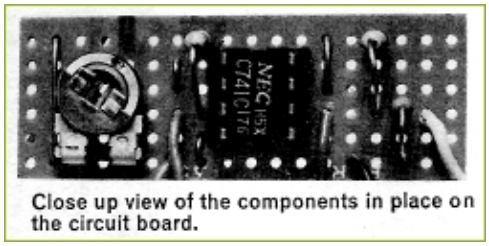
Soil Moisture Meter

Published in Everyday Electronics, November 1980

This was a simple little project, remembering that I got the same page rate from the publishers (IPC Magazines) regardless of the circuit's complexity. It comprised of two brass rods that were prodded into a pot plant to see whether the soil needed watering.

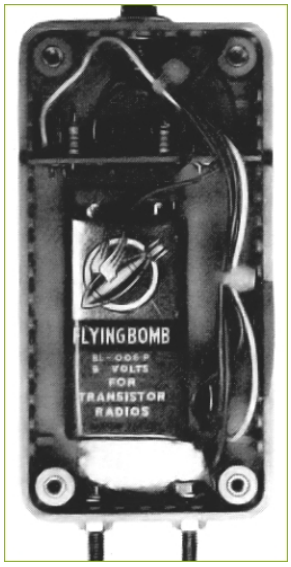
"Moisture Meter" was maybe a misnomer because it gave a meagre red or green lamp indication of soil resistance and nothing else. However it demonstrated that an op.amp 'output' could actually sink current into it as well and make an LED glow.

I first had the idea of using threaded brass rod as a water level probe for my simple **Water Level Alert** project of Dec. 78. The threaded stud was all I could come up with at the time because raw materials weren't readily available in the hobby electronics marketplace, but Maplin sold threaded rod for electronics use. Today I'd get some stainless steel or aluminium round bar off ebay and thread it at one end only, to bolt it down. EE painted the brass rods with typists correction fluid on to make them show up better in the photo.



Close up view of the components in place on the circuit board.

As I recall it was built into an orange BIMbox and (of course!) I used a couple of coloured lens-clips for the LEDs, and a single-pole pushbutton which I recall came from Maplin, a larger version of the cheap pushbuttons seen everywhere else. EE used Letraset on it as usual.



There's not much else to say really – except that I wondered if the Publisher's choice of 9V battery ("Flying Bomb") was a tongue-in-cheek message reflecting the quality of my work….

Unfortunately my example was scrapped or robbed for bits long ago. You can download the article itself from www.alanwinstanley.com

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