

# **MOTOBATT** *Hybrid* **GO BEYOND LIMITS** *OF BOTH LEAD ACID & LITHIUM BATTERIES*

## **MB-BCT BATTERY CAPACITY TESTER OPERATION SPECIFICATIONS AND USER INSTRUCTIONS READ THE INSTRUCTION BEFORE USE**

Thank you very much for purchasing your MB-BCT Battery Capacity Tester. Please read this instruction carefully before use to ensure proper use and please keep the purchased receipt for your product warranty service to be valid!

- Before use check that the alligator clip and cables are intact.
- The MC-BCT is compatible with Lead Acid and Lithium Batteries.
- The product is not suitable for use in the case of performance failure of the battery!
- Default -12V Batteries
- Manually Selectable for 12V and 24 Batteries

### **Specifications**

Product Name	: Battery Capacity Tester
Model No.	: MB-BCT
Product Size	: W.123mm x H.218mm x T.56mm (Alligator Clip size not included)
Product Weight	: 1150g
Max. Input	: 8Vdc - 26Vdc :130W Max.
Operation Temperature	: -20C to 40C
Storage Temperature	: -20C to 65C

### **Features**

- Constant current control
- Voltage Limit control
- Auto Calculation Battery Capacity
- Manual Set Loading Amps (12V Battery 1A to 10A / 24V Battery 1A to 5A)
- Memory Function
- Over Voltage Protection
- Over Temperature Protection
- Wrong Polarity Protection
- Beep Sound Alert

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**WARNING:** *If you ignore this information and use the product incorrectly, it may cause damage to the tester and battery.*

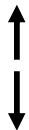
- Before using the tester, be sure to read the instruction carefully. In addition, please do not use the product for any other purpose other than described.
- If you contact the battery fluid/acid, rinse with water immediately, keep your hands away from your eyes.
- When using this product, ensure the unit and cables are away from any fans, belts, pulley etc.
- Do not remove or modify any parts of the product.
- Do not use this product near flammable liquids (gasoline) or other areas where flammable gases are present.
- Only use in a well-ventilated area.
- Ensure you are wearing the appropriate safety equipment.
- Do not use in high temperatures environments or in direct sunlight. Also, during operation, if the operation temperature surpasses 40 degrees Celsius turn off the unit.
- This product contains electronic circuits, please handle carefully to avoid collision or dropping.
- Keep out of reach of children when in use or stored.
- Before using the appliance, be sure to check the alligator clip, cables and parts for abnormalities.
- This product is only available for 12V Battery and 24V Battery.
- We shall not be liable for personal injury or damage to articles caused by human factors or improper use of the operation.

**CAUTION** If this indication is ignored and used incorrectly. It may result in personal injury, product failure or other damage/loss of property.

## **BEFORE TESTING BEGINS**

- Ensure the battery is **fully charged before use.**
- The product is not suitable for use in the case of performance failure of the battery itself! It is for testing functional batteries for capacity performance
- Do not use for any other purpose.
- Do not move the cable or body when using the appliance. Only use the unit on a stable surface.
- Do not use the appliance in outdoor or humid environments. The functionality of the product may be affected.
- When storing this tester, put the retained cable back in its original position and store it at room temperature. Do not keep the product place in a hot, humid, dusty environment for long periods of time.
- When stored at -20 C or lower temperatures, devices with LCD displays may not display correctly due to low temperatures.
- Please keep this product out of the reach of children, **persons with limited experience and knowledge, without supervision.** Please ensure children do not play with this device.

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## USING THE TESTER

Select up and down arrows to toggle between functions

Enter Button – Select the required function and press enter to confirm.

Please connect to the battery and set the clock : Date/Hour/Min/Sec before use.

Example : Testing a battery at known 130Ah / C20 nominal capacity.

- Select **USER** / Enter
- Select **VOLTAGE** / Enter
- Select **CURRENT** / Enter as 130Ah by toggling arrows
- Select **EXT USER SET** / Enter
- Select **AGM TEST** / Enter
- Select **START** / Enter
- Testing automatically discharges at C20 (6.5A of C20 capacity).
- An example result may be 124.71Ah / 6.5 = 19 Hours 11 minutes
- Since the result is C20.
- Acceptable standard tolerance is 5% of nominal capacity so 124.71 Ah is within 5% of 130Ah – this battery is PASS.

## EXITING TO ANOTHER TEST MODE

- EXT AGM TEST / Enter
- Select from AGM, EFB GEL or LITHIUM accordingly

## USER SETTINGS

**IMPORTANT:** The MB-BCT is designed to allow a *maximum input* of 130 watts

**Voltage Setting:** The cut of voltage is user selected between 6v-26v

**Default Nominal cut off:** Lead Acid battery 10.5v, Lithium battery 8.0v

**Current Setting:** AMPS is user selected between 0.5-10.0 Amps

**Selecting Amps:** (note maximum input is 130 Watts)

**Watts = Amps x Voltage**

e.g. 5 Amps x 12.5v = 62.5watts

**Amps =Watts divided by Volts**

e.g. 62.5 divided by 12.5=5 Amps



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## TESTING A FULLY CHARGED 12V BATTERY

Watts Max	Voltage	Max Amps Selectable
130W	13.2	9.85
	13.0	10.00
	12.8	10.16
	12.6	10.32
	12.4	10.48
	12.2	10.66

## TESTING WITH A FULLY CHARGED 24V BATTERY

Watts Max	Voltage	Max Amps Selectable
130W	26	5.00
	25.6	5.08
	25.2	5.16
	24.8	5.24
	24.2	5.37
	24.0	5.42



The MB-BCT is intended for commercial use by persons with at least a minimum understanding of battery technology and performance and the use of electronic equipment.

### Disclaimer

We shall not be liable for any damage or malfunction caused by the illegal use of this product, direct or indirect damage to the goods or financial loss.

- Retrofitting, adjusting modifying or replacing with unauthorized parts.
- Exposure to higher AH capacity than the stated (200AH)
- Due to fire, earthquake, flood, lightning, other natural disasters damage, water damage or damage to the product due to abnormal voltage.
- Legal proof of purchase cannot to provided.
- Trade through resale or second-hand goods (including auction purchases)