Thanks for buying our products. Please go Through the instruction manual before Starting to use the meter.

I. INTRODUCTION:

1.SWITCH

Our DMM adopt rotational switch which Situated at the middle of the front case. It is used for the selection of FUNCTION, RANGE AND POWER ON-OFF. In order to save energy, please turn the switch to "OFF" position when not in use.

2.DISPLAY

3 1/2, 12mm height LCD display.

3. "COM" jack

Common jack

4. "V Ω mA" Jack

Voltage, resistance, not more 200mA. Current and battery input test jack, 50Hz square wave output jack.

5. "10A" jack

For the input of less then 10A current

II.FEATURES:

Display: 3 1/2 LCD with maximum Display 1999 and updates two or three times every second.

Polarity: Auto polarization

Overrange: Maximum display "1"

Working environment: temp. 0-40℃ relative Humidity: <75%

Storing environment: -15~50℃

Battery: 9V IEC 1604 NEDA 6F22

High voltage symbol: DC 1000V or AC 750V Range will show high Voltage symbol "HV"

Low voltage indication: Left side of LCD will Show or BAT Symbol.

Size: 129mm×71mm×28mm

Weight: 150g include battery

III. International Electrical Symbols:

~	AC (Alternating Current)	Ω	Resistance Test
⎓	DC (Diect Current)	•))	Continuity Test
⏚	Grounding	▶|	Diode
▣	Double Insulated	⊟	Fuse
⚠	Warning. Refer to the Operating Manual	CE	Conforms to Standards of European Union

IV. TECHNICAL SPECIFICATION:

Accuracy: ± a% reading ± NO of digits Guaranteed for 1 year.

Environmental temperature: 23℃ ± 5℃

Relative humidity: <75%

1. DC Voltage:

Range	Resolution	Accuracy
200mV	100uV	±1.0%of±2digits
2000mV	1mV	
20V	10mV	
200V	100mV	
1000V	1V	±1.2%of±2digits

Input impedance: 1MΩ. on all ranges

Overload protection: DC or AC peak value of 1000V.

2. DC Current:

Range	Resolution	Accuracy
200uA	100nA	±1.4%of±2digits
2000uA	1uA	
20mA	10uA	
200mA	100uA	±1.6%of±2digits
10A	10mA	±2.0%of±5digits

Overload protection: 0.2A/250V fused. 10A Range not fused.

3. AC Voltage:

Range	Resolution	Accuracy
200V	100mV	±1.4%of±15digits
750V	1V	

Frequeucy range: 45Hz to 400Hz.

Overload protection: AC 750V rms.

Indication: Average value (rms of sine wave).

4. Resistance:

Range	Resolution	Accuracy
200Ω	0.1Ω	±1.2%of±2digits
2000Ω	1Ω	
20KΩ	10Ω	
200KΩ	100Ω	
2000KΩ	1KΩ	±1.4%of±5digits

Overload protection: 250V DC or AC rms.
Less than 10 sec.
Open circuit voltage: Approx 2.8V.

5. Temperature:

Range	Resolution	Accuracy
-40℃ to +1000℃	1℃	Less then 150℃ ±(3℃+2) More then 150℃ ±3%

6. Transistor hFE:
Vce approximately 2.8V, Ib approximately 10uA, Display show appromately hFE 0-1000.

7. Diode and Audible Continuity:
Diode: Testing voltage approx 2.4V, current 1.5mA, indicate forward diode approx value.
Buzzer: Sounds when measure less than 70Ω ±20Ω.

8. Square Wave Output:
Output square wave 50Hz, output voltage Approx 3V p-p.

9. Battery Test:

Range	Current Consumed
1.5V	50mA
9V	5mA

PANEL DESCRIPTION

① LCD display window

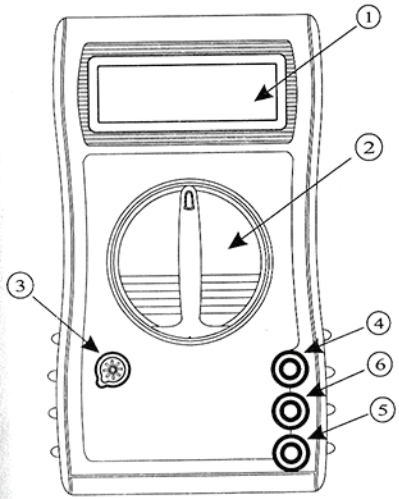
② Function rotary switch

③ Transistor test hole

④ 10A terminal

⑤ COM terminal

⑥ V/Ω/mA terminal



V. OPERATING INSTRUCTION:

1. DC Voltage Measurement V-(DCV):
   1.1 Connect RED test lead to "V Ω mA" jack, BLOCK test lead to "COM" jack.
   1.2 Set the FUNCTION switch to the desired V-(DCV) position. If not sure, set to the Highest range.
   1.3 Connect the test leads across the source or load under measurement.

