BOE-Boost (#00000): BOE-Bot Battery Booster

General Description
The BOE-Boost battery booster increases the battery capacity of the BOE-Bot from four to five cells. This results in a 7.5V nominal output voltage for alkaline cells, making it possible to discharge them more fully before replacement. It also yields a 6V nominal output voltage for nickel-cadmium (NiCad) and nickel-metal-hydride (NiMH) rechargeable batteries, allowing their use with the BOE-Bot, which wasn’t readily feasible before now.

Features
• Snap-in adapter requiring no assembly or disassembly to install.
• Saves money on alkaline batteries by allowing them to discharge more fully before replacement.
• Permits the use of 1.2V rechargeable batteries.

What’s Included

What You Need to Provide
• Parallax BOE-Bot.
• Another AA battery.
Installation

Installation of the BOE-Boost is a simple four-step process:

1. Install a battery in the BOE-Boost battery holder with the polarity indicated in the holder:

2. Install four batteries in the BOE-Bot battery holder: two of them all the way, and two only partially, with their positive terminals resting on the edge of the holder, as shown:

3. Position the BOE-Boost tabs against the two partially-installed cells, as shown:
4. Slide the BOE-Boost tabs behind the partially-installed batteries’ positive terminals and press them against the spring pressure until they can slide into the BOE-Bot’s battery holder. These tabs should now slip into place between the battery terminals and the battery holder contacts. Push the BOE-Boost the rest of the way in until it snaps into place. Make sure all batteries are now fully seated:

You are now ready to enjoy more power for your BOE-Bot!

A couple items worth noting:

1. Not all servos will tolerate 7.5V. If you happen to be using alkaline batteries and you’ve jumpered your servo power for Vin, be sure to change it back to Vdd.

2. While it’s certainly possible to install two BOE-Boost adapters (one in either side of the battery holder), be aware that most of the power gained by doing so will be wasted in the BOE-Bot’s 5V regulator – especially when using alkalines.