



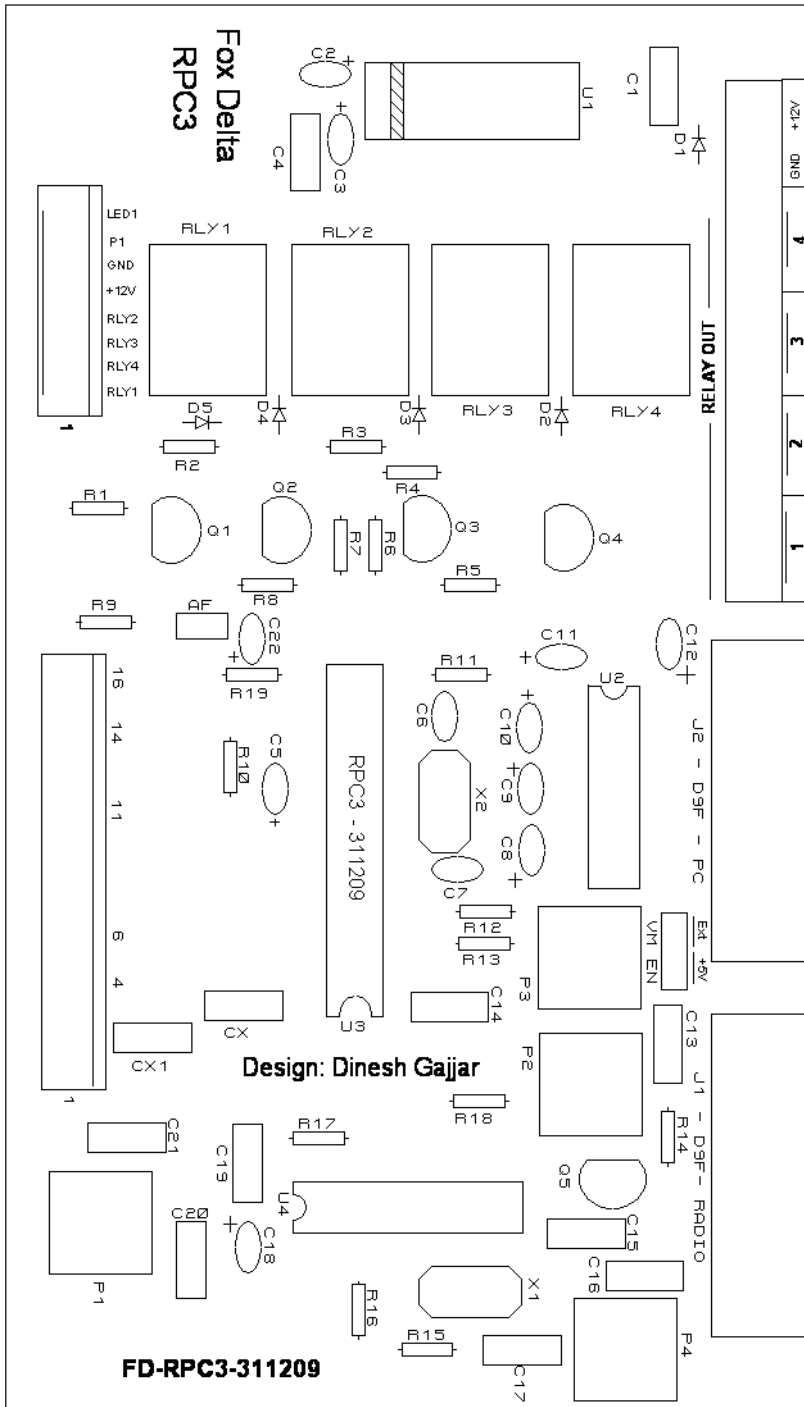
**Fox Delta**

Amateur Radio Projects & Kits

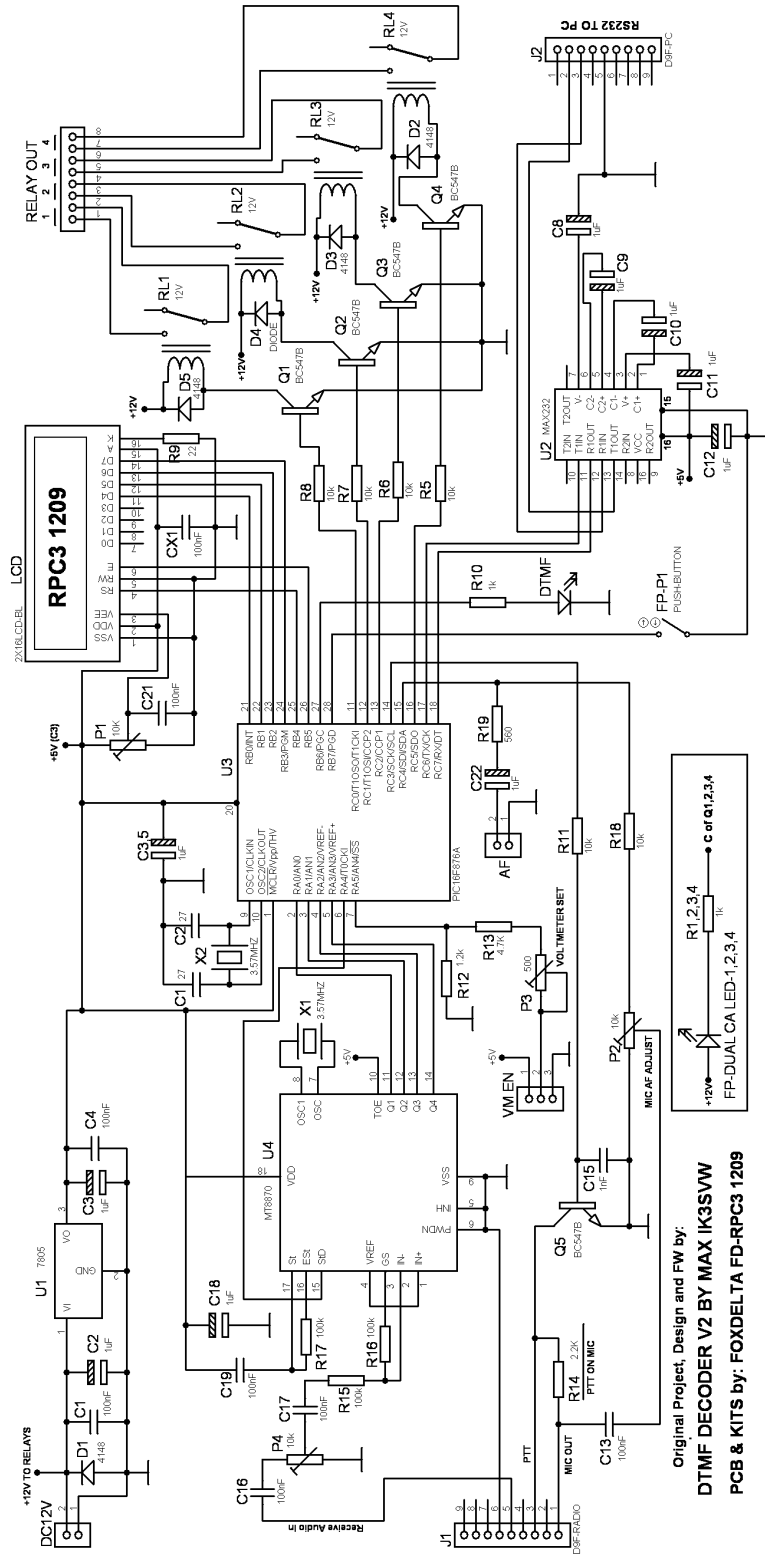
**FD- RPC3**

Technical Info Doc: PIC16F876A LCD DTMF Decoder by Max IK3SVW

**RPC3-1209: DTMF Remote/Repeater Controller**

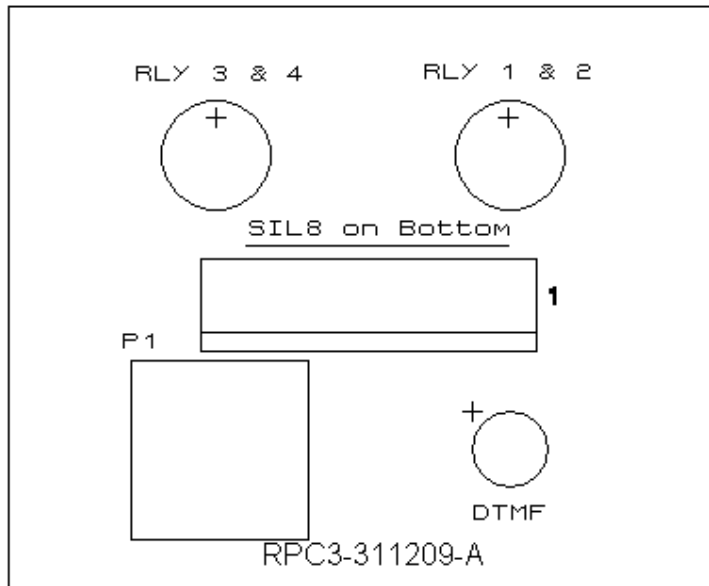


# Schematic RPC3:



Original Project, Design and FW by:  
**DTMF DECODER V2 BY MAX IK3SVW**  
**PCB & KITS by: FOXDELTA FD-RPC3 1209**

## Key Board PCB:



## RPC3-1209 Kit Parts List:

Quantity	Part ID	Details
1	U1	7805
1	U3	PIC16F876A Pre-programmed with FW by IK3SVW V3.00
1	U2	MAX232 DIP16
1	U4	MT8870 DIP18
