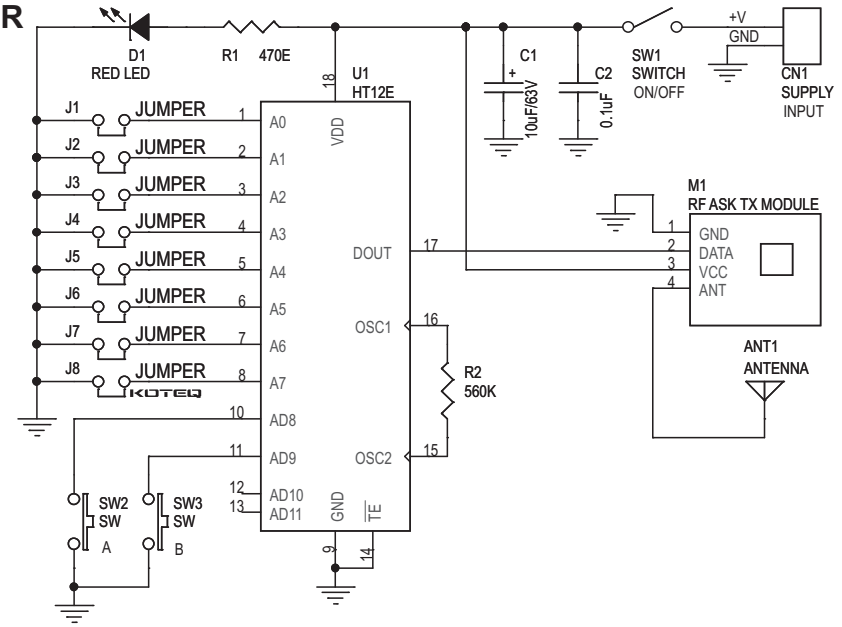
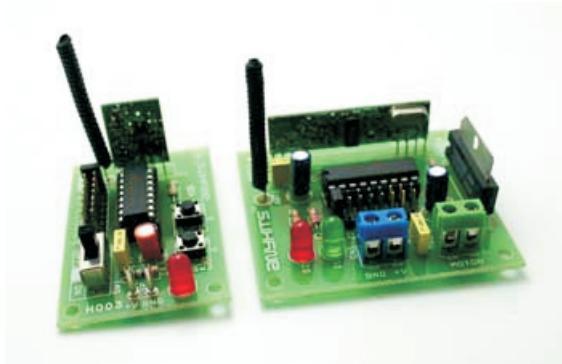


RF BASED REMOTE CONTROL DC MOTOR DIRECTION CONTROLLER

RF Based DC Motor Direction Controller project provides an easy way to control the direction of your DC Motor connected to the receiver. This project has been design around HT12E and HT12D encoder / decoder chips from Holtek. With jumper selectable address on the receiver and transmitter we can control multiple motors in one area without interference with one remote. Ideal for mechatronics

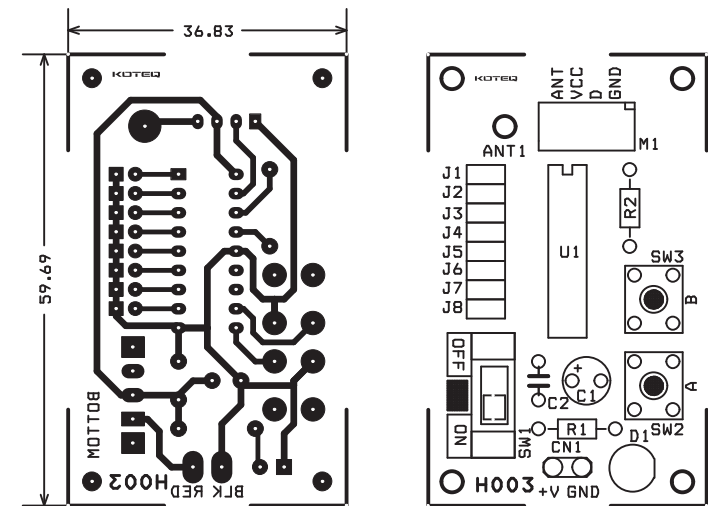
- Supply input, Transmitter : 3 ~ 5 VDC, 5 V @ 20 mA & Receiver : 5 V @ 31 mA without Motor
- Motor rating 5 ~ 6 VDC @ 500 mA
- Upto 30 meters range (Indoor)
- Jumper connector selectable 8 bit address code
- LED output to indicate reception
- ON/OFF slide switch in the transmitter
- Power-On LED indicator in the receiver/transmitter
- High noise immunity
- Screw terminal connector and terminal pins for easy input/output connection
- Four mounting holes of 3.2 mm each
- PCB dimensions, Transmitter : 60 mm x 37 mm & Receiver : 60 mm x 58 mm

