

# Mixing and Switching Extruders

**Feature Name:** Mixing Extruder, Switching Extruder

**Feature Name in Annotation:** MIXING\_EXTRUDER, SWITCHING\_EXTRUDER

## 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:** 0.1 hour

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

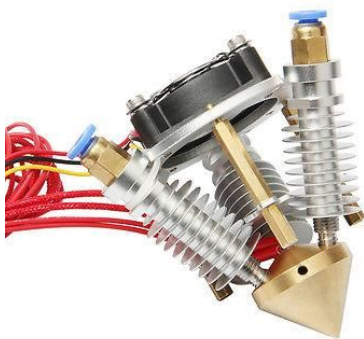
## Feature Description:

This feature is supporting two new type of extruder: Mixing extruder and Switching extruder. Theses extruders use for add multiple filaments.

Mixing Extruder:

Demo:

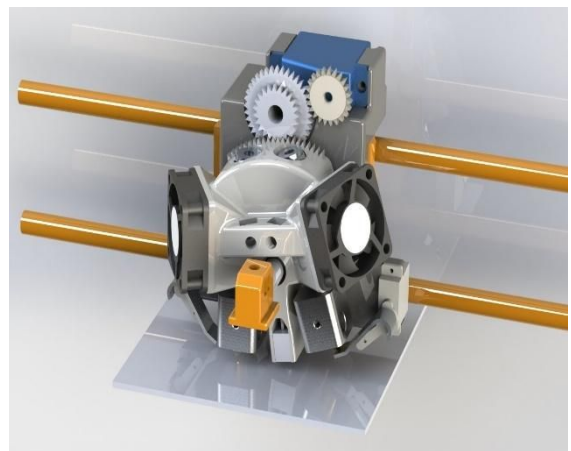
<https://www.youtube.com/watch?v=bWk2i3Z9gdE>



Switching extruder:

Demo:

<https://www.youtube.com/watch?v=9aekOiyL1qY>



**Feature Information and Statistics:**

PR No.	Merged Time	PR	Commits	Files	Line Added	Line deleted
#4163	17 Jul 2016	Mixing and Switching Extruders	3	36	1354	397
#4339	18 Jul 2016	Follow-up the PR #4163 (Mixing and Switching Extruders)	1	2	48	2

**Ratios of sources (%)**

RL	PR	CM	Ifdef	DK	CC	SC	GD
50	35	10	5	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/4163>

<https://github.com/MarlinFirmware/Marlin/pull/4339/>

**Feature Characteristics:**

Feature Name	LoFC	SD	TD	Completely Wrapped by ifdef
Mixing Extruder	638	30	21	Yes
Switching Extruder	137	12	2	Yes
Sum	775	42	23	Yes