



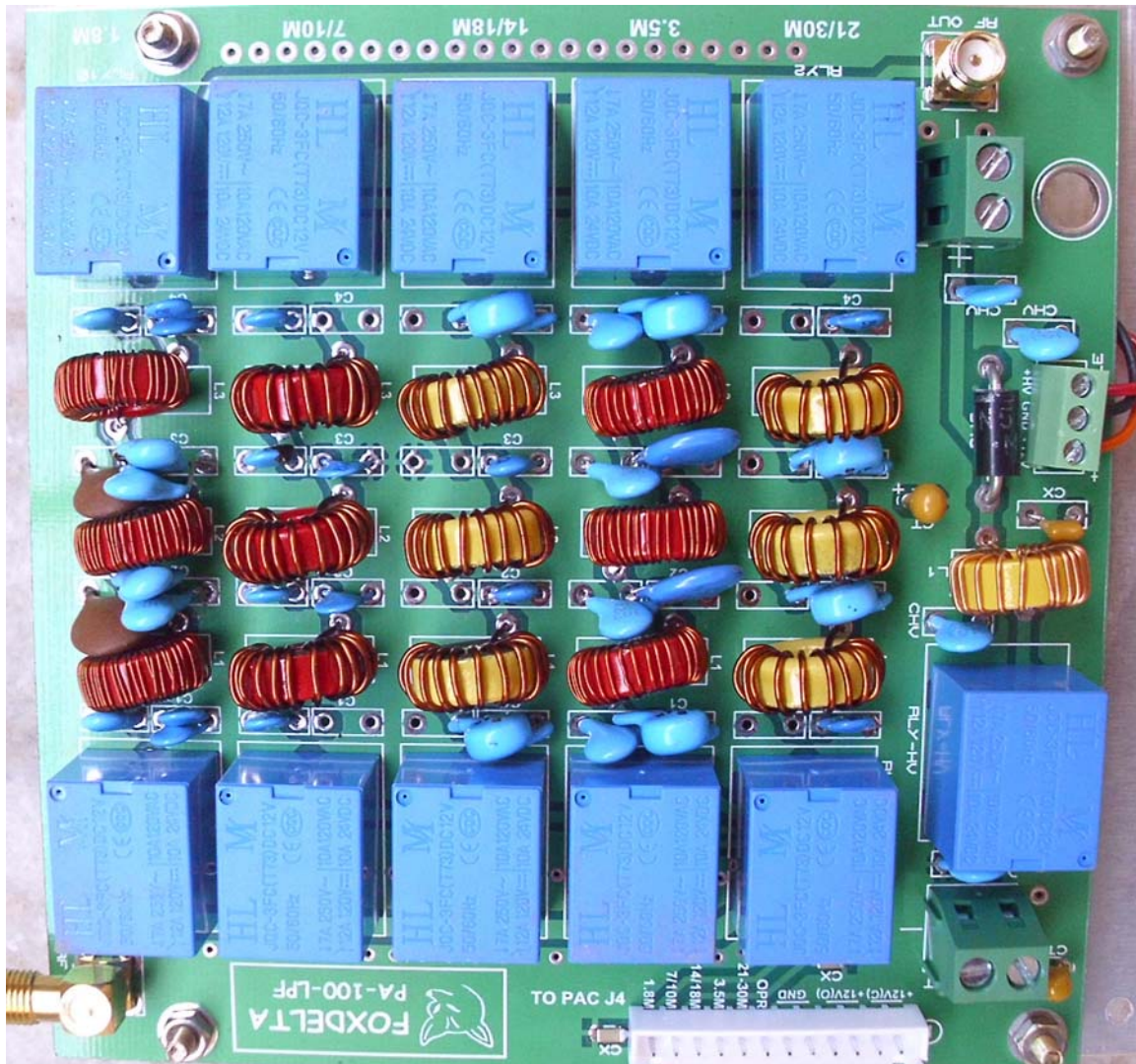
Fox Delta

Amateur Radio Projects & Kits

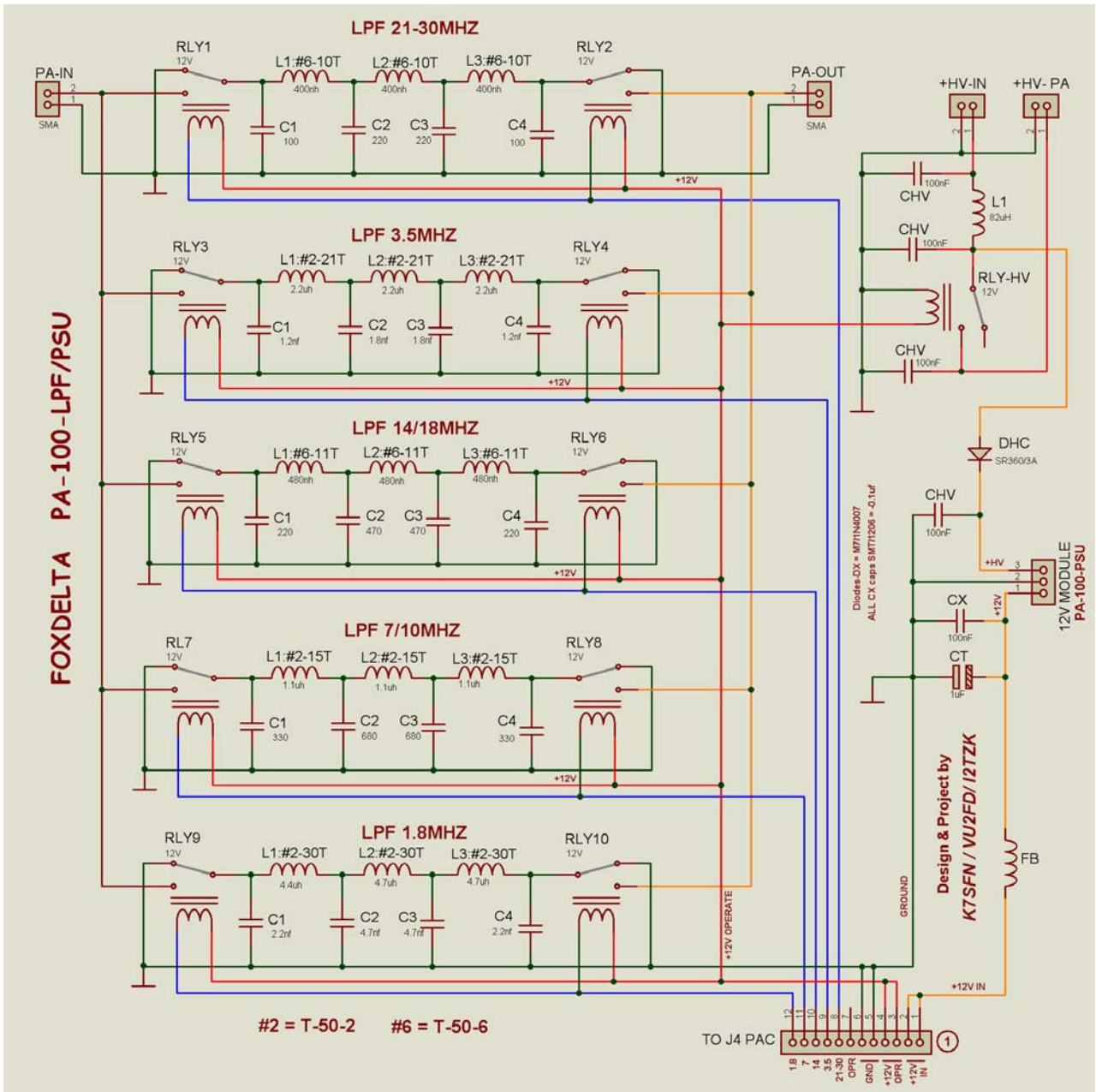
PA -100M LPF

