## CODIGO MANDO ARDUINO





This is for the Arduino Uno. Connect up the power and connect the Signal output to digital pin 2.

Once you have uploaded the program it will display the code of the key pressed in the Serial Monitor

```
// Arduino code for using the IR Remote Control Kit
// Please feel free to copy, edit, distribute, sell, plagiarise ... Whatever you want :)
// We are going to use the Port Registry to check the output of the IR sensor, this is
faster
#define IRpin_PIN PIND
                               // Digital pin 2 is one of the Port D Input Pins
Register
                                // Set up Digital Pin 2.
#define IRpin
// For more on using the Port Registry see
http://www.arduino.cc/en/Reference/PortManipulation
uint16_t pulses[50][1];
                                 // To store the duration of the LOW pulse
uint8_t currentPulse = 0;  // Index for pulses we're storing
void setup()
 Serial.begin(9600); // Start the serial link to show what key has been
pressed
void loop()
```

```
uint16_t highPulse, lowPulse;
                                   // Temporary storage for timing
  highPulse = 0;
                                    // Set
  lowPulse = 0;
                                    // start out with no pulse length
  while (IRpin_PIN && (1 << IRpin)) // Look for a HIGH pulse</pre>
    highPulse++;
                                   // Increase the counter for duration of the HIGH pulse
    delayMicroseconds(30);
                                   // The lower this number the more frequently we check,
30 works about right
     if ((highPulse >= 4000) && (currentPulse != 0)) // Check for time out or end of data
                                   // We have reached the end ( or timed out ) so print
         printPulses();
out what we have
        currentPulse=0;
                                    // Reset the pulse count ready for a new key press
                                     // Start again
        return;
    pulses[currentPulse][0] = highPulse; //Save the reading in the array
    // Now we have detected and measured a HIGH pulse we look for a LOW one
    while (! (IRpin_PIN && _BV(IRpin)))
                                           // Look for a LOW pulse
       lowPulse++;
                                         // Increase the counter for duration of the LOW
pulse
                                        // The lower this number the more frequently we
        delayMicroseconds(30);
check, 30 works about right
        if ((lowPulse >= 4000) && (currentPulse != 0)) // Check for time out or end of
data
                                        // We have reached the end ( or timed out ) so
            printPulses();
print out what we have
           currentPulse=0;
                                        // Reset the pulse count ready for a new key
press
                                        // Start again
           return;
       // When we reach here we have read one HIGH - LOW set so increase our currentPulse
count and start looking for the next
```

```
currentPulse++;
void printPulses()
   ec{\ \ \ } Although the IR remote sends quite a few pulses we actually only need to look at a
    / to differentiate between the keys so we will just look at them.
       (int i = 17; i < 24; i++)
       // Strictly we do not need the next if / else, but it just cleans up the array so it
just contains
       // 1s and 0s which will make it easier for you to decode
       if (pulses[i+1][0] > 50)
             pulses[i+1][0] =1;
        else
              pulses[i+1][0] = 0;
         Serial.print(pulses[i+1][0], DEC);
                                                 Print the result to the Serial link
     Serial.println("");
```

The code you will see in the Serial Monitor is:

```
1010001 = CH-
0110001 = CH
1110001 = CH +
0010001 = Previous
```

0000001 = Next

1100001 = Play

1110000 = Vol Down

1010100 = Vol Up

1001000 = EQ

0110100 = 0

1001100 = 100 +

1011000 = 200 +

0011000 = 1

0001100 = 2

0111101 = 3

0001000 = 4

0011100 = 5

0101101 = 6

0100001 = 7

0100101 = 8

0101001 = 9

FIN