

# Car Stereo Replacement

Steak Electronics

10/27/19

## 1 Overview

Replacing a car stereo.

## 2 Work Log

### 2.1 I2C OLED display

Just for fun, I bought an I2C oled display and are going to use it to display something. Notes on this: Using the adafruit SSD1306 and GFX library (this procedure is well covered in other places), you can load an example sketch and get it running. First thing to change is to remove the Adafruit logo and replace it with my own. Let's do that.

From <https://design.goeszen.com/convert-image-for-oled-display.html>

I'm on Linux here and found that the readily-available ImageMagick package will do

```
convert some_image.png some.image.mono
```

That's efficient. But it didn't really work out. Too much work, I don't need it that bad. Have to convert it to something the c compiler can read.

### 2.2 Internal AVR Temperature Sensor

For starters I setup the code to read from the internal temp sensor on the duino. However there is also this:

<https://thecavepearlproject.org/2019/02/25/no-parts-temperature-measurement-with-arduino-pro-mini-to-0-005c-or-better/>

This would be something to do for more resolution. The built in sensor is not very good, so this above link would be great. Hack a day also covers it.

### **3 Wiring Pinout is wrong on Internet**

I looked at the picture I have detailing the pinout (Delco Delphi radio wiring diagram.jpg in resources). It's close, but not exact to the cable. I found that the cable has small text labels on each wire which explain which everything does. I didn't notice earlier, as I didn't look close enough (and no one mentioned this).