K1NQ Ver1 YCCC 3 Stack Controller Rev2

C1-C4 .001uf 100v

D1-D4 1N4001 or Eqiv.

K1-K4 12V 10A (High breakdown)

J1-J4 UHF Female Bulkhead

J5 6 pos .1"sp header

Almost Free Contest Gear		
HF 2 or 3 Ant Match		
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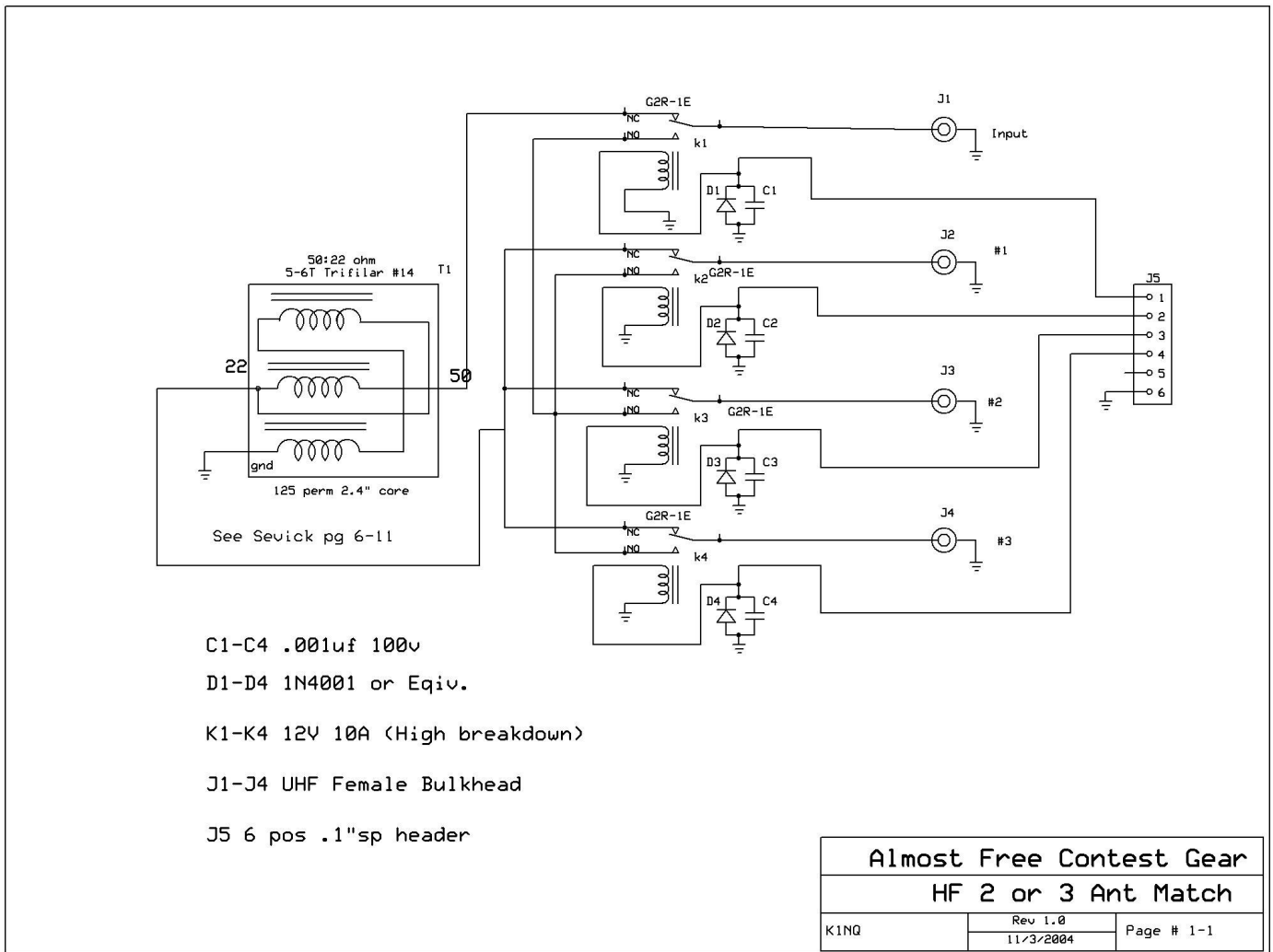
