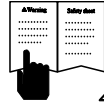
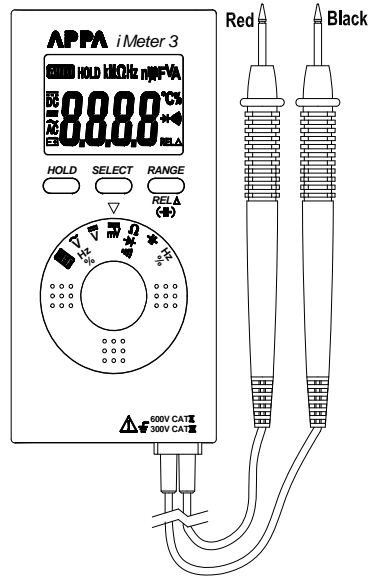




**APPA iMeter 3
Card Meter**

*Instruction
Card*



Read First

Safety Information

- Use the Meter only as specified in this manual or the protection by the Meter might be impaired.
- Always use proper terminals, switch position, and range for measurements.
- Do not apply more than the rated voltage, as marked on Meter, between terminals or between any terminal and earth ground.
- To avoid false readings that can lead to electric shock and injury, replace battery as soon as low battery indicator ea appears.
- Disconnect circuit power and discharge all high-voltage capacitors before testing resistance, continuity, diodes, or capacitance.
- Do not use Meter around explosive gas or vapor.
- To reduce the risk of fire or electric shock do not expose this product to rain or moisture.

Symbols as marked on the meter and Instruction card

	Risk of electric shock
	See instruction card
	Equipment protected by double or reinforced insulation
	Battery
	Earth
	Conforms to EU directives
	Application around and removal from hazardous live conductors is permitted

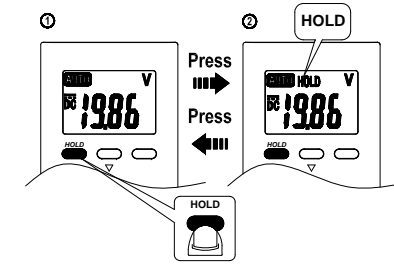
Maintenance

Do not attempt to repair this Meter. It contains no user-serviceable parts. Repair or servicing should only be performed by qualified personnel.

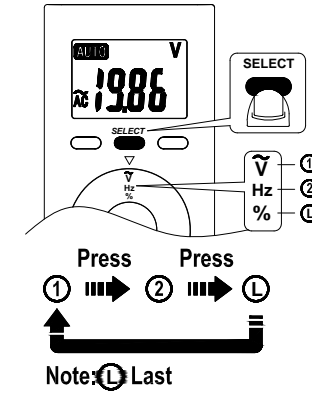
Cleaning

Periodically wipe the case with a dry cloth and detergent. Do not use abrasives or solvents.

Display Hold



Selecting Function

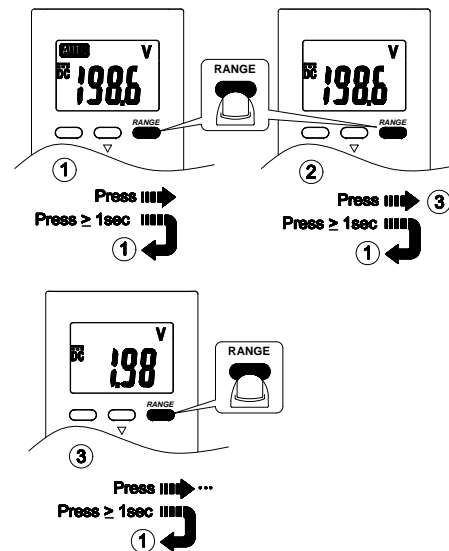


.1.

.2.

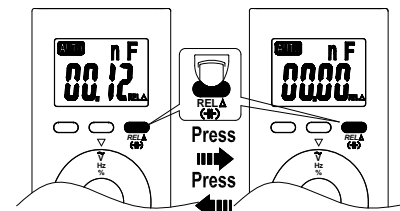
.3.

Manual Ranging And Auto Ranging

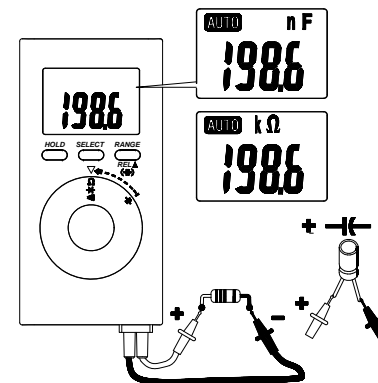


.4.

