

Abstract

This research, home of the multifunctional controllers through microprocessor (Arduino) and Bluetooth, idea is makes people with disabilities operate household electric appliances freely as long as they make use of mobile phones. This paper mainly researched three common household electric appliances, motors, sprinklers and infrared sensor lights. Using a microprocessor (Arduino) to control stepper motors, sprinklers and infrared sensors, and then use the mobile application (APP Inventor) to manipulate them directly via Bluetooth. Install electric fan or rotating cabinet on stepper motors can control their movements and turns; add a temperature sensor (DHT11) to sprinklers can be set to start automatic sprinkling function when it reach a certain temperature. It can also watering by manual control; using infrared sensor of the human body to detect whether someone at home, and determine the lamp brightness. The lamplight can also change into manual control. As long as using a cell phone, you can easily operate household electric appliances. It can bring a lot of conveniences to home.