Function Settings

There are 4 functions settings to chose from. Press ⚠ on the rear to select which display setting you prefer. When you have chosen the correct preset, press the ○ button to return to main screen.

Function	F0	F1	F2	F3
Backlight State	Constantly on	Turn off after 10s	Turn off after 10s	Switch on or off
Digital Display	Constant display	Constant display	Close after 10s	Switch display or close
Power Consumption	High	Medium	Low	Low
Function of Button	None	Turn on the backlight	Turn on the display	Turn the display on or off

F0: Constant Mode
Backlight and LCD Display remain on.

F1: Standby Mode
Backlight will turn off after 10 seconds. LCD display will remain on with no backlight. Press the ○ button to turn the background light on for another 10 seconds.

F2: Momentary Mode
Meter will enter a state of sleep after 10 seconds. Press the ○ button to turn the background light and LCD display back on. The screen will return to sleep after 10 seconds.

F3: On/Off Mode
The ○ button will act as an on/off switch. Press the button to turn the display on and off at will.

Display Settings

There are 3 display settings that you can chose from. Press ⚠ on the rear to select which display setting you would prefer. When you have chosen the correct preset, press the ○ button to return to main screen.

Battery Voltage and Percent of Capacity
The meter will show both Voltage and Battery Percentage. Press the ○ button to switch between Voltage and Battery Percentage.

Battery Percent of Capacity
The meter will only show Battery Percentage.

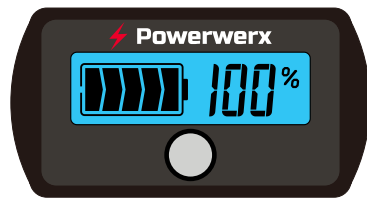### V Battery Voltage
The meter will only show Battery Voltage.

Support

For technical assistance, please contact:

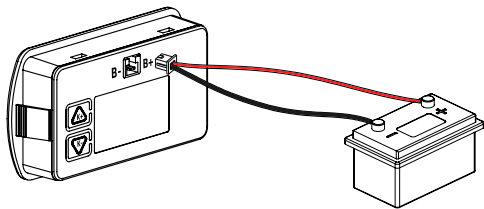# ⚡ Powerwerx

Battery Capacity Meter User Manual

Introduction
The Powerwerx BVM-100 is a battery capacity meter that acts like a fuel gauge for your battery. The meter accurately measures your batteries state of charge (SOC) and voltage. This unit is compatible with most Lithium, Lead Acid, and Lithium Iron Phosphate batteries ranging from 12-60V. The BVM-100 can be easily programmed on the go and does not require any additional tools or devices to program out in the field.

Wiring Instructions

The meter is supplied with a 7in long pigtail to hook up to your battery. In some cases, this length will be too short so it is suggested to splice on any additional length that you might need. Connect the Black wire to your batteries Negative (-) terminal and connect the Red wire to your batteries Positive (+) terminal. Next, you will need to insert the 2 pin plug on the pigtail into the rear of the meter. The back of the display has a B- (Battery Negative) and B+ (Battery Positive) marking indicating the correct polarity for installation. Make sure to pay attention to the orientation of the plug before inserting.

Meter Installation

The meter will require a rectangular knockout to insert and is held in place by pressure fitting tabs on each side. In most installations you will need to knockout an additional 1mm on each side for the tabs to fit in the knockout. Please refer to the knockout reference table below.
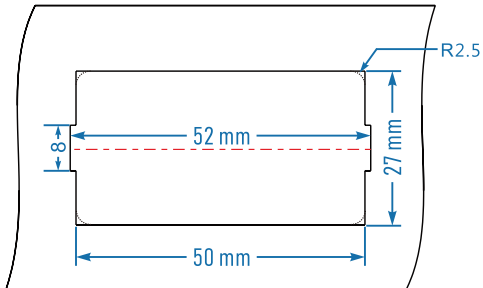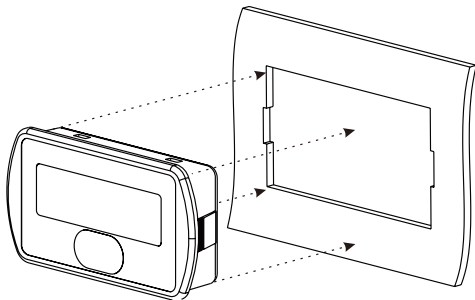
Battery Chemistry and Cell Count

With the meter powered off, press and hold the ⚠ on the back and power on the meter. The display will show the current battery preset that is selected. You can use the ⚠ and ⚠ to scroll through the available menu options. When you have chosen the correct preset, press the ○ button to return to main screen. At this point the meter is programmed for the correct battery chemistry and cell count, so it should be accurately measuring the current state of charge (SOC). When selecting a Lithium or LiFePO4 chemistry, the cell count refers to the number of cells

1P	1P: Lead-acid 12V
3c	3C: 3 cells lithium
4F	4F: 4 cells lithium iron phosphate (LiFePO4)

Specifications

Operating Voltage: 6-69VDC

Standby Current (on): 4.0-6.0mA

Standby Current (sleep): 0.005mA

Voltage Accuracy: ± 3-5%

Temperature Range: 14 to 140°F (-10 to 60°C)

Warranty: 6 Months

Lithium	Code	Lead	Code	LiFePO4	Code
2 cells	2c	12VPb	1P	2 cells	2F
3 cells	3c	24VPb	2P	3 cells	3F
4 cells	4c	36VPb	3P	4 cells	4F
5 cells	5c	48VPb	4P	5 cells	5F
6 cells	6c	60VPb	5P	6 cells	6F
7 cells	7c	72VPb	6P	7 cells	7F
8 cells	8c	84VPb	7P	8 cells	8F
9 cells	9c	96VPb	8P	9 cells	9F
10 cells	10c			10 cells	10F
11 cells	11c			11 cells	11F
12 cells	12c			12 cells	12F
13 cells	13c			13 cells	13F
14 cells	14c			14 cells	14F
15 cells	15c			15 cells	15F
16 cells	16c			16 cells	16F
				17 cells	17F
				18 cells	18F
				19 cells	19F