

### Relay Table

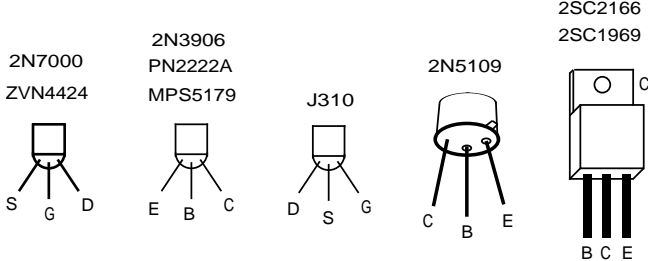
SET Relays			
Band	BPF	LPF	VCO
160m	K2	160m-K1	-
80m	K2, K3	K8	K13
+60m	K1, 60m-K1	K12	K13, K14
*40m ALT	K1	K12	K13, K14
40m	K1	K12	K14
30m	K3, K4	K9	K14, K15
20m	K4	K9	K13, K14, K15
17m	K5	K11	K13, K15
15m	K5, K6	K11	K15
12m	K6, K7	K10	K13, K14, K15
10m	K7	K10	K13, K15

+ 60 meters is available only if the K60XV option is installed.  
 \*40m ALT applies if D19-D20 are not installed.  
 NOTE: All relays are single-coil latching type and are shown in the RESET position in schematics.  
 Relay pins 5 and 6 are not connected internally.

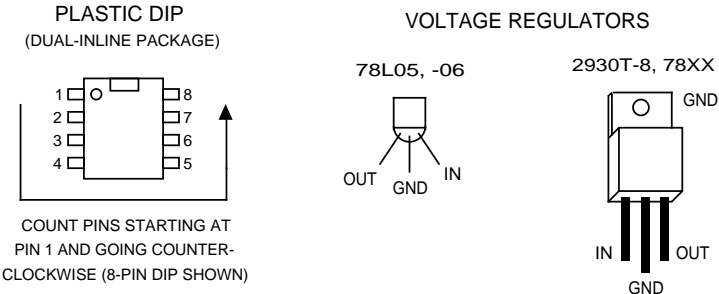
### Diodes



### Transistors



### Integrated Circuits



### Special Symbols

= On bottom of PC board.      = Jumper

### VCO Table

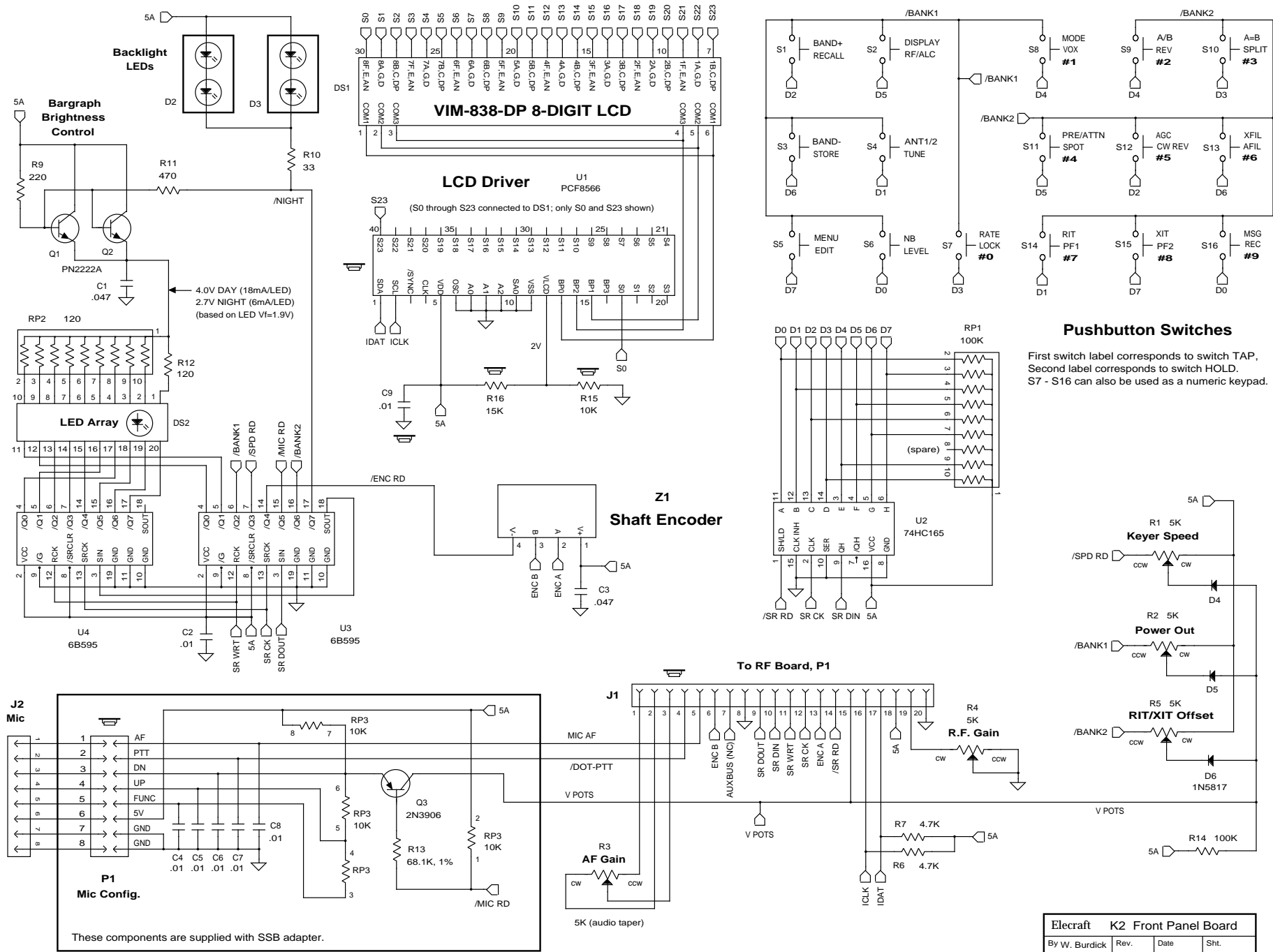
Band	Fixed Cap., pF	Total Cap., pF*	VCO Freq. at band edge**
160m	C75 (470)	525-629	6715 (subtract)
80m	C72 (270)	325-429	8415 (subtract)
60m	C71+C73 (129)	215-259	10165 (subtract)
***40m ALT	C71+C73 (129)	163-209	11915 (subtract)
40m	C71 (120)	154-203	11915 (subtract)
30m	C73+C74 (67)	102-131	14915 (subtract)
20m	C74 (20)	55-84	18915 (subtract)
17m	none (0)	35-64	22915 (subtract)
15m	C73 (47)	82-111	16085 (add)
12m	C74 (20)	55-84	19975 (add)
10m	none (0)	35-64	23085 (add)

