Huazheng®

HZ-503 Cable fault pin-pointer

Huazheng Electric Manufacturing(Baoding) Co.,Ltd

Cable fault pin-pointer

1.Description

HZ-503 cable faults pin-pointer is used for pin-Pointing kinds of cable faults of underground Power cable by using acoustic and magnetic method. by means of Electronic flashover generates by the impulse generator. Magnetic sound signal of the electronic flashover wave is picked up and amplified through the probe, and judged by auditory and visual to accuracy find out the underground cable faults.

In addition, the instrument can be used with any manufacturer's surge generator

2.Features

- Can synchronously receive sound and electromagnetic wave when faults point discharges.
- With strong ati-disturb function.
- Structure feature: receiver and probe separate. Arm-grade ati-noise earphone.
- The probe is made of special technology with professional sound collector.
- Portable and easy to use,can fast and accuracy find out the cable faults.

3.Technical data

Receiving mode: Magnetic sound synchronization

Receiving frequency: audio frequency

Magnification: 50,0000 times

output impedance :350Ω

Positioning accuracy:±0.2m

Power dissipation: Quiescent current is less than 10mA, The working current is not more than 10mA

Working voltage: DC9V Battery power

Operating temperature:-10 ~ 55°C

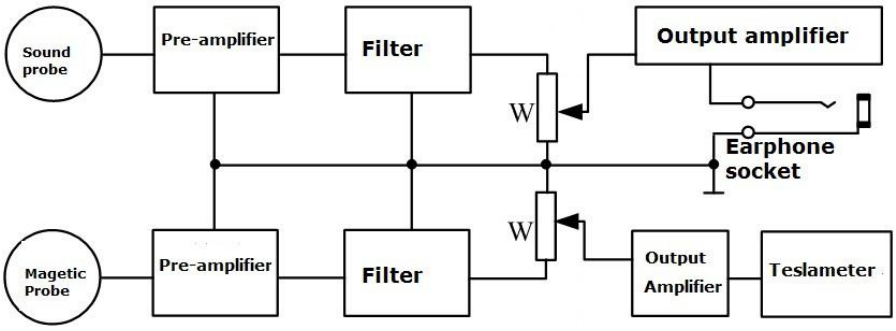
Dimension :200*150*80mm Weight:1.5kg (NW)

4. Panel of control part

1) Header-Teslameter： to indicate the magnetic field strength.
2) Level: adjust magnetic field strength base to make the header effective swing.
3) Frequency: adjust receiving frequency during cable route detecting.
4) Volume: Sound adjust when faults and cable route locating to adjust the suitable sound signal for the user.
5) Input: connect with the probe
6) Way to work: Select working mode **7) Output: connect with earphone**

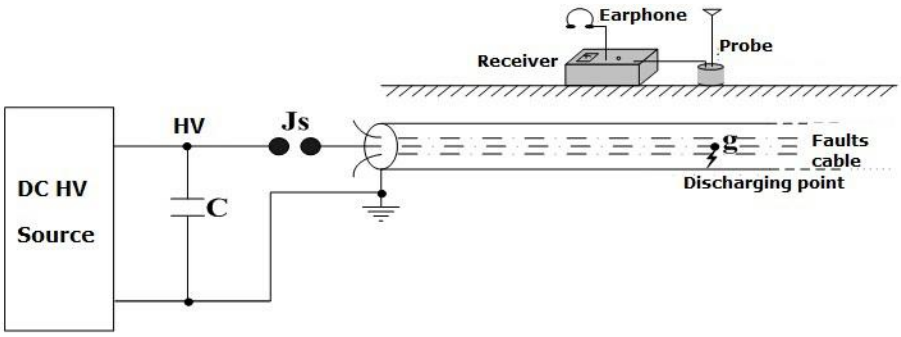
5. Cable fault locating principle and working method:

The Cable fault point produce flashover discharging under the function of high voltage, at the same time there are four kinds of physical phenomenon: echo, sound wave, electromagnetic wave, infrared wave. The cable fault flash tester detects the echo to pre-locate the cable faults.HZ-503 cable faults pin-pointer to accuracy find out the cable faults by acoustic and electromagnetic of flashover discharging.

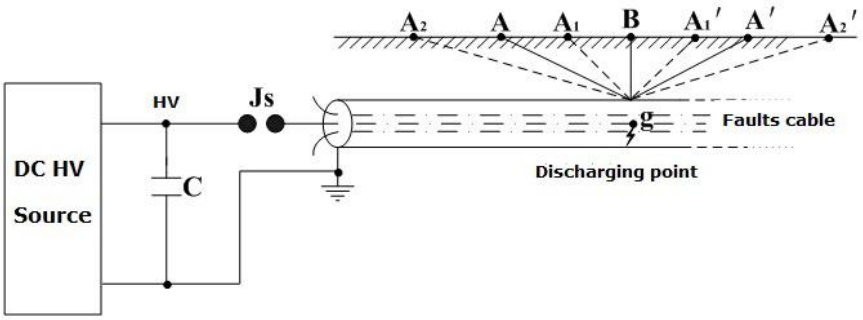


Working principle Graph

Field testing graph



Testing site



The detection process graph

5. Operation steps:

(1). Connect the earphone and the probe well with the control part.

(2). Adjust the **Way to work** knob to select the working mode to set the working mode at the Point mode (cable fault pin-point state).

(3). Adjust the **Level** knob to make the header of the Teslameter swing effectively

(4) Adjust the **volume** knob to make the sound is suitable for the user.

(5) Put on the earphone, and hand held the instruments and the probe.

(6) During the detection the user should walk along the cable route to detect the cable faults within the pre-location range, the noise is increased when close to the fault point ,above the fault points the sound is loudest and the header of the Teslameter is swinging strongest. this point is the cable fault point , as the B point of above graph.

6, Attentions

1, The batteries should be taken out of the instrument to avoid leakage, if not using it for long time.

2, when the battery voltage is low, the sensitivity decreased, shall immediately replace the battery.