

## RF Secure Coded Communication System.

#### **About This Project:**

The project is designed to send secured message by using a secret code from a matrix keyboard connected to the transmitting unit via RF technology. The project helps sending secured message transmitted through RF communication by using microcontroller and received by another microcontroller where the message is retrieved against a secret code used by the transmitter. LCD display units at transmitter and receiver is used to display the message. When there is a need for sending any secret message, one can type the message through a computer keyboard interfaced with the system comprising of an Arduino family microcontroller and a RF transmitting module. The message is then transmitted through the RF transmitting module. At the receiver end the signal is received by the RF receiver module. The message is then retrieved only if the secret code is known to the receiving personnel. Once the secret code is entered, then message is displayed on the receiving unit on the LCD display. The project is designed to send secured message by using a secret code from a computer keyboard connected to the transmitting unit via RF technology. The message is retrieved at the receiver end only upon entering the secret code used by the transmitter. Thus, complete secrecy is maintained in this communication process.

### **Block Diagram:**

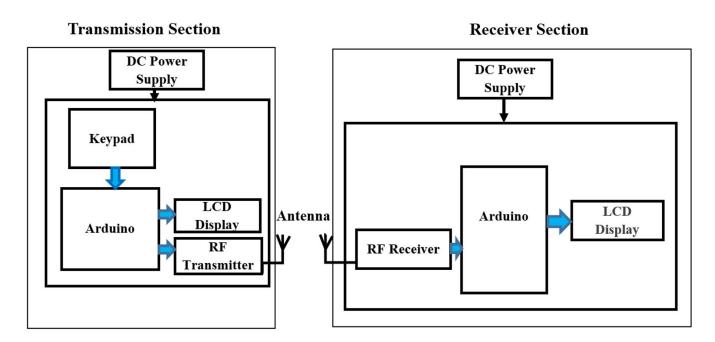


Figure: Block Diagram of RF Secure Coded Communication System.



#### **Required Instrument:**

- Arduino.
- RF Module.
- Matrix Keypad.
- Switch.
- LCD Display.
- Transformer.
- Diode.
- Voltage Regulator.
- Capacitor.
- Buzzer.

### **Advantages:**

- High Security.
- Cost Effective.
- It is easy to use.



# **Applications:**

The Applications of this project are



- It can be used in Military Operations.
- It can be also used at Airport.
- It can be widely used in Air Force.

**N.B:** Any modification of this project can be done as per your requirement. We will make the project according to your needs. Contact us with your any innovative engineering projects idea. We will help you to implement your project.