Schematic & Parts List: HF Power Amp Low Pass Filter Board

PA-100M - LPF: Completed

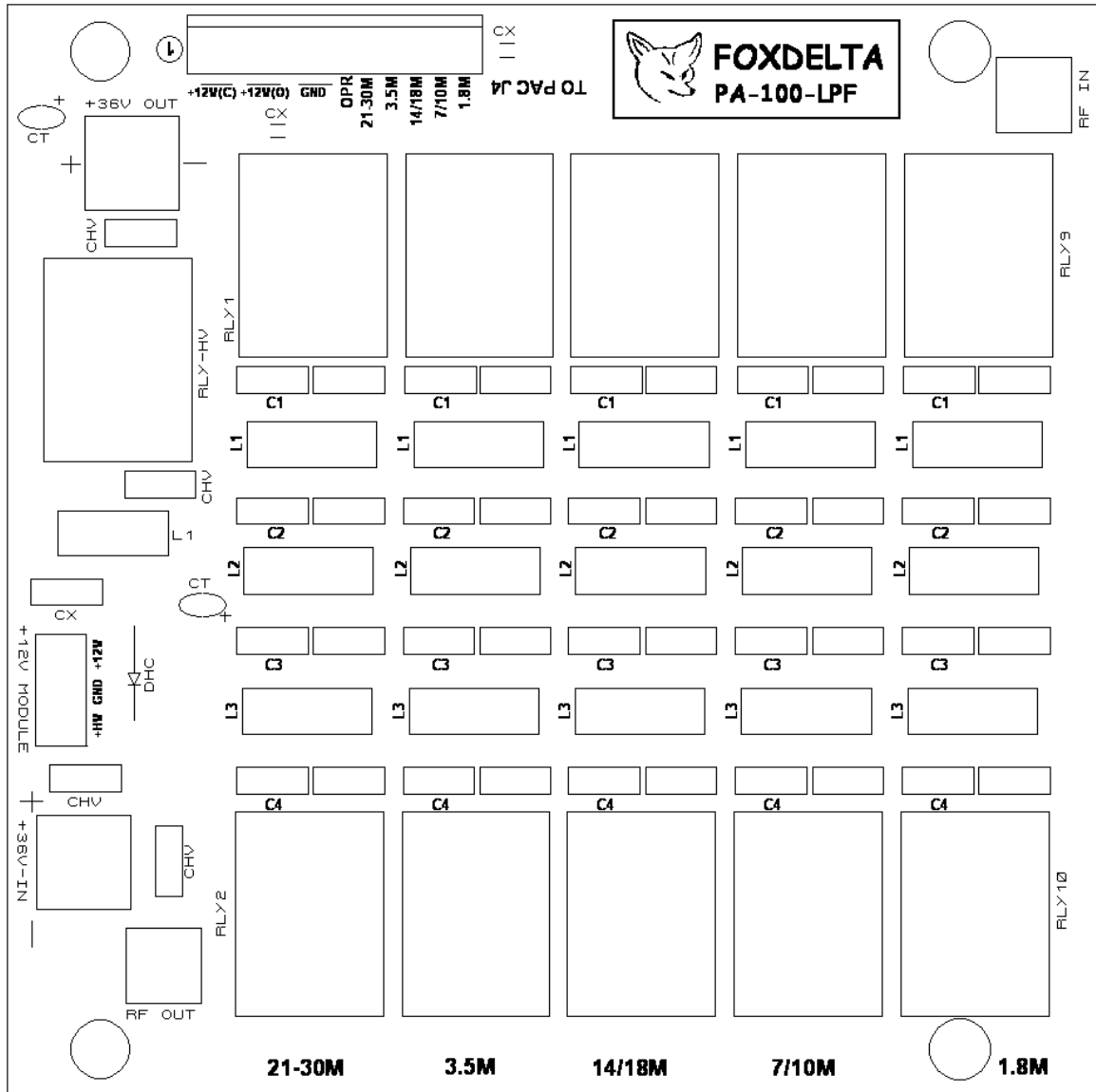


PA-100M - LPF: Schematic



Note:
 Many capacitors, C1 to C4, may be paralleled using two or three capacitors to get required capacitance as stated on schematic.

