Card Used : Arduino Uno R3

Library used : IRremote 3.5.2

IDE : Arduino IDE 2.0.4

Receiver Code:

#include <IRremote.h>

const int IR\_RECEIVE\_PIN = 7;

IRrecv irrecv(IR\_RECEIVE\_PIN);

decode\_results results;

void setup()

{

Serial.begin(9600);

irrecv.enableIRIn();

}

void loop() {

if (irrecv.decode(&results)) {

Serial.print("Received LG code: 0x");

Serial.println(results.value, HEX);

irrecv.resume();

}

}

Output HEX codes and their input :

|  |  |
| --- | --- |
| Input | Hex Code |
| Power | 20DF10EF |
| Volume + | 20DF40BF |
| Volume - | 20DFC03F |
| CH+ | 20DF00FF |
| CH - | 20DF807F |
| Arrow UP | 20DF02FD |
| Arrow Down | 20DF22DD |
| Arrow Left | 20DFE01F |
| Arrow Right | 20DFA25D |
| CH 1 | 20DF8877 |
| CH 2 | 20DF48B7 |
| CH 3 | 20DFC837 |
| CH 4 | 20DF28D7 |
| CH 5 | 20DFA857 |
| CH 6 | 20DF6897 |
| CH 7 | 20DFE817 |
| CH 8 | 20DF18E7 |
| CH 9 | 20DF9867 |
| CH 0 | 20DF08F7 |
| Input | 20DFD02F |
| Settings | 20DFC23D |
| Play | 20DF0DF2 |
| Pause | 20DF5DA2 |

Transmitter Code:

#include <IRremote.h>

const int IR\_TRANSMIT\_PIN = 3;

const int BUTTON\_PIN = 4;

IRsend irsend(IR\_TRANSMIT\_PIN);

void setup() {

Serial.begin(9600);

pinMode(BUTTON\_PIN, INPUT\_PULLUP);

}

void loop() {

if (digitalRead(BUTTON\_PIN) == LOW) {

// Button is pressed, send LG code to turn TV on or off

unsigned long lgCode = 0x20DF10EF; // LG code to be transmitted

Serial.print("Transmitting LG code: 0x");

Serial.println(lgCode, HEX);

irsend.sendNEC(lgCode, 32); // send the code using the NEC protocol with 32 bits

delay(500); // wait for 0.5 seconds before sending the next code

}

}

## Change code accordingly as per hex values to imitate an actual remote.