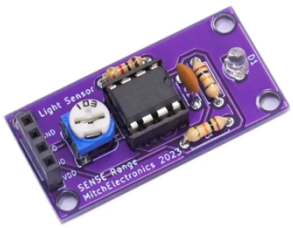
MitchElectronics Ltd.

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	The Light Sense is a self-build DIY electronics kit that includes everything needed to detect ambient light. Powered from voltages between 3V and 12V, the Light Sense has two outputs; one digital and one analogue. The digital output is connected to the output of the onboard comparator that produces either a logical 1 or 0 depending on the presence of light, and the Light Sense potentiometer is used to determine the sensitivity of the sensor. The analogue output is a voltage that is proportional to the amount of light falling onto the sensor, and this can be useful for measuring ambient light levels. While the board comes with components suitable for most applications, it is perfectly possible to change the components to adjust its operation. For example, changing the size of the sensor series resistor can increase the sensitivity of the sensor.

PRODUCT SPECIFICATION:

- Component Count: 9
- Operating Voltage: 3V to 12V
- Output Voltage (Digital): VCC – 1.7V
- Operating Frequency: N/A
- Dimensions (PCB): 40mm x 20mm
- Mounting Holes: Yes
- Prebuilt: No – Kit form
- Batteries Not Included

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PARTS INCLUDED:

- 1 x LM358
- 1 x 8 DIP Socket
- 1 x Light Sensor
- 1 x 1KΩ Resistor
- 2 x 10KΩ Resistor
- 1 x 100nF Capacitor
- 1 x 10KΩ Potentiometer
- 1 x 4-Way Socket

APPLICATIONS

The Light Sense is excellent for applications that need to detect ambient light levels, and react accordingly. For example, automatic lights that turn on at night can use this kit to detect outdoor ambient light levels, and the onboard potentiometer can be used to present the trigger point. A more advanced use of this kit would be a backlight control for displays. The analogue output of this kit can be used to read the ambient light level and set the backlight level of a display so that the display maintains the same relative brightness.

KIT INSTRUCTIONS

https://mitchelectronics.co.uk/resources/light-sense-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.