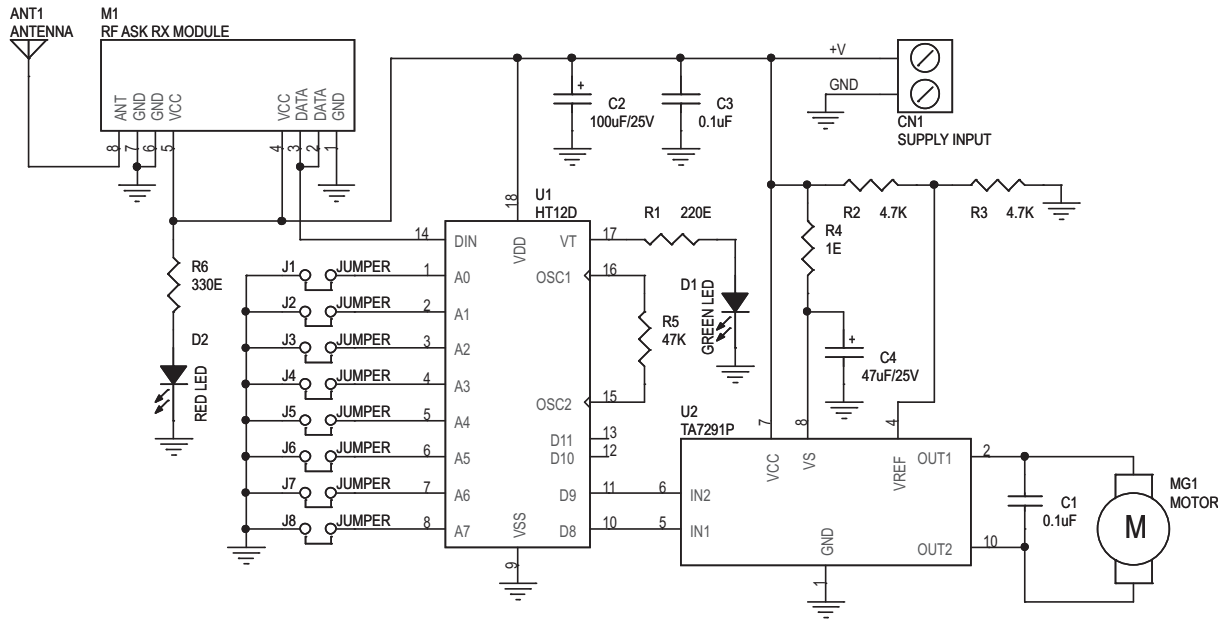


Transmitter

J1 to J8 : For transmitter and receiver address setting should be same

| SR. | QTY. | REF. | DESCRIPTION |
|-----|------|-------------------------|---------------------------|
| 1 | 1 | ANT1 | ANTENNA |
| 2 | 1 | CN1 | 2 PCB PIN |
| 3 | 1 | C1 | 10uF/63V OR 50V |
| 4 | 1 | C2 | 0.1uF |
| 5 | 1 | D1 | RED LED |
| 6 | 8 | J1,J2,J3,J4,J5,J6,J7,J8 | 2 PIN JUMPERS WITH CLOSER |
| 7 | 1 | M1 | RF ASK TX MODULE |
| 8 | 1 | R1 | 470E |
| 9 | 1 | R2 | 560K |
| 10 | 1 | SW1 | SLIDE SWITCH |
| 11 | 2 | SW2,SW3 | TACT SWITCH |
| 12 | 1 | U1 | HT12E |
| 13 | 1 | SOCKET | 18 PIN DIP IC SOCKET |





Receiver

| SR. | QTY. | REF. | DESCRIPTION |
|-----|------|-------------------------|--------------------------------|
| 1 | 1 | ANT1 | ANTENNA |
| 2 | 1 | CN1 | 2 PIN SCREW TERMINAL CONNECTOR |
| 3 | 2 | C1,C3 | 0.1uF |
| 4 | 1 | C2 | 100uF/25V |
| 5 | 1 | C4 | 47uF/25V |
| 6 | 1 | D1 | GREEN LED |
| 7 | 1 | D2 | RED LED |
| 8 | 8 | J1,J2,J3,J4,J5,J6,J7,J8 | 2 PIN JUMPER WITH CLOSER |
| 9 | 1 | MG1 | 2 PIN SCREW TERMINAL CONNECTOR |
| 10 | 1 | M1 | RF ASK RX MODULE |
| 11 | 1 | R1 | 220E |
| 12 | 2 | R2,R3 | 4.7K |
| 13 | 1 | R4 | 1E,1/2W |
| 14 | 1 | R5 | 47K |
| 15 | 1 | R6 | 330E |
| 16 | 1 | U1 | HT12D |
| 17 | 1 | U2 | TA7291P |
| 18 | 1 | SOCKET | 18 PIN DIP IC SOCKET |

