

M.A.F.I.A.

Mr Arcade's Fast Inexpensive Amplifier

If you are looking for an inexpensive, fast, and simple way to amplify the sound output of a pc through an existing arcade speaker ... this might be for you. This is a MONO amp ... not stereo.

All that is required is a cheapo set of amplified pc speakers and some electrical tape. I do suggest you have a soldering iron and some solder...but twisting the wires together will work.

These are the speakers I use...they are \$9.99 at Kmart.



I am sure you can use any amplified speakers....but these speakers are cheap and they work well. If you want to try another brand that is fine.

We are only concerned with the speaker that has the button and knob on the front.



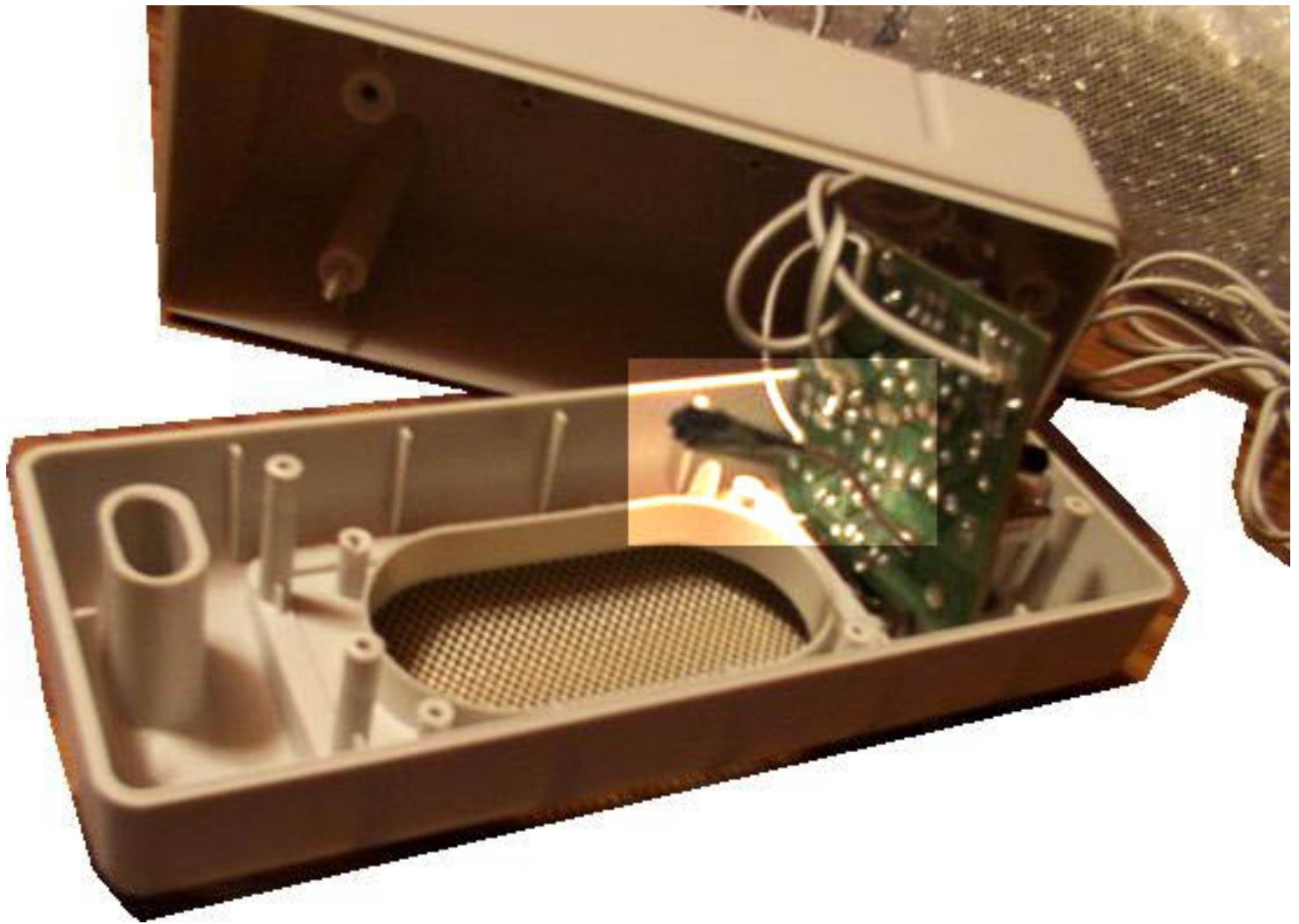
Remove the 4 screws and carefully open the speaker enclosure.

You will have a small pcb and a speaker...once the enclosure is open the pcb is free to move around a bit.



Once opened just cut the 2 wires going to the speaker. Since this is a mono speaker set... the signal goes from the pcb through one speaker...through the other speaker ...then back to the pcb. After cutting the wires I remove the speaker and save it for future projects. Then bare up the ends of the 2 wires and twist them together. Solder them if you wish (I do). Wrap the exposed conductors in electrical tape.

When you are done this is what you should have.



