# MIB Cricket Sound and Light Kit Installation Guide into Nicksdad Kit Hyperdyne Labs © 2011 www.hyperdynelabs.com

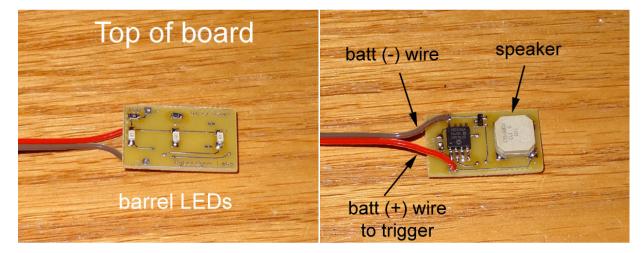
# Please read all the directions. They will help you do the installation correctly.

There are two versions of the cricket. The first is the older Nicksdad version, as shown in the below pic. 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.

Tools needed:

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

Here is a pic of the cricket board:



Here is a sample pic of a prop gun (Nicksdad version) with the cricket electronics kit next to it:

<u>NOTICE:</u> There is no warranty on kits!! It is your responsibility to install the board. Kits cannot be returned! 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.



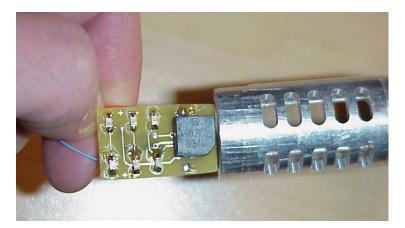
These instructions will go over the Nicksdad version.

# INSTALLATION

# <u>Step 1:</u>

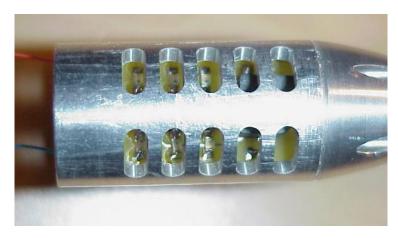
Take the board and insert it into the barrel as shown below.

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.



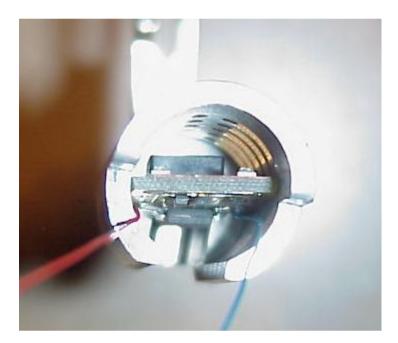
#### <u>Step 2:</u>

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.



#### <u>Step 3:</u>

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.



### <u>Step 4:</u>

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).

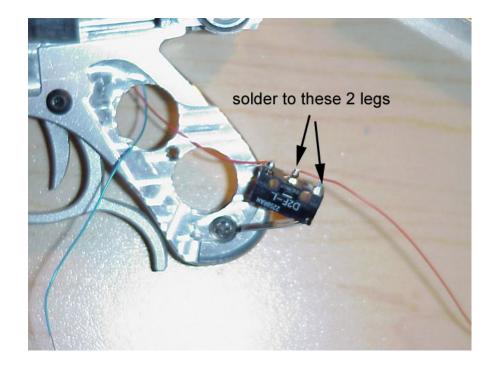


Above picture shows Nicksdad version.

# <u>Step 5:</u>

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 a circular hole 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!



NOTE: I have recently found a couple of the switches do not connect the leftmost lead to the switch contacts. In this case, if you soldered it like above and the switch is not working, connect one red wire to the middle and the other red wire to the rightmost lead (as shown above). The switch should work then. You can use a multimeter to check continuity if you want to do it the easy way.

#### Step 6a:

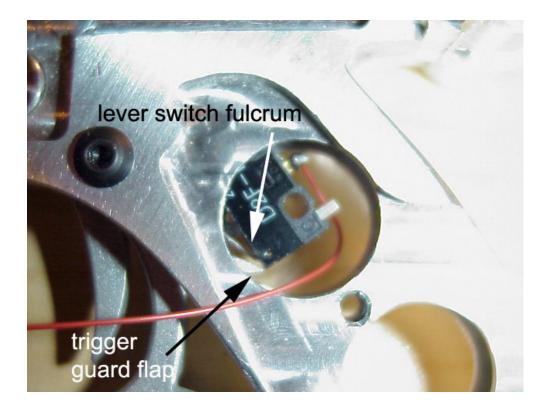
This is the trickiest part of the install. The switch must be secured into place so it works with the trigger.

