

Si Type Electronic Discriminator (SED-V) Manual

1. Power supply, using AC 220V, don't use when the voltage of the power is above 240V. (In some countries with the power AC 110V, you should use an adapter AC110V to AC220V.)
2. Connect the measuring wire to the Discriminator.
3. Make the power wire connected, switch on, seeing the switch LED on (If the switch LED is still off, maybe the plugs are not connecting well or the fuse in the fuse seat is broken, the fuse standard circuit is 1A). P,N LED in the faceplate will flash for a short while. Test the discriminator with low resistivity sample every time you turn on to check the discriminator is working OK.
4. Make the probes upright contact the sample: n LED on denotes the material is N type, p LED on denotes the material is P type. If sometimes the P,N LED are neither on, it denotes the material with very low resistivity($<10^{-2}$ Ohm.cm),at the same time the speaker and the red LED will alarm.
5. When the sample have low resistivity which is lower than we have set, the speaker and the red LED will alarm.
6. In order to insure the coherence of the measurement, the probes' slope angle should not be more than 30° , don't press the probes so hard when measuring, limited length which the spring can supply. Press the probes until 3/4 of the probes drawback, then the elasticity that the spring supply can make the measurement high coherence. DO NOT: Press the probes so hard that the spring would not work.
7. When measuring a sample which has no plat, notice: don't make the probes band. (Fig. 1)

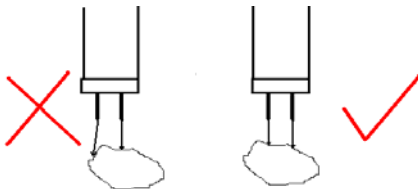


Fig.1 the left is wrong using, the right is right using

8. Let special people replacing probes, otherwise one may snap the wire inside.(Fig.2)

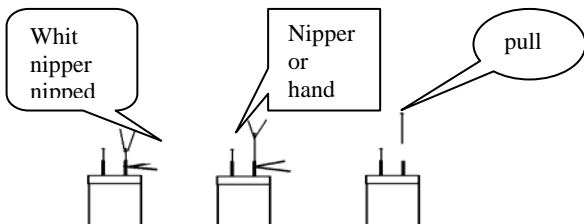


Fig.2 Replacing probes

9. If the probe breaks off in the pin sheath, please replace the pin sheath (random offer). The method is pull the white probe-head out gently with tools (Notice: Please pull gently, or you must snap the wire inside which connected to the end of the sheath). Take off the hot shrink pipe, solder off the sheath from the wire, replace the sheath, using the hot shrink to protected, push the white probe head back.

10. Particular Notice: because there are variety kinds of Si materials, so the measurement may be not vary precision, the sample should be polished before measuring. Suggest replacing the probes every fifty hours.

11. The mainframe' s free repair period is 12 months, without the easy broken parts.

12. The easy broken parts includes: the measuring wire, the white probe head, the probe, etc.

Please keep the parameter below, offer it if you want to change the standard.

Standard: 1 Ohm*cm

R1	R2
750 Ohm	1K Ohm