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# How-to: Make your own 1920's style bluetooth handset

BY [BARB DYBWAD](#) [@DOCTORPARADOX](#) JUNE 7TH 2005, AT 2:18:00 PM ET



*This week's how-to is brought to us by [Jon Preussner](#), who'll be showing us how to make a bluetooth handset out of a slightly less cutting edge piece of telecommunications...*

This device is a conversion of a 1920's candlestick phone to a bluetooth enabled handset. I thought it would be a fun gadget and conversation piece to have on the coffee table. Also I am sure this delivers the lowest amount of brain-tumor-causing radiation of all the headsets currently on the market. Even the tiny bit of RF generated by the bluetooth module is over a foot from your head. It would make a great gift for the paranoid.

## **PARTS LIST:**

1. Bluetooth headset, run over by car (run over by car is optional)(ebay) \$10 link
2. crosley candlestick replica \$50 (or use a real candlestick phone if u want) ebay
3. tools, soldering iron, dremel, hot glue gun, stuff everyone should have around.
4. clock \$16- to fill the void where the cheesy looking dial used to be.

Total parts price: \$76

## PROCEDURE

1. Take apart the HS810 bluetooth headset. I assume any bluetooth headset will work. this was just the best option for me. The device had been crushed by a car. All the switches and parts were shot but luckily the circuit board still worked. A \$10 gamble :)

The two switches that will be interfaced control the on/off function and the pickup/hangup/voicedial function.

2. Disassemble the candlestick phone, clip out the circuitboard and check out the parts.

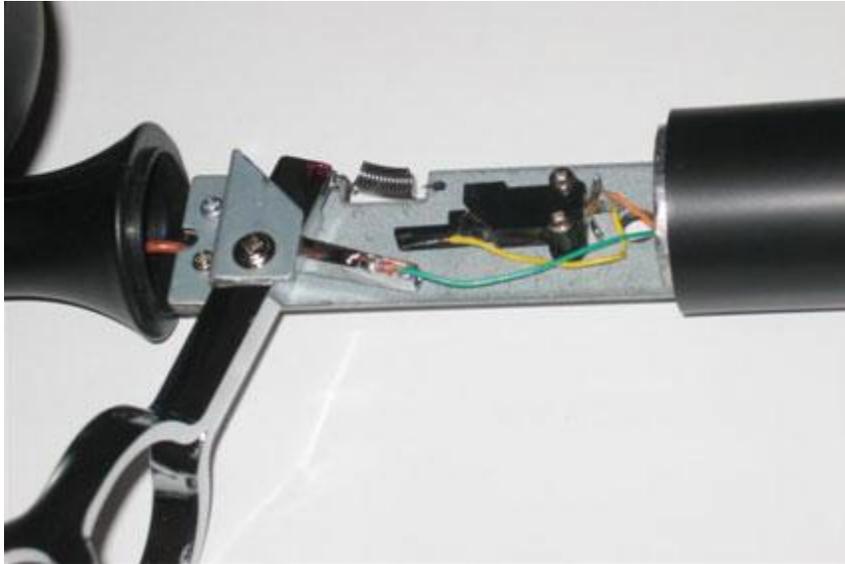
3. Interface the on/off contacts of the circuitboard with a simple switch. They're tough to solder, luckily Steve was helping me and he has strong soldering skillz.