\* This includes capacitance of varactor diodes D23-D26 on all bands, D21-D22 on 80 -160 m, and D19-D20 on 40 and 60 meters (if applicable). Only a portion of the indicated capacitance range is actually used to cover each Amateur band segment. VCO frequency can be calculated based on a total inductance of 0.95 μH (T5 in parallel with L30).

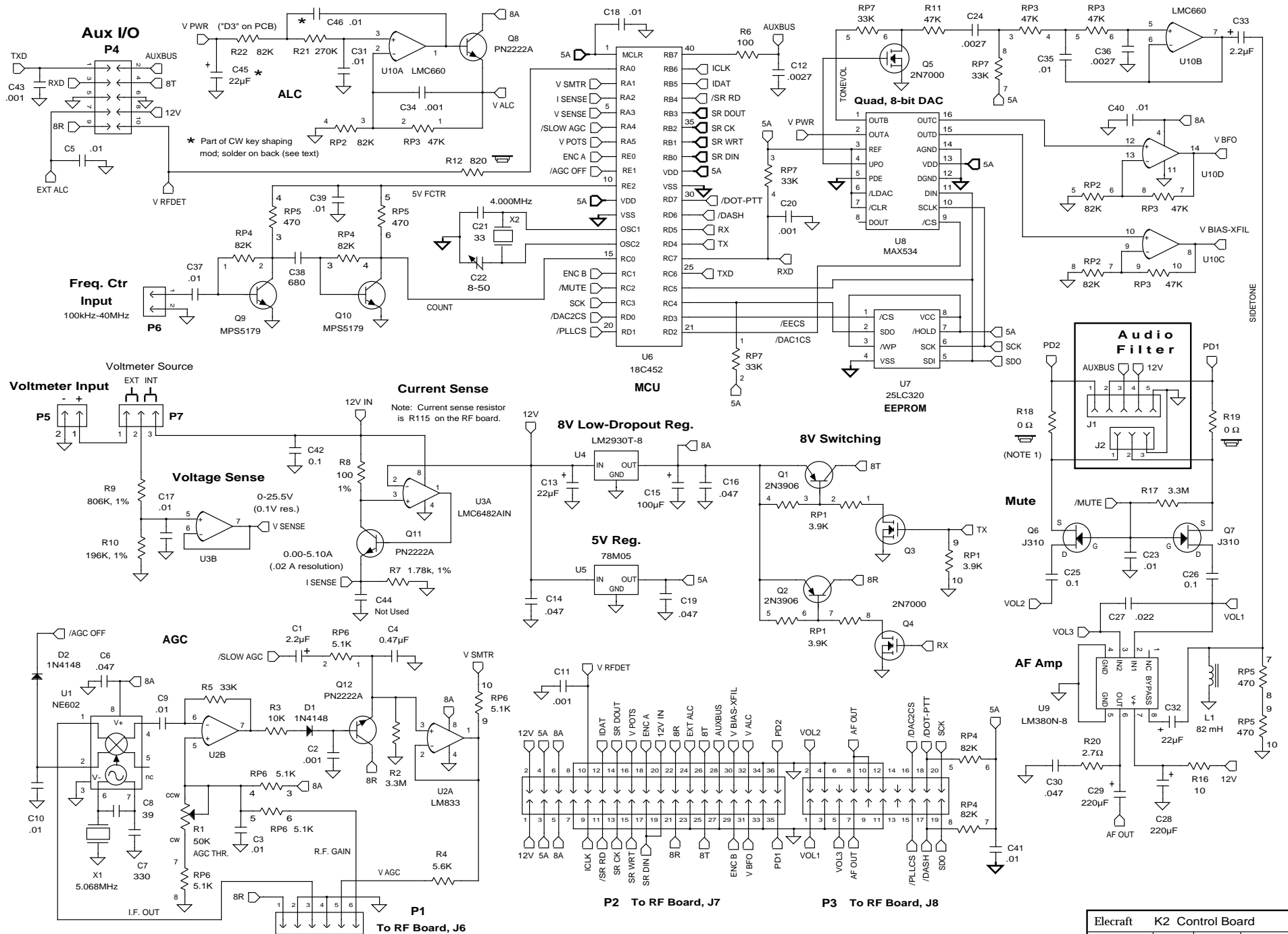
\*\* Based on an I.F. of 4915 kHz (e.g., 6715 - 4915 = 1800).  
 5250 kHz used as 60-meter lower band edge (pending U.S. FCC ruling).

