

# IOD40 Instructions for Ion, Electric Field, Lightning and Paranormal Disturbance and Distortion Detector 911



Remove rear cover via four screws and insert a fresh 9 volt alkaline battery. Note Velcro pieces for securing battery in case. Battery will last a very long time. Units also have a floating stereo jack that can be used for a chart recorder. Not shown on above.

## Explanation of Controls reference picture

1. ON/OFF and METER RESPONSE control...turns unit on and off and adjusts meter to activity level. Try and keep set for highest sensitivity or FCW.
2. DAMP switch sets the speed that the meter moves to changing electric phenomenon. Up position meter will respond faster and may be difficult to set in high electric activity
3. EXT OUT is a 3.5mm stereo jack and provides an ungrounded out to a 1000 ohm input for chart recorder, alarm, turn off control etc
4. LED lights with changing brightness in strong potential dangerous fields.
5. ANTENNA is pickup probe for the electrical energy. Extend for weak conditions and vice versa. In many cases you can adjust sensitivity by adjusting antenna height
6. METER gives the relative indication of electric field strength in uamps that moves the needle.
7. POLARITY switches the antenna from receiving positive or negative fields and is identified up position for + and vice versa
8. SENSITIVITY control may take getting used to as when used for real weak electric fields may be erratic until it settles down. There is also a certain amount of meter drift in this high sensitivity mode that is attributed to semi-conductor diode drift with temperature and circuitry drift to humidity. It is suggested to try and keep the meter setting at mid scale for good sensitivity. The circuit is built with high resistance parts to try and minimize this effect as much as possible.
9. REMOVABLE GROUNDING LEAD is for returning the charge potential to ground. It not needed if you are outside or on damp or cement floors, as these are conductive enough to virtually ground any currents accumulating on the metal enclosure by your hand contact. On the other hand if you are inside on wooden floors you will need to clip onto preferably a known grounded point such **as the ground pin of an AC receptacle**. You can use a large conductive object. Reading will be erratic and not make sense otherwise.

## Applications

Your ion/charge detector is a very, very sensitive electric field detection device. It can be used for relative measurement but is not designed for absolute measurement. Sensitivity can be in the pico amp when stabilized, or about 1uC/m.

For quick indications of the presence of a charge field the unit is hand-held and can be used to determine where the source is. The sensitivity of this device can be realized by the simple experiment using a plastic comb through one's hair and laying it near the probe antenna.

Those who are familiar with the metallic leaf electroscope will soon realize the advantage of portability and sensitivity. When used for indicating or testing the relative strength of charge/field sources, the unit should be hard wire grounded for best results. Now adjustments to known source to determine output may be made noting meter reading and then readjusting of the METER RESPONSE to bring meter reading on scale.

A very interesting phenomenon will be noted when using this device in detecting residual ion fields, shielding of ions, field direction, static charges, resultant polarity and intensity of static charges and a host of others. The unit is an invaluable tool determining the output of ion generators, air purifiers, and the presence of dangerous static electricity situations associated with lightning etc...

Many sources of charged particles soon become apparent when using the device. People's clothes, fluorescent lighting, plastic containers, certain winds, etc., will all indicate a charge.

Please note that the antenna probe on you unit is a telescoping antenna properly secured and electrically isolated.

It is important to remember that any type of leakage around the input of Q1 can reduce the sensitivity. The input to the unit must be switched by low leakage slider switches. The particular ones used have 5 to 10 gohm resistance. Unfortunately they will reduce performance in high humidity environments. Unit however is still very operational except performance at the super low sensitivity may be sluggish.

## **Use in Paranormal Research**

*It has been observed that certain paranormal activity is often accompanied by a changing electric field as the entity moves about. These changing fields are usually too weak to be detected by conventional detectors. The IOD40 has on several occasions detected unexplained fields in coincidence with other events. At the time of this writing a study is being done at several selected grave sites to see if weak fields can be detected and correlated with other unexplained events*

*When used for paranormal research detection of changing electric fields in area where floors are wood tile, rugs, it is suggested to place on a large metal object or connect to an earth ground such as the ground pin of AC receptacles. If you are standing on earth ground or other non insulated surfaces, simply holding the unit with your hand provides the necessary virtual grounding*

***A good starting setting of the controls for stationary detection is the following for all applications.***

- 1. Ground unit to an electrical socket plate screw or something metal as a pipe. If outside you may simply push a metal object such as a screw driver into the earth and connect the ground wire to the metal shaft.***
- 2. Extend antenna full length***
- 3. Turn meter response pot full cw***
- 4. Slide polarity switch to neg. Damp switch up.***
- 5. Try to preset the meter near mid range by careful adjustment of the sensitivity control. Note the setting may drift and take several attempts to reset it. If electrical activity is high you may set the damp switch down at the expense of detection response. The settings will be very sensitive to static charges and are easily demonstrated.***
- 6. Experiment with the polarity switch at positive and reset switches as above***