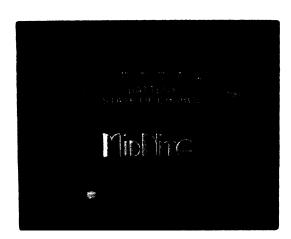
## Operation:

There are 10 "Battery State of Charge" LEDs and 3 "Battery care" LEDs. State of charge is displayed by the arched, 10 LED percentage "Meter". The 3 "Battery Care" LED's are on the left side and will indicate the following conditions:

- 1- The top GREEN LED will light up when the batteries have received a "Full Charge". ©
- 2- The center AMBER LED will come on if the batteries have not been fully charged for 1 week. 

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- 3- The bottom RED LED shows that the batteries have not been charged for 2 weeks or more.  $\, \otimes \,$



## Approximate battery voltages relative to percent State of Charge

12 Volt	24 Volt	36 Volt	48 Volt	State of
Battery	Battery	Battery	Battery	Charge
11.65	23.30	34.95	46.60	10%
11.77	23.54	35.31	47.08	20%
11.89	23.79	35.67	47.58	30%
12.02	24.03	36.06	48.06	40%
12.14	24.28	36.42	48.56	50%
12.26	24.52	36.78	49.04	60%
12.38	24.77	37.14	49.54	70%
12.51	25.01	37.53	50.02	80%
12.63	25.25	37.89	50.50	90%
12.75	25.50	38.25	51.00	100%

The display above tells us that the batteries state of charge is 90% and that the battery, as indicated by the RED Battery Care LED has not been fully charged in 2 weeks or more.

The Green LED will be illuminated under the following conditions:

FOR BATTERY SYSTEM VOLTAGE: 12v 24v 36v 48v

For Gel batteries, the voltage must reach
For AGM batteries, the voltage must reach
For Flooded batteries, the volt

## **Key switched version instructions:**

The "S" version (MNBCMS) of the meter has an additional short wire attached. This wire is the "Switched lead" This feature allows the LEDS to be turned off while retaining the Battery Care memories. This wire should be connected through a switch to Battery positive. This is usually the ignition switch of a vehicle, but can also be any type of push button, or toggle switch. If you do not have this extra wire and would like to use this feature, please go to: <a href="http://www.midnitesolar.com/pdfs/batCapMeterMod.pdf">http://www.midnitesolar.com/pdfs/batCapMeterMod.pdf</a>

## Specifications:

Battery voltage (Automatic select)
Battery types supported
Maximum Input voltage (Reverse polarity protected)
Average Power draw
Switched version when "Off"
Physical Size

MidNite Solar Inc. 17722 67<sup>th</sup> Ave NE Arlington, WA 98223 12V, 24V, 36V, 48V

Gel, AGM, Flooded Lead Acid

70V

12.5 mA

6mA or .07watts@12v

4.75" x 3.76" x 0.85"

midnitesolar.com Ph: 425-374-9060 Fax: 360-691-6882