MyHalloweenPage

Home of the 'DEAD OAKS' Halloween home haunt

http://www.johnnyspage.com/borishowto.htm

Boris Hack

Talk through Boris skulls are getting very common around Halloween. If you are like me, you want to be able to have Boris speak to a recorded voice, and through a speaker other than the internal speaker that comes with the Boris. This how-to will tell you how to rig a Boris so you have a single plug that goes into a CD player, mp3 player or computer to play back a recorded voice, and play the voice back through a single powered speaker instead of the cheap internal speaker the Boris comes with.

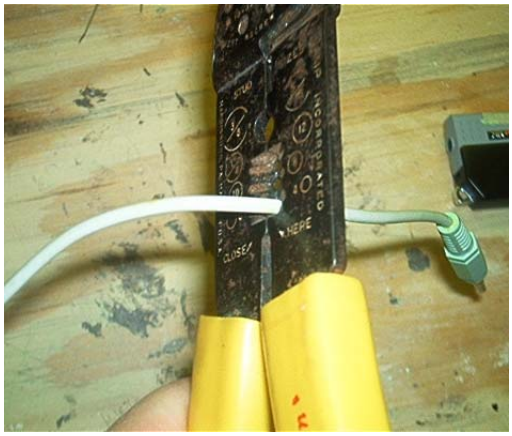
The original Boris Hack came courtesy of Wolfstone, make sure you check this out!

Here is everything you need for this project; A 100 microfarad capacitor, a 10 ohm resistor, a powered computer speaker, and a Boris. You will also need a music source you can plug the speaker into for testing

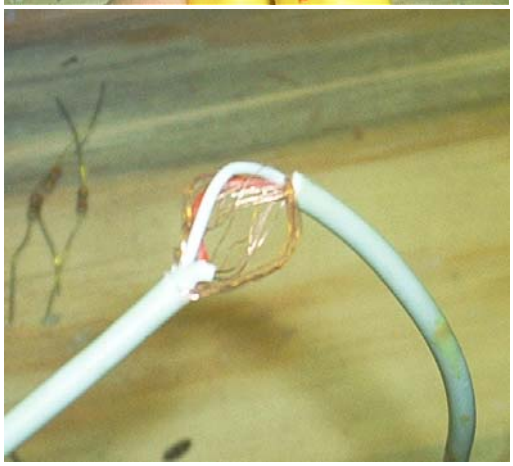
If you look closely, you will see that I have 3 resistors. I have a lot of 27 ohm resistors lying around, and if I use those in parallel the result is 9 ohms. I have found that anything from 8 ohms to 13.5 ohms will work okay. If you don't understand about parallel resistors just get a single 10 ohm resistor.

Finally, you need a single speaker from a pair of powered computer speakers, the one that has the power cord, volume control, and plug that goes into the computer, mp3 player or CD player.

