# **MIB Cricket Sound and Light Kit**

Installation Guide into Unobtanium Kit Hyperdyne Labs © 2011 www.hyperdynelabs.com

Please read all the directions. They will help you do the installation correctly.

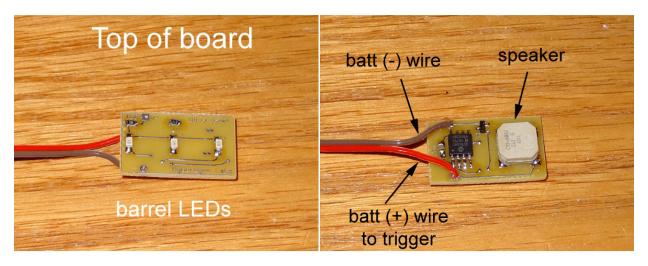
There are two versions of the cricket. The first is the older Nicksdad version. The second is the Unobtanium (UB) version, which is very much like the Nicksdad kit. The major difference is the trigger assembly and the one battery compartment in the UB version. The electronic kit can run off any battery voltage from 3-6V.

#### Tools needed:

- soldering iron
- wire snippers
- hot glue or superglue
- tweezers, sandpaper (optional)

The electronic board is fully assembled and tested. Some minor wiring and install of the trigger and batteries is needed to finish your prop!

Here is a pic of the cricket board:



Below is a sample pic of a prop gun with the cricket electronics kit next to it:

NOTICE: There is no warranty on kits!! It is your responsibility to install the board. Kits cannot be returned! This kit can consume a lot of current. Be careful if you plan to 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.



NICKSDAD VERSION

**UNOBTANIUM VERSION** 

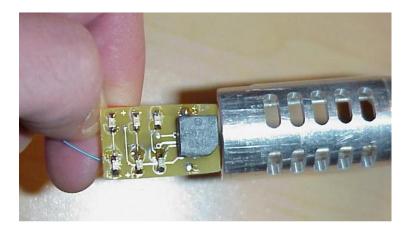
# These instructions will go over the Unobtanium version.

# **INSTALLATION**

#### Step 1:

Take the board and insert it into the barrel as shown below.

NOTE: If the board is too snug, you can sand down the sides with sandpaper. If it is too loose, you can glue it into place or put some tape on its side to make the fit more snug. Dont force the board in! It should slide in with small resistance.



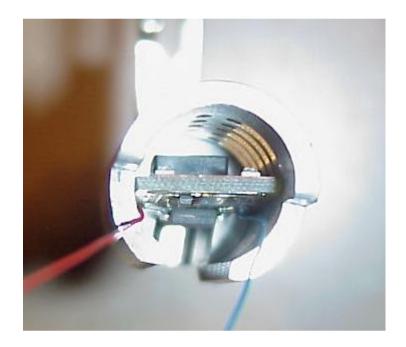
# Step 2:

Make sure the board is sitting in the middle of the cylinder and it straight. Dont pull on the wires in order to realign the board, as too much force and you can break them off!! Use your tweezers to realign the board.



# Step 3:

Looking down the barrel, the board should be flush and straight. If the board is not snug, you can secure the board with hot glue, gel super glue, etc. The board should not move around. The end of the board should not protrude out the back of the barrel also.



### Step 4:

Now run the wires down the rectangular hole into the handle. You don't need to slide the barrel back on, just give yourself enough room to work! Run the red wire to one side of the handle and the brown to the other side (this will be apparent later).

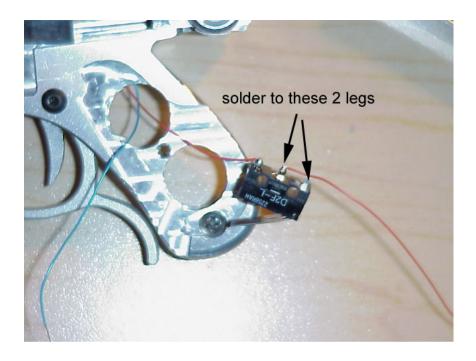


Above picture shows Nicksdad version. Unobtanium (UB) model only has one battery slot

### Step 5:

Now is time to attach the wires to the switch. Get your soldering iron out.

- 1) Snip down the leads some on the switch (since you have to insert it into the gun body in the next step.
- 2) Strip and attach the one red wire coming from the board to the end lead on the switch. Solder it in place.
- 3) Take an extra red wire from the kit, strip and solder it to the middle lead on the switch. You are done!



# Step 6a:

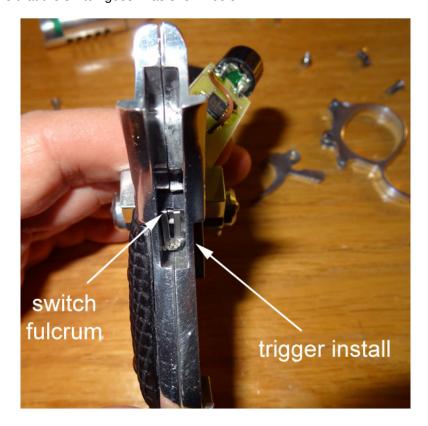
This is the trickiest part of the install. The switch must be secured into place so it works with the trigger.

- 1) Remove all the allen screws from the gun body. The trigger guard will release. You can now remove the trigger guard and the trigger mechanism.
- 2) The lever switch installs inside the trigger cavity so the trigger arm will press the button when the trigger is depressed.



