



EBMX Smart Charger Instructions

User's Manual



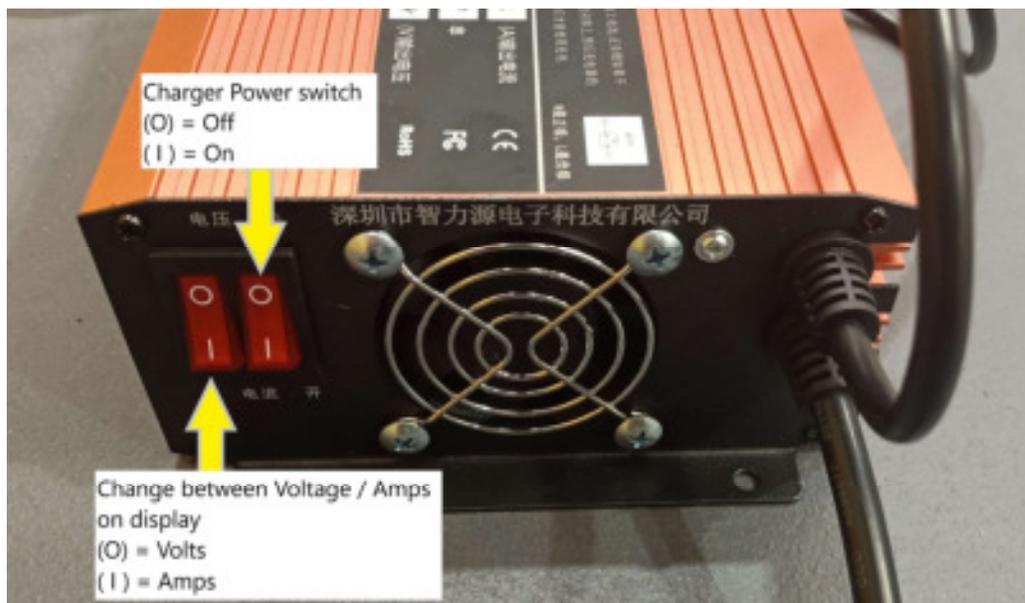
Please read this document carefully before using the charger.



BMX 72 Variable Electric Charger Basic Info:

- Input Voltage: 110v & 220v options depending on location
- Output Voltage: 84v
- Output Current: Adjustable 0-10amps
- Applicable Battery Model: 72v EBMX Lithium Ion NMC Pouch Cell

Charger Layout and Info:





Instructions for using the Charger:

1. Check the back of the battery and switch both switches to the (O) positions. This is off position for power and the voltage position for the display. Before plugging the charger into the wall, plug the battery into the charger and confirm the Red LED (far right on above the charger display). This signifies that the charger is correctly wired and ready for use.
2. Plug the charger into the wall outlet and turn on the power switch to the charger (inside switch) and the charger will turn on, the fan will start and the display will light up. Your battery is now charging. The LED on the far left will display red which indicates charging and then the green light will turn on when the charge is complete.
3. You can now switch the outer switch on the back of the charger to the (I) position where it will read out charging amps and you can use the adjustable knob on the front of the charger to set the desired charging speed (amps) you want to use. The EBMX batteries are rated for charging loads of up to 40 amps and charging at full load (10 amps) will not damage the battery, however if you have extra time, charging at lower amps is easier on the battery over the long term.
4. This charger is a constant current and constant voltage smart charger, which will stop automatically when fully charged; you do not need to worry monitoring the battery or charger to unplug the charger after the charge is complete. When the battery is fully charged, the fully charged (Green middle LED) will light up signifying the charge cycle has been completed. If the charger is left on and connected to the battery it will enter an automatic shutdown mode after one hour to protect the battery from overcharging and to save power usage.
5. Please note that when the battery is nearing a full charge you may witness the charger switching back and forth between the Red LED (charging) and Green LED (charge completed) and the fan speeding up and slowing down. The charger is working to equalize the charge and the BMS is working to balance the cells, this behavior is perfectly normal. During this phase and when the voltage of the battery is approaching the full mark, the charging amps will start to decrease as the final energy is put in to the battery. This trickle charging is normal and the best way to ensure the cells have time to balance as the final charge is applied to your battery pack.

Tips:

1. Do not charge the battery in locations with high ambient temperatures or near to flammable or explosive items. Do not use the charger in areas with high humidity wherever possible, if too much moisture is present you will increase the chance of having a short circuit of electrical components.
2. If you require the use of an extension power lead to reach your charging location, ensure the power lead is rated to at least 10amps.
3. Do not use the charger to charge a battery if there is any damage present or the battery has not been functioning properly. Contact EBMX ASAP to relay any issues.
4. Never attempt to dismantle the charger. If you have any issues, contact your EBMX Dealer that you purchased the battery/controller kit from.