How to make your own Tilt Sensor

This describes how to make a simple tilt sensor that detects whether an object is vertical or horizontal.

When the bottle is tilted the water completes the circuit between the two pins, giving a reading to the scratch sensor board.

*Note:* As an faster alternative to glue, wide rubber bands can be used to create a temporary seal. Wrap bands round the bottle and push pins through them.

**Ingredients:** 2 pins, small bottle, PVA glue (or two rubber bands), salt water

**Step 1:** Push pins into the plastic bottle (heating the pins may make this easier).

**Step 2:** Seal the holes with glue so they don’t leak, and leave to dry.

**Step 3:** Half fill with salt water. (Salt water is much more conductive, than ordinary water).

**Step 4:** Connect your new tilt sensor to the Scratch Sensor Board using crocodile clips.

**Safety:** Please note that you use these resources at your own risk. Correct use of some components requires care.