



## BATTERY TESTER

Testing a battery with a voltmeter isn't a particularly good test, since the battery voltage can still be quite high if no load current is being drawn. This circuit tests 1.5V batteries by draining about 400mA in the *Low* position and about 800mA in the *High* position.

Since a red LED requires about 1.6V to operate, C1 is switched as a voltage doubler. To adjust VR1, it's easiest to have one good cell and one that's run down but not completely dead. Test the good cell to confirm circuit operation, then test the run-down cell while adjusting VR1 until the LED just fails to flash. It may need some tinkering until you get reliable operation; since the LED does not switch sharply, some interpretation is needed — you'll find that the LED stays on over a fairly large adjustment of VR1.