

Developing Light Reacting Speaker with Bluetooth Embedded and Fingerprint Security System

Mohamad Luqman Hakim Bin Mohamad Mokhtar & Abdul Hapes Bin Mohammed

(Supervisor)

manhakim56@gmail.com

mazterpeace@gmail.com

ABSTRACT

Mobile device has been use widely as a medium to listen to music. Mobility is a must on every devices in last 5 years. The device that can give more satisfaction to the music listener is a speaker. But it must be secured to make sure it cannot be access by outsider. The objective of the system is to provide a security system for the speaker and to provide a wireless connection for the speaker to any devices. Motivated by the trend in the last 5 years which is the biometric security system in every mobile device, Developing Light Reacting Speaker with Bluetooth Embedded and Fingerprint Security System project also use the same type of security system. This device was develop using Arduino Mega, sound sensor, Bluetooth module HC-05, and the most important part is Fingerprint scanner that represent the biometric security reader. The system will provide security system which is user has to scan their fingerprint to start the speaker instead of using the switch. When the fingerprint is detected, the Bluetooth module in the speaker will turn on so user can connect their device to the speaker. The significant of Bluetooth device is to allow the mobility of the speaker up to 10 meters without the distraction of any obstacles from wall.

Keywords: Arduino Speaker, Bluetooth, Fingerprint, Sound sensor.