\*\*\*40m ALT applies if D19-D20 are not installed.

Elecraft K2 Schematic Key			
By W. Burdick E. Swartz	Rev. D	Date 10/23/02	Sht. 1 of 1



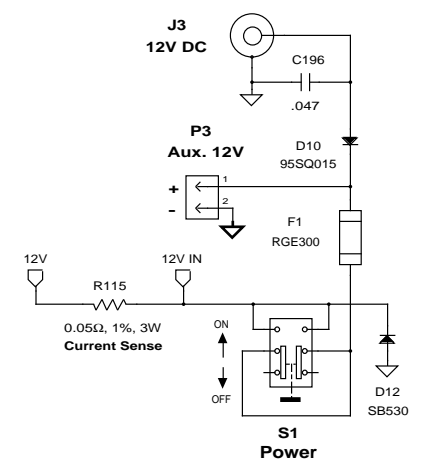
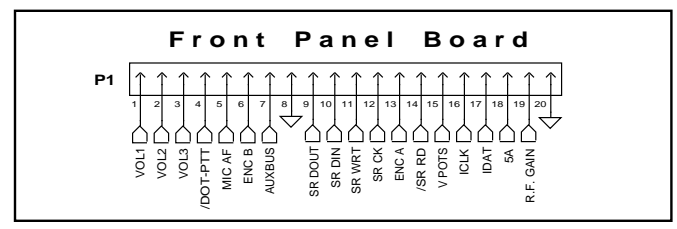
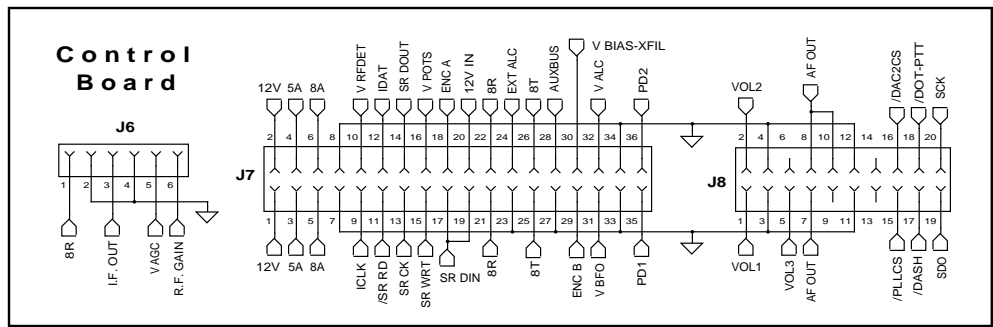
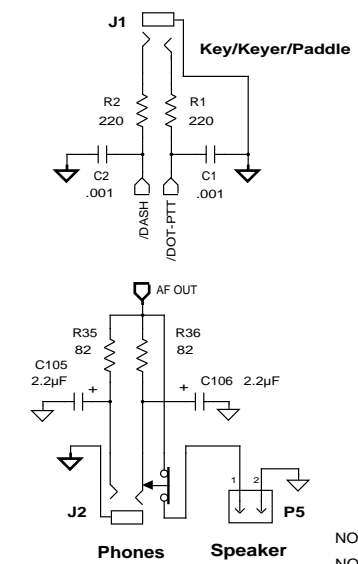
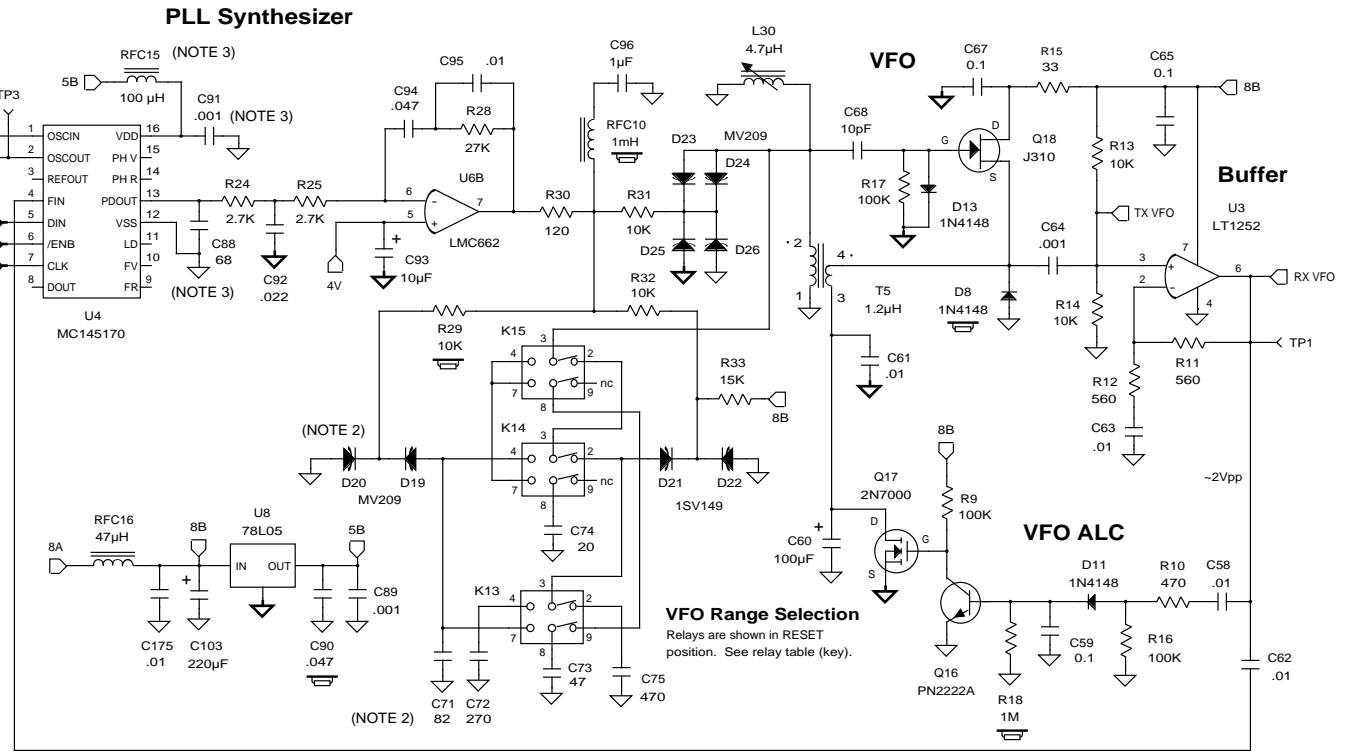
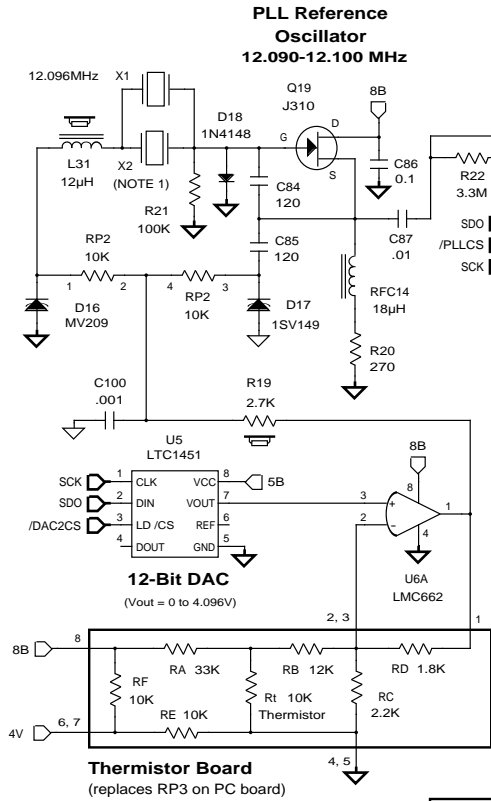
Elecraft K2 Front Panel Board			
By W. Burdick	Rev. C	Date 10/6/02	Sht. 1 of 1



NOTE 1: Jumpers are used at R18 and R19. They must be removed if the Audio Filter option is installed.