# Step 6b:

1) Make sure that the switch goes in as shown below.



- 2) Reinstall the trigger guard and trigger with just one screw on the trigger fulcrum.
- 3) Make sure the trigger can be depressed and you can hear the lever switch clicking on and off.
- 4) When you have the correct placement, use a small amount of hot glue or other glue to secure the switch in place.

Make sure not to use too much glue or you might glue the lever switch mechanism!

Wait until the switch dries completely before going on to the next step. When its dry, make sure the trigger operates and that the switch still clicks when you depress the trigger.

### Step 7:

THIS STEP IS IMPORTANT IN ORDER FOR THE GRIPS TO FIT BACK ON FLUSH. THE BATTERIES USED WILL DETERMINE HOW MUCH OF THE BATTERY SPRING TO CLIP OFF.

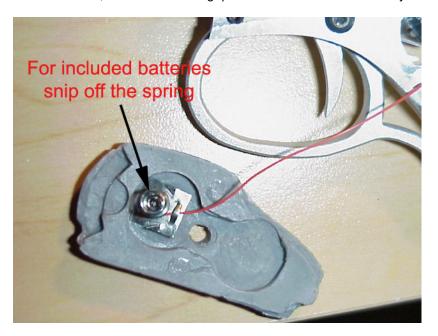
Now, you will connect the 2nd red wire you attached to the switch to one of the battery springs.

- 1) Take the corresponding handle grip (right one for the UB kit).
- 2) Solder the red wire to one of the battery springs.
- 3) In order for the grips to fit back on, cut a small piece of the spring off the battery spring holder! I have found that 1-2 rings of the spring will do just fine! Not much of the spring can protrude and you still be able to reattach the grips flush.
- 4) Hot glue or super glue the cut piece of the spring to the inside of the handle, in the bottom battery indentation. This is the positive (+) side for the batteries.

#### FOR THE UB VERSION (CR1620 BATTERIES):



NOTE: Cut off some of the spring, solder the red wire to it, and then glue that down into the grip. I have found that this works much better, and it allows the grips to reattach flush without any trouble.



### Step 8:

The easiest way to secure the other side of the batteries is to use the batt plate (if it was included in your kit). Otherwise use any piece of spare metal. When you attach this plate, the body of the gun is now ground (negative). So you can take the brown wire batt (-) from the circuit board and secure it anywhere to the gun body.

Here is a pic of the (-) wire attached:



### Step 9:

Take the two CR 1620 batteries and use some tape to attach them together. If you don't have the plastic batt holder, this will help them from moving around in the hole and also isolate them from touching the metal handle. You can also use electrical tape, or a sheath to hold the batteries together.



The bottom flat side is (+) and the top side shown here is (-)

### Step 10:

Now, take the handle grip with the red wire attached to it and screw it back in. The battery spring should be aligned up with the bottom hole. Put the batteries in the bottom hole ( - side of batteries showing in pic).



#### Step 11:

Attach the negative battery plate, making sure the base of the (+) battery spring is making contact with the batteries and the (-) plate is also making contact.



# Step 12:

Reassemble the cricket. Slide the barrel back on. Make sure not to tangle up the excess wire. You can carefully use some tweezers to redirect the wire underneath the board.

NOTE: This is why you wanted to snip the wires down some so there is some excess, but not too much. This will allow you to take the cricket apart again without having too short of a wire. Too long a wire and you have to hide it by wrapping it around the inside. You can break the wire either way, so just take your time and be careful!

Dont pull on the wire or work it too much. Try not to make 90 degree bends in it more than once, or you risk breaking it, which will ruin your day! Also be careful when taking the barrel back off. Too much force and you can break one of the wires.

#### **OPERATION**

You are done! If you did everything correctly, pull the trigger and watch your cricket come to life!



The LEDs should sequence back and forth for 2 sec, then ramp back down. The board will also play out a ramping up cricket chirping, which will stabilize after 2 sec, telling you the gun is now charged and ready to rock! The ramp down ends up with a beeping effect to tell you the gun is now discharged.

This effect is repeated every time you let go and pull/hold the trigger again.

The batteries should last at least an hour on continuously. If you use the cricket at 5-10sec intervals, the batteries should last you quite a long time! You can replace the batteries with any two 3V lithium cells.

### Good luck and enjoy!

#### TROUBLESHOOTING TIPS

Q: Cricket doesnt come on, what is wrong?

A: Check to see if the switch is working with the trigger. See if the batteries are making contact with the battery springs, make sure the batteries are not dead. You can also use 2 AAA batteries to check to see if the board is working or not.

Q: Wire broke during installation, what do I do?

A: You can resolder the wire together or use a bigger gauge if you want to rewire everything. Try and go back to the step where the wire broke and repair the wire.

Q: I cant install mine. Will you do it?

A: Typically installs are left to the end user. We do not install kits that were already opened and/or used. This is a KIT, which means it is your responsibility that it is installed correctly. We cannot refund broken or opened kits. We can give you pointers, online help, or live support to help you with your install.

#### **SPECS**

• Size: 9/16" x 1.0"

- Runs off coin cell batteries. Voltage 3-6V DC
- Includes accurate chirping sound
- 3 onboard hyperbright green LEDs
- Current consumption: 20-40 mA (active)

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