

Abstract

Conventional home security systems now are mostly delivered through a voice that does not allow for the deaf to use it. The security system has been created for the deaf use only the PIR sensor (the sensor body heat) and display it on the screen, whereas according to data obtained from the reference [3], the number of cases of fires in Indonesia from 2011 to 2014 occurred as many as 509 cases of fire of which is caused by the negligence of residents. Based on these data is necessary to the device can also detect fire and gas, as a precaution against fire. Therefore we need a device that is always connected to the deaf with the existing security system at home.

AWEAR is a watch that is used by the deaf. When there are theft, fire, or gas leaks, then the watch will give notification in the form of vibration and image display icon to notify the condition of the house to the user (the deaf). AWEAR can detect the existence of mankind up to a 11 meter on an upright position and the distance of 5 m at position 30 degrees and 300 degrees, it can also detect the source of the fire with a maximum distance of 90 cm and the source of the fire of the stove with a maximum distance of 180 cm, and it can also detect gas densities, fighter from a distance of 4 cm with a time of 6 minutes and a portable gas densities, from a distance of 70 cm with a time of 1 second. The advantage of AWEAR is because the device is shaped watches that can be used at any time so that users feel safe wherever they may be (while still connected wireless).

Keywords : deaf, sensors, watches, security systems