

Bake-o-meter Instructions

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HOW TO MAKE A BAKE-O-METER

Note: This is an inexpensive way to find "hot spots" in your environment. It can help you determine areas to avoid and areas that are safer by showing relative changes. It is not calibrated and not meant to be an accurate instrument but it will show relative changes.

Supplies needed:

1. 5 Ft Schedule 40 PVC pipe (available at any hardware store)
2. 1 ft sticky back velcro
3. 2 ft double sided velcro
4. 2, 24" clip leads, or 4, 12" clip leads
5. 2 aluminum baking pans or cookie sheets (grocery store)
6. 1 cheap volt meter (Radio Shack or online) ~ \$10
7. Tape measure
8. Paring knife
9. Wide tape (optional)
10. 2 shelf brackets and screws (optional)
11. Camera Tripod (optional)

Clip lead



Bake-o-Meter



ASSEMBLY

- First. Cut the sticky velcro into two sections. This will secure the double sided velcro and aluminum pans to the PVC.
- Second. Attach one section around the PVC pipe near the top. Measure down from the velcro one meter (~ 38 inches) and attach the other sticky velcro around the pipe.
- Third. Cut two slits in the side of the aluminum pan or cookie sheet and thread the double sided velcro through it from the outside to inside and out again.
- Fourth. Stick the free ends of the velcro coming out of the pan to the upper velcro that is wrapped around the pipe. This should hold the pan in a vertical position. Repeat for the lower pan. Depending on your location you will sometimes get larger readings if the pans are in a horizontal position.
- Fifth. It can be helpful to screw two shelf brackets onto the pipe to stabilize the pans in a horizontal position. Tape can also be used to attach the top of the pan to the pipe.
- Sixth. Attach one clip lead to the upper pan, and the other to the lower pan.
- Seventh. Attach free ends of the clip leads to the wires on the volt meter. The black volt meter wire (ground) should be attached to the lower pan.
- Eighth. Turn the voltmeter on and walk around your environment. You will see it jump when you are near wires or EM fields from dimmer switches, clock radios etc.
- Ninth. You may find it convenient to attach the Bake-0-Meter vertically resting on the ground to a camera tripod to leave it hands free if you want to note the voltages you read.
- Tenth. You can use this to identify "hot spots" to avoid, and safer spots in which to spend extended time such as reading or sleeping.
- Eleventh. The clip leads can also be hooked up to an oscilloscope or spectrum analyzer to look at wave forms and frequencies.