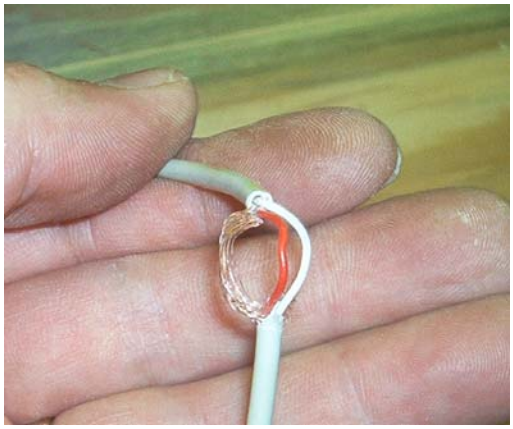
Obtained from orianhunedtrail.com



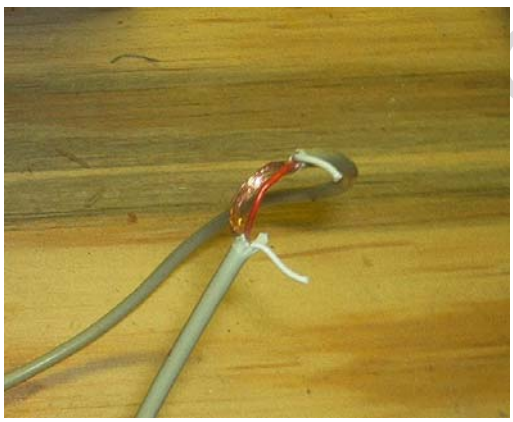
Carefully strip 1-2 inches of the outer insulation from the speaker cord, about 6 inches back from the 3.5mm phone plug (also called a TRS). I use strippers to barely cut through the outer insulation, then I pull the necessary cover away with my finger nails. If this does not work you can use needle nose pliers to pull the insulation back, or a pair of diagonal cutters or small scissors to cut away the cover. Be careful not to cut the wires inside the cover.



You should end up with something that looks like the picture to the right. The bare copper wire is common between both speakers, and the 2 insulated wires are each for a single speaker. Connecting the copper wire and the white wire will make sound come from 1 speaker, connecting the red wire and the copper wire will make sound come from the other speaker.



Twist together all the copper wire so it is like a single wire. What we want to do next is to cut the wire for the speaker that we are not using, and to keep the wire for the powered speaker that we are using, so when it is plugged in sound still comes out of the speaker. So plug the speaker in to some music and make sure the speaker is working.



While the speaker is playing pick the wire you think is NOT for the speaker you are using and cut it. I guessed that the red wire was for the speaker I was using and cut the white one. If you guess right sound will still be coming out of the speaker, for my speaker the white wire was the right one to cut. If you guess wrong, strip a little insulation from each end of the wire you cut and twist them back together, and cut the other wire. The sound should come back on, and you can solder this connection when you solder the other connections later. Unplug the speaker from the music source. Strip some insulation from the cut wire that is comes from the phone plug. Don't do anything to the cut wire that comes from the speaker.

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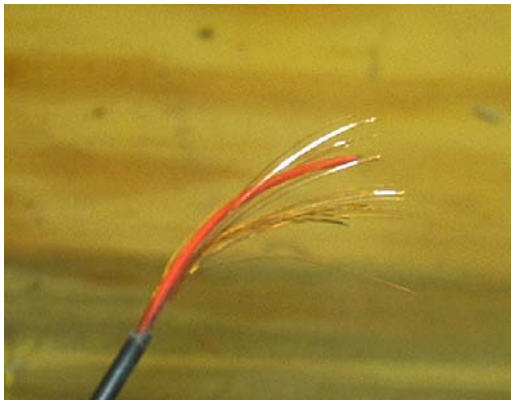
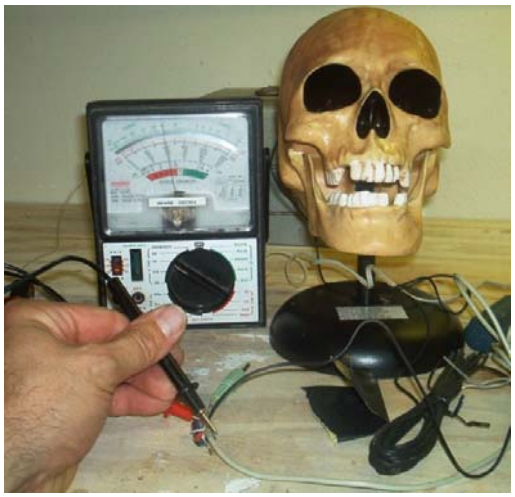
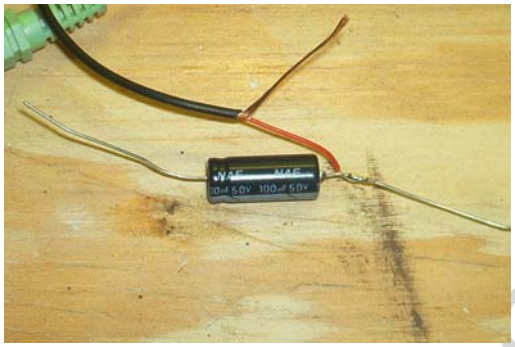


