

DONDOLO v1 firmware setup guide

The modification involve three files:

Config.h

Marlin_main.cpp

Pins.h

and relate the two parts:

stepper motor (the same for the two hotends)

servo (to switch between the two hotends)

Config.h

```
#define EXTRUDERS 2 // 1

// Added for DONDOLO dual extruder
#define DONDOL0_SERVOPOS_E0 110
#define DONDOL0_SERVOPOS_E1 10
#define DONDOL0_SERVO_DELAY 1000

#define TEMP_SENSOR_1 5 // default 0 for none, put your thermistor type index

#define INVERT_E0_DIR false
#define INVERT_E1_DIR true    // reverted polarity as E0

// Uncomment and put 1 to enable servo management
#define NUM_SERVOS 1 // Servo index starts with 0 for M280 command
```

Marlin_main.cpp

Search for the line “else if(code_seen('T'))” and modify the code as shown:

```
//Added for DONDOLO dual extruder
if(tmp_extruder == 0) {
    st_synchronize();
    servos[0].attach(SERVO0_PIN);
    servos[0].write(DONDOL0_SERVOPOS_E0);
    delay(DONDOL0_SERVO_DELAY);
    servos[0].detach();
}
if(tmp_extruder == 1) {
    st_synchronize();
    servos[0].attach(SERVO0_PIN);
    servos[0].write(DONDOL0_SERVOPOS_E1);
    delay(DONDOL0_SERVO_DELAY);
    servos[0].detach();
}
//end

if(tmp_extruder >= EXTRUDERS) {
```

Pins.h

Search for the section related to your motherboard and map the extruder 1 pins as the extruder 0.

Ex.:

```
#define E0_STEP_PIN 35
#define E0_DIR_PIN 36
#define E0_ENABLE_PIN 34

// Changed for DONDOL0 dual extruder
//#define E1_STEP_PIN 29
//#define E1_DIR_PIN 39
//#define E1_ENABLE_PIN 28
#define E1_STEP_PIN 35
#define E1_DIR_PIN 36
#define E1_ENABLE_PIN 34
// end
```

Then, if not already present, add the servo pins definitions choosing an available pin on your board.

Ex:

```
// Added for DONDOL0 dual extruder
#ifndef NUM_SERVOS
#define SERVO0_PIN 11

#if NUM_SERVOS > 1
#define SERVO1_PIN 6
#endif

#if NUM_SERVOS > 2
#define SERVO2_PIN 5
#endif

#if NUM_SERVOS > 3
#define SERVO3_PIN 4
#endif
#endif
// end
```

THAT'S ALL!!

Credits:

The firmware adaptation is mainly the work of Stargrove1 for his D.E.I.S.S. extruder

<http://www.thingiverse.com/thing:651723>

I just made it working on my Megatronics v2 board.