Battery Bug®
CAPACITY & LIFECYCLE METER

USER MANUAL

ARGUS® ANALYZERS

⚠ CAUTION

Batteries contain dangerous amounts of energy. To reduce the chance of sparks, damage, or injury:

- Remove metal jewelry from hands and wrists
- Use only tools with insulated handles
- Turn off engine
- Turn off connected electronics and loads
- Disconnect chargers

COMPATIBILITY

The BB-DCM12-100 can be used on all types of 12V lead acid batteries up to 100Ah (approximately BCI G27 size). The BB-DCM12-100 can be installed on banks of batteries connected in series or parallel as long as the voltage between the chosen terminals is nominally 12V and the capacity is not more than 100Ah.

Other Battery Bug models are available for larger capacity batteries and other voltages including 6V and 24V.

INSTALLATION

1. Securely attach the metal end of the Battery Bug RED wire to the positive (RED, '+') battery terminal. For the most accurate performance, the Battery Bug terminal should directly contact clean lead battery post.
2. Repeat the step above to attach the Battery Bug BLACK wire to the negative (BLACK, '–') battery post.
3. Attach the Battery Bug body to a clean and conveniently viewable surface on or near the battery using the adhesive pad on the back cover.

If you do not feel comfortable performing the installation safely, ask a professional technician to install the Battery Bug for you.

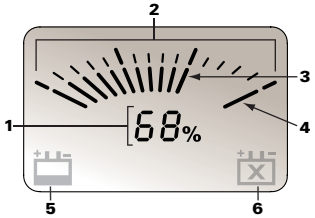
After installing the Battery Bug, fully charge the battery to 'teach' the Battery Bug the full capability of the battery. Six hours of charging is recommended.

The Battery Bug is designed to monitor the performance of a battery over its useful life. The Battery Bug can be temporarily removed and reinstalled on the same battery without affecting accuracy. To move the Battery Bug to a different battery, you must RESET it (see the Reset section).

OPERATION

The Battery Bug capacity and lifecycle meter becomes active one minute after installation. Once active, the Battery Bug measures the internal resistance of the battery every 60 seconds and calculates all important battery parameters. Power capability, charge level, battery voltage, battery life, and critical alarms are indicated on the LCD display.

The numerical display will continuously alternate between three important values: power capability (MHO), charge level (%), and battery voltage (V). The graphical 'fuel gauge' display indicates charge level and battery life.



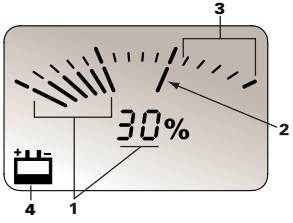
1 Numerical display
2 Fuel gauge display
3 Charge level
4 Battery life
5 Recharge battery indicator
6 Replace battery indicator

Power Capability

Power capability is an absolute indication of a battery's ability to deliver electrical energy. A higher number indicates more capability. Power capability increases with charge level and slowly decreases with age. If the measured power capability exceeds the rating of the Battery Bug, the screen will flash and the alarm will sound. Select a Battery Bug with a higher rating.

Charge Level

Charge level is a relative indication of how full a battery is, expressed as a percentage. Charge level is calculated every 60 seconds and displayed on the fuel gauge and on the numerical display. When the charge level drops below 30%, the recharge icon ( ) will turn on, and an audible alarm will sound for 10 seconds. Recharge the battery at this time. The alarm will continue to sound 5 beeps every 2 minutes until the battery begins charging. If the charge level continues to drop below 15%, the recharge icon will flash and the alarm will sound rapid beeps every 2 minutes until the battery begins charging.



1 Charge level
2 Battery life
3 Lost capability
4 Recharge battery icon

Battery Life

Battery life is the present capability of the battery to store and deliver energy compared to when the Battery Bug was first installed on the battery. Battery life is calculated and updated every time the battery is fully charged. Battery life is always indicated on the fuel gauge by the position of the ***rightmost*** bar. When the Battery Bug is newly installed, the battery life bar will be fully to the right of the fuel gauge scale. As the battery ages and loses capability, the position of this bar will slowly move to the left. The battery life bar also indicates the limit of recharge. When the battery life bar decreases to the middle of the fuel gauge display, the replace battery icon ( ) will turn on and a slow beeping alarm will sound for 3 seconds every 30 minutes. When this condition occurs, your battery has reached the end of its useful life. Replace your battery to avoid an unexpected failure.

RESET

If the Battery Bug is removed from one battery and installed on a different battery, a 'reset' must be performed to erase the stored characteristics of the previous battery from memory, allowing the Battery Bug to learn the characteristics of the new battery.

To reset the Battery Bug after installing it on a new battery, expose the reset button by gently peeling back the right side of the label on the rear of the unit. With the tip of a pen, depress and hold the reset button for one second. A beep will indicate the Battery Bug has been reset. Reattach the label over the reset button to maintain a water resistant seal.

Performing a reset erases all history stored in memory. A reset should be necessary only once, following installation on a new battery.

Note: For ideal performance, the Battery Bug should be installed on a new battery and remain attached for the life of the battery. However, it may be installed on a used battery. Regardless of actual battery age, the Battery Bug will establish the charge level range and battery life starting point based on the condition of the battery at the first full charge after a reset.

WARRANTY

For a period of 12 months from the date of purchase by the first user, Argus will repair or replace this product should it stop working as a result of normal use. Physical, chemical, or other damage is not covered by this warranty.

To make a warranty claim, send the defective Battery Bug and the original purchase receipt postage pre paid to: Argus Analyzers, Product Service, PO Box 203, Jamestown RI 02835.

For additional information on this or other Argus products, please visit www.argusanalyzers.com.

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