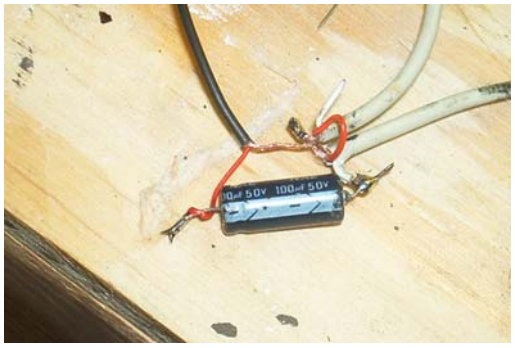
Cut the bone microphone off the Boris, leaving however much wire connected to the Boris you want. I cut the bone off right next to the bone so the longest possible amount of wire was left connected to the Boris. Strip a couple of inches of this wire and you should find some lose copper wire, and a single insulated wire. Twist the copper wires together to form a single wire, and strip about 1/2 inch off the end the insulated wire. Do I need a Capacitor? Yes!! There is at least 4 volts D.C. across the leads that go to the microphone, just like the old Boris. The Capacitor will let the sound past (A.C.) but it will block the D.C., protecting your sound source.



Twist the striped wire from the Boris around one of the leads coming from the capacitor. If you are using an electrolytic capacitor like the one pictured, connect the wire from the Boris to the positive (+) side. I like to do it close to the capacitor so there is not a lot of extra wire. Solder this connection (now is a good time to solder the speaker wire if you cut the wrong one earlier) and trim the excess. Those of you paying attention may have noticed that the picture to the right has the wire from the Boris connected to the negative (-) lead of the capacitor, which is wrong! Refer to the picture below, which shows the capacitor connected correctly.

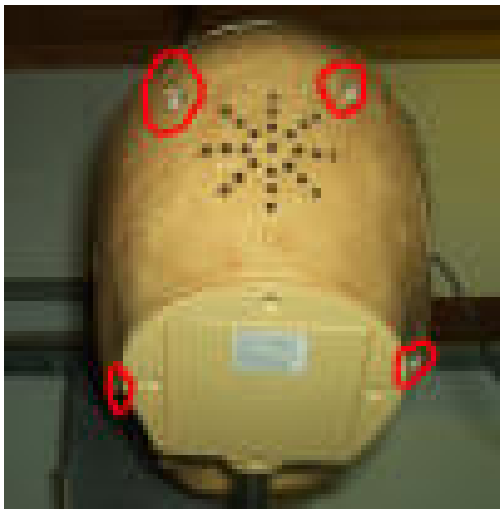


Twist the speaker wire from the powered speaker around the other lead on the capacitor (the wire with the insulation, not the bare copper wire), and solder this.

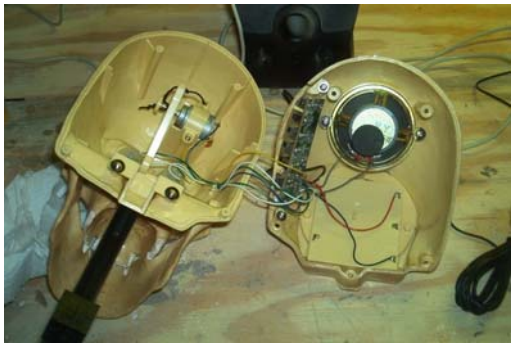


Finally twist the bare copper wire from the Boris around the bare copper wire from the speaker, and solder this. Plug the speaker back in, and turn Boris on. You should be able to turn up the sound and the Boris will start talking. You should be able to hear sound from both the computer speaker and the Boris speaker. Unplug the speaker.

