

# Digital Voltmeter

Model EPT/DPM-20  
Measurement Test Instrument



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## 1- Special information the EPT/DPM-20

Model EPT/DPM-20 is designed not only for use by non Technical personnel such as crews, service technicians, and meter readers but also suitable for the most experienced engineer and staff who working in corrosion and cathodic protection testing on under ground structures. It is designed for the field testing under almost any environmental conditions. The 3-1/2 digital display is easy to read under both field conditions.

EPT/DPM-20 unit is recommended for potential surveys, side drain measurements, surface potential surveys, IR drop measurement, DC volt of Rectifiers DC output, checking for stray current.

Checking galvanic anodes. DC current measurement requires the use an optional plug in shunt 0.01 ohm (0- 20 Amp).

### **Specifications:**

**Display:** Liquid Crystal, 3- 1/2" digit

**DC Volt Range:** 0-200 mV (, 1 resolution)

0-2 V (0.01 resolution) 0-20 V (0, 1 resolution)

**DC Current Range:** using a shunt 0.01 Ohm shunt for 0-20 Amp

**AC Rejection:** -60 db with an active filter in the input.

**Decimal point:** Automatic set by range switch

**Polarity:** Automatic negative symbol displayed, Positive assumed

**Input resistance:** Over 100 Mega Ohm.

**Battery:** 6 volt 500 mAh NCD rechargeable

## 2- Accessories:

- 1- Battery Charger:
- 2- Lead Wire
- 3- Electrode Extension Adapter
- 4- Manual Instruction

## 3- Warning:

This unit is very sensitive to the high voltage. For measuring unknown voltage start from high to low range.



## 4-Getting Started

### 1- Measuring DC volt:

Assemble the meter with the electrode extension adapter and connect the Ground wire to the unit. Turn it ON and put on proper range.

It must be 20 DC for unknown voltage.

Then if you find that the voltage is less than 2 volt you can switch on 2 volt range switch. You can continue for the same to the range 200 MA if applicable.

In measurement you must patient and wait the unit come to a balance. Because of high impedance some time the final digit may fluctuate although

this digit is not important however you can select between high and low final digit readings.

Keep instrument clean and dry. Clean instrument case with soft cloth dampened with kerosene, then wipe dry. Do not use solvents such as lacquer thinners, etc.

## 5- Battery Charging Instructions:

When the battery is weak, two indicators are ON:

- 1- In display shows battery is weak
- 2- Red led will turn ON

Because of the weak battery may you have some offset in the display. and you have to charge the Battery

Caution: Meter "ON-OFF" switch must be in "OFF" position while charging Battery. Use only Battery charger provided.

Plug charger in the instrument and Plug AC power cord to the outlet. Charge the Battery for 12 Hours. When the Battery is being charged the battery, a yellow led indicator is on to show the AC power is in the unit.

The Battery is 6 Volt 500 mAh NCD Battery