

# BLTouch Sensor for Homing

**Feature Name:** BLTouch Sensor for Homing

**Feature Name in Annotation:** BLTOUCH

## Source of Information

Releaselog, pull requests, commits, ifdefs with feature annotation name

## Strategy Used:

Feature is identified from the latest release log first. The release log also provides the pull request and commits linked to the feature (see the links and tables below), Ifdefs are also used for speeding up feature location.

**Feature Release Version:** 1.1.0 – RC7

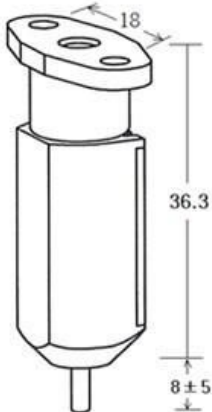
**Time took to Identify and Locate the feature:** 0.5 hour

**Time took to Understand the Implementation:** 1 hour

## Feature Description

This feature is used for supporting the BLTouch Sensor.

BLTouch is an auto leveling sensor for 3D Printers based on open-source. It could work with any kinds of bed materials, such as glasses, woods, metals, and so on. BLTouch is noiseless on the standby phase. Moreover, BLTouch makes even a small click sound instead of the Servo Motors' irritating loud noise while the push pin is moving. You can see that in the video. Compared to most of the Servo Motors, BLTouch is free from frequent breakdown.

Specification	
	<ul style="list-style-type: none"><li>■ Model : BLTouch<ul style="list-style-type: none"><li>• Diameter : <math>\Phi 13</math></li><li>• Height : <math>39 \pm 5</math> mm</li><li>• Voltage : 5 V</li><li>• Current : 15 mA</li><li>• Max Current : 800 mA</li><li>• Weight : 0.32 oz (9g)</li><li>• Cable length 15cm</li></ul></li><li>■ Solenoid Push-pin Up<ul style="list-style-type: none"><li>■ servo signal 90Degree</li></ul></li><li>■ Solenoid Push-pin Down<ul style="list-style-type: none"><li>■ servo signal 0~80Degree</li><li>■ servo signal 100~180Degree</li></ul></li><li>■ Function<ul style="list-style-type: none"><li>☑ Auto leveling Sensor</li><li>☑ Self-test</li><li>☑ alarm</li><li>☑ Adjustable Magnetic Force</li></ul></li></ul>

**Video Demo:** <https://www.youtube.com/watch?v=9Sur36cmxBs>

**Introduction:**

<https://www.indiegogo.com/projects/bltouch-auto-bed-leveling-sensor-for-3d-printers#/>

**Feature Information and Statistics:**

PR No.	Merged Time	PR	Commits	Files	Line Added	Line deleted
#4336	17 Jul 2016	BLTouch probe sensor	2	24	86	5

**Ratios of sources (%)**

RL	PR	CM	Ifdef	DK	CC	SC	GD
50	20	15	15	0	0	0	0

**RL:** Release Log; **PR:** Pull Request; **CM:** Commit, **Ifdef:** Ifdef Expression; **DK:** Domain Knowledge; **CC:** Code Comment; **SC:** Source Code; **GD:** G-Code Documentation.

**Pull Request Links:**

<https://github.com/MarlinFirmware/Marlin/pull/4336/files>

**Feature Characteristics:**

Feature Name	LoFC	SD	TD	Completely Wrapped by ifdef
BLTouch Sensor for Homing	65	5	3	Yes

**Feature's relevant historical data**

*Request(issue) proposed*

Time: 29 May 2016, by: timeshell

Feature: BLTouch Special Handling #3902

<https://github.com/MarlinFirmware/Marlin/issues/3902>