☐ = on bottom of PC board

Elecraft K2 Control Board			
By W. Burdick	Rev. F	Date 1/27/04	Sht. 1 of 1

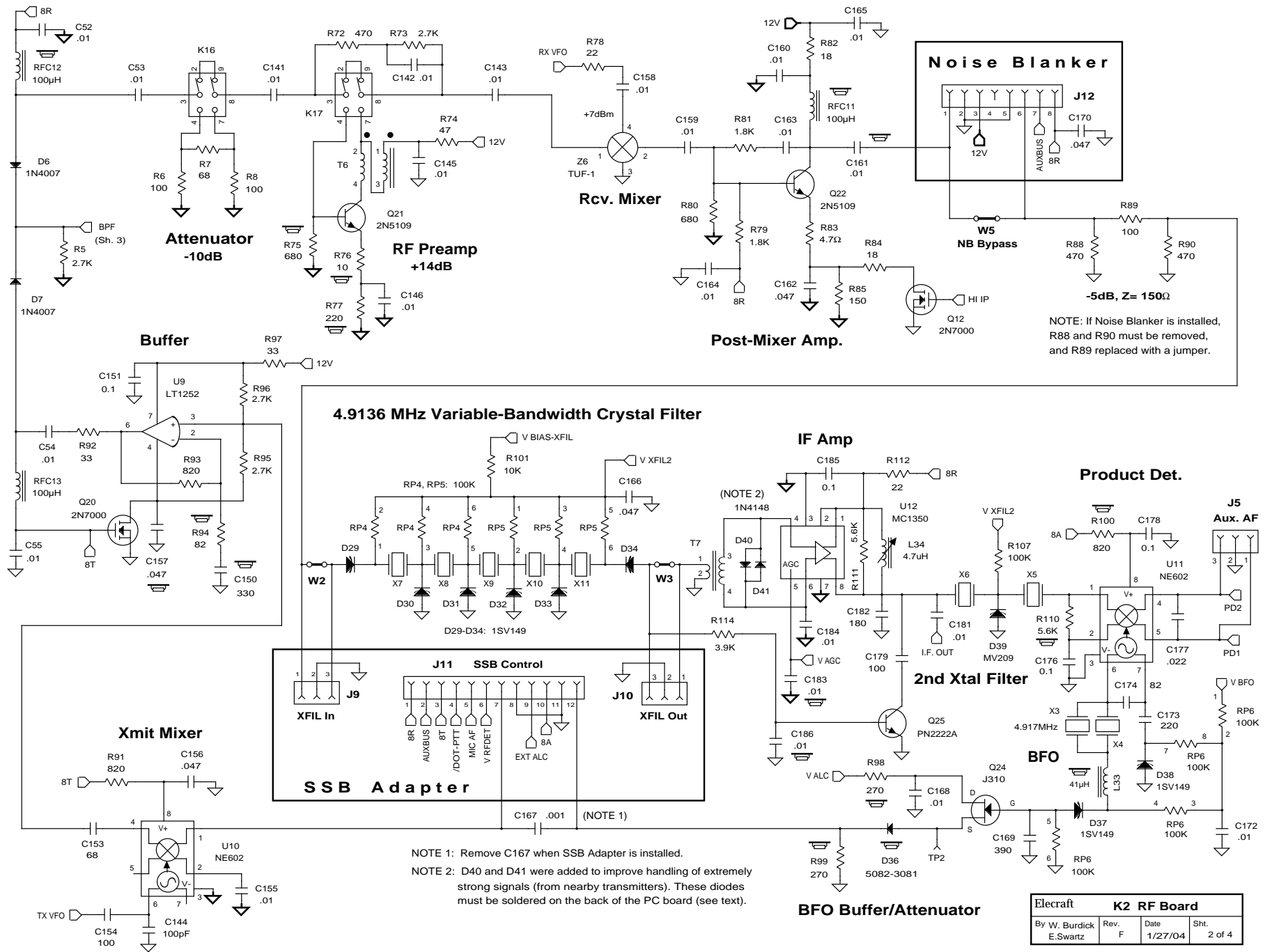


NOTE 1: X2 is not used.

NOTE 2: D19-D20 are supplied with the K60XV option. They must not be installed unless the K60XV option is also installed (60 m band and transverter I/O). C71 must be changed to 120 pF if D19-D20 are installed.