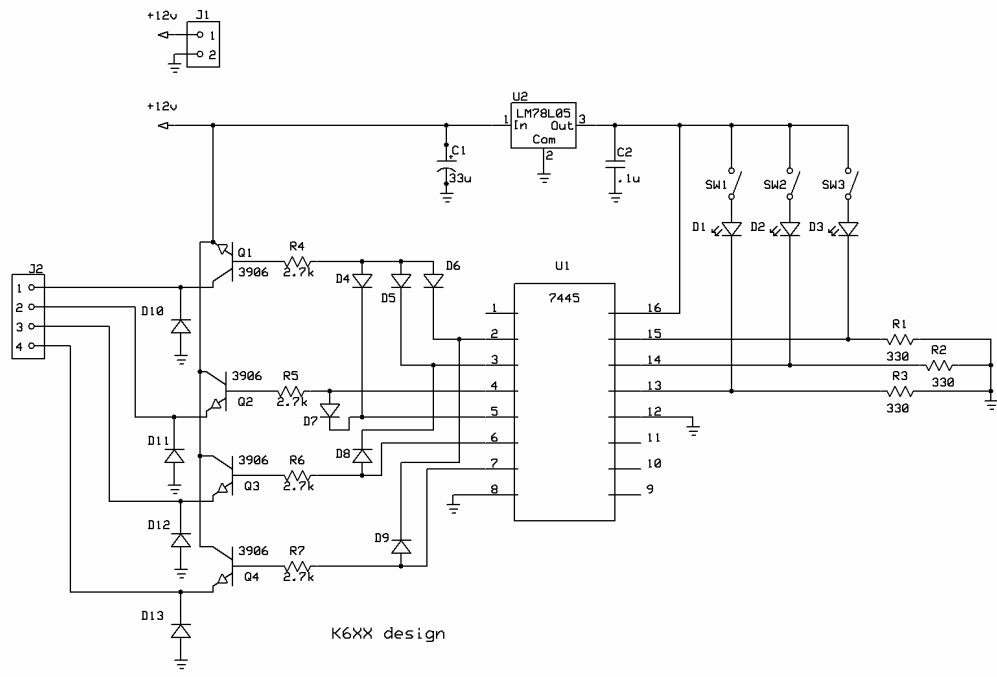|	
T5022	5-6T #14 E Trifilar on FT-240 125 perm
C1-C4	.01uf 50/100V
D1-D4	1n4001 or Eqiv
J1-J4	UHF CONN
J5	6pin .1" header or solder terminal
k1-k4	Omron G2R-1E-DC-12 Or American Zeatler AZ755-1C-12D
Box	Your choice