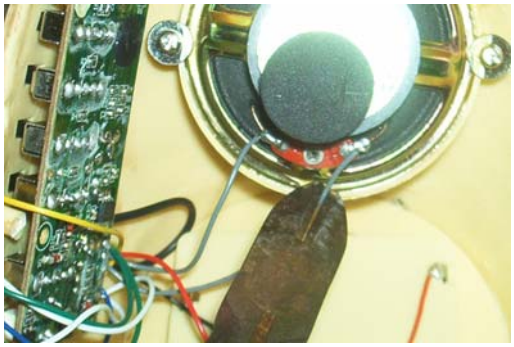
Obtained from
Omarshaunt.com



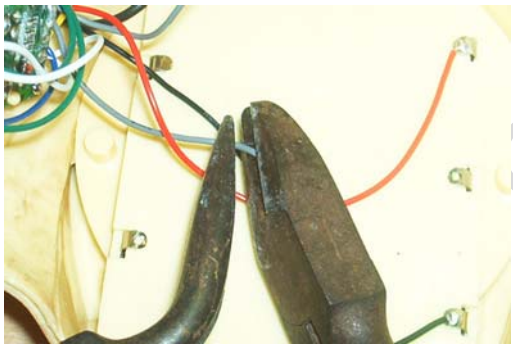
Now its time to disconnect the internal Boris speaker. Remove the 4 screws circled in red as shown to the right. Inside the Boris you will find 2 gray wires going to the speaker.



Carefully cut the 2 gray wires that go to the speaker, leaving about an inch of wire next to the speaker in case you want to connect the internal speaker back up.



CAREFULLY strip about 1/2 inch from the 2 gray wires you just cut that are coming from the circuit board, NOT the wires from the speaker. To do this I grab the wire with needle nose pliers first, so that when you strip the wire you are pulling against the needle nose pliers, not where the wire is connected to the circuit board. You do not want to pull the speaker wire out of the circuit board.



Twist the striped end of one gray wire around one end of the resistor (or resistors if you used three 27 ohm resistors like I did),

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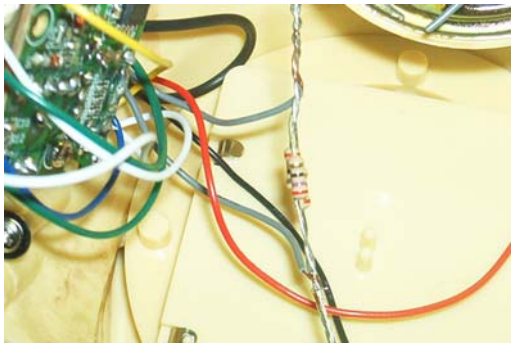
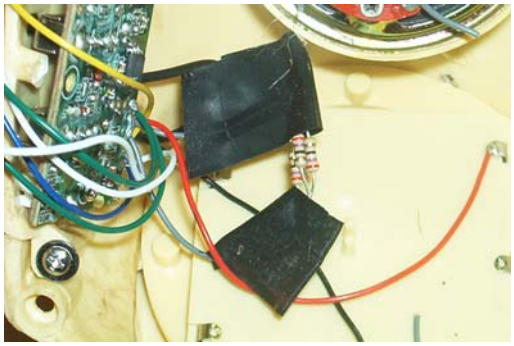
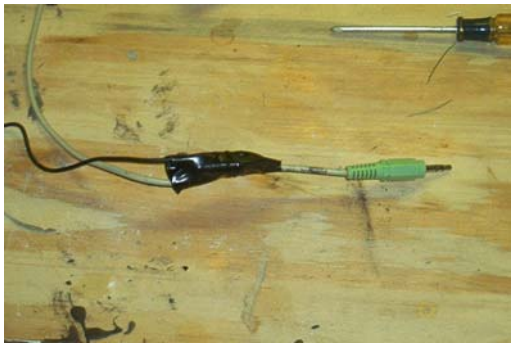


then wrap the striped end of the other gray wire around the other end of the resistor. Solder these connections.



I use a little electrical tape to cover the bare wire on the resistor connected to the speaker leads, and the connections you made earlier with the speaker cable, capacitor and Boris microphone cord.



The end result is a single phone plug that splits into the lead that goes to the Boris, and the lead that goes to the speaker.

Put the Boris back together with the 4 screws, turn it on, and plug the speaker back into the sound source. Adjust the volume of the sound until you get good movement from the Boris.

Adjust the volume on the powered speaker for how loud you want the sound to be. Thats it!

Obtained from
Omarshaytedtrail.com