

Electronic Tool Tip #9 – Multifunction Cable Tester



Every now and then, I come across an idea that is so good that I wish that it had been my idea in the first place. In this case, I had been looking to build just such a tester as the one discussed here, but I realized that I could not do the job nearly as well as the manufacturer of this device did it without breaking the bank on the project.

I was looking to build a cable tester that could test multiple configurations of cables, regardless of what connector types were on the opposite ends of the cable. In other words, I wanted to be able to test a cable that had, for example, a 6.35mm TRS plug on one end and an XLR connector on the other, or maybe, a 3.5mm TRS plug on one end and a 6.35mm TRS plug on the other end. Whatever the arrangement, I wanted it to be seamless, and to test and report on a wire-by-wire basis when I had

continuity and if I had wire-to-wire shorts or wire-to-shell shorts. While this tool does not test *all* possible cable types, it does test enough of them to merit a place on my workbench. It is much easier and quicker to test with this tool than with an ohmmeter or continuity tester.

The *CT-20 Cable Tester* from MFL does an amazing job for the cost of the unit. It has the ability to test cables having connectors including 3.5mm TRS, 6.35mm TRS, 3-pin XLR, 5-pin XLR, RCA, 3-pin DIN, 5-pin DIN, 7-pin DIN, 8-pin DIN, mini 4-pin DIN (S-video), 4-pin Speakon, powerCON, RJ-45, HDMI, USB-A, USB-B, micro-USB, and/or banana plugs, in any combination of connectors on a given cable. The unit is powered by a single 9V “transistor radio” snap-top battery. A battery test function is available on the front panel via the main rotary control.

That rotary control on the front panel steps through each wire of a given cable, indicating continuity by an illuminated LED. Additional LED’s lit indicate a short to that wire or to GND (shell). Pins 11 through 20 of an HDMI cable are tested by use of a momentary switch that is held down while stepping through those pins, after the first ten pins have been tested. A chart on the back panel of the tester shows the wire connections for the various plug types.

Sure... the device has its limitations. For example, it does not test USB-C or some of the other USB appliance connector variations. I am currently looking for an easy way to add some of those connector types to the unit, but no promises yet on that score. But... for what the unit cost to purchase, it does a creditable and convincing job on the cables that it will test.

This tester is available online from Amazon, at a price of \$60.99 (USD) plus shipping if you are not an Amazon Prime member. Of course, the governor has to get his share, so tax will also be applied.

Go to <https://www.amazon.com/gp/product/B0972J2ZR9> to investigate this item for yourself. *NOTE:* At the time that this was written, Amazon shows “out of stock” on this item, but I imagine that they will be getting it back into their inventory. Meanwhile, AliExpress also offers this item, if you don’t mind doing business with them. I have had pretty good luck the few times that I bought from AliExpress, so I am not opposed to buying from them again. Just Google “*CT-20 cable tester*” and it should come up.