

Movement Codes (G)

G0 Rapid Motion Implemented - supports X, Y, and Z axes.
G1 Coordinated Motion Implemented - supports X, Y, and Z axes.
G2 Arc – Clockwise (Not used by Skienforge)
G3 Arc - Counter Clockwise (Not used by Skienforge)
G4 Dwell Implemented.
G20 Inches as units Implemented.
G21 Millimetres as units Implemented.
G28 Go Home Implemented. (X = -135mm, Y = 100mm, Z = 0mm)
G90 Absolute Positioning Implemented.
G91
G92 sets an origin offset, which is currently used to set the extruder 2 X,Y offset from extruder 1.

Special functions (M Codes)

M101 Turn extruder 1 on Forward.
M102 Turn extruder 1 on Reverse. (?)
M103 Turn all extruders off.
M104 S145.0 Set Extruder 1 target temperature to 145.0 C.
M105 Custom code for temperature reading. (Not used)
M106 Turn fan on.
M107 Turn fan off.
M108 S400 Set Extruder 1 speed to S value/10 = 40rpm.
M201 Turn second extruder on Forward.
M204 S145.0 Set Extruder 2 target temperature to 145.0 C
M208 S400 Set Extruder 2 speed to S value/10 = 40rpm.
M210 AUX 1 off
M211 AUX 1 on
M220 AUX 2 off
M221 AUX 2 on
M222 Set speed of fast XY moves
M223 Set speed of fast Z moves
M224 Enable extruder motor during fast move
M225 Disable extruder motor during fast move
M226 Pause the printer until ESC key is pressed
M227 S1000 P800 on extruder stop (M103) reverse the extruder stepper for S turns and on extruder start (M101)
M228 - Disable M227
M229 - Same as M227 but P and S parameters specify prime and reverse extruder thread revolutions (not stepper steps)
M301 Turn extruder 3 on Forward.
M304 S145.0 Set target temperature of extruder 3 to 145.0 C
M308 S400 Set Extruder 3 speed to S value/10 = 40rpm. (Note to turn off extruders 2 and 3 use M103 which turns off all extruders)
M542 - Enter 3000 nozzle wipe / move to RapMan rest location
M543 - Exit 3000 nozzle wipe / does nothing on RapMan
M551 / M552 / M553 - Prime extruder 1 / 2 / 3. Parameter P = stepper steps, S = RPM * 10
M561 / M562 / M563 - Reverse extruder 1 / 2 / 3. Parameter P = stepper steps, S = RPM * 10

Future functions (M Codes)

M codes that may be introduced for the RepRap

M120 Pgain PWM control values

M121 Igain “

M122 Dgain “

M123 I_{max} “

M124 I_{min} “