

433.9 MHz

Technical Description of EX220 transmitter

EX220 is a RF remote transmitter which is used for the garage door opener & car alarm application. The transmission is through the radio frequency 433.9MHz. This transmitter must be operated with a matched receiver (our ER294).

This transmitter has 6 major functional blocks as per Block Diagram on above.

They are :

1. Battery – 9V battery to provide the power for whole unit.
2. Switch – is used to enable transmission & supply power to other blocks.
SW1
3. Regulator – is used to maintainance a stable & regulated power source to other blocks.
U2
4. Encoder – is used to generate a 41bits code to transmitter. This 41 bits code is used for identify which transmitter is the matched transmitter.
U1
5. Transmitter – It is an amplitude modulation (on/off key) transmitter in 433.9MHz. The 41 bits code will be modulated with the carrier of 433.9MHz by this transmitter & transmit out via the antenna.
Q1,X1
6. Antenna -- is used to radiate the RF (radio frequency) signal from transmitter to receiver.
AW15