

**HyperBlade Saber Blade System  
Li-Ion Recharging Unit**  
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<http://www.hyperdynelabs.com>

**NOTE: If you have a newer 11.1V battery (marked “N”) that was purchased after 7/24/07, then the recharge wiring diagram is IDENTICAL to the 7.2V battery.**

**The charger settings and recharge wiring diagram is different for the 7.2V battery and the 11.1V battery. Please read these instructions before hooking the recharger up to your battery.**

**Li-ion batteries are volatile. Please read all the instruction that come with the charger. By purchasing a Lithium Polymer and/or Li-ion battery, the buyer assumes all risks associated with lithium batteries. Hyperdyne Labs assumes no responsibility for misuse of the battery pack and charger. More information can be seen here: <http://www.batteryspace.com> under the “Safety” link**

### Li-Ion Recharger

If you have purchased our rechargeable battery pack and charger, this document shows you how to easily recharge your saber at any time!

Here is a pic of Li-Ion charger:



**SPECIAL NOTE: If you have a newer “smart” charger without the voltage selection switch, then you don’t have to worry about setting the voltage switch before recharging. The charger will auto sense your battery capacity when it is connected correctly. Please follow all other wiring instruction in this document.**

**It is important that you set the voltage switch on the charger to the correct mode for your battery pack. Also note that the jack polarity is different for the 7.2V and the**

**11.1V battery recharging (unless you have the newer 11.1V battery). Reference the instructions for the battery system you have.**

***NOTES:***

- *Connecting up the charger incorrectly can damage the battery, potentially catching it on fire or melting it. Li-Ion and Polymer batteries & packs may explode and cause fire if misused or defective.*
- *When charging a Li-Ion Battery Pack, please put battery in a fire-proof container. Please do not leave battery pack and charger on a wood material or carpet*
- *Must keep Li-Ion & Polymer battery packs away from children.*

**Charger LED:**

The charger LED will light green when the battery is fully charged. If the battery is nearly dead, the charger LED will be red while recharging. As the battery is charging, the LED will turn orange when midway charged and then finally green for fully charged.

**7.2V battery pack recharging**

If you are using our 7.2V Li-ion battery pack: **Make sure the charger switch is set to 8.4V or 7.2V!**

Next, you can plug the 1/8" male key switch into your saber recharging jack (remember this key is also used to disconnect the battery from the circuit).



Now unscrew the jack black sheath to reveal the positive and negative posts inside the jack.



The longer post on the bottom of the jack is the **negative** connection and the small post on the top is the **positive** connection. **It is imperative that you connect up the charger correctly or the battery can become damaged!**

Now take the red alligator clip from the charger unit and attach it to the top smaller post. Take the black alligator clip from the charger unit and attach it to the longer bottom post. ***Make sure the black and red clips are not touching each other or each other's post, as this will result in a short in the charger!!*** You can use the plastic sheathing on the alligator clips to cover up the clip as much as possible.

Here are 2 pics showing the clips attached to the recharge jack. You can also slightly bend the posts if you want to have more clearance between the alligator clips.



Now just plug in the charger and the LED on the charger will turn red when it is charging. It will turn green when the battery is fully charged! Unplug when it is done and take off the clips. Screw the jack sheath back on! You are done.

#### **Alternate method for 7.2V battery**

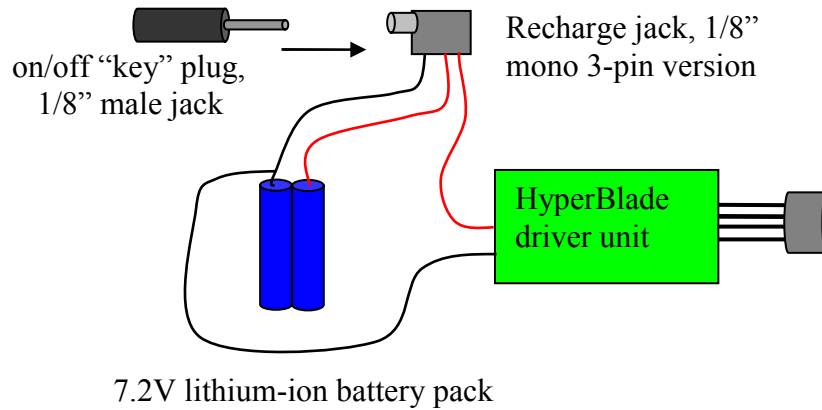
If you want to keep your recharge jack separate from the key switch, you can get a secondary 1/8" mono male cable and cut one end off to use as a recharge cable. Splice the 1/8" cable to reveal the positive (inner smaller wire) and negative (wire strands around sheathing) wires. You can now attach the red alligator clip to the smaller center wire and the black alligator clip to the outer wire (twist these negative wires into one



large wire). Now you have a dedicated recharge cable, just plug it into the saber when you need a quick charge!



### 7.2V Battery Diagram w/ Recharge Jack and On/Off Key



## **11.1V battery pack recharging:**

If you are using our 11.1V Li-ion battery pack: **Make sure the charger switch is set to 12.6V or 10.8V!**

**NOTE: The 11.V battery pack has a 2.5mm DC plug attached to it, rather than the 1/8" mono jack. This DC plug is needed for the extra current draw the larger battery pack delivers w/ our V2 LED driver board.**

Next, you can plug the 2.5mm DC key switch into your saber recharging jack (remember this key is also used to disconnect the battery from the circuit).



Now unscrew the jack black sheath to reveal the positive and negative posts inside the DC jack.



