

Library

```
#include "Otto.h"
```

Object

Otto Otto

Servo definition:

```
#define PIN_YL 2          //servo[2]
#define PIN_YR 3          //servo[3]
#define PIN_RL 4          //servo[4]
#define PIN_RR 5          //servo[5]
```

Servo setup:

```
Otto.init(PIN_YL,PIN_YR,PIN_RL,PIN_RR,true);
```

Movements Parameters

```
int T=1000;           //Initial duration of movement
int moveld=0;         //Number of movement
int modeld=0;         //Number of mode
int moveSize=15;      //Associated with the height of some movements
```

Arrows

Functionality	Value	Function
Up	1	Otto.walk(1,1000,1)
Down	2	Otto.walk(1,T,-1)
Left	3	Otto.turn(1,T,1)
Right	4	Otto.turn(1,T,-1)
Pause	5	Otto.home()

Movements

Functionality	Value	Function
Ascending turn	6	Otto.ascendingTurn(1,T,moveSize)
Bend	7	Otto.bend(1,T,1)
Cursaito	8	Otto.crusaito(1,T,moveSize,1)
Flapping	9	Otto.flapping(1,T,moveSize,1)
Jitter	10	Otto.jitter(1,T,moveSize)
Jump	11	Otto.jump(1,T)
Shake Leg	12	Otto.shakeLeg(1,T,1)
Swing	13	Otto.swing(1,T,moveSize)
Tiptoe swing	14	Otto.tiptoeSwing(1,T,moveSize)
Up down	15	Otto.updown(1,T,moveSize)
Moonwalker	16	Otto.moonwalker(1,T,moveSize,1)

Arduino Code

```
/*
*****
* File Name : Otto_App.ino
* Author   : Bibek Poodar
* Company  : Curiosa Innovation Labs
*****
*/

#include <SoftwareSerial.h>

SoftwareSerial BTSerial(10, 11); // CONNECT BT RX PIN TO ARDUINO 11 PIN | CONNECT BT TX PIN TO
ARDUINO 10 PIN

#include "Otto.h"

Otto Otto;

#define PIN_YL 2 //servo[2]
#define PIN_YR 3 //servo[3]
#define PIN_RL 4 //servo[4]
#define PIN_RR 5 //servo[5]

//-- Movement parameters
int T=1000;           //Initial duration of movement
int moveld=0;         //Number of movement
int modeld=0;         //Number of mode
int moveSize=15;      //Asociated with the height of some movements

//-----

void setup()
{
  pinMode(9, OUTPUT); // this pin will pull the HC-05 pin 34 (key pin) HIGH to switch module to AT mode
  digitalWrite(9, HIGH);
  Serial.begin(9600);

  BTSerial.begin(38400); // HC-05 default speed in AT command mode

  Otto.init(PIN_YL,PIN_YR,PIN_RL,PIN_RR,true);
  Otto.home();
}

void loop()
{
  // Keep reading from HC-05 and send to Arduino Serial Monitor
  if (BTSerial.available())

  {

    int x = BTSerial.read();
    Serial.println(x);

    switch (x){
      case 1: Serial.println("UP");
               Otto.walk(1,1000,1);
               break;
    }
  }
}
```

```
case 2: Serial.println("Down");
        Otto.walk(2,1300,-1);
        break;

case 3: Serial.println("Left");
        Otto.turn(1,1000,-1);
        break;

case 4: Serial.println("Right");
        Otto.turn(1,1000,-1);
        break;

case 5: Serial.println("Pause");
        Otto.home();
        break;

case 6: Serial.println("Ascending turn");
        Otto.ascendingTurn(1,T,moveSize);
        break;

case 7: Serial.println("bend");
        Otto.bend(1,T,1);
        break;

case 8: Serial.println("Cursaito");
        Otto.crusaito(1,T,moveSize,1);
        break;

case 9: Serial.println("Flapping");
        Otto.flapping(1,T,moveSize,1);
        break;

case 10: Serial.println("Jitter");
        Otto.jitter(1,T,moveSize);
        break;

case 11: Serial.println("Jump");
        Otto.jump(1,T);
        break;

case 12: Serial.println("Shake Leg");
        Otto.shakeLeg(1,T,1);
        break;

case 13: Serial.println("Swing");
        Otto.swing(1,T,moveSize);
        break;

case 14: Serial.println("Tip Toe Swing");
        Otto.tiptoeSwing(1,T,moveSize);
        break;

case 15: Serial.println("Up Down");
        Otto.updown(1,T,moveSize);
        break;

case 16: Serial.println("Moon Walker");
        Otto.moonwalker(1,T,moveSize,1);
        break;
```

```
default: Serial.println("Invalid");  
    break;
```

```
}//end switch
```

```
} //end if
```

```
}//end loop
```