

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

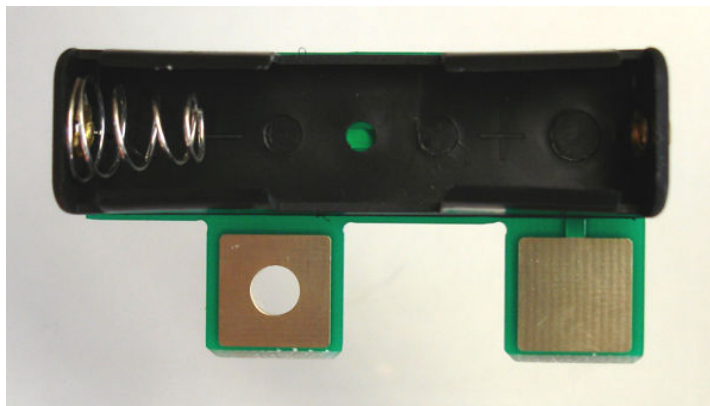
### **General Description**

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**



BOE-Boost battery holder/adaptor

### **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:



- 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  $V_{in}$ , be sure to change it back to  $V_{dd}$ .
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.