Frost Indicator, 02-20-2013

Denis Ivanov

Problem Definition

- Driving cars without outside temperature display could be dangerous. Inside warmth of the car distracts drivers attention from possible icy driving conditions.
- The goal of this project is to develop a frost indicator which would warm driver when outside temperature is reaching freezing temperature.
- Project development is broken down in 3 stages:
- Analysis of the best approach, new ideas, searching a partner for this project...
- Compiling list of components
- Finalization. Device assembly.
- Internet, teachers and co-students

Research/Analysis

Research and analyzing of all existing ideas is progress. Although a working design is already developed.

Every one is welcome to participate or just simply send your ideas to the owner of this project.

Proposed Solution

At this stage two approaches were found:

- •A simple thermistor triggered switch with adjustable threshold. It triggers with cold temperatures so may be used as a frost alarm or cold temperature switch.
- •Use thermistor as switch to send a signal to PIC processor which would send a signal to LED



Potential Applications

- Cars without outside temperature display.
- Household use to warn about coming frost to save plants or exposed water pipes and watering systems.
- By changing temperature limit it could be used as temperature increase or decrease warning systems.

