

	Qty	Title	Detail	Ref(m)	Vendor	Vend-P/N
PCB parts						
	1	Printed circuit board	IsoCat			
	2	Capacitor, aluminium electrolytic, radial lead	22 uF, 16 V, 20%	C2, C5	Digikey	P5135
	1	Capacitor, aluminium electrolytic, radial lead	33 uF, 16 V, 20%	C7	Digikey	P5136
	5	Capacitor, metal film, radial lead	1 uF, 50 V, 5%	C1, C3, C9, C10, C12	Digikey	P4675-ND
	2	Capacitor, polyester	0.01uF , 50 V, 5%	C11, C13	Digikey	P4582-ND
	4	Capacitor, polyester	0.1uF , 50 V, 5%	C4, C6, C8, C15	Digikey	P4593-ND
	4	Diode	small signal, 1N914, axial lead	D1, D2, D5, D6	Digikey	1N914BCT-ND
	1	LED, red, diffused	T-1 3/4, 50 deg viewing angle	D3	Digikey	160-1707-ND
	1	LED, green, diffused	T-1 3/4, 50 deg viewing angle	D4	Digikey	160-1706-ND
	2	LED, yellow. diffused	T-1 3/4, 50 deg viewing angle	D7, D8	Digikey	160-1703-ND
	1	Connector, pc mount	DIN, 8 pin, female, ra PCB mount	J7	Digikey	CP2280-ND
	4	Transistor	NPN, ss, 2N3904, TO-92	Q1, Q4, Q5, Q6	Digikey	2N3904FS-ND
	2	Transistor	PNP, ss, 2N3906, TO-92	Q2, Q3	Digikey	2N3906FS-ND
	2	Resistor, carbon film, 1/6W, 5%	27 ohm	R1, R2	Digikey	27EBK-ND
	1	Resistor, carbon film, 1/6W, 5%	47 ohm	R11	Digikey	47EBK-ND
	3	Resistor, carbon film, 1/6W, 5%	10 ohm	R12, R25, R38	Digikey	10EBK-ND
	2	Resistor, carbon film, 1/6W, 5%	110 ohm	R13, R39	Digikey	110EBK-ND
	2	Resistor, carbon film, 1/6W, 5%	300 ohm	R14, R19	Digikey	300EBK-ND
	3	Resistor, carbon film, 1/6W, 5%	10K ohm	R15, R29, R34	Digikey	10KEBK-ND
	1	Resistor, carbon film, 1/6W, 5%	3.3K ohm	R2	Digikey	3.3KEBK-ND
	1	Resistor, carbon film, 1/6W, 5%	33K ohm	R21	Digikey	33KEBK-ND
	1	Resistor, carbon film, 1/6W, 5%	100 ohm	R22	Digikey	100EBK-ND
	1	Resistor, carbon film, 1/6W, 5%	560 ohm	R23	Digikey	560EBK-ND
	1	Resistor, carbon film, 1/6W, 5%	6.2 ohm	R24	Digikey	6.2EBK-ND
	1	Resistor, carbon film, 1/6W, 5%	2.2K ohm	R28	Digikey	2.2KEBK-ND
	1	Resistor, carbon film, 1/6W, 5%	1.5K ohm	R3	Digikey	1.5KEBK-ND
	1	Resistor, carbon film, 1/6W, 5%	100K ohm	R32	Digikey	100KEBK-ND
	1	Resistor, carbon film, 1/6W, 5%	1.0K ohm	R33	Digikey	1.0KEBK-ND
	2	Resistor, carbon film, 1/6W, 5%	470 ohm	R4, R10	Digikey	470EBK-ND
	2	Resistor, carbon film, 1/6W, 5%	270 ohm	R5, R6	Digikey	270EBK-ND
	6	Resistor, carbon film, 1/6W, 5%	4.3K ohm	R7, R8, R9, R16, R35, R40	Digikey	4.3KEBK-ND
	1	Trimpot	cermet, 12 turn, top adjust, 10K	R26	Digikey	490-2970-ND
	1	Trimpot	cermet, 12 turn, top adjust, 1K	R27	Digikey	490-2969-ND
	2	Optoisolator	4N33, 6-pin DIP	U2, U3	Digikey	4N33-ND
	1	DC-DC converter, surface mount	MAX253, SOIC	U6	Digikey	MAX253ESA+-ND
	1	Memory	93C46, SSOP	U7	Digikey	AT93C46A-10TU-2.7-ND
	1	Crystal	Resonator, ceramic	X1	Digikey	490-1222-ND
	1	Connector, pc mount	USB, Type B, PC mount, RA	J1	Mouser	571-787780-1
	5	Connector, pc mount	1/8 phone, ra	J2, J3, J4, J5, J6	Mouser	161-3508
	1	Transformer	Converter, MAX253	T1	Mouser	580-7825355VC
	2	Transformer	Audio, 600:600 ohm, miniature	T2, T3	Mouser	42TL016
	1	USB-serial converter	FT-232-BL, LQFP-32	U1	Mouser	895-FT232BL
	2	SS relay	7141-1A, 6-pin DIP	U4, U5	Mouser	551-PS7141E-1A-A
	1	Inductor	ferrite bead			

	Qty	Title	Detail	Ref(m)	Vendor	Vend-P/N
Standard cables						
	1 ea	Cable, USB Type A / Type B, 6 ft				
	3 ea	Cable, stereo audio, 1/8 phone to 1/8 phone, 6 ft				
Custom cable						
	1	Connector, cable	DIN, 13 pin, male		Digikey	CP1013-ND
	1	Connector, cable	DIN, 8 pin, male		Digikey	CP2080-ND
	6 ft	Cable	22 ga, 8 conductor, PVC, black			
	3 in	Heatshrink tube	1/16 in			
	4 in	Heatshrink tube	5/16 in			
Enclosure						
	1	Enclosure	ABS, Black, 4.38 x 3.25 x 1.41		Digikey	SR032B-ND
	4	Screw	machine, M3 x 5 mm		Digikey	H742-ND
	4	Washer, flat	Nylon, .140 x .250		Digikey	3133K-ND