ABSTRACT

At the time there are many people use LPG (Liquefied Petroleum Gas) because influence of government program convert petroleum to LPG gas as fuel in their solve. Although LPG stove is have advantage simple to use than petroleum stove, but it is still have disadvantage dangerous if there are gas leak. Their dangerous can make exploded and burned. As their danger, so need a detector gas leak, warning signal if there are leak and exceed the gas leak.

To get a system that can be automatic operation, so need microcontroller as controller. System will use LPG gas sensor that useable to detect gas leak on gas stove equipment and stopping gas flow from tube to stove. Beside that, a system use LCD as display of information gas concentration leakage that detected by sensor.

Times is needed by valve to close after gas leakage at regulator are 0,42 second. If there are gas leakage at end of pipe near stove it will need 1,76 second and if there are gas leakage at end of pipe near LPG regulator it will need 2,33 second.

Key words : microcontroller, LCD.