**WIRELESS DEVICE CONTROL**

**AIM:**

The aim of the project is design system for controlling the devices using wireless technology

**BLOCK DIAGRAM:**

**RF RX**

**RF TX**

**HT12D**

**HT12E**

**LEDS**

**KEYS**

**PowerSUPPLY:**

**Step Down**

**Transformer**

**Bridge**

**Rectifier**

**Filter**

**Circuit**

**Regulator section**

**DESCRIPTION:**

Here we have used RF434 MHz modules to make wireless remote. Using this remote, we can control the appliances within the range of 100 meters. This project has two sections, one is transmitter section and the other is receiver section. At transmitter section, we use HT12E encoder and at receiver section, we use HT12D decoder.

When we press any key in the remote, the transmitter section generates the corresponding RF signal and this signal is received by the receiver section, hence it switches the corresponding appliance.

A four channel encoder/decoder pair is used in this system. The input signals at the transmitter section are taken from the four switches and the output signals at the receiver are indicated by the four LED’s corresponding to each switch. Here, the encoder HT12E is used to convert parallel data to serial. This data is transmitted serially to receiver point through RF.

RF receiver receives the data serially and then gives to the HT12D decoder to convert it to the parallel. Four LEDs indicate the received data.

**HARDWARE:**

* RF TX,RF RX
* HT12E
* HT12D
* LED’S
* Power supply

**RESULT:**

By using wireless communication we are controlling the devices