

ABSTRACT

Along with the rapid development of technology, everyone is inclined to do everything with easy and practical. Using the remote control to control the lights would be one practical application of the principles and flexible working. Using the remote control to be one option to make it easier to control the room lights. Data transmitted by the remote will be received by the infrared receiver sensor to be forwarded to microcontroller. At microcontroller data will be processed and executed to control the whole system working circuit. Using assembler language programs are generally small so efficient in memory usage and can be executed quickly. Real Time Clock can store the data for the reference timing control indoor lights so that lighting automation control can be works. The use of scanning display techniques can be used to save the port on the circuit seven segment by exploiting weaknesses in the human sense of vision to display the security key settings, elapsed time and display lighting control automation settings. Driver transistor and relay serves as a switch to turn on and turn off the light. With these tools designed so people no longer need to control the lights manually. So it would be more practical and safer when the house was abandoned by its inhabitants because the lights will turn on and off automatically.

Keywords: Remote Control, Microcontroller, Assembler Language, Real Time Clock, Scanning Display Technique, Driver Transistor and Relay