E.S.-Deaf: Home Emergency Device for the Deaf

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The objective of this project is to develop a prototype that allows the deaf members of the " AGRUPACIÓN ENTRE EL SILENCIO Y EL RUIDO COYHAIQUE (ASCOY)", to request the presence of any of the emergency organisms in their homes. We hope that the average reception time (Ambulance or Fire or Carabineros center) from pressing one of the buttons until the mail or alert signal (SMS message) arrives does not exceed 8 [seconds], so that a Once this mail is delivered, emergency units are dispatched to the home of the person with hearing problems who request attention. In order to achieve the stated objective, three fundamental procedures were established: design and construction of the prototype, programming of the prototype through Arduino and testing of the prototype. 100 tests were performed for each button (300 times total) and the average time between pressing a button and the reception of the mail or signal (SMS message) alert was 8 seconds. We estimate that the device can be scaled to be used by prostrate people who have mobility of their upper extremities, blind or visually impaired people, people with motor disabilities, as well as older adults who do not use communication technologies and seek ways of rapid communication and effective. Among its improvements, is that the device is mobile, so if people are outside the home, you can use it at any time and location.

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