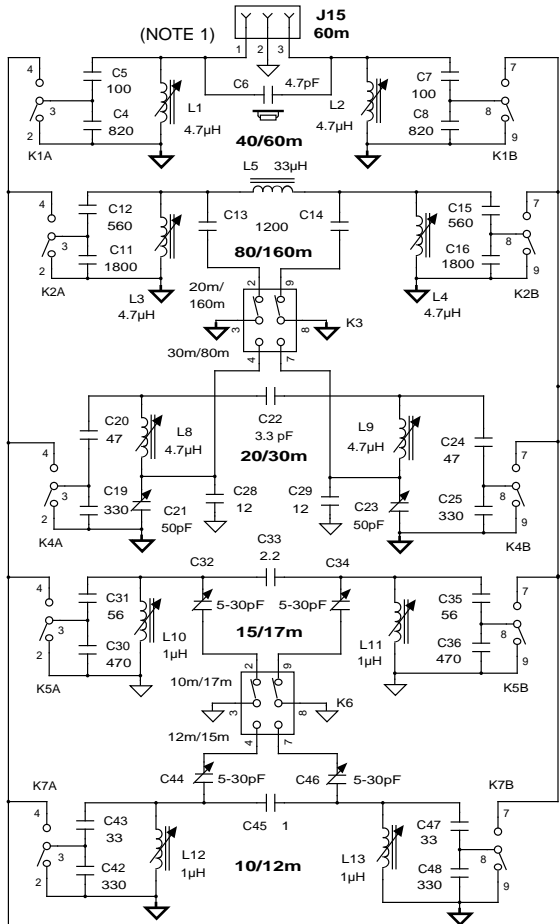
NOTE 3: These components improve PLL stability; they must be soldered on the back of the board (see text).

Elecrafft K2 RF Board			
By W. Burdick	Rev. F	Date 1/27/04	Sht. 1 of 4



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

Appendix B

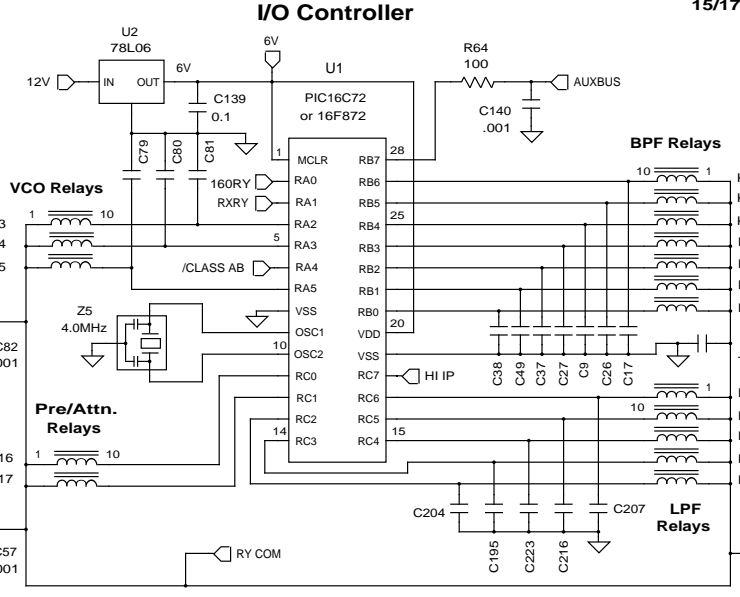
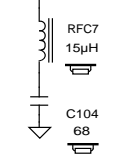
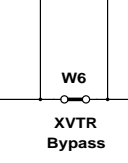
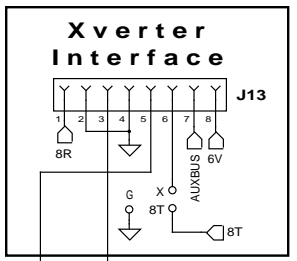


**Band-Pass Filters**

ALL RELAY BYPASS CAPACITORS ARE .001μF  
 C17, C27, C195, C204, C207, C216, C223

NOTE1: When the K60XV (transverter and 60 m) option is installed, C6 must be removed and J15 installed in its place, on the top side of the PC board.

NOTE2: Pins 5 and 6 of relays are not connected internally. However, these pins may be connected to other relay pins or to other components on either side of the PC board.



