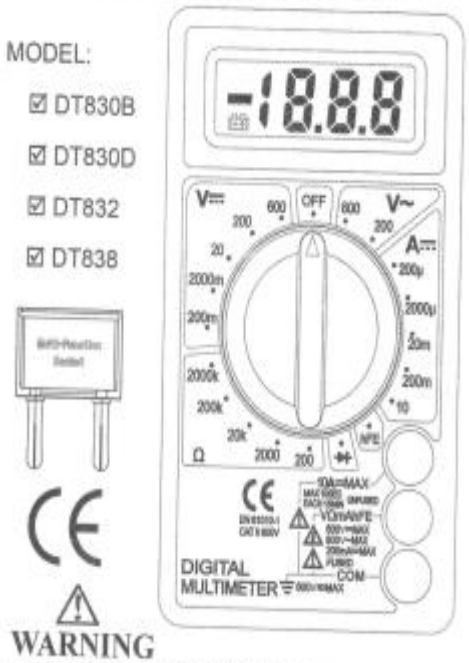
## *FICHA TECNICA*

**MODELO: DT-838H**

# OPERATOR'S INSTRUCTION MANUAL
# DIGITAL MULTIMETER

MODEL:

- ☑ DT830B
- ☑ DT830D
- ☑ DT832
- ☑ DT838




**WARNING**

READ AND UNDERSTAND THIS MANUAL BEFORE USING THE INSTRUMENT.

**Series Multimeters Function Table**

| Model | DCV | ACV | DCA | OHM | ⊣⊢ | ◁◎ | hFE | BAT | ⎍⎍ | ℃ |
|---|---|---|---|---|---|---|---|---|---|---|
| 830B | √ | √ | √ | √ | √ | | √ | | | |
| 830D | √ | √ | √ | √ | √ | √ | √ | | √ | |
| 832 | √ | √ | √ | √ | √ | √ | √ | | √ | |
| 838 | √ | √ | √ | √ | √ | √ | √ | | | √ |

***Technical Specifications***

Accuracies are guaranteed for 1 year, 23℃±5℃, less than 80%RH

**DC VOLTAGE**

| RANGE | RESOLUTION | ACCURACY |
|---|---|---|
| 200mV | 100uV | ±(0.5% of rdg + 3D) |
| 2000mV | 1mV | ±(0.8% of rdg + 5D) |
| 20V | 10mV | |
| 200V | 100mV | |
| 600V | 1V | ±(1.0% of rdg + 5D) |

OVERLOAD PROTECTION: 220V rms AC for 200mV range and 600V DC or 600V rms for all ranges.

**AC VOLTAGE**

| RANGE | RESOLUTION | ACCURACY |
|---|---|---|
| 200V | 100mV | ±(2.0% of rdg +10D) |
| 600V | 1V | |

RESPONSE: Average responding, calibrated in rms of a sine wave.

FREQUENCY RANGE: 45Hz ~ 450Hz

OVERLOAD PROTECTION: 600V DC or 600V rms for all ranges.

**AUDIBLE CONTINUITY**

| RANGE | DESCRIPTION |
|---|---|
| •)) | Built-in buzzer sounds if resistance is less then 30±20Ω |

OVERLOAD PROTECTION: 15 seconds maximum 220 V rms.

**DC CURRENT**

| RANGE | RESOLUTION | ACCURACY |
|---|---|---|
| 200uA | 100nA | ±(1.8% of rdg +2D) |
| 2000uA | 1uA | |
| 20mA | 10uA | |
| 200mA | 100uA | ±(2.0% of rdg +2D) |
| 10A | 10mA | ±(2.0% of rdg +10D) |

OVERLOAD PROTECTION: F500mA/600V and F10A/600V fuse
MEASURING VOLTAGE DROP: 200mV

**RESISTANCE**

| RANGE | RESOLUTION | ACCURACY |
|---|---|---|
| 200Ω | 0.1Ω | ±(1.0% of rdg +10D) |
| 2000Ω | 1Ω | ±(1.0% of rdg +4D) |
| 20KΩ | 10Ω | |
| 200KΩ | 100Ω | |
| 2000KΩ | 1KΩ | |

MAXIMUM OPEN CIRCUIT VOLTAGE: 3V.
OVERLOAD PROTECTION: 15 seconds maximum 220Vrms.

**TEMPERATURE (with K-TYPE PROBE)**

| RANGE | RESOLUTION | ACCURACY |
|---|---|---|
| -40℃ to 150 ℃ | 1℃ | ±(1.0% + 4) |
| 150℃ to 1370 ℃ | | ±(1.5% + 15) |

***OPERATING INSTRUCTIONS***

**DC & AC VOLTAGE MEASUREMENT**

1. Connect red test lead to "VΩmA" jack, Black lead to "COM" jack.
2. Set RANGE switch to desired VOLTAGE position, if the voltage to be measured is not known beforehand, set switch to the highest range and reduce it until satisfactory reading is obtained.
3. Connect test leads to device or circuit being measured.
4. Turn on power of the device or circuit being measured voltage value will appear on Digital Display along with the voltage polarity.

**DC CURRENT MEASUREMENT**

1. Red lead to "VΩmA". Black lead to "COM" (for measurements between 200mA and 10A connect red lead to "10A" jack with fully depressed.)
2. Set RANGE switch to desired DCA position.
3. Open the circuit to be measured, and connect test leads INSERIES with the load in with