Winding the transformer. Start with 3 pc's ~18" of #14 enamel wire and tape side by side every 2".Mark each end for easy identifications 1-2, 3-4, 5-6.1. See Sevick W2FMI pg 6-11 transmission line transformers for

details.

1

Tape

2

3

4

5

6

Keep wires flat and next to each other. Do not twist

After filling core with 5 turns evenly spaced around, connect wires 5&2 together and solder. Connect 6 to 3 and solder. Only 1 wire can fit thru the hole (center hole)

Solder to pin #2 on board wires 6&3. solder wire #4 to left hole on pcb and solder wire 1 to ground

6&3

T1

Wire 4

GRND

Wire 1

50ohm
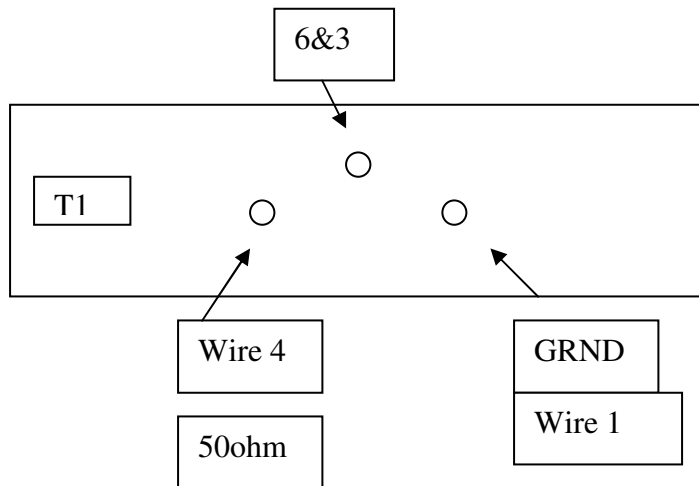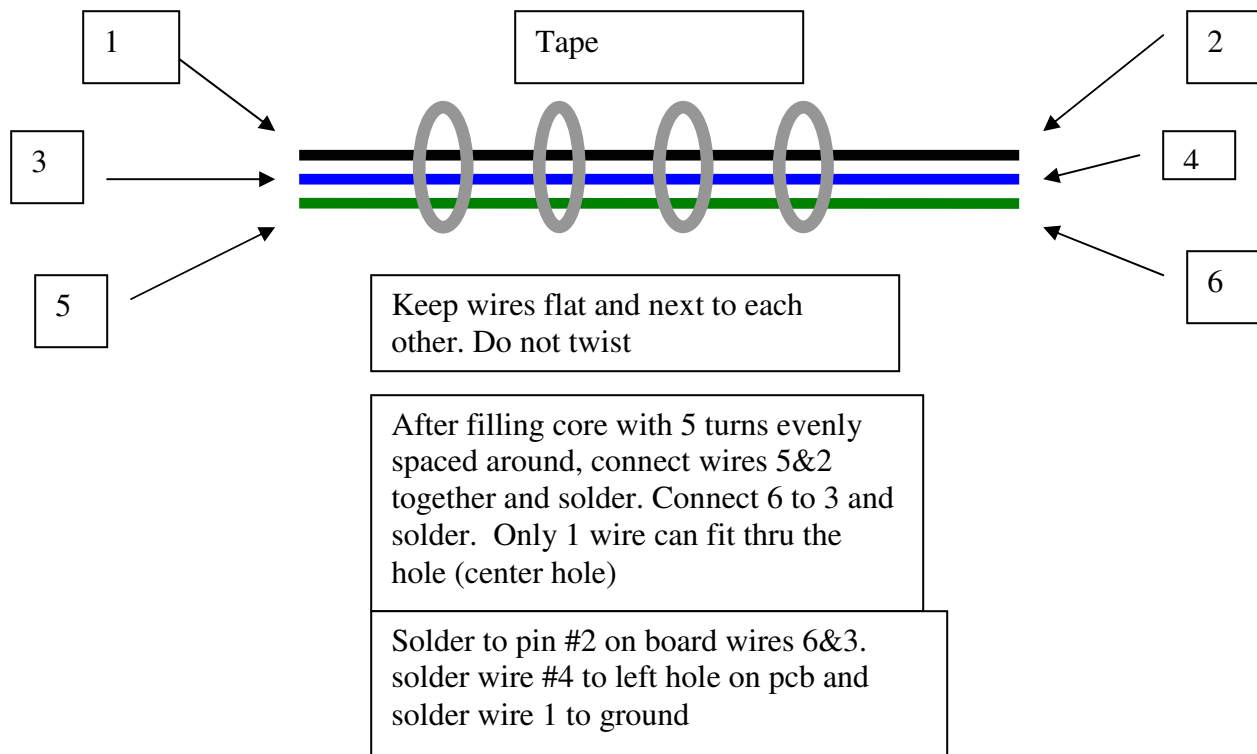
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3 stack Control

