



Digital Multimeter - Basic

TOL-12966 ROHS ✓

★ ★ ★ ★ ☆ 18

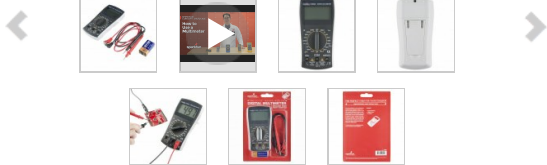
DESCRIPTION

INCLUDES

FEATURES

DOCUMENTS

- DC Voltage - 200mV/2V/20V/200V/600V
- AC Voltage - 200V/600V
- DC Current - 200uA/20mA/200mA/10A
- Resistance - 0 to 20M Ohm
- Continuity Buzzer
- Diode Test
- Max Display: 1999
- **Not Yellow!**



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Digital Multimeter - Basic Product Help and Resources

TUTORIALS

VIDEOS

SUPPORT TIPS

SKILLS NEEDED



How to Use a Multimeter

JANUARY 9, 2015

Learn the basics of using a multimeter to measure continuity, voltage, resistance and current.

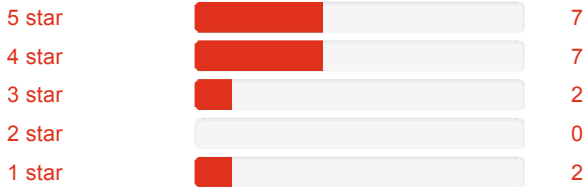
COMMENTS 36

REVIEWS ★ ★ ★ ★ ☆ 18

Customer Reviews

★★★★★☆☆ 3.9 out of 5

Based on 18 ratings:



Currently viewing all customer reviews.

1 of 1 found this helpful:

★★★★★ Good value, simple multimeter

about 3 years ago by **Member #147110** ✓ verified purchaser

Good entry multimeter with basic functions. Great value, slick design. Everything you need for basic usage.

1 of 1 found this helpful:

★★★★★☆☆ Not a Fluke, but not a fluke either!

about 3 years ago by **CompuCat** ✓ verified purchaser

This meter has its shortcomings, but it's quite good for the price.

The soldering is excellent, there's decent (but not excellent) input protection, a loud continuity buzzer, and all the basic features a student or basic hobbyist would need.

A couple of things I found a bit irritating:

- Most probes have fully shrouded plugs; these have half-shrouded plugs. If I wanted to replace these with higher quality probes, such as Fluke probes, they wouldn't fit. (Also, the probes are shrouded for a reason!)
- The range switch is quite nice, but it's impossible to turn one-handed due to the meter's light weight and lack of rubber feet. Even on the stand (which is a bit narrow, but okay), it's hard to turn.
- I'm no expert, but I'm not quite sure if this really meets CAT III input protection specs. The only input protection seems to be a couple of PTCs and glass fuses-better than some other meters, but still not the best. (At least it isn't as bad as the UNI-T meter with a screw hole right through the supposedly 10A GND trace-check out the EEVBlog on that one!)
- The continuity buzzer is loud, but takes a second to beep after touching the probes together. It's relatively easy to make it miss a quick tap of the probes. An intermittent connection could be missed.
- The 1 megohm input impedance is okay for small resistances, but can make measurements inaccurate for larger measurements. You might have to do a little math to extrapolate the actual value of the part being measured knowing that it's effectively being placed in parallel with a 1 megohm resistor. Trying to measure a 1 megohm resistor with this meter will result in a highly inaccurate 0.5 megohms reading.
- 2000 counts only: while this is good for a basic meter, it shows its shortcomings when you try to measure certain voltages, etc. For example, the ARVBLog (not EEVBLog) on YouTube reviewed this meter and showed this when attempting to measure a precision 2.048V reference voltage.

Praise:

- When you turn it on, it just works. No splash screens, no bootup time. It. Just. Works.
- It's small, compact, and still easily readable and usable.
- I can't confirm this for myself, but the ARVBLog showed that it's pretty accurate in real-world tests.
- This thing might get a little scratched up, but it doesn't seem easily damageable.
- Again, the soldering and construction is excellent, apart from the plastic screen cover (which can be easily pushed in at the center).
- The input jacks are proper metal cylinders and soldered all the way around into the PCB. Some other meters get away with flimsy split-tubes that fall apart easily.

It's not flashy, but it does the job. For the price, it's quite an excellent little meter and definitely a good pick for a student's first meter. Sure, a Extech or a Fluke 17B would be nice to start with, but this'll do the job for most work. Besides, when you upgrade, this'll serve as a handy backup.

★★★★★☆☆ good for the price

about 3 years ago by **Sn0MaN** ✓ verified purchaser

Pretty straight forward Does what I need it to...

about 3 years ago by **Member #659092** ✓ verified purchaser

this is not the first multimeter that i have ever used, but it is the first that i have had the chance to call my own

i bought it along with some beginners parts and an arduino to start playing with electronics

i read the ridiculous story about the yellow meters and feel like i was lured in with sympathy or something... but at i wasn't expecting much, except for it to work

im not sure if the included leads are supposed to have the metal rods with the points come out of the plastic housing but i suspect that is why i hardly get a reading. i can set the meter to continuity and touch the two probes together and get no sound or sound that will start and stop. it seems to help if i push the metal rods deeper into the housing but needless to say i cant always do this when trying to measure resistors or other components.

perhaps i need to buy better leads but for now i have to say its really not even worth the i spent on it. i cant even measure a 330 ohm resistor and find out what value it is because the connection seems to be so poor

edit (6/4/2015)

after seeing my review I was contacted by sparkfun and they sent me a set of the needle tipped probes from their website. they do seem to work better, however as the member above me pointed out they do not seem to fit correctly in the actual multimeter. because it does work a little better now I will upgrade it to 3 stars, but my honest opinion is to just spend the \$\$ to get a nice multimeter up front. im going to end up doing that anyways. to each his own. A+ on the customer service from spark fun though.

