

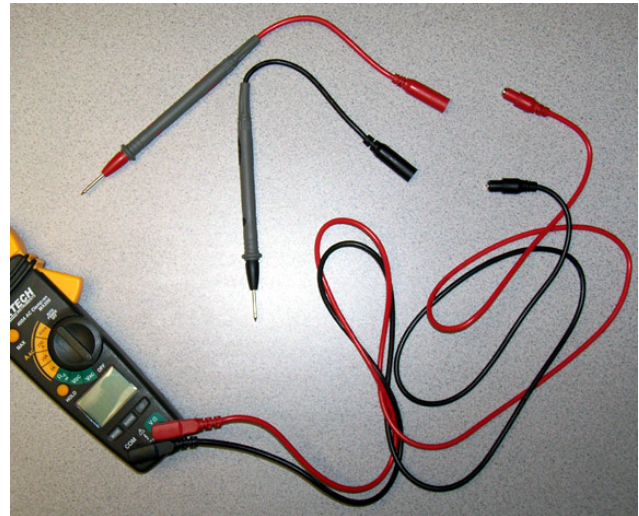
Magnetic Personality Test Leads

TR July TIP-of-the-Month

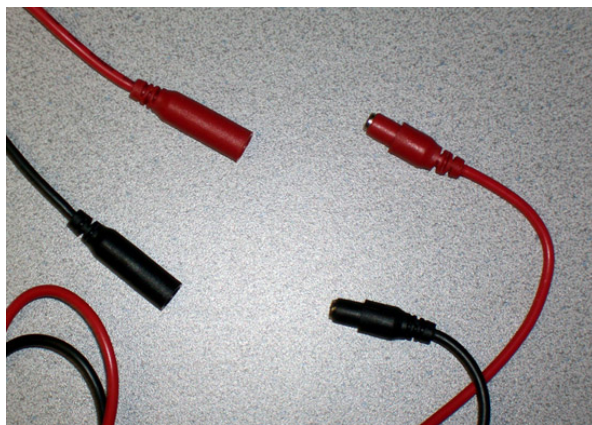
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This month's TIP is a quick review about a great new gadget you can use with any type of multi-meter (or other device that uses fairly standard test leads) to make your work one notch less frustrating. The "gadget" is a new set of test leads that incorporate a magnetic tip on each end. This is used to quick-connect to different types of lead end adaptors (probe tips, alligator clips, etc.). But the biggest advantage is that fact that the magnetic tip will stick to any "ferromagnetic" material...like screw terminals!

When was the last time you were up on a ladder and trying to measure the voltage or continuity of a security sensor, speaker wiring, or other gadget and you literally needed three hands: one for each test lead and one to hold the meter. Well, for me it was last month and these test leads made my life way less frustrating (otherwise I would have had to have someone else hold the meter)! I just "snapped" the magnetic end of each lead to one of



the nickel plated steel screw terminals of the PIR sensor and had both hands free to fiddle with the meter and the sensor. Ya gotta love it.



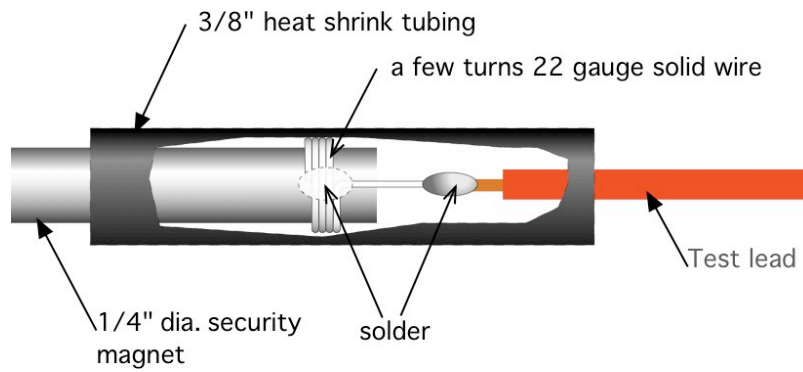
The photo at left shows the magnets in the ends of the test leads. The "tips" have a "female" end that also includes a magnet so they stick together securely (they need to make a very good electrical contact). The test leads will also stick to pipes (for a ground), screws, speaker terminals, tools (to allow the tool to be a test lead), chassis, racks, car bumpers, and other test leads. Cool.

The leads are distributed by BES Manufacturing. They have distribution rights for the "CEDIA" industry. BES's Bill Bergman says they should be available by CEDIA EXPO. Stop by his booth to try them out and get price/delivery details.

Build Your Own

If you can't wait till EXPO, you should be able to build a set of these by using a couple of small magnets out of a standard door or window security sensor—the magnet part that goes in the door or window. Take a pair of existing test leads, cut off the ends, strip back about ½ " of insulation, then attach to the magnet. You won't be able to solder to the mag-

This tip is also available at <http://hometoys.com>



net (even if you could, it would wipe out the magnetic field from the metal), so you could attach as shown in the diagram. There are probably other, better ways to do this, but this is what came to mind quickly. Tightly wrap a few turns of, say, 22 gauge solid wire around the magnet, leaving about 1" free. Solder them together so they won't come off. Now solder the

test lead to this wire. Then cover the connections and all but about $\frac{1}{8}$ inch of the magnet with heat shrink tubing (just big enough to go over the magnet). This should last you till you can get the real thing.

If you have any questions/suggestions about anything in the TIP (or past TIPs), drop me an e-mail at grayson@trainingdept.com

NEXT MONTH

More new tips on tone generators, plus some network installation tips.

Catch you next month....Grayson