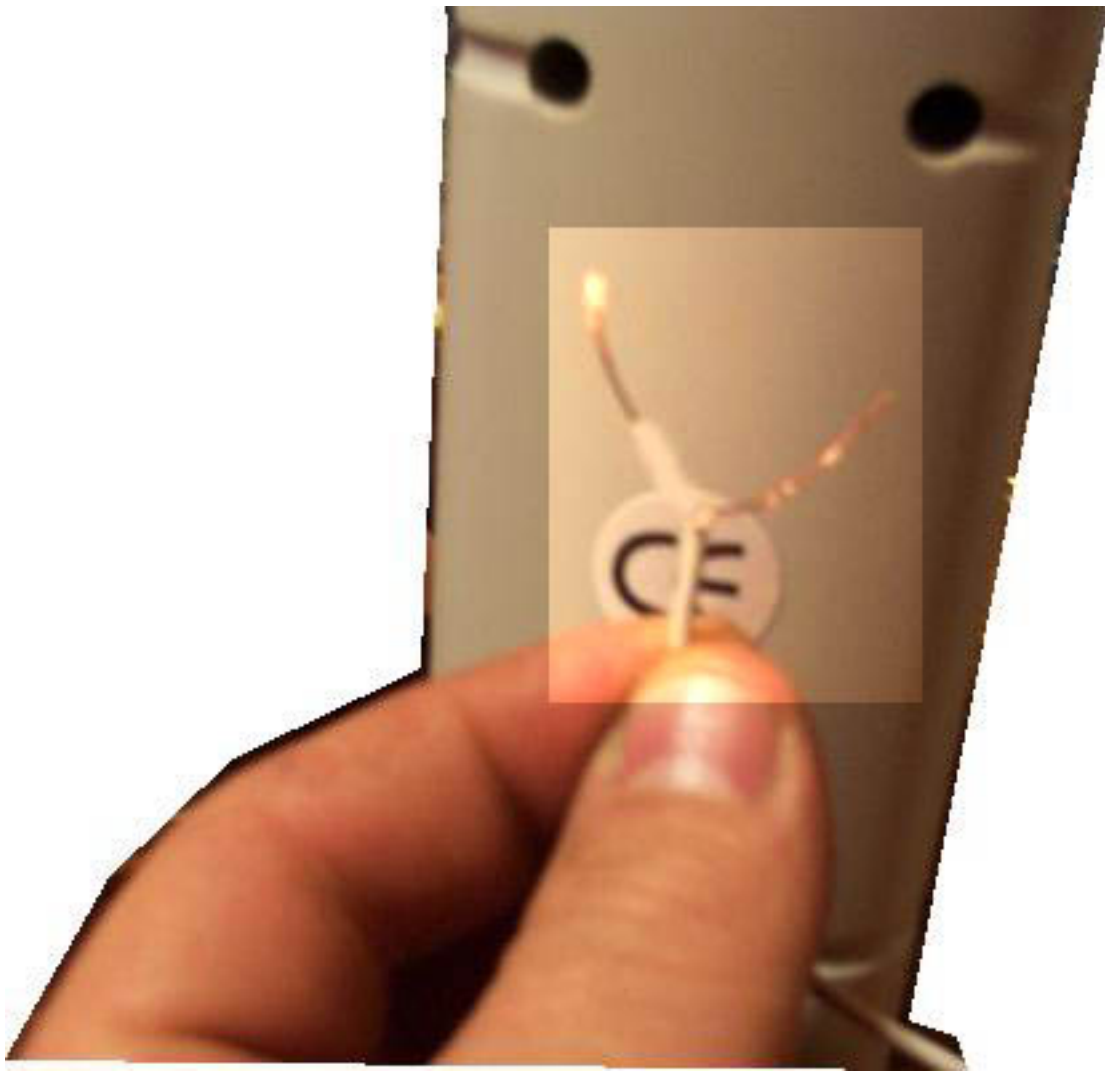
Then carefully line the pcb up with the slots that hold it in place...and the button and knob with the holes in the front...install the 4 screws...

Next you cut the wire going from the amp speaker....cut it very near the secondary speaker...



Then peel away some of the outer insulation. You will have bare wire and a second wire with insulation around it.

Peel away the insulation so you have 2 conductors that are still insulated from each other...like this...



These are the wires that hook directly to the existing speaker in the arcade cabinet.

I mount the speaker enclosure with the amp in it inside the coin door for easy access to the volume control. just remember where the pcb is...and where the speaker was...you have lots of room to run a few screws into the enclosure without hitting anything. A pair of angle brackets and a few screw does the job nicely.

Finally, just plug in the AC adapter and the green mini-plug into the soundcard and you are set.

This amp won't go super loud...but it will do a good job for \$10.

If you want to invest a bit more...and aren't afraid to cut an extra hole in your cab...the Cambridge Soundworks 3 speaker set can be had for around \$39...and it goes louder and carries much more bass.... but you need to mount the subwoofer and make sure it has a grill to let the sound out of the cab.

I hope this helps some of you.

If you have any question feel free to [email me](#).