

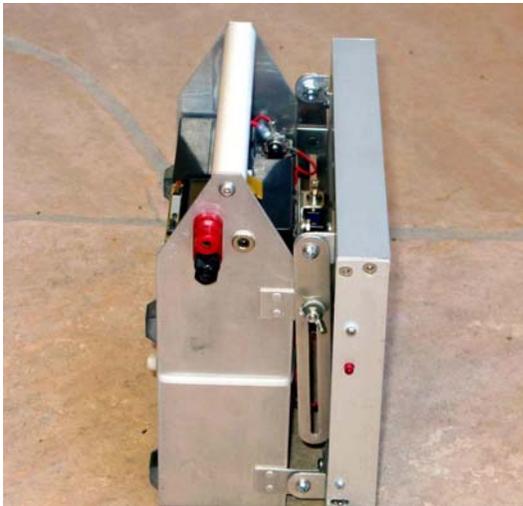
SLA battery w/solar charger for portable operation



For my portable qrp field operations I use a 12V 17A/Hr. SLA (sealed lead acid) battery. I fabricated a simple removable aluminum frame, secured with tyrap, and fitted with a solar panel and tilt brackets, that can easily be removed when the battery needs replacement. Incorporated into the scheme is a digital voltmeter attached with two sided tape to the top of the battery, and a 10A Polyfuse (resettable fuse), in case I get tangled up with wires and accidentally short something out. The solar panel is a Lavie 4 watt 17.5v aluminum framed model, off eBay, that is regulated to keep the battery charged to 13.5-13.8v. The battery is about 3 years old and I use it with a variety of my qrp rigs, the highest current draw being the Icom IC-703+. When not in use, I keep it close to a window that gets an hour or two a day of direct sunlight. It stays fully charged, best for SLA batteries, and is always ready whenever I take off.



In the left picture you see a small board attached to the side of the battery. That is a 12v - 24v buck booster used to power my small magnetic loop antenna tuning motor.



Power Terminals



Digital voltmeter & 10 amp polyfuse
(flat orange component)

As further reference, I use an SLA two stage charger/maintainer on my other SLA batteries. The part number is <12BC0500D-1>. A Google search will turn up many sources for this charger. It has performed very well for a number of years.

Ken – wa4mnt
www.qrpbuilder.com