Conservation of energy which is the main focus of this paper is very important in order to reduce utility cost in residential buildings. Hence, a Smart lighting Point and Temperature Control system is designed and developed to control automatically, the electrical appliances in residential buildings. Smart lighting Point and Temperature Control system consist of a microcontroller, which serves as the brainbox of the system. The functionality of a Passive Infra-red sensor is employed in this system to detect the motion of a person entering or leaving the building; the system further detect the difference in surrounding light intensities through the aid of a Light Dependant Resistor to turn ON/OFF the lights automatically. it then checks to see if the temperature within the building is above the pre-set value to turn ON/OFF the cooling system. The number of persons entering or leaving the building is displayed on a seven-segment display. Keywords: —

Automation

Cooling system

Microcontroller

Temperature sensing device (LM35)

7segment Display.