★★★★★☆☆ Solid multimeter.

about 3 years ago by **Member #483202** ✓ verified purchaser

It's cheap, but it works. It takes a second or two before it'll give you a reading. But it works and for the price it's great

★★★★★☆☆ Pretty good multimeter for pretty cheap

about 3 years ago by **Member #565915** ✓ verified purchaser

I've been using mostly the special from Harbor Freight for a while, and this is is definitely better. The feel of the knob used for settings feels like it's high quality and will last a long time. The plugs make a solid connection and don't feel like they are letting off of their firm hold even after trying to abuse it a bit.

Overall, for general use, this would probably fit most users needs as well as newcomers budgets.

★★★★★☆☆ Great multimeter

about 2 years ago by **Member #615422** ✓ verified purchaser

This multimeter is sturdy enough for most applications, very simple to use, and has decent accuracy for an entry-level multimeter.

★★★★☆☆ works fine, build quality is just ok

about 2 years ago by **Member #735257** ✓ verified purchaser

so the meter works just fine. my only problem is that the gray face plate can start to pop off during normal use and my unit had a small piece of plastic rattling around inside it when it was new. however for just using at your desk it is just fine, maybe not so good for a mobile tool box where a more rugged one would be preferable.

🔥 **Single T** replied on December 2, 2015:

One of our technicians will be in contact with you. Sorry for the issues, however, these are both quick and easy fixes that can be done with a small phillips-head screw driver.

★★★★★☆☆ Good Simple Meter

about 2 years ago by **raster** ✓ verified purchaser

Not the greatest meter ever made, but also not the most expensive meter ever made. Good enough for most tasks. This is one of the meters I recommend to my students getting started in electronics.

★★★★★ Exceeds expectations

about 2 years ago by **Member #810125** ✓ verified purchaser

Great product, not much to say about it besides it works exactly as advertised and has a great durability, plus easy to use.

★★★★★ **Very good multimeter for the price!**

about 2 years ago by **Member #768127** ✓ verified purchaser

Plug everything in and works right out of the box. Unfortunately, I blew out the 200mA fuse right away by measuring current I wrongly calculated. But the 10A worked perfectly fine for the 400mA I was measuring. Purchased a few 200mA fuses and replacement was easy. Volt meter works like a charm, and ohm meter measures to a T. Continuity worked fine, but I haven't used it long. Diode test is detailed to the thousandths of a volt.

★☆☆☆☆ **Simply doesn't work well**

about a year ago by **riedlse** ✓ verified purchaser

Intermittent errors on resistance scale, short leads together and sometimes you get 0 other times infinite or something else. Will contact support and try again, maybe the second one will work.

★★★★★ **It's a basic DMM.**

about 4 months ago by **BerenV** ✓ verified purchaser

This is a good basic multimeter for a fair price. The continuity setting works well enough, and it has a bunch of current and voltage ranges that seem to be pretty accurate. However, the other day when I turned it on, the two spring-loaded ball bearings that provide the indents in the dial rotation fell out and were lost. It still works, but now the dial turns smoothly, and you have to point the arrow exactly to the setting you want to use. I have used it quite a bit when my good one isn't handy, and although a bit cheaply made, I have blown several fuses, and it hasn't let me down.

edit: SFE sent me store credit to replace it, their phenomenal customer service is just another reason to buy stuff from them!

★★★★★

about 3 months ago by **Member #1256648** ✓ verified purchaser

Solid build, not too large, sturdy leads, big display. has everything but auto ranging. but it's only .

★★★★★☆☆ **Good product for the price**

about 3 years ago by **Member #621208** ✓ verified purchaser

I just use it for small electronics projects, and it's been good for that

★★★★★

about 2 months ago by **Member #1263608** ✓ verified purchaser

excelente producto

★☆☆☆☆ **It's junk**

about 3 years ago by **Member #16395** ✓ verified purchaser

This DMM kit is awful. DMM does not accept standard test leads, such as the tweezer test probes sold by SparkFun (the plug sockets on this DMM are too short to accept the insulation around regular leads). Also the center conductor on the negative test lead pulled right out because it wasn't bonded to the lead. Garbage.

👤 **Single T** replied on February 13, 2015:



I'm sorry to hear that you had problems. Please contact us and we'll be happy to help you with this issue. <https://www.sparkfun.com/returns>

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In 2003, CU student Nate Seidle blew a power supply in his dorm room and, in lieu of a way to order easy replacements, decided to start his own company. Since then, SparkFun has been committed to sustainably helping our world achieve electronics literacy from our headquarters in Boulder, Colorado.

No matter your vision, SparkFun's products and resources are designed to make the world of electronics more accessible. In addition to over 2,000 open source components and widgets, SparkFun offers curriculum, training and online tutorials designed to help demystify the wonderful world of embedded electronics. We're here to help you start something.

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