- 1) Look inside the handle and find the trigger flap. When you pull the trigger, this small flap raises up. This flap sits on another flap, the trigger guard flap. You want to place the switch here so when you pull the trigger it contacts the switch and turns on the board.
- 2) Take the switch and insert it into hole 1 in the handle. This is why you needed to snip the leads above, so it will fit!

#### Step 6b:

- 1) Make sure that the switch goes in as shown below. That is, the dangling lever part of the switch is inserted first.
- 2) Place the switch so the lever part sits on top of the trigger flap. For best placement, the fulcrum (joint) of the lever switch should be flush with the trigger guard flap.
- 3) Hold the switch in place and pull the trigger to make sure you can hear the switch being depressed. It should click 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.

#### <u>Step 7:</u>

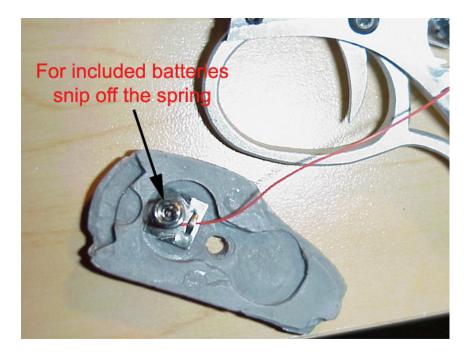
THIS STEP IS IMPORTANT IN ORDER FOR THE GRIPS TO FIT BACK ON FLUSH. THE BATTERIES USED WILL DETERMINE HOW MUCH OF THE BATTERY SPRING TO CLIP OFF.

With the recommended batteries with your kit, follow the advice below.

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 (left one in the below picture).
- 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!

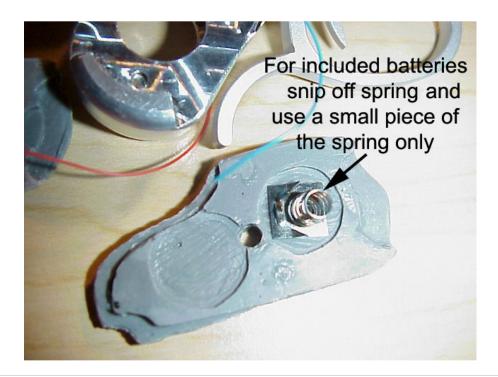
NOTE: The below picture does not show the best way to do this!!! Cut off a circular piece of the spring instead, solder the red wire to it, and then glue that down into the grip. I have found that this works much better, and it allows the grips to reattach flush without any trouble.



# <u>Step 8:</u>

Do the same thing for the wire on the other handle. Now you know why I told you above to run the wire to the opposite side! It will hold the negative (-) battery spring.

NOTE: When using the recommended batteries, cut the spring off here as well, or the batteries will not fit with the grips on! I have found that it is even better to cut a small circular piece of the spring and solder that right to the blue wire. Place this into the grip indentation. This allows the grips to reinstall flush. Again, make sure you have enough wire to work, but not too much as it will be difficult to hide it all once you reassemble the gun!



Let the battery springs dry completely.

#### <u>Step 9:</u>

Take the two 357 watch batteries and use some tape to attach them together. 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 (-)

#### <u>Step 10:</u>

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. The 2 handle grips will sandwich the batteries in the handle so contact is made!



#### <u>Step 12:</u>

This is an important step also. Attach the other handle grip, making sure the base of the battery spring is making contact with the batteries.

NOTE: If the handle grips are not flush with the handle, you can realign the base of the battery springs to make them fit. If you followed my advice and use several circular spring pieces from the battery springs, it should be making sufficient contact on the batteries.



#### <u>Step 13:</u>

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!

NOTE: 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.

#### Step 14:

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 flash rapidly. The board will also play out a ramping up cricket-like chirping, which will stabilize after 2 sec, telling you the gun is now charged and ready to rock! This effect is repeated every time you let go and pull 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 1.5V button cells. We recommend 357 button cell watch batteries.

# 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.

#### 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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