## BMon R-5 12V Battery Monitoring System

## INSTALLATION INSTRUCTIONS

- The length of the connection cables is critical for proper operation – Do not shorten or extend them.
  Connect the cables directly to the battery.
- Connect the cables directly to the battery terminals only.
- If calibration has already been performed for the existing system, there is no need to recalibrate.
- 1. Mount the device near the batteries using several screws. Ensure that the connection cables (red and black) can reach the battery terminals.
- 2. Identify the battery terminals using a measuring device and confirm the positive and negative sides.
- 3. Turn off the battery charger and wait at least 5 minutes.
- 4. Ensure the battery terminals are clean.
- 5. Loosen the negative (-) terminal nut on the battery.
- 6. Connect the device's black cable to the negative terminal and tighten the battery nut securely.
- 7. Connect the red cable to the positive terminal of the battery in the same manner and tighten the nut securely. It is recommended to apply grease to the terminals to prevent corrosion.
- 8. After connecting both cables, two possible scenarios may occur:
- 9. Device not calibrated The green LED is off, and the red LEDs are on. Perform calibration according to the instructions.
- 10. Device calibrated The green LED stays on for two minutes, and the three red LEDs blink. After two minutes, the device will perform a test.
- 11. During these two minutes, recalibration is possible (if necessary), as defined in the calibration instructions.
- 12. If the device is already configured for the system, wait until the LEDs stop blinking and the test is complete.
- 13. After the test is complete, if everything is functioning properly, only the green LED will remain on.
- 14. )A charging fault LED may turn on because the charger is still off(.
- 15. Turn the battery charger back on.
- **16.** The green LED will blink every few seconds, indicating that the device is functioning correctly.













CONNECTIONS

**BazzTec** 

**Connecting the BMon Device** to an External Alert System Designed for connection to a control room, SMS transmitter, external signal activation, etc.

Connect the communication cables to the green removable connector according to the table below.

Once completed, insert the removable connector back into its place on the side of the device.

Terminal No. 1, located at the top of the device, is marked on the device.

<u>Dry contact connection</u> – Normally closed circuit in normal operation.

Common connection (COM) – Terminal 8.

Charging fault – Terminal 1.

Low battery fault – Terminal 2. Battery failure – Terminal 3.

<u>4-20mA indication connection</u> – Terminals

4,5.

Battery health status in percentage:

Healthy battery (100%) – 20mA.

Depleted battery (0%) – 4mA. RS485 Modbus communication –

Terminals 7,6.

Connecti on	<u>Connector</u> <u>Terminal</u>	<u>Indication</u>
1 + 8	1	Check Charger Charging Fault
2 + 8	2	Low Battery
3 + 8	3	Check Battery Battery Fault
4 + 5	4 +	Battery Health (+) 4 – 20 mA
4 + 5	5 -	Battery Health (-) 4 – 20 mA
6 + 7	6 A	Full Data in Modbus
6 + 7	7 B	Protocol RS485
	8	Common Connection for Dry Contact <b>сом</b>

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