C53.
3. Unsolder and lift the leg of C53 which is closest to the relay K16.
4. extend this leg vertically upwards, and use this leg to solder the inner conductor of a short piece of RG-174U. Trim the braid (shield) of the coax at this point and insulate it with a small piece of heat-shrink tubing.
5. Solder the inner conductor of a second short piece of RG-174U into the hole from which you removed the one leg of C53. Trim away the braid and insulate as in 4 above.
6. Solder the cable from C53 to the jack marked „OUT“. Connect the cable's shield to chassis ground.
7. Solder the cable from the printed circuit board (K16) to the jack marked „IN“ and also connect its shield to chassis ground.

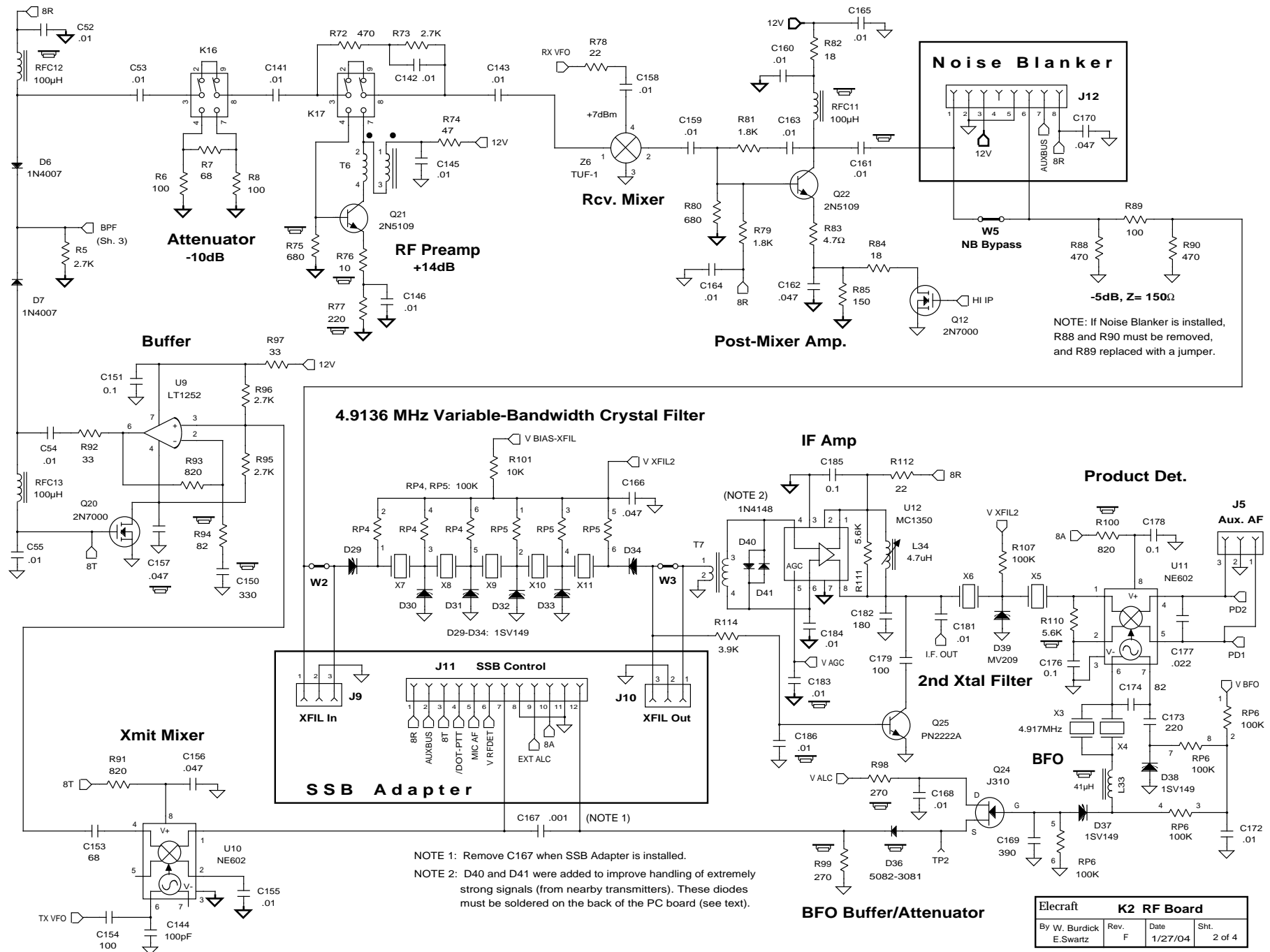
Unless your preselector is a passive device and fully bi-directional, you must pay attention to cable connection:

- Connect the K2's "OUT" to the Preselector's "IN"
- Connect the Preselector's "OUT" to the K2's "IN"

**NOTE:** When there is no external Preselector connected to the K2, you must insert a small coaxial jumper (RG-58 or RG-174) between new IN and OUT jacks.

