



17712A



17712B

**Introduction**

A battery is an electrochemical cell that is charged externally to store electrical power. The stored power of the battery is released when it is needed for various applications that could be required for normal day to day working, back-up operations, critical applications or for emergencies. The use of batteries is increasing every day in order to drive / support various applications such as Cars, Motor Cycles, UPS, Generators, Automobiles, Emergency Lights, Solar Power etc.

A battery is expected to always perform flawlessly as per its capacity. However sometimes even new batteries fail and hence periodic testing and maintenance of batteries is required. It is important to also test incoming batteries as a part of the quality control procedure to ensure proper compliance of the supply made by the battery manufacturer. The loss of battery capacity occurs gradually often without the knowledge of the user.

The function of the Battery Meters to check the capacity condition of various lead acid storage batteries and to ensure that the supported equipment is adequately backed-up, prevented from unexpected failures and forewarned for any calamity. The battery tester helps to identify the weak batteries so that they can be re-charged or weeded out of the system before they make the complete system unreliable.

Automobile Battery Meter which can check the capacity condition of different types of Motorcycle and Motorcar batteries from 2 to 200Ah.

The product consists of a DC Voltmeter, Load Resistor and Testing Clip. The state of the battery is indicated on the meter dial as 'FULLUP' (White), 'NORMAL' (Green), 'RECHARGE' (Yellow), 'DISCHARGE' (Red) directly.

**Technical Specifications**

**Rated Voltage of Battery to be Tested :** 2, 6, 12V DC  
**Rated Capacity of Battery to be Tested :** 2 - 200Ah  
**Dimensions :** 225 x 124 x 68mm (approx.)  
**Weight :** 500gms (approx.)

**Application**

MOTORCYCLE	CAPACITY	VOLTAGE	MOTORCAR	CAPACITY	VOLTAGE
50cc	2Ah	6V or 12V	20 - 360cc	20 - 24Ah	6V or 12V
51 - 125cc	6 - 10Ah		500 - 2000cc	30 - 60Ah	
126 - 250cc	9 - 15Ah		2000 - 5000cc	55 - 100Ah	
251 - 750cc	10 - 18Ah		5000 - 8000cc	100 - 200Ah	

Battery Meter which can check the capacity condition of different types of batteries from 4 to 500Ah.

The product consists of a DC Voltmeter, Load Resistor and Testing Clip. The state of the battery is indicated on the meter dial as 'OK' (Green), 'WEAK' (Yellow) and 'BAD' (Red) directly.

**Technical Specifications**

**Rated Voltage of Battery to be Tested :** 2, 6, 12V DC  
**Rated Capacity of Battery to be Tested :** 4 - 500Ah  
**Dimensions :** 220 x 120 x 70mm (approx.)  
**Weight :** 550gms (approx.)



Note: Specifications are subject to change.

**Tesca Technologies Pvt. Ltd.**

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17712C

Specifications

Battery Types Tested	UPS Battery, Motor Cycle (6V/12V : 2 ~ 20Ah), Car (12V : 21 ~ 80Ah), Truck (12V : 83 ~ 160Ah) Household Appliances [(9V : upto 625 mAh), (AA : upto 2850 mAh), (AAA : upto 1250 mAh), (C : upto 8350 mAh), (D : upto 20500 mAh)], Lithium Notebook Battery [(14.8V : 3600 ~ 4800 mAh), (11.1V : 3600 ~ 7200 mAh)], Lithium Digital Camera Battery (3.7V : 650 ~ 1350 mAh), Lithium Cordless Phone Battery (3.7V : 800 ~ 1250 mAh),
Battery Capacity	0 to 500Ah
Resistance	Ranges : 40mΩ, 400mΩ, 4Ω, 40Ω Resolution : 10μΩ, 100μΩ, 1mΩ, 10mΩ Accuracy : ± (1% Reading + 10 Digits) on all Ranges
Measurement Condition	Current : 25mA, 2.5mA, 250μA, 25μA Frequency : 1KHz ± 10%
Voltage	Measurement : 4V, 40V Resolution : 1mV, 10mV Accuracy : ± (0.1% Reading + 6 Digits)
Open Circuit Terminal Voltage	≤ 3.5V PP
Manual Data Logging	500 Sets
Continuous Data Logging	9600 Sets
Comparator Settings	Resistance High and Low Limits and Voltage Throughhold Point
Number of Comparator Settings	99 Sets
Operating Environment	0°C to 40°C (32°F to 104°F), 80% RH or Less, Non-Condensing
Maximum Input Voltage	50VDC
Power Supply	Six 1.5V AA Size Batteries
Battery Life	7 Hours
Dimensions / Weight	250 x 102 x 48 mm (approx.) / 490gms Including Batteries (approx.)
Accessories	Instruction Manual x 1, Batteries (installed), Test Probe (Alligator Clips) x 1, RS232 Cable x 1, Software Disk x 1, Carrying Bag x 1, Carrying Bag x 1, <b>Optional</b> : Thermal Printer x 1

