

## ABSTRACT

A tissue box tissue making place manually. Tissue retrieval manually cause much tissue is wasted due to tissue retrieval is done sometimes in excess of what is needed. This is a waste of tissue. Along with technological advances, many household devices using automation so as to increase the efficiency of the equipment used at each including the tissue box. The application of domestic aspect is automatically tissue box.

In this final project, has designed an automated tissue box that works based on the working principle of infrared sensors and DC motors. The tissue box is also equipped with an SMS Gateway as a notification to the user when the tissue in a depleted state. ATmega8535 microcontroller is used as the control center to give orders to any output used input. The microcontroller will drive the DC motor when the infrared sensor detects the presence of a barrier in front of the object of his so wipes will come out automatically.

The results of this final project was in accordance with the scheme which has been designed previously. Infrared sensors have to be implemented in its existing condition objects barrier in front of her. Infrared sensors can detect objects at a distance of 10cm-50cm. DC motors are used also has to function as an activator of tissue. DC motor will work optimally if the ration gets 12 volts. Wavecom modem is used as a medium for sending sms notification to the user. This tool has an average delay sending an SMS notification to the users during 5,4s according to tests performed. Hence his overall this tool can work well in accordance with the systems and schemes designed.

**Keywords :** *Infrared sensor, DC Motor, SMS gateway, Microcontroller ATmega8535, Input output, Modem Wavecom.*