The longer post on the bottom of the jack is the **positive** connection and the small post on the top is the **negative** connection. **It is imperative that you connect up the charger correctly or the battery can become damaged! Note that this is the reverse polarity than the 7.2V jack setup.**

**UPDATE: If you have a newer 11.1V battery (purchased after 7/24/07), then the polarity is actually the same as the 7.2V battery setup. You should connect up the recharger with the longer post being negative and the smaller post is positive!!**

### NEW 11.1V BATTERY HOOKUP

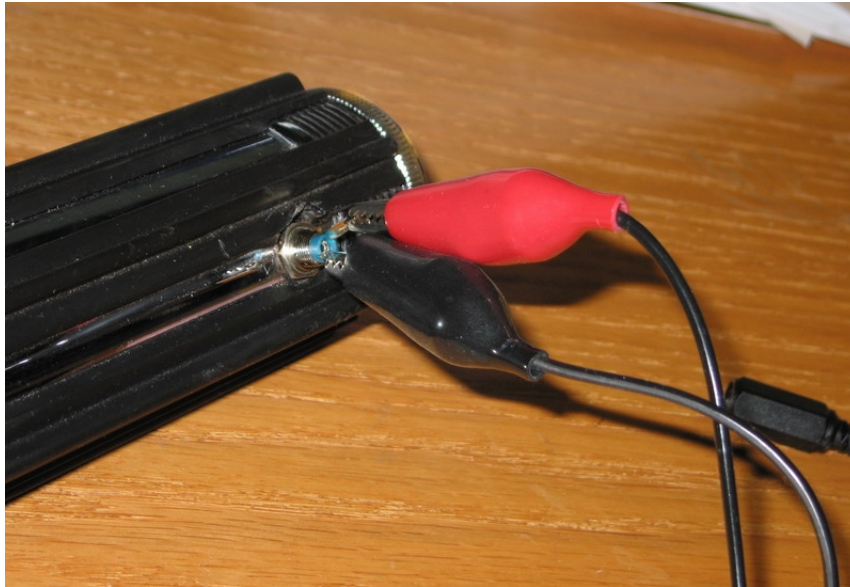
The longer post is the negative, and the shorter post is the positive lead.



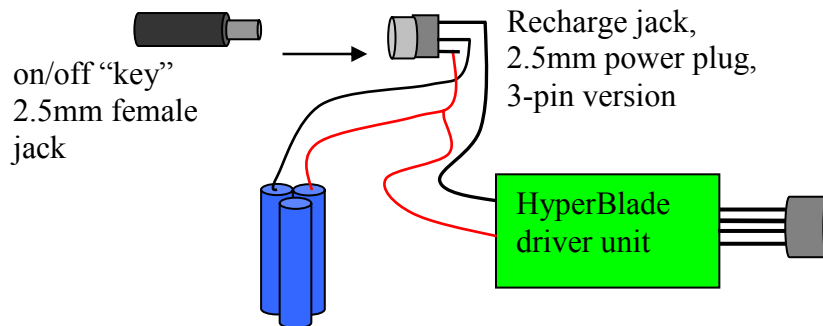
### OLD 11.1V BATTERY HOOKUP (for batteries purchased before 7/24/07)

Take the black alligator clip from the charger unit and attach it to the shorter post. ***Make sure the black and red clips are not touching each other or each other's post, as this will result in a short in the charger!!*** You can use the plastic sheathing on the alligator clips to cover up the clip as much as possible.

Here is a pic showing the clips attached to the recharge jack for the 11.1V battery (old version only).



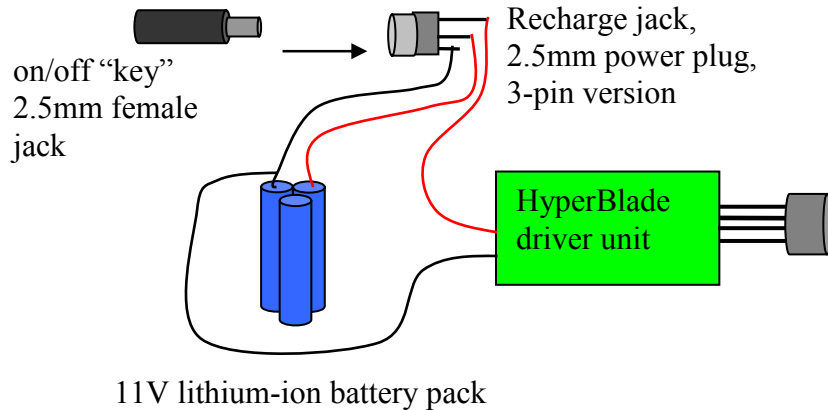
### 11.1V Battery Diagram w/ Recharge Jack and On/Off Key (NEW VERSION – POLARITY SAME AS 7.2V BATT)



11V lithium-ion battery pack



### 11.1V Battery Diagram w/ Recharge Jack and On/Off Key (OLD VERSION)



On the newer Tenergy chargers that ship with the hyperblade system, you can easily tell if you have the polarity correct. If the recharge LED does not come on when you plug in the recharger, most likely you have the reverse polarity on the battery connections. Switch them around and see if the recharge LED goes red (for charging) or green (done charging).

**NOTICE:** There is no warranty on kits. It is your responsibility to install the board. Opened kits cannot be returned. Be careful if you use a battery source that is capable of delivering a lot of current. Contact a professional if you need assistance. Hyperdyne Labs assumes no responsibility for the misuse of this kit or any damage to your saber hilt due to improper installation. This guide is only one way to do the install and does not represent all methods. Use at your own risk!!