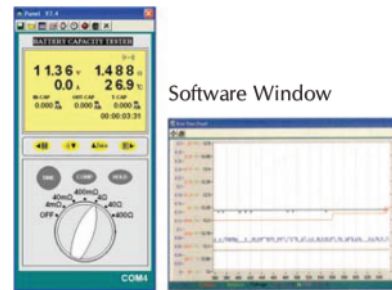
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**17712D**



Software Window

**Features**

- Right Device to know the TRUE-LIFE of Battery Capacity (Resistance / Voltage / Current & Temperature) Simultaneously
- Measure battery charge / discharge capacity (Ah)
- Measure battery State of Charge SOC (%)
- On-line Testing without shutting down battery
- Built-in Comparator Function
- Rates Conditions as PASS, WARNING or FAIL
- Datalogging Memory Function
- Compact and lightweight
- Optical USB Interface & Software
- Load Test Analysis (Charge / Discharge)
- Auto-Hold & Auto-Data Storage
- Wide Range 0 ~ 1200 Ah
- Auto Power Off
- Memory & Read Function

**Specifications**

<b>Battery Types Tested</b>	<b>UPS Battery, Motor Cycle (6V/12V : 2 ~ 20Ah), Car (12V : 21 ~ 80Ah), Truck (12V : 83 ~ 160Ah) Household Appliances [(9V : upto 625 mAh), (AA : upto 2850 mAh), (AAA : upto 1250 mAh), (C : upto 8350 mAh), (D : upto 20500 mAh)], Lithium Notebook Battery : [(14.8V : 3600 ~ 4800 mAh), (11.1V : 3600 ~ 7200 mAh)], Lithium Digital Camera Battery : (3.7V : 650 ~ 1350 mAh), Lithium Cordless Phone Battery : (3.7V : 800 ~ 1250 mAh),</b>
<b>Battery Capacity</b>	0 to 1200Ah
<b>Resistance</b>	<b>Ranges : 4mΩ, 40mΩ, 400mΩ, 4Ω, 40Ω, 400Ω Resolution : 1μΩ, 10μΩ, 100μΩ, 1mΩ, 10mΩ, 100mΩ Accuracy : ± (0.8% reading + 6 digits) on all ranges. except ± (3% reading + 20 digits) on 4mΩ</b>
<b>Measurement Condition</b>	<b>Current : Approx. 40mA, 4mA, 400μA, 40μA, 4μA Frequency : 1KHz± 30Hz</b>
<b>DC Voltage</b>	<b>Range : 6V, 60V; Resolution : 1mV, 10mV; Accuracy : ±(0.1% reading + 6 digits)</b>
<b>Temperature</b>	<b>Range : -20°C to 60°C (-4°F to 140°F); Resolution : 0.1°C / 0.1°F; Accuracy : ± 1°C / ± 1.8°F</b>
<b>DC Current</b>	<b>Range : 4A; Resolution : 1mA; Accuracy : ± (2%rdg + 2dgt), Range : 30A; Resolution : 10mA; Accuracy : ± (2%rdg + 3dgt), Range : 600A; Resolution : 0.1A; Accuracy : ± (2%rdg + 2dgt)</b>
<b>Open Circuit Voltage</b>	5V max
<b>Datalogging</b>	999 Data Sets of Manual & Auto Data Memory / 6000 Data Sets (only use PC Download)
<b>Comparator</b>	<b>Setting : Resistance Upper and Lower Limits and Voltage Upper and Lower Limit Memory : 99 Sets of Values</b>
<b>Operating Environment</b>	0°C to 40°C (32°F to 104°F), 80% RH or less, Non-condensing
<b>Power Supply</b>	Six 1.5V AA size Alkaline Batteries
<b>Battery life</b>	5.5 Hours
<b>Dimensions / Weight</b>	198 x 94 x 49 mm (approx.) / 505gms Including Battery (approx.)
<b>Accessories</b>	Alligator Clip Type Test Lead with Temperature Sensor x 1, Pin Type Test Lead x 1, DC Current Adaptor x 1, Zero Adjustment Board x 1, Instruction Manual x 1, Batteries (installed), AC Adaptor x 1, Optical USB Cable x 1, PC Software Disk x 1, Carrying Bag x 1, <b>Optional : Thermal Printer x 1</b>

