MitchElectronics Ltd.

HI LOW ALARM

Electronic Kit | Data Sheet

PRODUCT IMAGE	SCAN FOR INSTRUCTIONS PAGE	SCAN FOR RESOURCE PAGE
		

MANUFACTURER	MitchElectronics
COUNTRY OF ORIGIN	United Kingdom
ROHS / REACH COMPLIANT	Yes
PRODUCT DESCRIPTION	The Hi-Low Alarm is a DIY electronics kit that sounds a beeper when the input voltage to the circuit has become either too small or too large. The use of two onboard potentiometers allows for setting the detection voltages, and a third potentiometer allows for changing the rate of the beeper. At the same time, two outputs are provided (indicating a high or low alarm), and these can be connected to other external circuits such a relays and microcontrollers. This kit is powered by a separate 5V supply, and this can be provided with the use of either the Simple Power Supply kit or the Simple Power Module SMD Trainer. The voltage being monitored is provided separately to the power supply, and this input has a 100Ω series protection resistor to protect against sudden current spikes.

PRODUCT SPECIFICATION:

- Component Count: 26
- Battery Powered: No
- Operating Voltage: 5V
- Operating Frequency: N/A
- Dimensions (PCB): 81mm x 35mm
- Mounting Holes: 4 x M4 (73mm x 27mm)
- Prebuilt: No – Kit form
- Batteries Not Included

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PARTS INCLUDED:

- 1 x 8 DIP Socket
- 1 x 14 DIP Socket
- 1 x LM358
- 1 x 4093
- 2 x 100Ω Resistor
- 4 x 1KΩ Resistor
- 2 x 10KΩ Resistor
- 1 x 100KΩ Resistor
- 3 x 10KΩ Potentiometer
- 2 x 100nF Capacitor
- 1 x 100µF Capacitor
- 2 x Red LED
- 1 x 1N5817
- 3 x 2N3904
- 1 x Buzzer
- 1 x Red Wire
- 1 x Green Wire
- 2 x Black Wire

APPLICATIONS

This kit is excellent for those who need an alarm that monitors a sensor, voltage, or even a current (with the use of a current-to-voltage converter). For example, this kit can be used to detect if a door has been left open, the current level of fluid in a tank, or the position of a potentiometer (such as a control knob). This is also ideal for those who want to learn about voltage detectors, comparators, and logic circuits that convert analogue signals into digital signals. Finally, the Hi-Low Alarm is great for those learning electronics and those who want to get some soldering practice.

KIT INSTRUCTIONS

https://mitchelectronics.co.uk/resources/hi-low-alarm-kit-instructions/

ELECTRONICS CONSTRUCTION MANUAL

https://www.mitchelectronics.co.uk/documents/electronicsConstructionManual.pdf

NOTES

Note that product specifics such as output frequency depend on the tolerance of the components. The numbers provided here are an approximation only. Also take note that the estimated delivery is not guaranteed (unless special delivery is chosen) and free delivery has a maximum waiting time of two weeks. Any product that is returned which is built using lead solder is ineligible for a refund.

All parts sold by MitchElectronics are compliant with RoHS and REACH directives which ensure that they can be used in commercial environments as well as complying with environmental laws.