# **Boundary Notifier**

#### Eric Latkovich, Paul Cicrich

#### **Problem Definition**

Peoples pets/kids get out of their yard without the owner or parent knowing quiet often. To solve this problem, an invisible boundary could be used to signal to the pet owner or parent if their pet or child has past the boundary so they can quickly react to the problem.

- Scope: To build a cost effective working prototype that can manufactured and marketed to potential customers
- Schedule:
  - Parts Acquired
  - Schematic Drawn
  - -- Built and tested
  - -- Improve/rebuild (May 21)
- Resources:
  - 2 engineering students
  - Internet

#### **Solution Specifications**

- Solution: A device (collar/wrist band) is attached to the kid or dog that is detected by a fixed boundary. The boundary system transmits a signal that causes an alarm to go off that notifies the user.
- Operation Description: This system is meant for proximity awareness.
- <u>Component Specifications:</u> Radio frequency sensor, transmitter, receiver, notifying device.



### **Competitive Analysis**

- Invisible Fences for dogs
- Ankle monitors used for law enforcement
- Anti-theft devices

## **Potential Applications**

The boundary notifier can be used for pets, children at home or school, and law enforcement. It can also be used to notify security when a product has been taken from a store.

#### **Future Improvement Ideas**

- Cell phone alerts
- GPS tracking
- Zone alerts



#### **Instructions:**

- 1) Use the previous page as a template to create a 11"x17" page data sheet and name the file the same as project title.
- 2) Create a project report in pdf format that including a description, schematics, part list and any other results . Name the file the same as the project title.
- 3) Upload data sheet and report to Moodle by the due date (ie. Great project data sheet.psf and Great project report.pdf)
- 4) Prepare to present in class and in club by due date.