60 Amp Hour battery box

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Notes:

- I mixed and matched the panel mount switches and output devices to get what I wanted, there are lots of options.
- I wired the switches with the Positives switched, so the switch lights don't work. I don't like switching to the Negative side.
- I used some foam to protect the panel mounts and to keep the batteries from moving, then I took a thin piece on top of the batteries. I just used some foam that worked, nothing special.
- I had to do some grinding on the back of the fuse panel for it to fit right.
- I ground out some lid supports so I could store extra cables on top of the batteries.
- I like the 3 20AH batteries, because they fit in the box well.
- I held the panel plates on the box and marked the big round holes. Then drilled the big holes with a spade bit. Then mounted all the panel mounts, switches, panel pole, etc. Then I went back and drilled holes for the screws. It's not the straightest mounting.
- I used all stainless steel screws and nuts, I don't remember the size. I used screws, lock washers, and nuts instead of sheet metal screws.
- I tried to use silicon and rubber washers where I could. It's probably not totally waterproof.
- The Miady cells have internal Battery Management Systems that have internal protection circuits, but still need a Lithium charger. You can use the power gate, but when you can use a Lithium charger to maintain the cells correctly.
- I used waxed string, because I don't like sharp wire ties. This may help you tie those knots. https://youtu.be/Hsid71hFMNQ

Images:









Parts:

I hope the links still work.

MTM Ammo Can - AC11

https://www.amazon.com/qp/product/B003ISKM9K

12AWG and 14 AWG power cable

https://www.amazon.com/BNTECHGO-Flexible-Conductor-Resistant-Extension/dp/B07CZZ11K 2

Ring terminals

https://www.amazon.com/Haisstronica-Connectors-Heat-Connectors-Insulated-Terminals/dp/B0 8HK1Q4F6

Fuse Panel

https://www.amazon.com/gp/product/B091XWSTR9

Miady 20ah LiFePO4 battery

https://www.amazon.com/gp/product/B089VXSBC6

Powerwerx PanelPole2

https://www.amazon.com/gp/product/B097QDKJJ2

Lights

https://www.amazon.com/gp/product/B09F2WQQSM

3 position panel mount

https://www.amazon.com/gp/product/B01D4CQ1FI

2 position panel mount

https://www.amazon.com/Cigarette-Lighter-Splitter-Charger-Waterproof/dp/B07RHY97ZZ

4 position panel mount

https://www.amazon.com/qp/product/B07JHH5YP4

Switches

https://www.amazon.com/qp/product/B06ZYD44P5

USB USB c outlet

https://www.amazon.com/gp/product/B092M6S98V

Wax String

https://www.amazon.com/Polyester-115-Pound-Strength-Lacing-1-Pack/dp/B075F5PS47

Not in the box, but nice to have

Charger

https://www.amazon.com/gp/product/B08G3M697M

PWRpath powergate, auto switches between power supply power and battery, and charges the battery

https://www.amazon.com/qp/product/B0794V58BK

Power pole connectors

https://www.amazon.com/gp/product/B07CB121LL

Wiring Diagram:

Batteries to Fuse Panel:







