

ABSTRACT

Security is an important thing for common people. Unfortunately, security systems nowadays didn't use room's key function maximally. Though in Indonesian people, key's still being main option to secure the room or house. In the other hand, electricity is an important but limited energy source. Now, electricity usage rate is unequivalent with its production, so electricity crisis' prevention steps are needed. One of the most common electric use is on room's lightning. People often leave the room with the light on though there's no one there. That's why, an alternative solution was made in form of room's key detection controller as a security tools and also controlling room's lightning automatically if room's owner leave it. Key's detection using two limit switch and infra red is used to detect the door's movement. This three inputs combinations is processed by AVR ATtiny2313 microcronroller to determine executed instruction by lamp and alarm block.

Keywords: key, security, ATtiny2313, infra red, limit switch