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**Resistance Measurement**

Range	Resolution	Measurement Current	Accuracy
4mΩ	1mΩ	40mA approx.	± (3% reading ± 20 digits)
40mΩ	10mΩ	40mA approx.	
400mΩ	100mΩ	4mA approx.	
4Ω	1mΩ	400μA approx.	± (0.8% reading ± 6 digits)
40Ω	10mΩ	40μA approx.	
400Ω	100mΩ	4μA approx.	

Measuring Current Frequency : 1KHz ± 30Hz

**Voltage Measurement**

Range	Resolution	Accuracy
6V	1mV	± (0.1% reading ± 6 digits)
60V	10mV	

Maximum Input Voltage : 60VDC maximum. No AC Voltage Input.

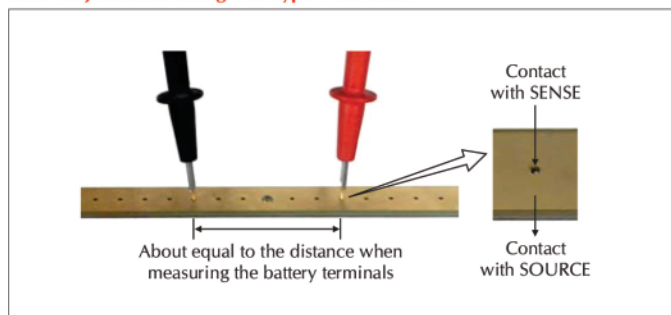
**Temperature Measurement**

Range	Resolution	Accuracy
-20°C to 60°C	0.1°C	± 1.0°C
-4°F to 140°F	0.1°F	± 1.8°F

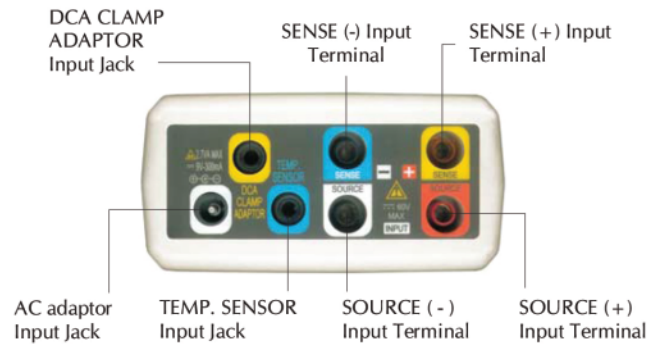
**DC Current Measurement**

Range	Sensitivity	Resolution	Accuracy
4A	6mA ~ 4A	1mA	± (2.0%rdg ± 2dgt)
30A	60mA ~ 30A	10mA	± (2.0%rdg ± 3dgt)
600A	0.6A ~ 600.0A	0.1A	± (2.0% rdg ± 2 dgt)

**Zero Adjustment Using Pin Type Test Lead**



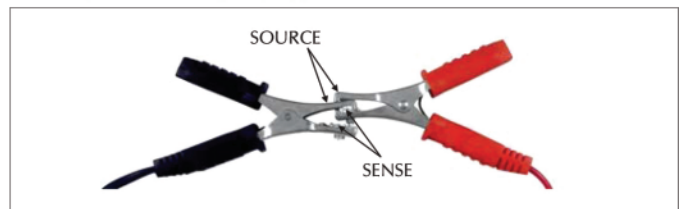
**Input Terminals**



**Usage**



**Zero Adjustment Using Clip Type Test Lead**



**Product Kit**



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