



USER GUIDE



Remote Audio's MEON Series LiFe Box 20 is a Lithium Iron Phosphate (LiFePO4) battery module designed to be used as a stand-alone 12 Volt DC power source providing 250 Watt-hours (20 Amp-hours) of battery life at up to 10 Amps continuous current and digital metering all housed in a compact and portable Pelican 1150 case. The LiFe Box 20 can also be used as a supplemental battery to the MEON LiFe cart power system to extend its run time.

LiFePO4 Battery

The MEON Series LiFe Box's Lithium-Iron-Phosphate (LiFePO4) batteries, similar to other Li-Ion technology batteries, are lower weight and smaller size than equivalent capacities in other chemistries, such as Lead Acid and NiMH. However, a key advantage of the LiFePO4 when compared to other Li-Ion types is its superior thermal and chemical stability, higher peak-power rating, and it contains no toxic heavy metals. It is internally protected against over-charge (> 15.2 Volts) and over-discharge (< 10.0 Volts) and short circuit conditions.

Connections

The LiFe Box 20 has two DC input/output connectors; a Neutrik 2-pole SpeakON Male and Neutrik 4-pin XLR Female.

The 2-pole SpeakON wiring configuration is 1+ = Battery +, 1- = Battery -.
The 4-pin XLR wiring configuration is pin 4 = Battery +, pin 1 = Battery -.

4. Current shunt range

This meter is designed to function with either a 50 or 100 Amp current shunt. The meter has been preset to use the supplied 100 Amp current shunt. This setting should not need any adjustment.

Step1: Press and hold the key (about 8 seconds) until "Curr" appears flashing at the bottom left of the screen. Then release the key.

Step2: At this time, you will see "100A" displayed at the top left of the screen. A single click of the key will switch between "100A" and "50A". Press and hold the key to save the setting. If there is no operation after 3 seconds the meter will automatically quit.



Specifications

Dimensions:	9.44" x 7.80" x 4.29" (L x W x D)
Weight:	7.4 lbs
DC Output Voltage:	12 V Nominal, battery shutdown below 10 V
Output Current:	10 A max, external automotive blade fuse
Input/Output Connectors:	One (1) 4-pin XLR Female and One (1) NL2 Male SpeakON
Battery Capacity:	250 Wh



Limited Warranty

Remote Audio warrants the MEON Series LiFe Box against defects in materials and workmanship for a period of one (1) year from the date of original retail purchase. The internal battery pack is warranted for six (6) months. Remote Audio will repair or replace qualifying products at its discretion at no charge. Please visit our website for complete terms and conditions or contact us at info@remoteardio.com



Fuse

The LiFe Box 20 uses an external replaceable standard automotive 10 Amp blade fuse for battery protection. When the continuous current being drawn from the box is higher than 10 Amps, the fuse will blow, causing the red LED fuse indicator to illuminate. The meter's under-voltage alarm will also be triggered when the fuse blows.

Charging

The LiFe Box 20 may be charged by a two-stage lead acid battery charger with a 10A recommended max current or by connecting it to a MEON LiFe cart power systems "DC INPUT" port.

Digital Multi-Function Meter

The on-board meter measures voltage, current, active power, and accumulated energy. It features a backlit LCD, dual over-voltage/low-voltage alarm function, and energy data storage when powered off.

Display format

Voltage: 6.50~99.99 Volts DC

Current: 0.00~99.99 Amps

Power: 0.0~9,999 kW (kilowatt)

Energy: 0~9,999 kWh (kilowatt-hours)

Single Key Meter Functions

1. Back-light control

A single click of the meter key will turn on/off the backlight.

2. Reset energy counter

The meter will cumulatively count the number of Amp-hours used based on its current measurements. This is solely an incremental counter and does not automatically reset once the battery life is depleted or recharged. The counter must be manually reset to 0 following this procedure:

Step 1: Press and hold the key (5 seconds) until 'CLr' appears flashing at the bottom left of the screen. Then release the key.

Step 2: At this time, the energy reading will be flashing, and a single key click will reset the cumulative energy counter.

Step 3: if there is no operation within 5 seconds, the cumulative energy counter will not be reset and the meter will just quit the energy reset process.

3. Voltage alarm setting

The meter comes preset with these voltage alarm thresholds:

Over-voltage alarm set to 15.0 Volts

Low-voltage alarm set to 10.2 Volts

When the voltage reading goes above 15.0 Volts or below 10.2 Volts the Voltage read out and the meter backlight will begin flashing and continue to do so until the situation is corrected.

It is recommended that these thresholds be kept at these preset values, however changing them can be accomplished following this procedure:

Step1: Press and hold the key (3 seconds) until "SET" appears flashing at the bottom left of the screen. Then release the key.

Step2: At this time, you will see 2 values on either side of the letter "V". The left one is the high volts alarm value. The right one is the low volts alarm value. Each click of the key will increase the flashing number by 1. If there is no operation after 3 seconds, it will jump to the next digit. The next digit will begin flashing and you can adjust it.

Step3: Once the correct values are being displayed, press and hold the key (about 5 seconds) until "PASS" is displayed under each of the voltage alarm values. That means that the new voltage alarm values have been saved to memory and will quit the setting process.