REL Δ Operating (For ∇ only)

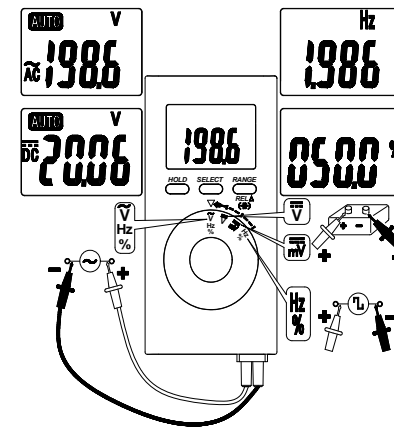


Measuring Resistance And Capacitance

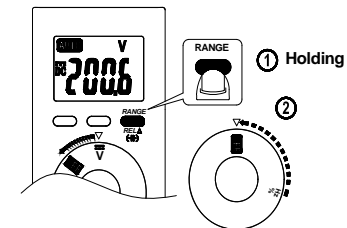


.5.

Measuring AC,DC And DC m Voltage, Frequency And Duty Factor



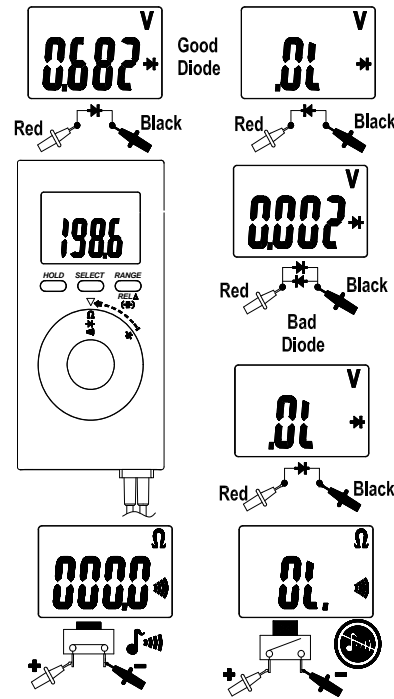
Disable Auto Power Off



.6.

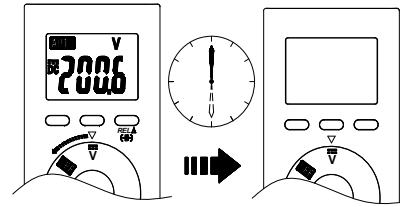
APPA TECHNOLOGY CORP.
9F, 119-1 Pao-Zong Rd.,
Shin-Tien, Taipei, 23115, Taiwan.
P.O.Box. 12-24 Shin-Tien, Taiwan.
Tel: +886-2-29178820
Fax: +886-2-29170848
E-mail : info@appatech.com
http://www.appatech.com

Measuring Diode And Continuity



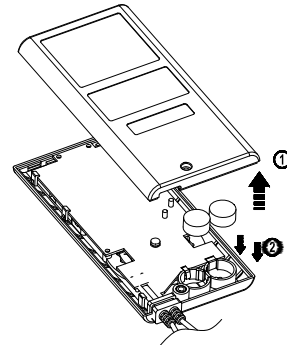
.7.

Auto Power Off (Battery Saver)



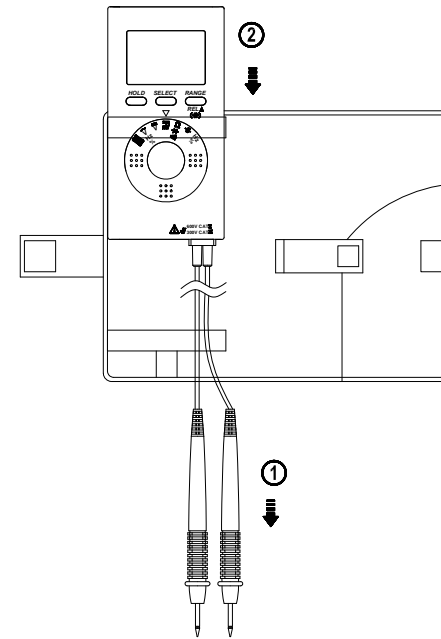
Battery Replacement

Refer to the following figure to replace the Battery :



.8.

Carry Case Assembling



.9.

