

**Crest Voltmeter mod. 188** 



Via Teocrito, 36 - 20128 Milan - Italy Tel: +39-022552900 - Fax: +39-022553097 e-mail: info@telemagnetica.com - http: www.telemagnetica.com

January 2013

BR-188-ENG-00

Telemagnetica S.r.l.

Pag. 1 of 3

## **General information Mod.188**

The Crest Voltmeter Mod. 188 is an electronic kilovoltmeter which shows in a 3 digit LCD display the output voltage of pulse-type Holiday Detector device, designed to test insulating coatings.

The peak value of these pulses, which last 2 to 20  $\mu$ sec with a repetition frequency of 10 to 50 Hz, and therefore have an average duty cycle of 1 : 10,000, is undetectable by the standard instruments on the market, but can be detected by the Crest Voltmeter Mod. 188.

The very low input capacity of the new model (18 pF) means that readings can be taken without loading the circuit: therefore the voltage reading shown on the instrument correspond with that really applied.

The instrument, with its sophisticated circuitry, presents very low absorption (under 0,1 mA), which means that it can be used continuously for over a year.

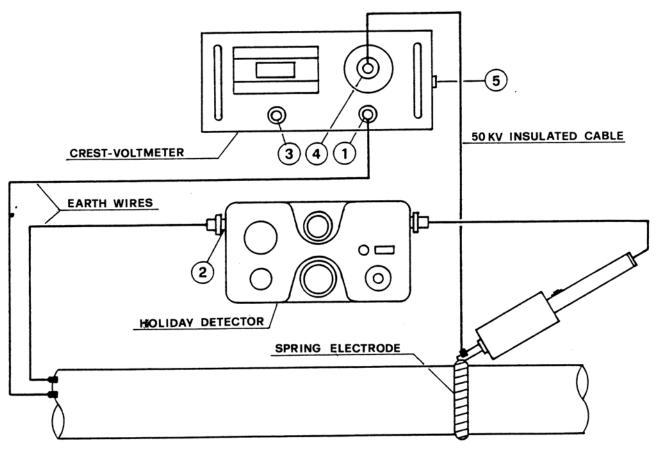
However, it is advisable to recharge the internal storage battery every 6 months (especially in hot climates).

## **Technical specifications**

Measuring range (pulse voltages) 6kV	: 0,1 kV ÷ 10 kV
Measuring range (pulse voltages) 35kV	: 0,1 kV ÷ 50 kV
Pulse polarity	: positive and negative
Measuring error (max)	: ±2%
Capacitive load of measurement	: 18 pF
Pulse ratio (min)	: 1/20.000
Pulse duration	: 1 $\mu$ sec ÷ 1 msec
Consumption (internal 12V/1,2Ah Pb storage battery)	: 100 μA
Average duration without recharging	: 1 year
Dimensions	: 280 x 240 x 120mm
Weight	: 3.1 Kg.

## How to measure voltage applied to coating

- 1) Connect the Crest Voltmeter earth terminal (1) to the structure to be tested.
- 2) Connect the Holiday Detector earth wire (2) to the structure to be tested.
- 3) Connect the high-tension cable between the capacitor (4) and the inspection electrode well rested on the coating.
- 4) Switch on the Crest Voltmeter (3).
- 5) Activate the Holiday Detector, ensuring that the electrode remains in contact with the coating.
- 6) Read off voltage on display.



## How to recharge battery

Connect battery charger (optional) to connector (5) on side of device.

The battery charger automatically limits the supply of current during the first charging stage.

If recharded with another device, it is advisable to use a constant voltage of 13.8 Volts, with a maximum output current of 120mA.