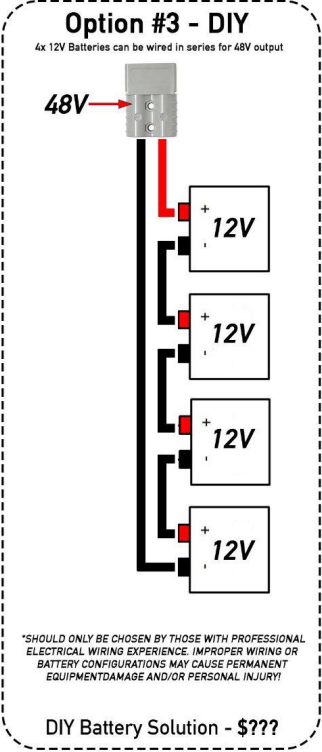
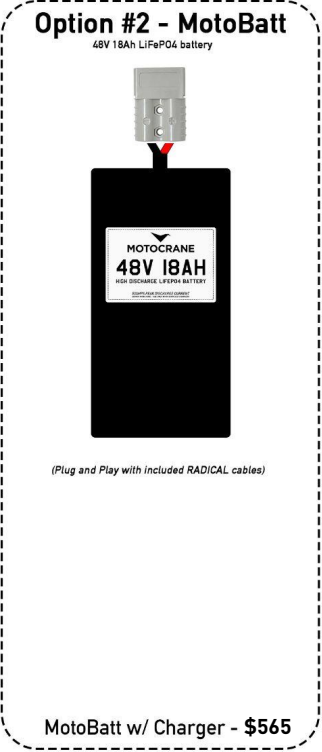
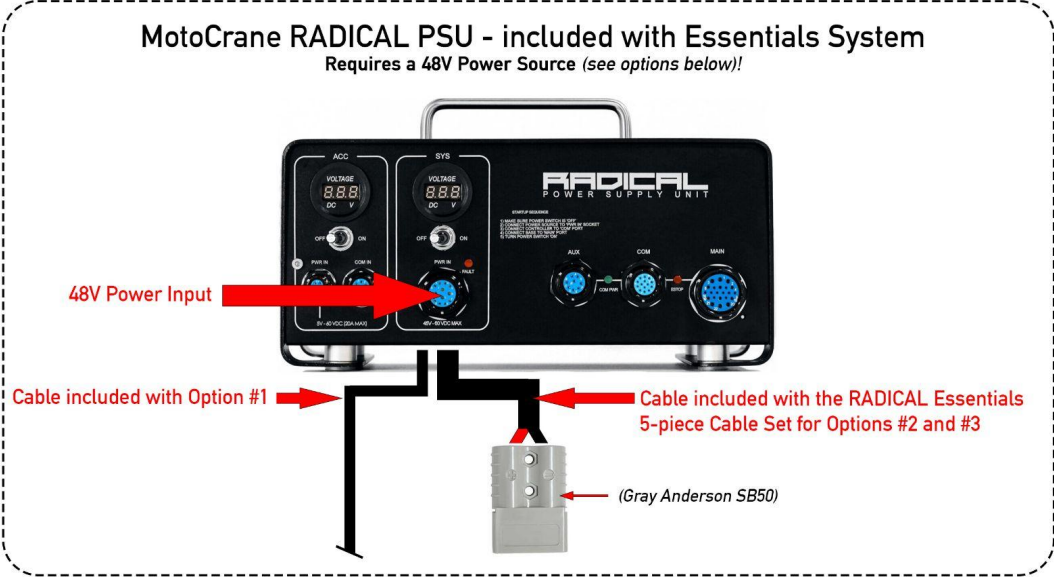


# MOTOCRANE RADICAL 48 VOLT POWER GUIDE

Your MotoCrane RADICAL includes a Power Supply Unit [PSU] which you will have to connect to a power source. The RADICAL PSU requires a 48 Volt DC input (45-60VDC MAX), and includes cabling for connecting to a Gray Anderson® SB50 Connector. Flying leads are also provided for “Do-It-Yourself” solutions. You may choose from 3 different 48V options, based on your application:



Each 48V option represents a different level of convenience, versatility, cost-effectiveness, and simplicity.

## 48V OPTIONS - EXPLAINED

### **OPTION #1 - [UPC + 12VA](#)**

The UPC allows MotoCrane RADICAL to be powered via 4x V-Mount batteries. The COMMAND Console allows operators to monitor individual V-Mount battery levels, power core energy, and diagnostic information for making sure the UPC is performing to the highest degree. The UPC contains no lithium chemistry so it is 100% safe for travel anywhere in the world. The UPC is available without the 12VA.

The 12VA is an *optional* extension module for the UPC that allows MotoCrane RADICAL to be powered by the tracking vehicle's own 12V battery. The 12VA includes the necessary cable for connecting to the UPC and vehicle's 12V battery.

### **OPTION #2 - [MOTOBATT](#)**

This **48V 18Ah LiFePO4** battery is the most common plug-and-play method for providing 48V to the MotoCrane RADICAL and ULTRA PSU (Power Supply Unit). Lithium Iron Phosphate battery chemistry offers higher discharge rates than Lithium Ion without the balance charging hassles/safety concerns of Lithium Polymer (LiPo). The battery comes terminated with a gray Anderson SB50 connector, directly compatible with the cable set included with your remote arm. 865Wh capacity provides 8-10 hours of run time (dependent on motor use/duty). Using the included 3 amp charger, it takes ~6 hours to recharge after fully depleted, and does not require any balance charging.

### **OPTION #3 - "DO-IT-YOURSELF"**

Customers with suitable electrical experience may choose to build their own 48V Power Source by wiring 4x common 12V lead-acid batteries "in series", to produce 48V voltage. If you use batteries in series, each individual battery should have the same Ah capacity.

## SPECIFICATIONS

### **VOLTAGE**

As previously explained, the RADICAL PSU requires a 48 Volt DC input (45-60VDC) and input voltages greater than 60VDC will cause permanent damage. The COMMAND Console will notify you if voltage is near the upper or lower limit of voltage

### **CAPACITY**

The energy storage capacity of a battery is described with the unit Amp-hours [Ah]. We have found that **15Ah** is enough for a typical day (8 hours of shooting). More frequent arm moves will require larger capacity (or additional backup) batteries. Batteries with 20, 30, or even 50Ah capacities are completely suitable for use, and simply provide additional capacity for longer shoots/run times.

### **PEAK DISCHARGE**

Any power source used must be able to discharge at least **40 amps peak** for optimum performance. This is especially important when using MotoCrane RADICAL at high speeds.

Questions about power for MotoCrane RADICAL? [Contact Us!](#)