DANGER: It indicates terminals where dangerous voltages can be
         Present.
WARNING

1.TO avoid electric shock or damages to the instruments, do not apply
  Voltages above 1000V DC or 750V AC RMS between input terminals
  of instrument.
2.Observe the proper safety precautions when working with voltages
  above 60VDC or 30V AC RMS. Such voltages can expose the user
  to dangerous electric shocks.
3.Make sure that the test leads are in good conditions of security.
CAUTION

To avoid damages to the instrument:
-Remove the test leads from test circuit before changing the
 measurement functions.
-Never connect voltages above 1000V DC or 750V AC RMS.
-Never connect voltages to the input terminals when the rotary switch
 is selected to measure resistance.
Use of the Proper Fuse
-To avoid dangerous fires, use the correct fuse of the same type and
 specification of operation current and voltage ,as specified. The use of
 fuse with different specification or short-circuit the fuse socket is
 prohibit and can cause extremely serious injury.

3.Specification

3.1 General Specification
-Display: 33/4 Digits/4000 counts (5000 counts, Frequency
&Capacitance mode)
-Data Hold Function
-Relative Function
-Auto Ranging and Manual selection
-Auto power off: 30 minutes after rotary switch or mode changes

(except RS-232 on model)
-RS-232
-Over range Indication : 'OL'
-Low Battery Indication: display shows: [+ -]
-Operation Environment : 0℃ to 40℃,RH<75%
-Storage Environment : -20℃ to 60℃,RH<80%
Power: Single 9V Battery (NEDA 1604 or IEC 6F22)
Size /Weight: 187×81×39mm/350g
3.2 Electrical Specification
Accuracy specified to one year calibration period, operation
temperature of 18℃～28℃(64℉～82℉)and relative humidity<70%.
DC Voltage
Range: 400mV/4V/40V/400V/1000V
Resolution: 0.1mV
Accuracy: ±(0.5%+4dgts) 400mV Range
          ±(0.8%+4dgts) 4V/40V/400V /1000V Ranges
          Input impedance:10MΩ
Overload protection: 1000VDC/750VAC (rms)
AC Voltage
Range: 400mV/4V/40V/400V/750V
Resolution: 0.1mV
Accuracy: (ET-2230)
       ±(1.0%+5dgts) 40～400Hz 400mV(>2% full scale) Range
       ±(1.0%+5dgts) 40～400Hz 4V/40V/400V Ranges
       ±(1.2%+5dgts) 50～60Hz 750V Range
          (ET-2231)
       ±(1.0%+5dgts) 50～60Hz CF<2 4V/40V/400V Ranges
       ±(1.2%+5dgts) 50～60Hz CF=1.414 750V Range
       ±(1.5%+5dgts) 40～400Hz CF< 2 4V/40V/400V Ranges
Input Impedance:10MΩ
 Overload protection: 1000VDC/750V AC (rms)
DC Current
Range: μA (400μA/4000μA) mA (40mA/400mA) A(4A/10A)
Resolution: 0.1μA

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Accuracy: $\pm$(1.0%+3dgts) μA
$\pm$(1.2%+3dgts) mA
$\pm$(1.5%+5dgts) A

AC Current
Range: μA (400μA/4000μA)   mA(40mA/400mA) A(4A/10A)
Resolution: 0.1μA
Accuracy: $\pm$(1.5%+5dgts) μA
(40~400Hz) $\pm$(2.0%+5dgts) mA
$\pm$(2.5%+5dgts) A

Resistance
Range:400Ω/4kΩ/40kΩ/400kΩ/4MΩ/40MΩ
Resolution: 0.1Ω
Accuracy: 400Ω~4MΩ $\pm$(1.0%+4dgts)
40MΩ $\pm$(1.5%+4dgts)
Overload protection: 250VDC/AC(rms)

Capacitance
Range:40nF/400nF/4μF/ 40μF/100μF
Resolution: 0.01nF
Accuracy: $\pm$(3.0%+8dgts)   40nF~4uF
$\pm$(4.0%+8dgts)   <100uF
Overload protection: 250VDC/AC(rms)

Frequency
Range: 5Hz/50Hz/500Hz/5KHz/50KHz/500KHz/5MHz
Resolution: 0.001Hz
Accuracy: $\pm$(0.1%+4dgts) 40Hz~5MHz
Sensitivity: 0.5Vrms ($\leq$1MHz) 5Vrms (>1MHz)
Max input : 10Vrms
Overload protection: 250VDC/AC(rms)

Duty Cycle
Range:0.1%~99.9%
Accuracy: $\pm$(2.0%+5dgts)
Sensitivity: 1V(rms)

Temperature
Range:-40~+750℃ or -40~1400℉

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Resolution: 1℃ or 1℉
Accuracy: $\pm$(1.0%+4dgts) -40~+400℃ or -40~+750 ℉
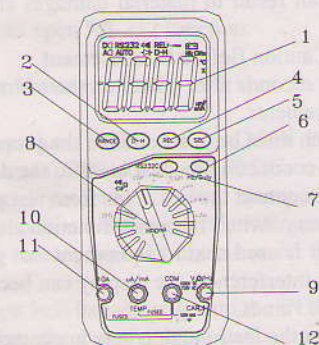$\pm$(3.0%+10dgts) +401~+750℃ or +751~+1400℉

Continuity
<30$\pm$10Ω, Sound

Diode
Test current: 0.6mA approx
Open voltage: 1.5V typical
Resolution: 0.001V

4.Fornt Panel Description

Refer to Figure 1 to identity controls and terminals .
1.LCD Display
2.Data hold function button
3.Manual range selection button
4.Relative function button
5.Select button
6.Hz/Duty select button
7.RS-232 switch
8.Rotary button

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