Abstract

In this present day of high technology and competition we must be more productive and cost conscious. The projects which we design as Electrical and Electronic Engineers must be cheaper and more efficient. With less time on our hands because of our busy schedules new products must be designed to be easier to use than ever before. More than that these products must be easy to install, upgrade and repair. The ideal system should be able to be broken into many small identical pieces, so that in the event of a failure in some part of the system, replacements can be made almost instantly.

Technically using the AC Electric line as a medium of communication is called The Current Carrier System. Our Computerized remote control system using the Carrier Current System as a medium is a very efficient way of controlling electronic and electrical devices within a local area that utilizes the same mains transformer. The advantages and disadvantages of this type of system will be discussed later in this project. We will use the FSK method of modulation because it is less error prone, in a noisy environment such as the Electric line.

This device can be used to build your own home, office or factory automation system where you can control lights, relays, timers and other transducers in your environment. Turn things on/off or control devices like stereos, etc. This project is Uni-Directional. It utilises Open Loop Control because of its simplicity and reasons due to lack of funding and time.