

CERAMBOT module tutorial

Version	1.0.2
Time	20190402
Author	Jony

CERAMBOT module tutorial

1. Note:

The input voltage of the CERAMBOT Pro module is 12V. If you are purchasing a CERAMBOT Pro, you can directly receive 12V from the printer's motherboard.

2. Download the nozzle fixing module:

1) Download the nozzle fixed module from the thingiverse, if you don't have it, you need to design it yourself.

<https://www.thingiverse.com/groups/cerambot/things>

2) Print nozzle fixed module and install

3. Modify the firmware

1) Open the M163 settings: <http://marlinfw.org/docs/gcode/M163.html>

```
/**
```

```
 * "Mixing Extruder"
```

```
 * - Adds a new code, M165, to set the current mix factors.
```

```
 * - Extends the stepping routines to move multiple steppers in proportion to the mix.
```

```
 * - Optional support for Repetier Firmware M163, M164, and virtual extruder.
```

```
 * - This implementation supports only a single extruder.
```

```
 * - Enable DIRECT_MIXING_IN_G1 for Pia Taubert's reference implementation
```

```
 */
```

```
#define MIXING_EXTRUDER
```

```
#if ENABLED(MIXING_EXTRUDER)
```

```
  #define MIXING_STEPPERS 2          // Number of steppers in your mixing extruder
```

```
  #define MIXING_VIRTUAL_TOOLS 16   // Use the Virtual Tool method with M163 and M164
```

```
  //#define DIRECT_MIXING_IN_G1    // Allow ABCDHI mix factors in G1 movement commands
```

```
#endif
```

2) Open the marlin firmware used by your printer, find the thermistor part, and change to the following settings:

```
#define TEMP_SENSOR_0 998
```

```
#define TEMP_SENSOR_1 0
```

```
#define TEMP_SENSOR_2 0
```

```
#define TEMP_SENSOR_3 0
```

```
#define TEMP_SENSOR_4 0
```

```
#define TEMP_SENSOR_BED 0
```

```
#define TEMP_SENSOR_CHAMBER 0
```

```
// Dummy thermistor constant temperature readings, for use with 998 and 999
```

```
#define DUMMY_THERMISTOR_998_VALUE 25
```

```
#define DUMMY_THERMISTOR_999_VALUE 100
```

3) Modify the temperature protection to 0

```
#define PREVENT_COLD_EXTRUSION  
#define EXTRUDE_MINTEMP 0
```

4. Modify the slice parameters

- 1) Specific view software settings section tutorial

5. Using the tutorial

View the CRAMOBOT Pro or CERAMBOT Air tutorial for the module of your choice