

Portable Power Boxes for Bioenno Power LiFePO4 Batteries

Congratulations on purchasing a portable power box, ideal for charging phones, tablets, and DC powered devices such as 12V air mattress compressors and two-way radios. If the power goes out or you are camping in a remote location, these power boxes are a perfect way to keep your favorite toys powered up. While these boxes are designed for customers using the Bioenno (LiFePO4) batteries, other 12V batteries may be used. However, the customer is responsible for ensuring their battery fits in the box and obtaining the proper connection cable from the battery to the box.

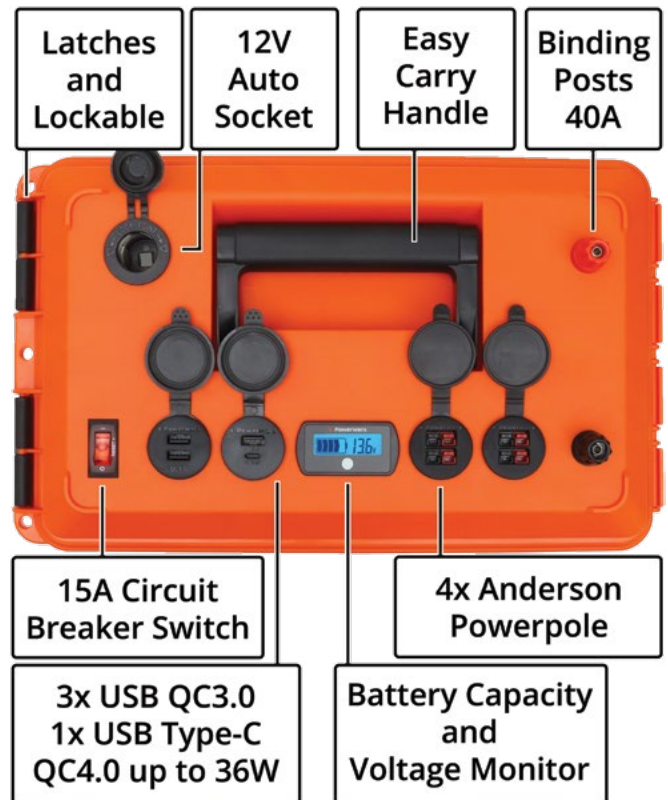
Battery Installation

1. Determine the optimal mounting position for your battery. For larger sized batteries, you may have to shift the battery to one side for the battery box lid to close properly. Position the batteries cables as close to the PWRbox lid hinge as possible or consider mounting the battery in the middle for even weight distribution.
2. Only after testing where to place your battery, use the supplied double-sided Velcro for battery mounting. Remove only one side of the adhesive protective cover and apply to the bottom of the battery.
3. Next, remove the adhesive protective cover on the other side of the Velcro strip and firmly press the bottom of the battery to the bottom of the PWRbox, applying firm pressure for 30 seconds.



Battery Connection

- **PWRbox2 - Bioenno Power LiFePO4 Battery with 30A Powerpole connector for the (12A, 15A, 20A batteries).**
Connect the PWRbox fused red/black Powerpole connector to the Bioenno battery's matching red/black Powerpole connector.
- **PWRbox2 - Bioenno Power LiFePO4 Battery with gray SB50 Powerpole connector (30A, 40A batteries)**
Connect the PWRbox fused gray SB50 connector to the Bioenno battery's matching gray SB50 connector.
- **MEGAbx2 - Bioenno Power LiFePO4 Battery with gray SB50 Powerpole connector (30A, 40A, 50A, 60A, 70A batteries)**
Connect the MEGAbx fused gray SB50 connector to the Bioenno battery's matching gray SB50 connector.
- **Customer Supplied Battery**
When connecting a battery other than Bioenno, the customer will have to make their own connection cable from the box to the battery.



Connecting the Battery Charger

- **Bioenno Power LiFePO4 Batteries: BLF-1212A (12Ah), BLF-1215A (15Ah), BLF-1220A (20Ah)**

A Bioenno 4-amp battery charger (BPC-1504DC) is recommended for charging these battery models. Connect the Bioenno battery charger's coaxial (round) DC power plug to the Bioenno battery's coaxial DC power socket. The PWRbox provides enough room to store the compatible Bioenno Power battery charger next to your battery.

- **Bioenno Power LiFePO4 Batteries: BLF-1230A (30Ah), BLF-1240A (40Ah), BLF-1250A (50Ah), BLF-1260A (60Ah), BLF-1270A (70Ah)**

A Bioenno 6-amp battery charger (BPC-1506DC) or 10-amp battery charger (BPC-1510DC) is recommended for charging these battery models. Connect the Bioenno battery charger's red/black Powerpole connector to the top of the Power box using the top mounted Powerpole connectors.

Operation

Both power boxes have a top mounted red backlit circuit breaker switch. This switch is rated at 15 amps maximum and switches power to the USB charging ports and the automotive (12V) socket. The USB chargers draw a small parasitic load on the battery even when not in use. **For this reason, it is recommended that you turn this red toggle switch off when not in use.** The red/black binding posts on the top of box and Powerpole connectors are always hot and fused directly to the battery. These connections have a combined maximum rating of 25 or 40A depend on the model.

Battery Capacity Voltage Monitor

Press the meter button to momentarily display the battery voltage and battery capacity. By default, the display will turn off after 10 seconds.

The included battery meter is preconfigured for 4-cell (12V) LiFePO4 batteries. Please refer to the included user manual to configure other battery chemistries or change settings.

The battery capacity estimate is most accurate when the battery is resting with no load or charge.

Battery Charging

It is recommended that you initially charge your new power box battery for 4-10 hours (depending upon battery and charger selection) before use. We also recommend you fully charge your power box at least once a month to maintain the charge. You may also safely leave the recommended Bioenno Battery charger connected continuously to your power box if you prefer. After using your power box, it is always recommended you recharge the battery before storage.



MEGAbx White/Red LED Light

MEGAbx includes a built-in LED work/strobe light. The left switch above the LED light turns the light On/Off. The momentary switch above the light allows you select different flash patterns when on. Solid LED light modes are also available for use as a work light.

Specifications

- PWRbox2 includes: On/Off circuit breaker switch, 2-USB charging ports, 12V socket, digital battery meter, 2-Powerpole connectors, red/black binding posts. Maximum Interior Dimensions: 6 in. H, 5.94 in. W x 11.0 in. L (152.4 mm x 150.9 mm x 279.4 mm).
- MEGAbx2 includes: LED light w/ selectable flash patterns, On/Off circuit breaker switch, 4-USB charging ports (Including (1) USB-C), 12V socket, digital battery meter, 4-Powerpole connectors, red/black binding posts. Maximum Interior Dimensions: 6.5 in. H x 6.375 in. W x 11.5 in. L (165.1 mm x 161.9 mm x 292.1 mm)

Tips

Always switch the top red power switch off when not in use. Close dust covers on the automotive socket, USB charge ports and Powerpole connectors when not in use. Keep the power box away from water and rain as it is not waterproof. Do not use to jump start a vehicle.

Troubleshooting

Unit will not turn ON

- Check and replace the internal ATO blade battery fuse with the same rating if needed, retry.
- Recharge battery for 4-6 hours and confirm at least 13.4 volts.

Red breaker Switch trips OFF

- Reduce current draw going through cigarette socket, retry.
- Disconnect all loads and check for short circuits.