

Designator	Comment	Quantity	Value
BT1	Battery	1	3,6V
C1, C2, C3, C4, C5, C7, C10, C12, C15, C16, C17	Capacitor	11	100n
C6, C8, C9, C11	Capacitor	4	1u
C13	Capacitor	1	2.2n
C14	Polarized Capacitor (Radial)	1	2.2uF/250V (350V)
C18, C19	Capacitor	2	22p
C20	Capacitor	1	100p
D1, D3	Fast Diode	2	1N4148
D2	Fast Diode	1	FR105 (UF4004)
D4	Diode	1	1N4001
DS1	LED	1	LED
J1	D Connector 9 (F)	1	D Connector 9 (F)
L2	Inductor	1	100uH
P1, P5, P6, P7, P10, L1	+12V DC, Enter, Move, Setup, Thermal and Alarm Output,	6	2 - Pin Connector
P2, P3, P9, P11	Anodes+DEC, Cathodes, LEDs, Programmer	4	Header, 5-Pin, Dual row
P4	GPS	1	5 - Pin Connector
P8	Read Data from GPS or PC (Jumper)	1	Header, 3-Pin
Q9	NPN Bipolar Transistor	1	BC547
Q1, Q3, Q5, Q7, Q10, Q12, Q14, Q16	NPN Bipolar Transistor	8	MPSA42
Q2, Q4, Q6, Q8, Q11, Q13	PNP Bipolar Transistor	6	MPSA92
Q15	N-Channel MOSFET	1	IRF740
R1, R5, R10, R14, R22, R28	Resistor	6	470K
R2, R6, R11, R15, R23, R29, R36	Resistor	7	100K
R3, R7, R12, R16, R26, R30, R37, R39	Resistor	8	33K
R4, R8, R13, R17, R24, R27, R34	Resistor	7	15K
R9, R20, R31	Resistor	3	560
R18	Resistor	1	56K
R19	Resistor	1	1K
R21, R35	Potentiometer	2	1K
R25, R33, R45, R46	Resistor	4	10K
R32	Resistor	1	220K
R38	Resistor	1	2.2K
R40	Resistor	1	470
R41	Resistor	1	1.2K
R42	Resistor	1	4.7K
U1	Nixie Driver	1	SN74141
U2	Temperature Sensor	1	DS1621
U3	RS232 Driver	1	MAX232
U4	Real Time Clock	1	DS1307
U5	AVR Microcontroller	1	ATmega32-16PI
U6	Timer	1	LM555
U7	Optocoupler	1	TLP521
VR1	Voltage Regulator	1	7805
VR2	Voltage Regulator	1	LM317
Y1	Crystal Oscillator	1	32.768KHz
Y2	Crystal Oscillator	1	7.3728MHz