Specifications

1-1 General Specifications

LCD display digits :
5000 counts digit large scale LCD readout.
Measuring rate : 3 times / sec.
Polarity Indication :
Automatic, positive implied,
Overrange display : "OL" or "-OL"
Unit symbol indication.
Automatic power off time :
Approximately 30 minutes after power on.
Low battery indicator : \approx is displayed.
Power requirement : 1.5V x 2 batteries.
Battery life : 100 hours (GPA76P)

1-2 Environmental Conditions

Indoor Use.
Calibration : One year calibration cycle.
Operating temperature :
0°C ~ 30°C ($\leq 80\% RH$)
30°C ~ 40°C ($\leq 75\% RH$)
40°C ~ 50°C ($\leq 45\% RH$)
Storage temperature :
-20 to +60°C, 0 to 80% RH (batteries not fitted)
Temperature coefficient : Add 0.2 x (Specific accuracy) / °C, < 18°C, > 28°C .
Overvoltage category :
IEC 61010-1 300V CAT. III.
600V CAT. II.

.10.

CAT. Application field

I	The circuits not connected to mains.
II	The circuits directly connected to Low-voltage installation.
III	The building installation.
IV	The source of the Low-voltage installation.

Operating altitude : 2000m (6562 ft)

Pollution degree : 2

EMC : EN 61326-1

Shock vibration : Sinusoidal vibration per MIL-T-28800E (5 ~ 55 Hz, 3g maximum).

Drop Protection :

4 feet drop to hardwood on concrete floor.

Dimensions (WxHxD) : 56 x 12 x 112mm

Weight : 115g

Accessories : Battery (installed), carry case and Instruction Card.

1-3 Electrical Specifications

Accuracy is \pm (% reading + number of digits) at 23°C \pm 5°C < 80%RH.

Function	Range	Resolution	Accuracy
ACV	400.0mV	0.1mV	\pm (1.5%+ 5 D)
	4.000V	0.001V	\pm (0.9%+ 5 D)
	40.00V	0.01V	
	400.0V	0.1V	
	600V	1V	

Frequency Response: 50 ~ 500Hz

.11.

AC Conversion Type : AC Coupled Average sensing rms indication.

Input Impedance : 10M Ω , <100pF.

Overload protection : 600V rms.

Function	Range	Resolution	Accuracy
DCV	400.0mV	0.1mV	\pm (0.7%+ 5 D)
	4.000V	0.001V	\pm (0.6%+ 2 D)
	40.00V	0.01V	
	400.0V	0.1V	
	600V	1V	

Input Impedance : 10M Ω , <100pF.

Overload protection : 600V rms.

Function	Range	Resolution	Accuracy
ohm	400.0	0.1	\pm (0.9%+ 5 D)
	4.000K	0.001K	\pm (0.9%+ 2 D)
	40.00K	0.01K	
	400.0K	0.1K	
	4.000M	0.001M	
	40.00M	0.01M	\pm (1.5%+ 5 D)

Open Circuit Voltage : 0.4V

Overload protection : 600V rms.

CONTINUITY CHECK

Continuity Threshold : Approx. <50 Ω

Continuity Indicator : 2KHz Tone Buzzer.

Input Protection : 600V rms.

.12.

DIODE TEST

Test Current : 1.1mA (Typical)

Open Circuit Voltage : 1.5V DC (max).

Input Protection : 600V rms.

Function	Range	Resolution	Accuracy
Cap	50.00nF	0.01nF	\pm (5%+ 0.2nF)*
	500.0nF	0.1nF	\pm (2.9%+ 5 D)
	5.000 μ F	0.001 μ F	
	50.00 μ F	0.01 μ F	
	100.0 μ F	0.1 μ F	

Note : * For best measurements, with Δ mode on nF ranges. Accuracys provide readings above 10nF at 50nF range.

Overload protection : 600V rms.

Function	Range	Resolution	Accuracy
Hz	5.000Hz	0.001Hz	\pm (0.3%+ 5 D)
	50.00Hz	0.01Hz	
	500.0Hz	0.1Hz	
	5.000KHz	0.001KHz	
	50.00KHz	0.01KHz	
	500.0KHz	0.1KHz	
5.000MHz	0.001MHz		

Sensitivity : 1.0Vp-p (Square Wave)

Overload protection : 600V rms.

.13.

Function	Range	Resolution	Accuracy
%	0.1 - 99.9%	0.1%	\pm (0.5%+ 3)

Sensitivity : 1.0Vp-p for 30% \leq Duty \leq 70% (Square Wave : 5 Hz ~ 5KHz)

Overload protection : 600V rms.

Limited Warranty

This Meter is warranted to the original purchase against defects in material and workmanship for One year from the date of purchase. During this warranty period, manufacturer will, at its option, replace or repair the defective unit, subject to verification of the defect or malfunction. This warranty does not cover fuses, disposable batteries, or damage from abuse, neglect, accident, unauthorized repair, alteration, contamination, or abnormal conditions of operation or handling. Any implied warranties arising out of the sale of this product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. The manufacturer shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expense or economic loss. Some states or countries laws vary, so the above limitations or exclusions may not apply to you.

.14.