

Dual Occupancy Detector Add-on Kit Assembly Notes

The Dual Occupancy Detector Add-on Kit is designed to be used with a Quad Occupancy Detector Board & Parts Kit to build TWO Dual Occupancy Detector units.

The Add-on Kit includes the following:

- 1 printed circuit board
- 1 6-pin header connector
- 2 2-terminal blocks

Separate Components For Each Unit

Most components included in the Quad Occupancy Detector Board & Parts Kit must be divided into two sets of components, with the Add-on Kit components.

The first step is to separate the 4-terminal blocks (X2 and X4) into pairs of 2-terminal blocks. To do this, when looking at the front of the terminal block (where wires are inserted), slide the left half up relative to the right half.

This will provide four 2-terminal blocks and when combined with the two in the Board & Parts Kit and the two in the Add-on Kit, you will have a total of eight 2-terminal blocks.

Separate the components for the two dual detectors:

Circuit boards:	One for each detector.
Resistors R1,3,5,7 (10 Ω):	Two for each detector to be used as R1 and R3.
Resistors R2,4,6,8 (2.7k Ω):	Two for each detector to be used as R2 and R4.
Opto-couplers U1-4 (MCT6):	Two for each detector to be used as U1 and U2.
LEDs LED1-4:	Two for each detector to be used as LED1 and LED2.
Transistors Q1-4 (2N3904):	Two for each detector to be used as Q1 and Q2.
SIP Headers (6-pin):	One for each detector as X5.
2-terminal blocks:	Four for each detector to be used as X1, X2, X3, and X4.
Capacitors C1-4 (33 μ F/25V):	Two for each detector to be used as C1 and C2.
Bridge Rectifiers B1-4:	Two for each detector to be used as B1 and B2.

Assembly

Follow the assembly instructions that are included with the Board & Parts Kit, keeping in mind that all the components that come in sets of four will be installed in sets of two on each circuit board.

The 6-pin header for each is installed as X5 as per the instructions.

A pair of 2-terminal blocks are installed as X1 and X3 as per the assembly instructions.

One 2-terminal block is installed as X2 aligning each terminal with the labeling **BL1** and **BL2**. Refer to Figure 1. X2 should be oriented so that the insertion openings face the edge of the board.

The remaining 2-terminal block is installed as X4 aligning each terminal with the labeling **O1** and **O2**. Refer to Figure 1. X4 should be oriented so that the insertion openings face the edge of the board.

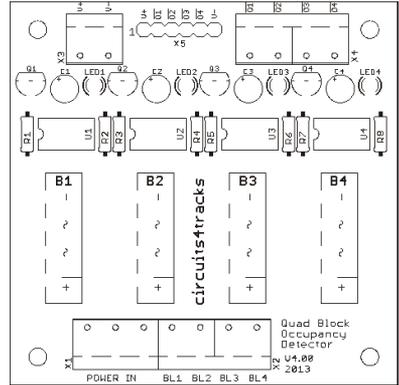


Figure 1

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