PA100M LPF Board TOP SIDE SILK:



PA-100M LPF Inductors and Capacitor Values: Table 1

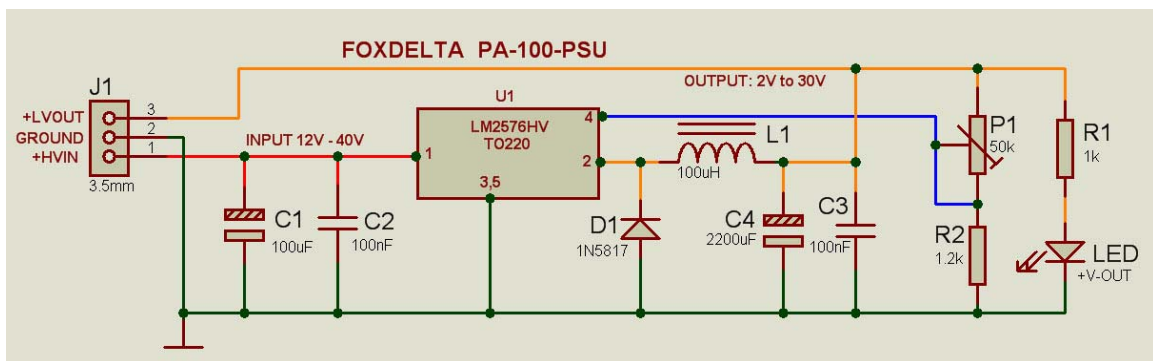
LPF	L1	L2	L3	C1	C2	C3	C4	CORE
160M	30T 4.4uh #30 50CM	30T 4.7uh #30 50CM	30T 4.7uh #30 50CM	2.2nf	4.7nf	4.7nf	2.2nf	T50-2
80M	21T 2.2uh #30 41CM	21T 2.2uh #30 41CM	21T 2.2uh #30 41CM	1.2nf	1.8nf	1.8nf	1.2nf	T50-2
40/30M	15T 1.1uh #24 30CM	15T 1.1uh #24 30CM	15T 1.1uh #24 30CM	330	680	680	330	T50-2
20/17M	11T 480nh #24 23CM	11T 480nh #24 23CM	11T 480nh #24 23CM	220	470	470	220	T50-6
15/12/10M	10T 400nh #24 22CM	10T 400nh #24 22CM	10T 400nh #24 22CM	100	220	220	100	T50-6

Cores supplied with Kits/Assembled:

1. T-50-2: 9pcs
2. T-50-6: 6pcs

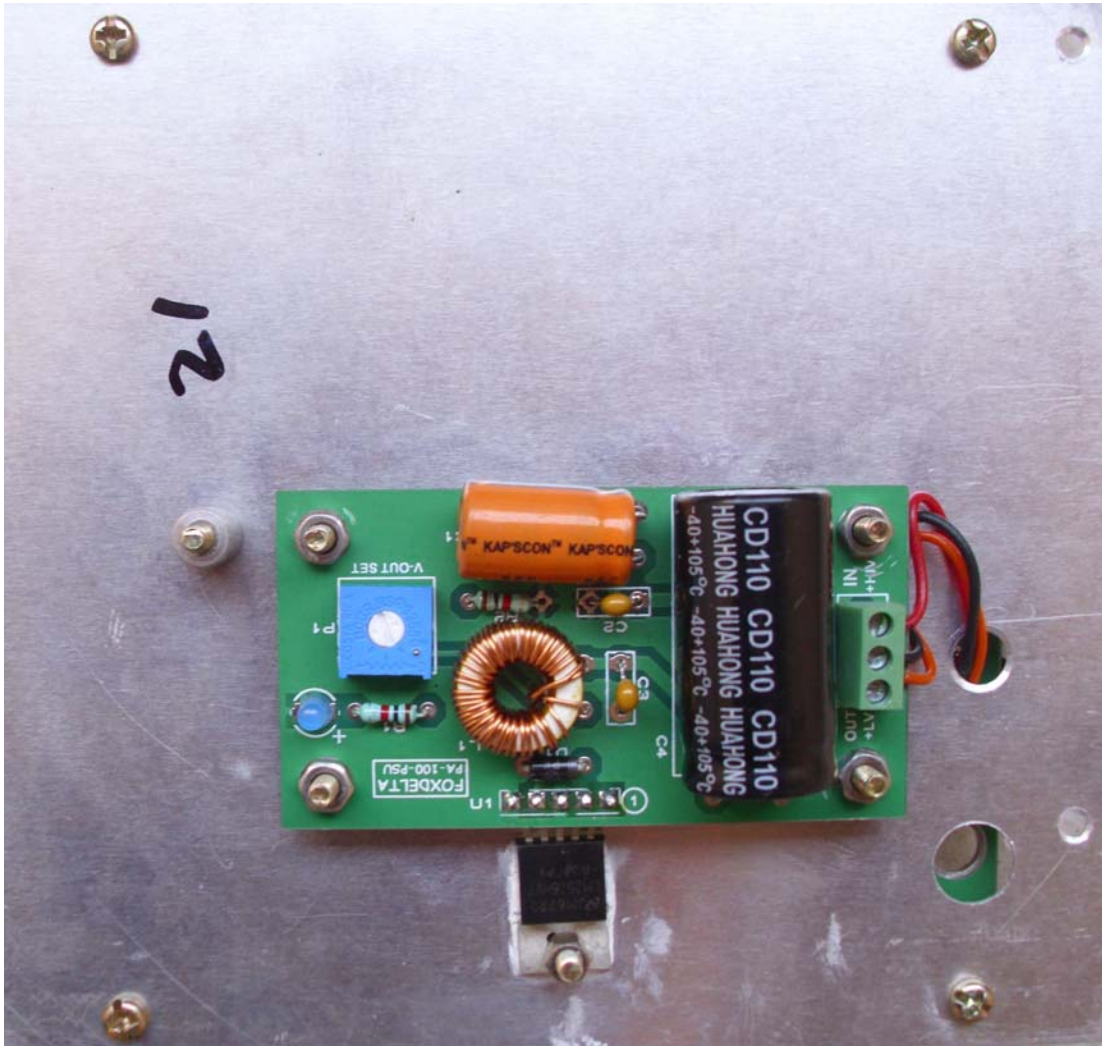
+12V POWER SUPPLY FOR CPU:

This Module is placed under LPF Board/Alum Plate



HV IN - MAX +30VDC
LV OUT - +12V DC FOR CPU & RELAYS

PSU FITTED UNDER LFP BOARD ALUM PLATE:



PSU PARTS LIST:

Quantity	Part ID	Details
1	U1	LM2576HV TO220
1	D1	1N5817
1	L1	100uH
1	C1	100uF 100V
2	C2, C3	0.1uf 50V
1	C4	2200uF 50V
1	P1	50K Preset
2	R1, R2	1.2K Resistors 1/4w
1	LED	POWER INDICATOR 3mm
1	PCB	PA100M-PSU ; Double Sided PTH

PA-100M LPF PARTS LIST:

Quantity	Part ID	Details
1	PCB	PA-100 LPF DSPTH PCB
11	Relays	OEN 61-12 or Equv
1	SIL 12	JST 12PIN Male Connector
2	2PIN 5mm Screw Terminal	For HV 24-28V INPUT and OUTPUT
1	3PIN 3.5mm Screw Terminal	For 12V Step-Down Regulator Board
1	L1	RF Chock
2	SMA	RF IN & OUT Connectors: Female
1	DHC	5A Diode
1 Set	PCB Hardware	For LPF and PSU mounting Buts and Bolts, Support Spacers
1	Alum Plate	For Mounting LPF Board
8	DX	SMT 1N4007
4	FB	SMT 1206 Ferrite Beads
9	L1, L2, L3	T-50-2 (For 160M, 80M, 40M)
6	L1, L2, L3	T-50-6 (For 20M, 10M)

Capacitors:

Quantity	Part ID	Details
15	CX	1206 0.1uf Poly
2	CT	1uf 35V Tantalum
1	CX	0.1uf 50V Poly
4	CHV	300V 0.1uf Poly
20	C1, 2, 3, 4	HV Ceramic as per LPF Schematic Table 1

Dinesh Gajjar / 23rd Feb 2025

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