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K6XX design

Controller	Ocean state electronics			
		qty	cost	total
C1	33u/20V	1	0.17	0.17
C2	.047u/50V	1	0.15	0.15
D1-D3	T1 LED	3	0.2	0.6
D4-D13	1N4148	10	0.1	1
J1	POWER	1	0.65	0.65
J2	5 TERM	1	1.95	1.95
Q1-Q4	2N3906	4	0.1	0.4
R1-R3	330	3	0.05	0.15
R4-R7	2.7K	4	0.05	0.2
SW1	SPST	3	1.5	4.5
U1	7445	1	0.99	0.99
U2	7805	1	0.59	0.59
	LED HOLDER	3	0.2	0.6
	CASE	1	0	0
	Total			11.95
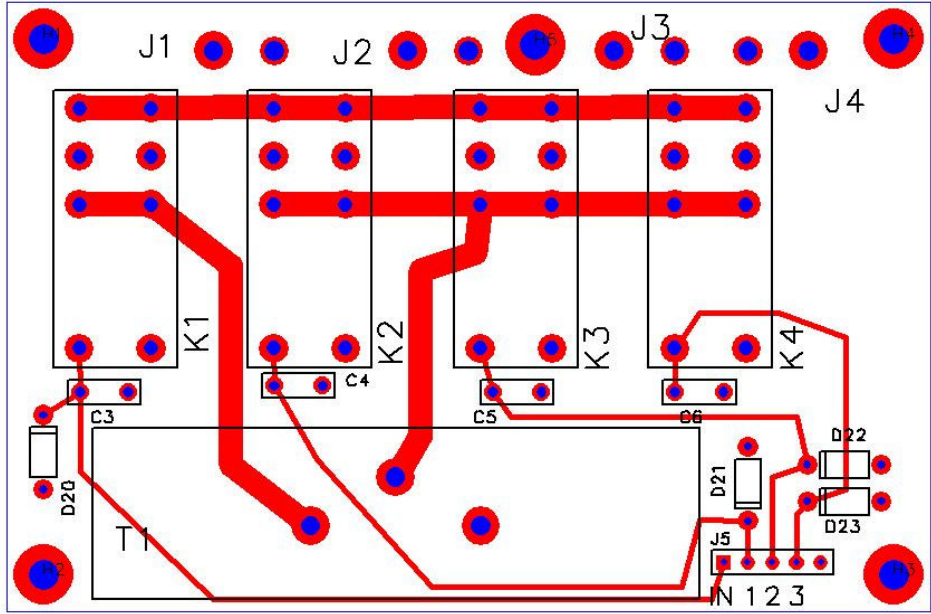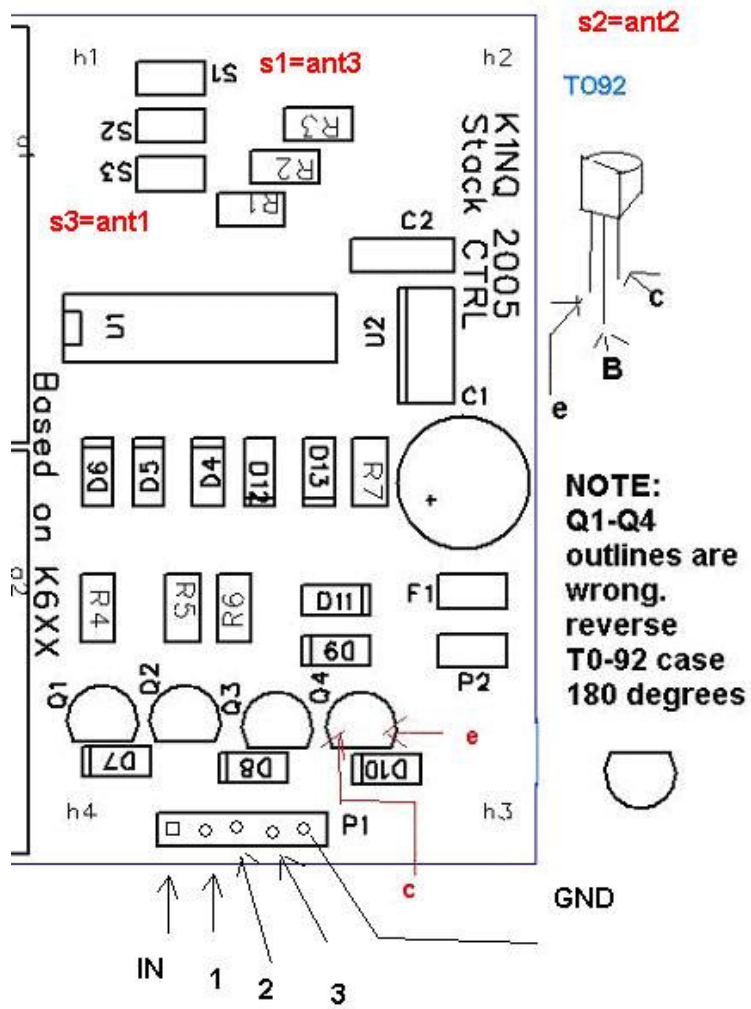
On switch control board.

LED's are off board and connected in series with the switches. See Schematic. Also P1 is for and off board fuse. You can place a jumper wire across Pin and Pin 2 of P1 is no fuse is used.
Note that only 1N41418/914 type diodes fit. The leads for 4001 type diodes are too big.
Also header pin holes tolerance is tight and P1-P4. Standard .1" headers will work but must be carefully inserted with gentle force. To separate stack and control board, carefully score the line of plated thru holes with a utility knife. Try 5X times each side and gently snap apart the boards. Do this before you populate
Note the package outline for Q1-Q4 is backwards. Install as shown in the margin.

S3 controls Antenna 1 or antenna relay k2 (J2)
S2 Controls Antenna #2 or relay k3 (J3)
S1 controls antenna #3 or relay k4 (J4)

P1 on control board connects to the Relay board
Pin #1 square pin) controls K1 relay
Next pin controls antenna #1, relay K2 or J2
Connect pin 1 of P1 to Pin 1 of J5 on the relay board
P1-2 to J5-2 ect….

Errors – old stack schematic had Transformer backwards.