



Taming the Staples Easy Button

The goal of this project is three fold. The first is to help thwart the dumbing down of America. It seems that advertising agencies think that they can cram any amount of factitious crap down the gullible throats of the public. We need to remind them we are a heck of a lot smarter, and can process far more complex equations, just given half a chance.

Second, as a business owner of 25 years, I found the mere notion of pushing a magic button which solves all problems a slap in the face. Business is not easy. It takes a great deal of blood, sweat, tears, skill and perseverance to make it all happen. I couldn't sit idly by when I saw this.

Third, and most important, is: *because we can do it!* That simple statement has propelled mankind beyond the boundaries which previously held it to outdated beliefs.

I do wish that I had basic knowledge of the circuitry and could truly hack the board as it exists. But since I don't, this is the way I did it. Now it's your turn to follow in my foot steps or even better, improve on what I have done. That's the whole point of this article. Having a cool toy is great, but the accomplishment of doing it is far greater.

Time to step down from my soap box and have some fun. I'll also state for the record, this project is a mod and not a hack. Anyone who's a little bit handy and possesses a basic knowledge of soldering can complete this project. I'm not going to make this a step by step, just a basic guide to steer you in the right direction.

Parts required:

Staples Easy Button \$4.95

Radio Shack part #276-1323, 9 volt recording module \$11

Radio Shack part #275-1571 momentary contact switch N/O \$3

Radio Shack part # 274-248 1/8" mini jack N/C \$3

Replacement rubber legs for the ones we remove

1/8" stereo male, to 1/8" mono male audio cable to input audio files from computer to button.

Tools required:
Small tip soldering iron
Solder, flux etc
Hot glue gun
Dremel tool
Jeweler's Philips screw driver
Wire cutter
Razor knife

Optional things to change the button text from "easy" to "evil". These kinds of things most people don't have access to. But in my line of work, I'm fortunate to.

6" x 48" stationary belt sander. A small hand held one will do to.

Mill plastic file
Orbital disc sander
220, 320, 400 and 600 grit sand paper. One disk each
Sewn polishing pads
Plastic buffing compound
Vinyl die cutter for the letters or your local sign shop

Disassembling the unit is simple. Removing the rubber legs exposes the small screws that hold it together. Once they are out and the unit is apart, you'll get to see that there's plenty of room to route wires and add the components as shown below. Fig A



A

Below is the Radio Shack recording module. Ditch the speaker/microphone and ditch the white recording switch. Fig B



B

Use the Dremel tool and enlarge the battery opening. Do what you need to. There's enough room but just barely. What would be great is if someone could refigure the circuitry so it could operate off the AA batteries that the compartment holds. Fig C



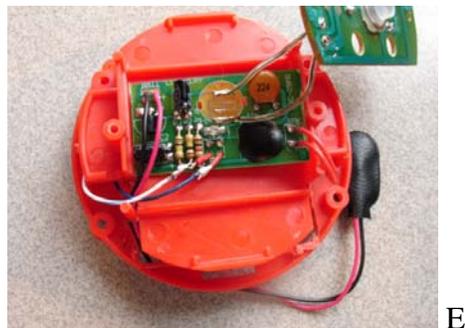
C

Here you can see the backside with the new record button and the 1/8" mini audio input. As you can see, I ground into the outer portion of the speaker for the battery to fit but did not touch the speaker cone. Fig D



D

With the middle section of plastic reinstated, I've placed the new recording board in the space right below the existing board which is now shown soldered to the switch contacts on the new board. The recording contacts are wired to the new switch and the speaker contacts are wired to the 1/8" jack and to the speaker. Fig E



E

Looking on the bottom, the unit is reassembled, the audio cable is in, and the other end is in my laptop's headphone jack. But I digress, take the cable out and hold the unit to your mouth. Press and hold the record button, and say something. If you've wired it correctly, you'll hear it back when the original play button is pressed. Fig F



F

Once you know that you can record back through the speaker, that's proof the wiring is correct. Put the cable back in the jack. Set your computer's headphone volume to VERY, VERY low. Fire up your favorite audio file player. Hold down the record button at the same time you press play on the computer. Wait till the file is played before you release the button, or 20 seconds. Whichever comes first. Hit the play button and Voila!
Right now mine say's, "But I don't like Spam!"

The final touch is changing the text. Carefully use a belt sander and grind the raised letters off. Be careful as the remaining plastic is only 1/16th thick. Next, sand it down to 600 grit until all scratches are gone. Using plastic polishing compound, bring the gloss luster back. Then you can go to your local sign shop, and for a few bucks, they'll knock out some vinyl letters for you. Put it all back together and show your friends!

Fig H



H

Well, that's it. You've taken a mindless toy and a moronic ad campaign and added some sensibility to it.

Regards,

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www.impulsedesign.com/evil_button.wmv