4	RLY1-4	OEN42 12V Relays
5	D1, 2, 3, 4, 5	1N4148
5	Relay Out	2pin Screw terminals X 5
3	P1, P2, P4	10K Preset
1	P3	500 Ohms Preset (Volt Meter Adjust)
2	X1, X2	3.57MHZ HC49U Crystal
5	Q1, 2, 3, 4, 5,	BC547B
2	J1, J2	D9 Female PCB Connectors
1	LCD	2x16 with backlight
1	LED	3MM LED (DTMF on KB)
1	VM-En	3PIN Header
1	Set	SIL8 Male + Ribbon
1	Set	SIL16 Male (8+8) + 2 x 8Ribbon
1	Case	Powder Coated Metal case
1	Set	Hardware Keyboard
1	Set	Hardware Case
1	Set	Hardware LCD
1	KB Push Button	KB button 12MM
1+1	PCB	RPC3-1209 DSPTH PCB & KB PCB
2	KB LED	CA Dual LEDs
1	IC Socket	16PIN DIP (MAX232)
1	IC Socket	28PIN DIP Narrow (PIC876A)
1	IC Socket	18PIN DIP (8870)

**Resistors:**

Quantity	Part ID	Details
4	R1, 2, 3, 4,	1K
1	R12	1.2K
1	R10	560 Ohms
1	R9	22 Ohms
5	R5, 6, 7, 8, 13	4.7K
1	R11	10K
1	R14	2.2K
3	R15, 16, 17	100K

**Capacitors:**

Quantity	Part ID	Details
10	C1, 4, 14, 13, 16, 17, 19, 20, 21, CX1	0.1uF Poly
2	C15, CX	0.001uF Poly
10	C2, 3, 5, 22, 8, 9, 10, 11, 12, 18	1uF Tantalum
2	C6, 7	22pf / 27pf Ceramic

**73s / Dinesh Gajjar / 10<sup>th</sup> January 2018**

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For more details, please visit Project Page: <http://www.foxdelta.com>