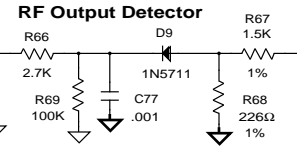
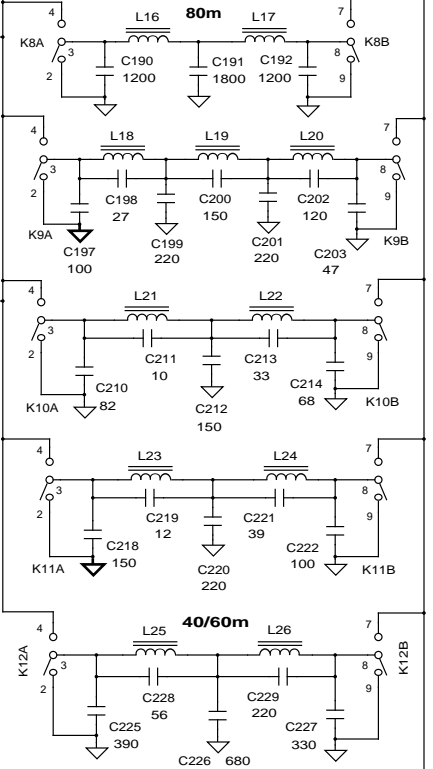
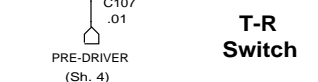
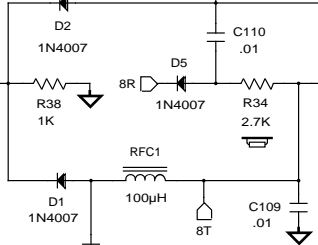
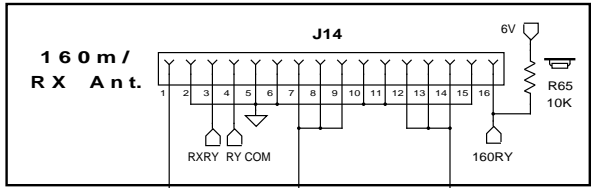
**T-R Switch**

