

ABSTRACT

Electricity is one of the most important what people needs to fulfill all the most important life needs and resources needed. The use of electrical energy without being taken into account its use will cause waste which results in reduced energy supply from the producer side because the producer of electricity is itself a non-renewable energy resource. Apart from the diminishing source of electrical energy, other factors that cause waste of electricity are from human nature, which is forgetful. This forgetfulness is one of the waste of electricity if the electrical device is still forgotten, and just remembered after passing through the house. On this occasion the author will explain the implementation of the final project system related to the management of the use of automated household devices.

The workings of this project are to regulate the power by limiting the load in terms of time by the user or can make the electrical device work automatically, and can monitor the use of electrical devices. This tool is focused on measurements in every household electrical device so that its use can be monitored. and can monitor the use of electrical devices. In the implementation of the system will be installed an electric switch (relay) that allows users to do on / off automatically using a controller. This tool also uses HMCT103C current transformer and 220 Volt to 9 Volt voltage transformer. The communication protocol on this tool uses Zigbee.

With the design of the use of electrical devices automatically and can be monitored. It is expected that the use of household electrical devices can be monitored so that the use of electrical devices is more efficient for costs.

Keywords : *Power Triangle, Home Automation, HMCT103C, Energy Monitor*