

# Hacking a Douglas Fir With No Aux Jack

## Parts:

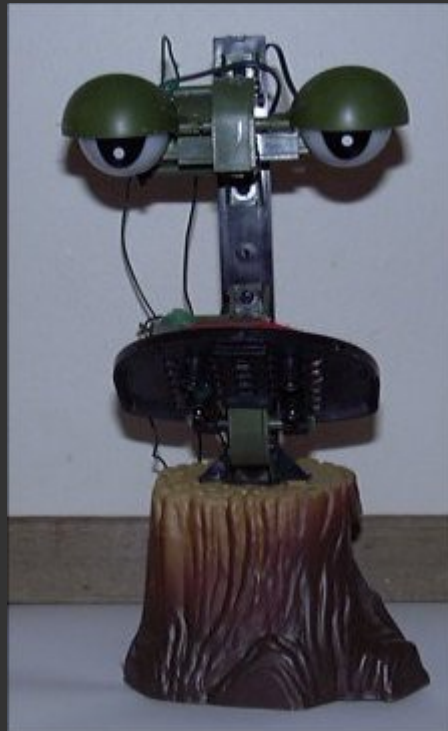
(4) alligator clips  
wire cutters  
wire strippers  
RCA cord or wire  
electrical tape  
powered stereo or amp  
a screw driver or  
socket head screw driver  
Dremel or small saw  
(optional)



## Description:

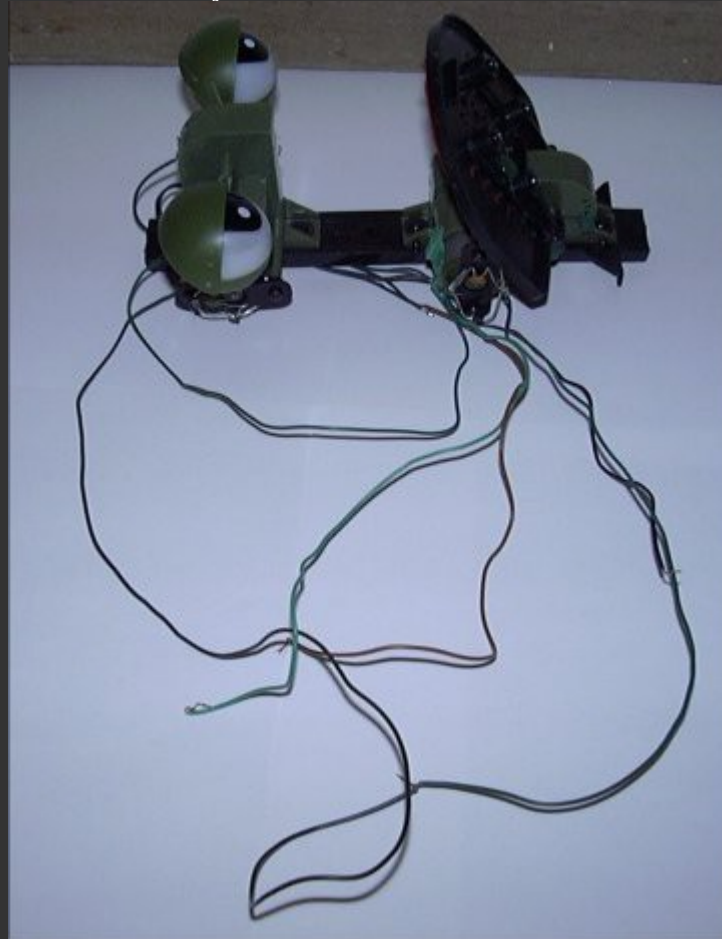
Take your Talking Douglas Fir out of his box and tear all the fake pine needles off him, and unwrap the wire ones around the trunk of the tree. When you are done, you should have something that looks like the picture to the right. Now unscrew the battery pack from the bottom of the trunk base, and cut the wires that attach it. Try to cut the wires as close to the battery pack as possible. Next pull out all the circuit boards inside the base so you can get to the speaker. The boards should be glued in by hot glue, and will come out with a little tugging. If you can't get the small board that has the power switch on it out, take the end of a socket set's Phillips bit and use a pair of pliers to grip it so you can turn it. After

you have removed both boards, you should be able to unscrew and remove the speaker.



