

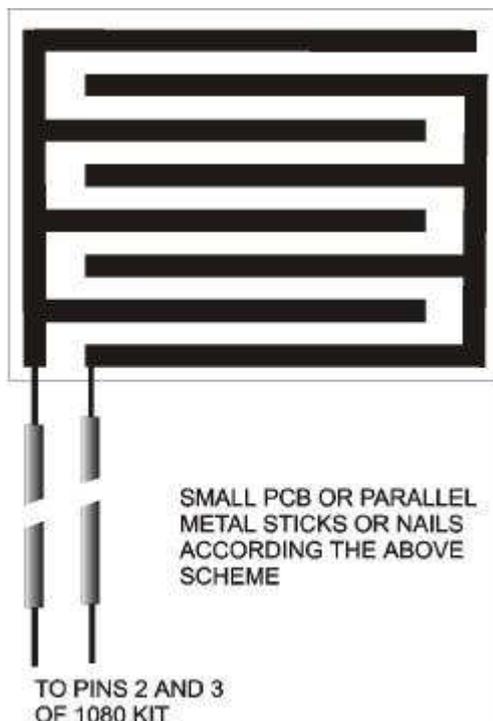
Kit No 1080 Application Notes

Kit No 1080 is a water level sensor circuit.

This is a very simple circuit for level controlling but it has no maximum and minimum capabilities. So when the water drops down the first sensor (pin 2) the relay goes ON, the pump is running and stops after a few seconds when the water level reaches the upper probe. This means that the circuit works well for fluid level control. When you want to keep the water level at a certain point of a tank you can use this circuit.

It can also be used as a simple rain detector if you make a small “PCB sensor” with parallel lines in 1mm distance between them, connect it with a cable with the kit at pins 2 and 3 and put it horizontally outdoors. In this situation you **must connect the pin 2 or 3 with 4 (ground)**. When the first raindrops fall on the small “PCB sensor” the circuit will be activate. We have not tested it with rain transducers. The small “PCB sensor” will be like the simple drawing below.

When a raindrop falls on it, it will short-circuit the two sequential lines and the relay will be activated.



KIT 1081

But what if you want to empty your tank when the water on it goes up to a preset point?

Kit 1080 is a simple level “supervisor” with no minimum and maximum capabilities. For more sophisticated liquid level control look at kit 1081 as this has greater capabilities. This circuit has minimum and maximum settings and can control several liquids. It has a special IC for this purpose (National Semiconductors’ LM1830).

This circuit can control the level in a better way than 1080. You put a “ground” probe in the bottom of the tank, a “minimum” probe near the bottom at the lower level you require and a third “maximum” probe at upper point you want.

On powering the circuit the relay activates and closes the pins 4 and 5. Now suppose that the tank is empty, fluid will fill the tank. When it reaches the lower probe the state of the circuit will not change. The situation will change ONLY when the water level reaches the upper probe. Now the relay deactivates and closes the pins 4 and 5. You can start your pump. Now you can decide at which points you must put the sensors (up and down). The pump works between the two probes.

Using this setup you can start your pump and the water level will goes down. When the level reaches the lower probe the state will be changed and the pump will stop. This procedure will repeat when the water level goes up.

Ordering

For pricing info and online ordering please visit:

<http://www.quasarelectronics.com/1080.htm>

For further info please contact us by e-mail:

[mailto: sales@QuasarElectronics.com](mailto:sales@QuasarElectronics.com)

COPYRIGHT © 2003 Quasar Electronics Limited. All rights reserved.
Reproduction of this document in whole or in part in any form or medium without express written permission of Quasar Electronics Limited is prohibited.

E&OE