

**Automotive iPod Holder**  
**Michael Olson**



## **Summary:**

The idea for this design stems from a knowledge that people love to listen to music while driving anywhere. To enjoy this past time it seems to be the trend that people like to listen to their own music through an iPod. Now in a small car there is almost nowhere to place anything, so there is usually no good place to place an iPod. So, the iPod usually sits on the seat next to the driver or some other craves that the driver find to put it.

There are two concerns in the area of safety, both to the driver and to the iPod while on the road. A lot of the time, the driver will want to look at the iPod to see what's playing, to change songs, etc. This poses a safety problem because the driver will have to look away from the road to grab the iPod and do whatever they want to do, ignoring other traffic hazards that could be coming up. Also the driver could be injured if he or she got into an accident by the iPod flying all over the place. The iPod also is not safe because there is nothing to keep the iPod from bumping and falling anywhere.

These were the problems set out to address in this engineering design. This design sought to create something that would let the driver safely listen to, look at, and generally use an iPod in their car to make the driving experience more enjoyable. In all this the most paramount requirement was to keep the driver and the iPod safe at all times.

There were three main designs considered in this process. The first was a hanging case, which soon died because it seemed too dangerous. The second was a track design, but this was not practical to create in this in the time allotted. The final design, and the one that was decided on, was a base and arm design that seemed that it would do the best for the time and resources that were available at the time.

Taking final conceptual design above the next step was how to make it work in reality. The first problem was how to make the movable arm work in practice and not have it flop and fall over at any time. This was finally overcome by using a gooseneck arm usually used in holding audio microphones. This new arm design gave the stability that was needed to hold the iPod steady. With this main design change, and a couple of other minor changes during the construction, the final prototype was constructed. Testing of the prototype proved that the iPod holder would work to the design specifications that were set out at the start of the design process.