4. Interface the main button contacts with a modified version of the existing arm-switch. The main button requires a ?pulse-like? connection. We'd like this to happen whenever the speaker is lifted or put back. to get a rising and falling edge. Here's an ascii diagram:

```
_____ |'''''| _____ |'''''| _____  
cell phone rings, pickup.....talk talk blah blah blah.... hangup
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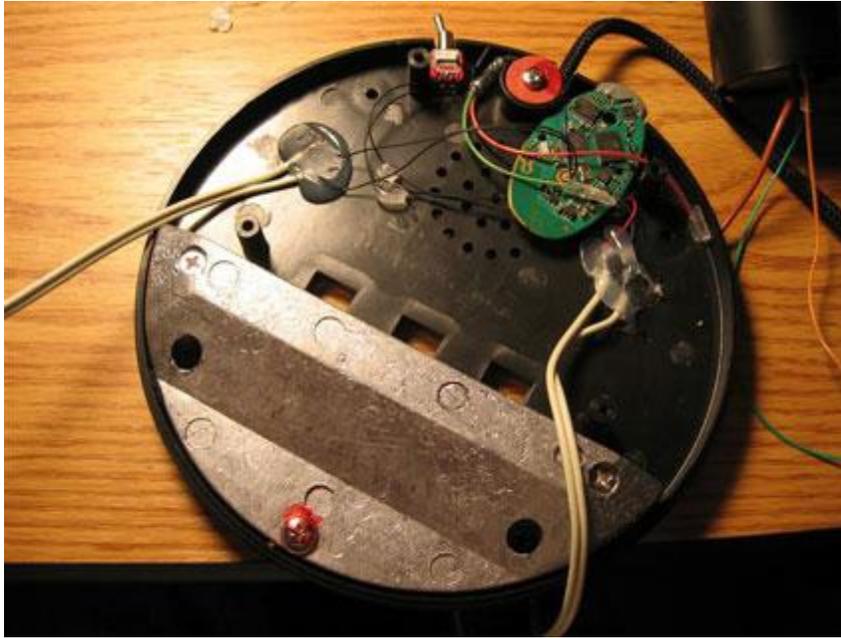
To make the first edge, wires were connected to the surfaces of the arm and switch. The meet, a contact is made, then the arm keeps moving, flipping the switch and breaking the contact. The arm is now up or down.



Remember to leave some extra wire, you'll have to connect the wires through the dial-hole.



5. Connect the mic and speaker to the wires on the headset.



6. Test it out.



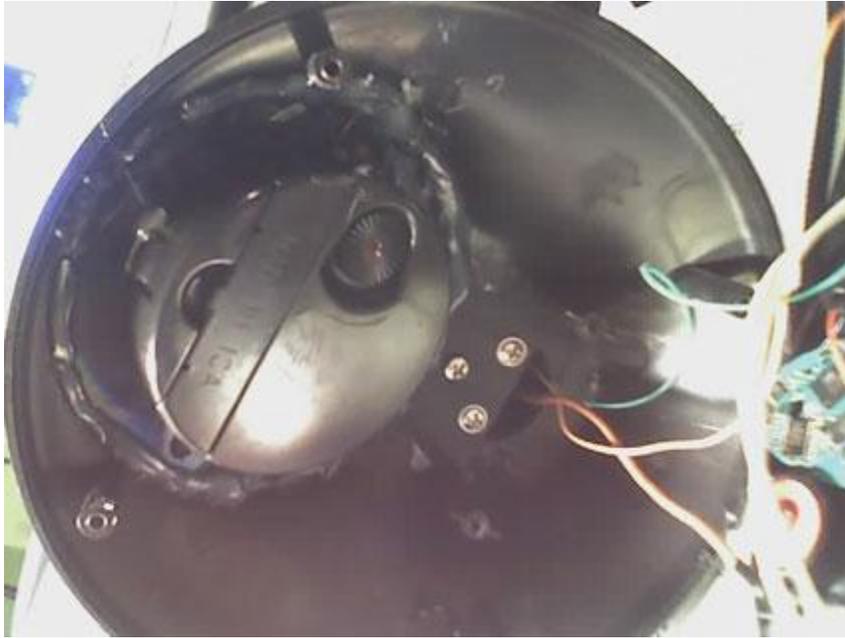
7. Making room for the clock in is a bit of a pain in the ass. The original position of the large weight is in the way. Pry it up and move it further back in the base. There is plenty of room since all the old circuitry has been removed. Dremel out useless plastic parts in the way. Glue the weight down in the new position.



8. Mounting the clock is a serious pain in the ass. The clock I picked up at a craft store was a bit small for the dialpad. Make a mount from a mini cd. Tape one side of the CD, trace out the back of the clock, and dremel out the middle. Spray paint it black.



9. Hot glue the cd inside the base, put the clock in, glue the clock in place.



10. Close it up ? you're done! 10 easy steps. walk around in public with it. It will get you more attention than those boring earpieces.

