

DCC Optimized Detector Parts List (Rev. E)
(In recommended order of assembly)

Qty.	Symbol	Description
2	R1,R2	1.0K Ω resistors [brown-black-red]
1	R3	220K Ω resistor [red-red-yellow]
3	R4-R6	100K Ω resistors [brown-black-yellow]
1	R7	10K Ω resistor [brown-black-orange]
1	R8	3.3M Ω resistor [orange-orange-green]
2	R9,R10	1.0K Ω resistors [brown-black-red]
2	R11,R12	10K Ω resistors [brown-black-orange]
1	R13	1.0M Ω resistor [brown-black-green]
1	D1	Fast Schottky barrier rectifier (Mouser 625-SD103C)
1	D2	1A, 100V diode (Mouser 625-1N4002 or Jameco 76961)
1	D3	1A, 100V high speed diode (Mouser 625-1N4934-ER)
1	S1	14-pin DIP socket (Jameco 112213)
1	S2	5-pin Waldom side entry connector (Mouser 538-09-52-3051)
1	C1	.01 μ F monolithic capacitor (Jameco 332646)
3	C3-C5	1.0 μ F, 35V tantalum capacitors (Jameco 33662)
1	P1	10K Ω potentiometer (Jameco 94714)
1	Q1	2N4401 small signal transistor (Jameco 38421)
1	L1	Red diffused size T1 LED (Jameco 333850)
1	U1	LM324N quad op amp (Jameco 23683)
1	W1	No. 22 solid insulated hook up wire or equivalent (see text), cut as required (JDR WJW22R with .045-inch insulation OD gives you 6-turn capability)
1	PT1	Current-sensing pulse-transformer (JLC PT1)

Author's recommendations for suppliers given in parentheses above with part numbers where applicable. Equivalent parts may be substituted. Resistors are 1/4W, 5 percent with color codes given in brackets. Note: C2 is not used with DCCOD Rev. E.