

# **Power Sources**

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#### Step 1 — Power Sources



- You must choose how you will power your ROV based on your needs.
- The two main choices include Power Packs, or a 12Volt Deep-Cycle Battery.

#### Step 2 — Powerpacks



- Powerpacks or battery packs that will provide the power you need. They are often kept in vehicles to jump-start a car battery if there is a problem.
- They will run down over time but can be recharged easily by plugging them into a wall socket. A standard power pack should be able to run an ROV for 1 to 2 hours.
- The power packs will need an adapter for the power connector to plug into. This adapter plugs into the cigarette lighter outlet found on the powerpacks, and the Power plug into the adapter.

### Step 3 — Deep-Cycle Battery



- Large lead acid batteries are another way to power the ROV.
- MATE recommends the Deep-Cycle Marine / RV battery, as they are designed to be run down and recharged many times (a standard 12-volt car battery is not designed for this).
- The battery should be able to run an ROV for 4 to 6 hours or you can run 3 ROVs at a time for an hour or more.
- The battery will need to be recharged after that. To recharge a car type battery, you will need to purchase a charger.
- The battery will also need an adapter for the power connector to plug into. This adapter has Alligator clips that connect to the battery posts on one end and has power connectors at the other end.

## Step 4 — Which should I choose?



• Speak to your teacher or mentor about selecting the right power source for your application.