

# DIGITAL VOLTMETER AND AMMETER DP3 MANUAL

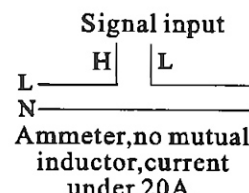
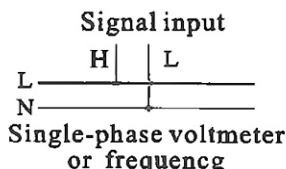
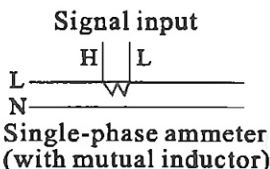
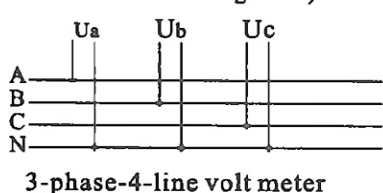
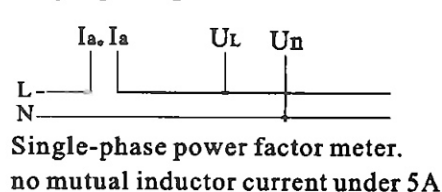
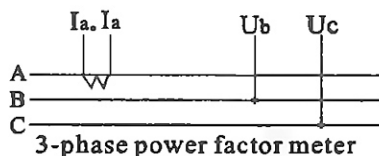
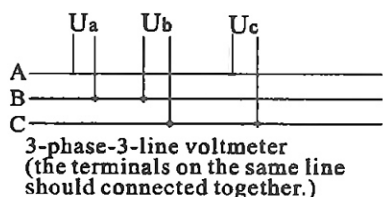
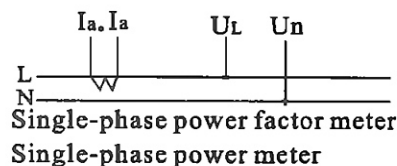
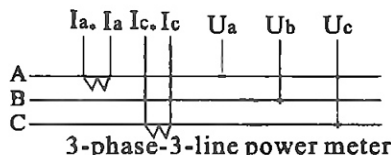
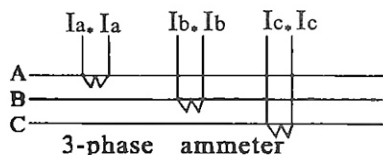
- For correctly use of this instrument, please read carefully this specification before operation.
- Check the ratio CT value if match with ratio meter.
- Keep properly this specification after reading.

- I. For this LED digital measurement instrument, the max. Display range is 1999/9999/19999, the precision is  $\pm 0.5\%$  or  $\pm 0.2\%$ , the power supply is AC 110V or AC 220V  $\pm 20\%$  50~60Hz. (Other power supply also can provide if customer required.)
- II. Before use, the instrument should connect onto the correct power, when use DC power, the positive and negative pole should not connect wrongly, otherwise, the instrument may be burned, For other power, please refer to the marks on the instrument.
- III. For those voltage input within the range (0 ~ 600V), just connect directly the input signal onto the instrument; if the input voltage is over 600V, a voltage mutual inductor ( $\square \square \square / 100V$ ) should be connected between the input signal and instrument. For DC voltage input, pay attention to the marks of High(H) and low(L) level, and should not be connected wrongly, otherwise, the display value should be negative.
- IV. For those current input within the range (0~20A), just connect directly the input signal onto the instrument; if the AC input current is over 20A, a current mutual inductor ( $\square \square \square / 5A$ ) should be connected between the input signal and instrument. For DC ammeter, a fixed current divider ( $\square \square \square / 75mV$ ) should be connected. The ratio of mutual inductor and divider should match with that of instrument. otherwise, the display will be wrong. For DC voltage input, pay attention to the marks of High(H) and low(L) level, and should not be connected wrongly, otherwise, the display value should be negative.
- V. For frequency meter of power frequency, the instrument will sample the amplitude value of AC voltage input signal (30~600V), i.e. Display the frequency of input signal, the display range is 15 Hz~1000Hz.
- VI. For single-phase and three-phase power meter and power factor meter, connect the wire according to the marks on the instrument. The input/output line of voltage/current should not connect wrongly, otherwise, the display will be wrong. For single-phase factor meter, input voltage: 220V, input current: 5A; for three-phase power factor meter, input voltage: 100V or 380V, input current: 5A, the display value:  $-0.5 \sim 1 \sim +0.5$ . For single-phase active power meter and reactive power meter, input voltage: 220V, input current: 5A (a mutual inductor  $\square \square \square / 5A$  with same ratio should be connected if the input current is over 5A). For three-phase active power meter and reactive power meter, input voltage: 110V or 380V, input current: 5A (a current mutual inductor which ratio is same with that of instrument should be connected if the input current is over 5A).
- VII. This instrument is exclusively use for sensor and frequency conversion equipment with linear output feature. The standardized input signal includes: DC 0~10V, DC 1~5V, DC 4~20mA, etc. And can display value of pressure, weight, temperature, humidity, revolving speed and frequency, etc. Whith correspond to the input signal.

## VIII. Note:

1. For best performance, the meter should be pre-heat 15 minutes before operation if it is not used for a long time.
2. The meter should be used under condition of: ambient temperature: 0~50°C, relative humidity:  $\leq 85\%$ .
3. The calibration interval should be one year; the precision of calibrator should be superior to 0.1 Grade.
4. The meter should prevent from shock and impulse, and should not used under condition of heavy dust or high concentration chemical drug or gas. Please apply power supply filter or other anti-interference circuit when use the meter in environment of high magnetic field, high frequency or high voltage spark.
5. The calibrating rheostat is used for calibrating the meter, non-professional should not calibrate or disassemble the meter, as well as no calibrator available.

## IX. Wiring diagram: ( $\sphericalangle$ indicate mutual inductor)



Note: "\*" indicates the current input terminal, the wiring method of it please refer to the wiring diagram on the product.