

Serial 10 Watt PLL Version 1 Parts List

Part number	Quantity	Description
C1, C5, C8, C10, C12, C20-21, C23, C29, C33, C50	11	.001uf capacitor, marked 102
C2, C6-7, C11, C18, C22, C24, C26, C28, C34	10	.1uf capacitor, marked 104
C25, C30, C38, C43, C45	5	.001uf capacitor, SMT1206
C31, C39, C42, C44	4	.1uf capacitor, SMT1206
C3	1	.0047 capacitor, marked 472
C4, C16, C19, C27, C35	5	22uf electrolytic capacitor
C9, C15	2	4.7uf electrolytic capacitor
C13	1	470uf electrolytic capacitor
C14, C17	2	.047uf capacitor, marked 473
C32	1	470pf capacitor, marked 471
C40	1	33pf capacitor, SMT 1206
C41	1	150pf capacitor, SMT 1206
C36	1	22pf capacitor, marked 22
C37	1	12pf capacitor, marked 12
C46	1	82pf capacitor, SMT 1206
C47	1	33pf capacitor, SMT1206
C48	1	5-30pf green trimmer capacitor
C49	1	100p mica capacitor
C50	1	56pf mica capacitor
D1-D4	4	1N914 diode
D5	1	LED diode
IC1	1	LF351/TL071 op amp
IC2	1	MC145170 serial PLL
IC3, IC8	2	78L05 voltage regulator
IC4	1	PIC16F628, programmed CPU
IC5	1	7812 voltage regulator
IC6	1	MAV11 amplifier
IC7	1	POS150 VCO, Mini-Circuits
L1-L5	5	Wide-band RF choke
L6	1	1uh choke, small brown or green body
L7	1	Coil 3 turns, #18, turns, .25 diameter
L8	1	Coil 2 turns, #18, turns, .25 diameter
L9	1	Coil 6 turns, #18, turns, .25 diameter
L10	1	Coil 3 turns, #18, turns, .25 diameter
Q1	1	RD15HFV1 Transistor
R1	1	Resistor, 15K - brown, green, orange
R2	1	Resistor, 8.2K - gray, red, red
R3	1	Resistor, 390 - orange, white, brown
R4	1	Resistor, 22K - red, red, orange
R5-6, R8-9, R12-13	6	Resistor, 33K - orange, orange, orange
R7	1	Resistor, 360 - orange, blue, brown
R10	1	Resistor, 120 - brown, red, brown
R11	1	Resistor, 680 - blue, gray, brown
R14	1	10K Trimmer
R15	1	Resistor, 220 - red, red, brown
R16	1	680 - blue, gray, brown
R18	1	Resistor, 1K - brown, black, red
X1	1	16 MHz crystal

Other items:

1 - 8 pin IC socket, 1 - 18 pin IC socket, 1 - 8 position dip switch, 1 - ¼" #4 bolt, 5 #4 nuts, 4 - ½" #4 bolts, 4 ¼" spacers, 1 - 10" length of #24 twisted pair, 1 - 5" length of #24 twisted pair, 1 - 10" length of RG174 coaxial cable, 1 - packet of thermal compound, 1 - red banana socket, 1 - red banana plug, 1 - black banana socket, 1 - black banana plug, 1 - SO239 socket, D mount, 1 - 10K potentiometer with washer and nut, 1 - RCA socket

