

# Signal Buoy

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The signal buoy is an electric device for fishers, who use a fishing net. With a signal buoy it is very easy for fishers to locate the fishing nets. Without the buoy the fishing net may get lost. Lost fishing nets tend to create a lot of problems. The signal buoy is also a good way for recycling old cellphones. The aim of this project is to design and build a device that has two main functions: it helps fishers and saves the environment. When the fisherman calls the cellphone inside the buoy, LED lights will start flashing. It makes finding the fishing net a lot easier. The buoy's electrical parts are a cellphone, battery voltage regulator, LED's flashing frequency and flashing duration control unit (3FDC). The mechanical parts are a waterproof case, transparent dome for the LED light, a hook and ballast. All tests performed with the signal buoy's first prototype were successful. The case didn't leak and the buoy's battery lasted for a week. The signal buoy is a cost effective product. The first cost around 30€ to build. I have also made the second prototype. The second prototype has several improvements, for example more powerful LED lights and lower power consumption. In the future the buoy will be able to take measurements from the environment and record these for analysis.

**Awards Won:**

