

```

#include <VarSpeedServo.h> // import library for servo motor speed control

VarSpeedServo sr1; // stage right head 1 - read/sitting from sr to sl
VarSpeedServo sr2; // stage right head 2
VarSpeedServo sl1; // stage left head 1
VarSpeedServo sl2; // stage left head 2

const int bOne = 2; // the number of the pushbutton pin from SH FX 1
const int bTwo = 3; // the number of the pushbutton pin from SH FX 2
const int bThree = 4; // the number of the pushbutton pin from SH FX 3
const int bFour = 5; // the number of the pushbutton pin from SH FX 4

int buttonState1 = 0; // variable for reading the pushbutton status
int buttonState2 = 0;
int buttonState3 = 0;
int buttonState4 = 0;

void setup()
{

  sr1.attach(6); // Attach command tells the Arduino to begin sending
control signals
  sr2.attach(9); // to the servo. Servo motors require a continuous
stream of control
  sl1.attach(10); // signals, even when not moving. To be able to turn
the servo by hand,
  sl2.attach(11); // one must first release the servo by using the
command servol.detach().

  pinMode(bOne, INPUT); // initialize the pushbutton pin as an input:
  pinMode(bTwo, INPUT);
  pinMode(bThree, INPUT);
  pinMode(bFour, INPUT);

  Serial.begin(9600); // initialize serial communication at 9600 bits per
second:
}

void loop()
{
  buttonState1 = digitalRead(bOne); // read the state of the pushbutton value:
  buttonState2 = digitalRead(bTwo);
  buttonState3 = digitalRead(bThree);
  buttonState4 = digitalRead(bFour);
}

```

```

Serial.println(buttonState1);          // delay in between reads for
stability
Serial.println(buttonState2);
Serial.println(buttonState3);
Serial.println(buttonState4);

    delay(1);

// This section moves the servo motors. With 4 bit binary there are 16 possible
programmable
// movements. This code uses just four. For more movements, add more else if
statements.

    if (buttonState1 == HIGH && buttonState2 == LOW && buttonState3 == LOW &&
buttonState4 == LOW) {
        sr1.slowmove(100,5);           // (position,speed(1-255max))
        sr2.slowmove(61,5);
        sl1.slowmove(90,5);
        sl2.slowmove(70,5);
        delay(80);                     // Short pause to allow it to move
    }

    else if (buttonState1 == LOW && buttonState2 == HIGH && buttonState3 == LOW &&
buttonState4 == LOW) {
        sr1.slowmove(178,25);         // (position,speed(1-255max))
        sr2.slowmove(139,25);
        sl1.slowmove(7,25);
        sl2.slowmove(2,25);
        delay(80);                     // Short pause to allow it to move
    }

    else if (buttonState1 == LOW && buttonState2 == LOW && buttonState3 == HIGH &&
buttonState4 == LOW) {
        sr1.slowmove(40,20);          // (position,speed(1-255max))
        sr2.slowmove(6,20);
        sl1.slowmove(150,20);
        sl2.slowmove(125,20);
        delay(80);                     // Short pause to allow it to move
    }

    else
    {
        sr1.slowmove(40,5);           // (position,speed(1-255max))
        sr2.slowmove(6,5);
        sl1.slowmove(150,5);

```

```
s12.slowmove(125,5);  
  delay(800);           // Short pause to allow it to move  
} }
```