

# Quad Occupancy Detector Circuit Board

Circuit board is RoHS compliant. Using RoHS-compliant (non-lead) solder and components will result in a finished board that is also RoHS compliant. If maintaining RoHS-compliance is not important to you, you may use solder containing lead or components that are not RoHS-compliant.

Assembly and installation instructions can be found on our website at:

<http://circuits4tracks.daxack.ca/php/productdocs.php?id=6>

## Part List

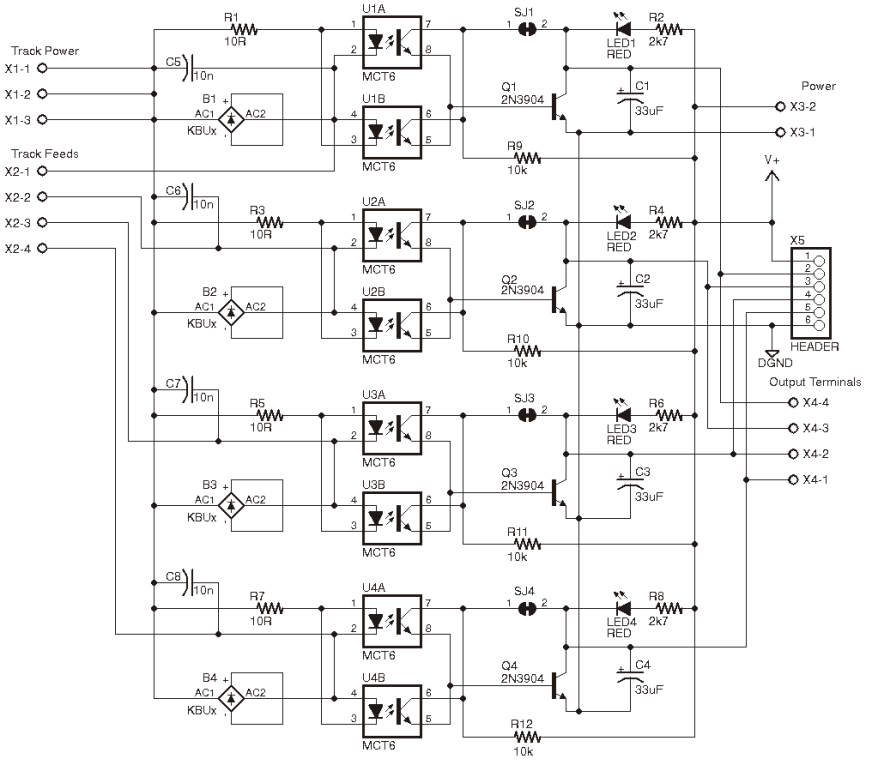
Part Number	Description	Digi-Key Number
B1 - B4 standard: high-current:	RS402L bridge rectifiers KBU8G or KBU800 bridge rectifiers	RS402BPMS-ND KBU8GGN-ND
Q1 - Q4	2N3904 NPN transistors	2N3904FS-ND
R1, R3, R5, R7	10 ohm, 1/4 watt resistors	CF14JT10R0CT-ND
R2, R4, R6, R8	2700 ohm, 1/4 watt resistors	CF14JT2K70CT-ND
U1 - U4	MCT6 opto-coupler	MCT6-ND
C1 - C4	33 $\mu$ F, 35 volt electrolytic capacitors *	565-1569-ND
LED1 - LED4	3mm indicator LEDs	25-1182-ND
X1, X3	2-position screw terminals	A97996-ND
X2, X4	4-position screw terminals <i>Two 2-position screw terminal blocks may be used</i>	A97998-ND
X5	6-pin SIP header †	ED7206-ND

\* Lower voltage capacitor may be used if driving a lower voltage circuit

† SIP headers with more pins may be cut to size, and are often more economical

Circuits4Tracks can supply individual parts where needed. Send an email to [circuits@daxack.ca](mailto:circuits@daxack.ca) for information.

# Circuit Schematic



*This document is available in PDF format on our website.*