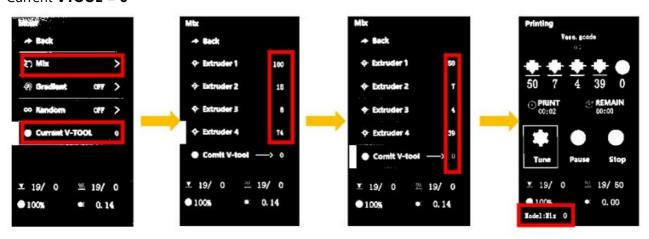
# Auto Color Mixing Feature User Guide

## Change printing color by adjust mixing rate

- Start to print a singel color gcode file from SD card.
- Wait until the print start to print, set on the LCD menu.
- Tune>>Mixer>>Current V-TOOL: Set the vtool to 0.
- Tune>>Mixe>>Mix>>Extruder1~4(M4): Arbitrarily adjust the percentage of extruder 1 ~ 4, the range is 0 ~ 100.
- **Tune>>Mixer>>Mix>>Comit:** Redistribute the percentage of all extruders in proportion and send it to the current vtool. The current vtool value changes color. After setting up, on the ideal menu shows Current **VTOOL = 0**

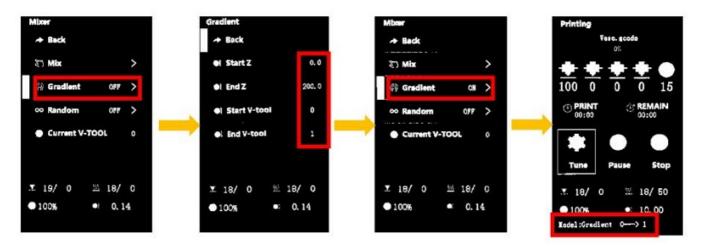


#### Auto gradient mixing



- Start to print a singel color gcode file from SD card.
- Wait until the print start to print, set on the LCD menu.
- Tune>>Mixer>>Gradient:OFF>>
  - **Start Z:** set the start Z heigth(such as:0mm)
  - **End Z:** set the END Z heigth(such as:200mm)
  - Start V-tool: set the start V-tool(such as:0)
  - **End V-tool:** set the end V-tool(such as:1)

After set **Start Z** isn't equal to **End Z**, and **Start V-tool** isn't equal to **End V-tool**, the LCD will shows **Gradient**: **ON**.



# Realize gradient mixing by modifing gcode file

You can also add a M166 command into the "start G-code" of the machine setting when slicing, so it can automatically work when print from SD card.

```
Descitpion of M166 command
M166: Start a gradient mix
S[bool] - Enable / disable gradients
A[float] - Starting Z for the gradient
Z[float] - Ending Z for the gradient.
I[index] - V-Tool to use as the starting mix.
J[index] - V-Tool to use as the ending mix.

For example: M166 S1 A0 Z200 I0 J1
S1->Enable gradient mix
A0->startZ is 0mm
Z200-> EndZ is 200mm
I0 -> Start V-tool is 0
J1 -> End Vtool is 1
```

## Auto random mixing



- Start to print a singel color gcode file from SD card.
- Wait until the print start to print, set on the LCD menu.
- Tune>>Mixer>>Random Mix: OFF>>
  - Start Z: set the start Z heigth(such as:0mm) End Z: set the end Z heigth(such as:200mm)
  - **Height:** set interval distance(such as:10mm), when printing height changed beyond this value, the mixing ratio be changed once.
  - Extruders: set the number of extruders with random variation(such as:4)

After set Start Z isn't equal to the End Z, the LCD will shows **Random: ON**.



X

Realize Random mixing by modifing gcode file

You can also add a M167 command into the "start G-code" of the machine setting when slicing, so it can automatically work when print from SD card.

Descitpion of M167 command.

M167: Start a random mix.

S[bool] - Enable / disable random mix.

A[float] - Starting Z for the random.

Z[float] - Ending Z for the random.

H[float] - Minimum height of changing mixing rate.

E[int] - how many extruders used on random mixing.

For example: M167 S1 A0 Z100 H0.2 E3

S1->Enable Random mix

A0->start Z heigth is 0mm

Z100->End Z heigth is 100mm

H0.2->change color every 0.2mm

E3->3 extruders (Extruder#1 to Extruder#3) will be used