

## **JET Multi Bay Battery Charger**

## Background:

The JET Multi bay battery charger is intended to charge up to eight individual batteries used in JET devices. This battery charger provides the appropriate voltage and current to safely charge batteries between uses. For optimal maintenance of battery capacity it is recommended to store batteries in a discharged state and at a cool temperature (e.g. refrigerator but not freezer) between uses. The battery should then be charged fully one or two days before use.

## **Charging and Maintenance best practices:**

There are several actions that can be taken to help maintain the effectiveness of the battery charger as well as improve the performance of the batteries.

- Make sure the batteries are fully charged. As a rule of thumb, it is best to leave the battery in the charger for a minimum of 6 hours. This will assure the battery is fully charged. A depleted battery is charged by applying a high current to the battery during the initial stage of charging, then reducing the current to a trickle level as the battery approaches full capacity. The charge indication light on the battery charger will blink during the high current charge, but may stop blinking during the trickle charge stage. Even if the battery charge indication light has stopped blinking, it is best to leave the batteries in the charger for two additional hours to assure full charge.
- Test batteries before use \*. Batteries will lose their capacity to hold a charge over time and through repeated use. Even if the charger indicates full charge and the batteries have been charged for more than 6 hours, if the battery has lost its charge capacity, it may not function for a full 24 hours study. You can check that a battery has a full charge by measuring the voltage of the battery before putting it into the JET device. The battery voltage can be measured using a simple DC Voltmeter. Simply measure the voltage across the two contacts on the battery. The voltage should be no less than 4.05 VDC. This measurement will only indicate that a battery was fully charged. If a fully charged battery fails to run for at least 24 hours, replacement with a new battery is recommended.
- Clean the battery charger contacts: Overtime, the contacts on the battery, charger, and JET
  device will oxidize, reducing the ability of the battery to fully charge and/or discharge. We
  recommend cleaning the contacts of the battery, charger, and JET device with alcohol and a Qtip or cotton swab at least once every 3 months being careful to not damage or deform the
  contacts.

<sup>\*</sup> For more information best practices for maintaining batteries, see 006515-001

• **Number of Charging Cycles:** As with any rechargeable battery, the number of charging cycles can impact the ability of the battery to maintain a full charge. The JET battery can be charged 200 times and still maintain full charging capacity. It is recommended that you keep track of how many times a battery has been charged and discard the batteries after 200 charge cycles.