2. DC Current Measurement A-(DCA):
   2.1 Connect the RED test lead to "V Ω mA" jack when the current is less than 200mA. and to "10A" jack when the current is larger than 200mA.
   Connect the BLACK test lead to the "COM" jack.
   2.2 Set the FUNCTION switch to the desired DCA position.
   2.3 Connect the test leads across the source or load under measurement.

3. AC Voltage Measurement V~(ACV):
   3.1 Connect the RED test lead to "V Ω mA" jack and BLACK test lead to "COM" jack.
   3.2 Set the FUNCTION switch to the desired ACV position.
   3.3 Connect the test leads across the source or Load under measurement.

4. Resistance Measurement (Ω):

   4.1 Connect the RED test lead to "V Ω mA" jack and BLACK test lead to "COM" jack.
   4.2 Set the FUNCTION switch to the Ω position.
   4.3 Connect the test leads across the resistor under measurement.
   4.4 When measuring the resistance, the power should be turned off and in short circuit statues by connecting the two test leads.

5. Temperature Measurement:
   5.1 Set the FUNCTION switch to ℃ position The built-in temperature sensor will show The room temperature.
   5.2 Insert the thermocouple plug into K PROBE socket and connect the object Under measurement. The display will show The temperature value.

6. Transistor hFE Measurement:
   6.1 Set the FUNCTION switch to hFE position.
   6.2 Insert the E B C of the PNP or NPN Transistor to the proper jack in the socket on the front panel.

7. Diode and Audible Continuity Measurement:
   7.1 Connect RED test lead to the "V Ω mA" jack and BLACK test lead to the "COM" jack.
   7.2 Set the FUNCTION switch to the position and connect the RED test lead to the ANODE of diode and BLACK

   to CATHODE. The display will then show the approx. Forward voltage of this diode . If connect the test leads on the other way round, the display will show an over range status "1".
   7.3 Buzzer sounds if the resistance between the two probes less then approximately 70Ω.

8. 50Hz Square Wave Output:
   8.1 Connect RED test lead to the "V Ω mA" jack and BLACK test lead to the "COM" jack.
   8.2 Turn the FUNCTION switch to position and the RED and BLACK test leads being the output jack.

Attention:
1. This function being the output message so Don't used for measuring voltage.
2. The circuit being protected by short circuit Device.
3. The voltage cannot exceed 40V p-p.

9. Battery Test:
   9.1 Connect RED test lead to the "V Ω mA" jack and BLACK test lead to the "COM" jack.
   9.2 Tum the FUNCTION switch to the BATT position. Connect the test lead across the

battery under measurement. The display will show the voltage of the battery.

VI. BATTERY AND FUSE REPLACEMENT

When the voltage of the battery is low, the Symbol [-·-] or BATT will appear on the Display. then the battery should be replaced. You should check the ⊣⊢ Fuse 0.2A 250V Fast when no measurement could be taken for current using mA range.

VII. CLEANING

Before cleaning, ensure to remove the test leads, and turn off the switch.
Do not drop water inside the case, Never immerse in any liquid.

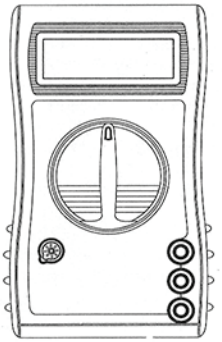
(Specifications are subject to change without notice.)

VIII. BRIEF SUMARY OF THE FUNCTION:

	RE828A	RE828B	RE828C	RE828D
DC Voltage	√	√	√	√
DC Current	√	√	√	√
AC Voltage	√	√	√	√
AC Current				
Max Resistance (MΩ)	10	10	10	10
Diode Test	√	√	√	√
Transistor Test	√	√	√	√
Continuity Buzzer			√	√
Light Emitting Indication				
Capacitor				
Frequency				
Temperature			√	
Conductance				
Battery Test	√			
Logic Test				
Square Wave Output Signal				√
Large Current(A)	10	10	10	10
Small Current(uA)	20mA	200	2000	2000

OPERATION MANUAL

AUTO-RANGEING DMM



DIGITAL MULTIMETER

Models:

RE828A ☐ RE828B ☐
RE828C ☐ RE828D ☐