**Low-Pass Filters**

**I/O Controller**

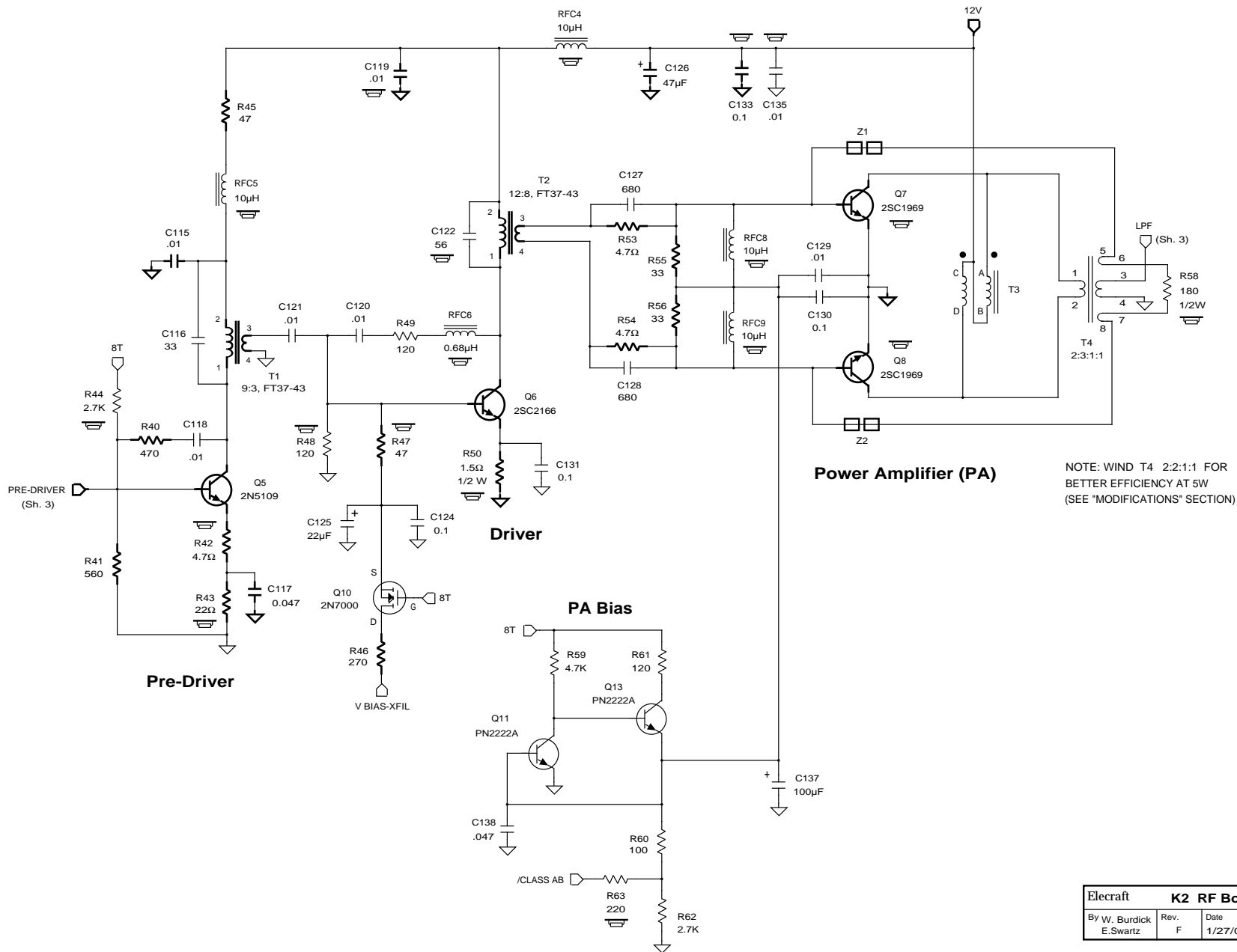
**BPF Relays**

**LPF Relays**



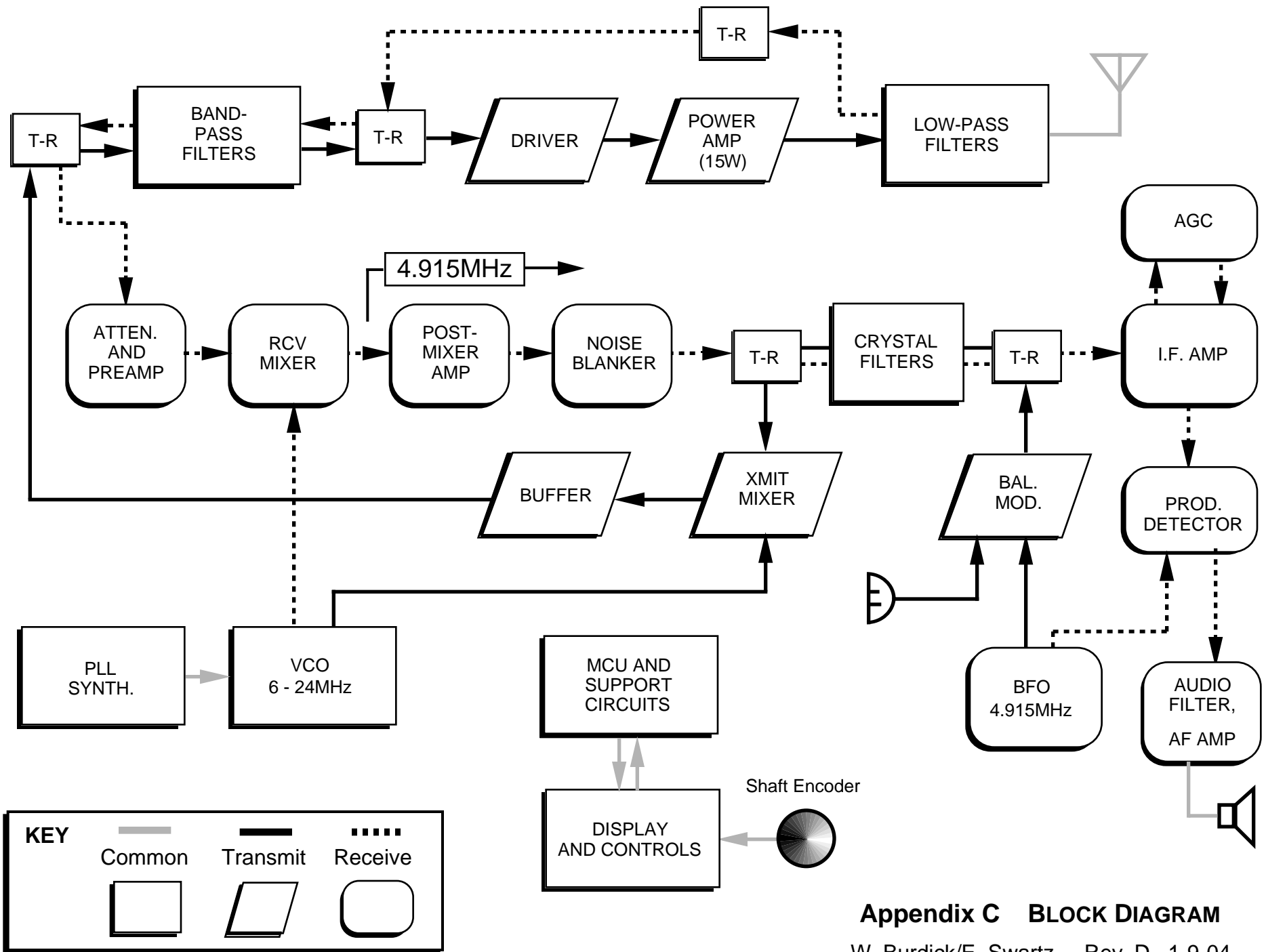
Elecraft K2 RF Board			
By W. Burdick E. Swartz	Rev. F	Date 1/27/04	Sht. 3 of 4

**Appendix B**



Elecraft		<b>K2 RF Board</b>	
By W. Burdick E. Swartz	Rev. F	Date 1/27/04	Sht. 4 of 4

Appendix B



### Appendix C BLOCK DIAGRAM

W. Burdick/E. Swartz Rev. D 1-9-04