

VorTech Battery Backup System:

Designed to provide emergency power to the EcoTech VorTech Propeller Pumps

The battery backup's typical charge time is 12 hours. For maximum battery performance, place battery in a cool dry place with an ambient temperature of 68° F. Unlike rechargeable AA batteries, fully draining and recharging the Backup Battery is not beneficial to your battery's life.

Average run-time for the VorTech in battery backup mode is up to 36 hours depending on speed setting. In battery backup mode, the VorTech will operate at half the maximum speed for 50% of its run time and at minimum speed for 50% of its run time, alternating every few minutes. If the speed control knob is set below half speed, the VorTech will operate at that speed in battery backup mode for 50% of its run time and at minimum speed for 50% of its run time, alternating every few minutes. Upon return of wall power, the VorTech will automatically return to normal operation. Connecting two pumps to the battery backup will reduce the backup operation time by 50%. Connecting two battery backups together will double the run time. Running a VorTech Propeller Pump the battery backup unit on a *3rd party wave timer* is **not recommended**. There is a two year warranty by IceCap against any defects not caused by misuse. We recommend the pump be placed at the surface of the water to maximize oxygen exchange.

Operational modes:

on the VorTech Driver

- Solid green light – normal pump operation
- Blinking green light – battery backup mode

on the Battery Backup charger

- Green light - Fully charged
- Yellow light - Half charged
- Red light - Charging

Warnings:

- Store in a well-ventilated area as the battery may produce hydrogen gas.
- Never dispose of batteries in the trash. Always recycle them.
- Do NOT use the VorTech with a battery backup on a wave timer.