/\* Modified by Pat McMahon 25/7/2021

\* A040-MFS8

Joystick to A4 & A5, Servos to D5 &D6

, Note-As the Joystick require 2 Analog connections and the MFS only has one external A5 pin, we need to use A4(middle pin) on the temp sensor.

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#include <Servo.h>

const int servo1 = 5; // first servo

const int servo2 = 6; // second servo

const int joyH =A4; // L/R Parallax Thumbstick

const int joyV = A5; // U/D Parallax Thumbstick

int servoVal; // variable to read the value from the analog pin

Servo myservo1; // create servo object to control a servo

Servo myservo2; // create servo object to control a servo

void setup() {

// Servo

myservo1.attach(servo1); // attaches the servo

myservo2.attach(servo2); // attaches the servo

// Inizialize Serial

Serial.begin(9600);

}

void loop(){

// Display Joystick values using the serial monitor

outputJoystick();

// Read the horizontal joystick value (value between 0 and 1023)

servoVal = analogRead(joyH);

servoVal = map(servoVal, 0, 1023, 0, 180); // scale it to use it with the servo (result between 0 and 180)

myservo2.write(servoVal); // sets the servo position according to the scaled value

// Read the horizontal joystick value (value between 0 and 1023)

servoVal = analogRead(joyV);

servoVal = map(servoVal, 0, 1023, 0, 180); // scale it to use it with the servo (result between 0 and 180)

myservo1.write(servoVal); // sets the servo position according to the scaled value

delay(15); // waits for the servo to get there

}

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\* Display joystick values

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void outputJoystick(){

Serial.print(analogRead(joyH));

Serial.print ("---");

Serial.print(analogRead(joyV));

Serial.println ("----------------");

}