Once all the inside goodies are out, you can either cut down the side of the trunk with a small saw or Dremel tool like in the picture to the left, and then pull out the wires through the slot. Or just cut all the wires leading to the larger of the two circuit boards, leaving as

much extra wire attached to the eyes and mouth as possible. Then once all the wires are removed from the circuit boards, you can chuck them. Yes I said chuck them! It's a little known fact that speakers put off power which causes the speaker to make noise, but you can also use this power to light lights or move motors like you will soon be doing when this is done. After all the wires are clear of the tree's trunk, unscrew the black stem that holds the eyes and mouth from the tree's trunk and you will have [this](#).



Now all you have to do is strip the ends of the wires, and then make your connections. You will either be hooking it up to the end of an RCA jack cord or just two sets of wires, whatever your stereo uses for speaker output. So depending on what type of connection you have, you can skip to the section explaining each and follow those instructions.

RCA jacks: if you have RCA jacks you can buy a cord that will plug into the RCA jacks at one end, and the other end goes to a headphone style connection. Radio Shack has one for about \$4.99 Cat.#: 42-2489 but I have seen them at other stores for less. In order to hook up all the loose wires from what's left of the tree, you will need to cut off the end of the cable that has the headphone style

connection on it, and strip all the wires back so you can twist all the wires together. OK, now take both the green leads coming from the face motor and the eye motor and attach them together. Then attach one of the brown wires coming from the eyeball lights (they start out as two double green wires, and are attached to brown ones by the factory) to one of the white speaker wires. Then do the same for the other brown wire with the other white speaker wire. If you don't want the eyes to light up, you can leave the brown wires disconnected, and just use the speaker. Also, you can attach whatever speaker to the RCA jack that you want instead of the one that came with your tree if it is not powerful enough for your liking. Now connect the negative lead of the RCA jack to the black wire coming off of the mouth motor, and then attach the positive lead of the RCA jack to the two green wires coming from both the motors. You should now have mouth and eye movement if you turn on your stereo. If you see no movement, either turn up the bass (this is the power channel of sound, as it moves the speakers the most) or turn up the volume. If still no movement, try flip flopping the wires so the positive lead is going to the black and vice-versa. Once you have the motors operating correctly, you can hook up the speaker and eye lights to the other channels leads. It doesn't matter which goes where, the speaker will still work either way. However, if you notice that the speaker retracts on loud sounds instead of "pumping" like it should, reverse the wires. That's it, you now have a talking Douglas Fir without the jack, and no need for a battery pack or AC adapter. Also, if you want more mouth movement but less sound coming out, you can simply adjust the left/right balance towards the side that the motors are attached, or do just the opposite if you want more volume.

Wire Jacks: if you have the little push button wire style jacks you can just hook up wires to the leads and plug those into the back of your stereo. To make the connection, first take both the green leads coming from the face motor and the eye motor and attach them together. Then attach one of the brown wires coming from the eyeball lights (they start out as two double green wires, and are attached to brown ones by the factory) to one of the white speaker wires. Then do the same for the other brown wire with the other white speaker wire. If you don't want the eyes to light up, you can leave the brown wires disconnected, and just use the speaker. Also, you can attach whatever speaker to the output speaker wire that you want instead of the one that came with your tree if it is not powerful enough for your liking. Now connect the negative lead of the speaker wire output to the black wire coming off of the mouth motor, and then attach the positive lead of the speaker wire output to the two green wires coming from both the motors. You should now have mouth and eye movement if you turn on your stereo. If you see no movement, either turn up the bass (this is the power channel of sound, as it moves the speakers the most) or turn up the volume. If still no movement, try flip flopping the wires so the positive lead is going to the black and vice-versa. Once you have the motors operating correctly, you can hook up the speaker and eye lights to the other channels leads. It doesn't matter which goes where, the speaker will still work either way. However, if you notice that the speaker retracts

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