

# LIGHT SENSE

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	<p>Testing circuits can be done with multi-meters and oscilloscopes but this is not always the best method. For example, not everyone has access to an oscilloscope and multi-meters are no good for fast-changing signals. Another reason is the ease of use, testing a circuit with an oscilloscope can be tricky as you need to probe the contact and then turn away to look at the display. All it takes is for the probe to slip slightly and then the oscilloscope will be showing the signal trace for a completely different connection.</p> <p>This is where the faithful logic probe saves the day! Instead of having numbers to show voltages or a display to show signals over time the logic probe has just three LEDs for outputs. These outputs can show on, off, floating, and oscillating! So long as the probe has a common ground to the circuit under test (which can be done easily by either using the same power supply or connecting the probes GND-REF to the circuit's ground), the probe will display one of the four listed conditions above when the probe contact is connected to a point in the circuit. But how does this probe work? Get this kit and find out!</p>

## PRODUCT SPECIFICATION:

- Component Count: 17
- Battery Powered?: No
- Operating Voltage: 3V to 16V
- Operating Frequency: N/A
- Dimensions (PCB): 72mm x 15mm
- Prebuilt: No – Kit form
- Batteries Not Included

## PARTS INCLUDED:

- 1 x 14 DIP Socket
- 1 x 4001
- 2 x 100nF Capacitor
- 3 x 1K Resistors
- 1 x 2M2 Resistor
- 1 x 4M7 Resistor
- 1 x Green LED
- 1 x Yellow LED
- 1 x Red LED
- 1 x Pogo Pin
- 1 x Red Wire
- 2 x Black Wire
- 1 x PCB

## APPLICATIONS

The Logic Probe is an ideal project for those who are building their own low-cost functional equipment while also providing a project. The use of a spring-loaded pogo pin makes the Logic Probe suitable for testing sensitive equipment while providing a secure probe connection between the circuit under test and the probe itself. The Logic Probe can be built in 30 minutes making it ideal for use in the classroom, and the in-depth documentation enable learners to understand how the logic probe works as well as how to construct it.

## KIT INSTRUCTIONS

<https://mitchelectronics.co.uk/resources/logic-probe-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.