/\* 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

}

/\*\*

\* Display joystick values

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void outputJoystick(){

 Serial.print(analogRead(joyH));

 Serial.print ("---");

 Serial.print(analogRead(joyV));

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

}