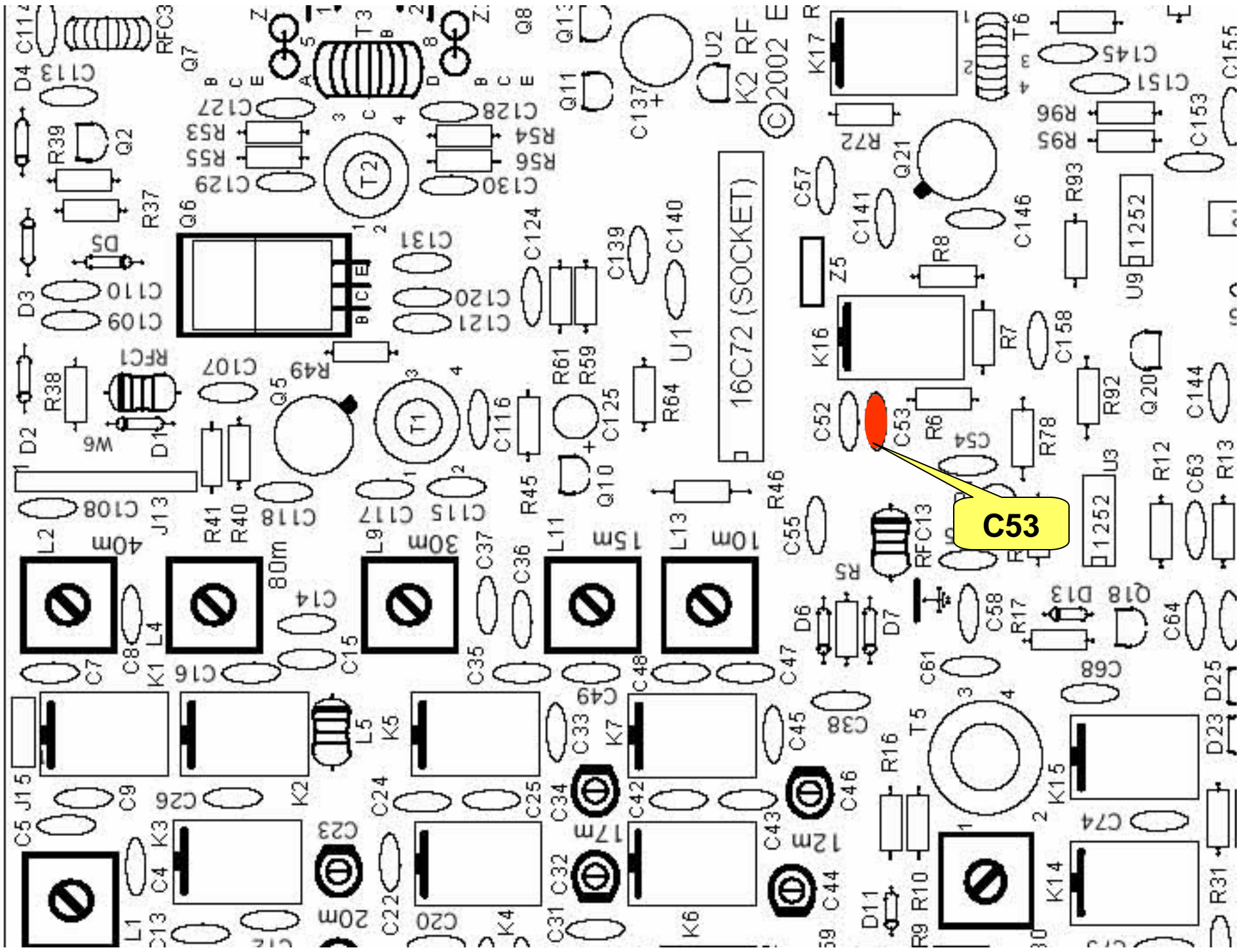
**Secondary Benefit of this Mod:** You may also insert "Noise Canselors" (e.g., S.E.M. QRM Eliminator, TimeWave ANC-4, etc.) into these jacks to help reduce the effects of heavy QRN.





| ElecRAFT <b>K2 RF Board</b> |        |                 |             |
|-----------------------------|--------|-----------------|-------------|
| By W. Burdick<br>E.Swartz   | Rev. F | Date<br>1/27/04 | Sht. 2 of 4 |

Appendix B



# Appendix F

# Parts Placement Drawing, Top

