

G-CODE COMMANDS

Calibration Commands

G21	Sets units to millimeters
G90	Use absolute coordinates
G91	Incremental positioning
M82	Set extruder to absolute positioning
M83	Set extruder to relative positioning
M84	Disable motors

Movement Commands

G0	Rapid linear move
G1	Linear move
G2	Move clockwise arc
G3	Move counter-clockwise arc
G4 PX	Pause for X milliseconds (dwell)

X	Move in X-direction
Y	Move in Y-direction
Z	Move in Z direction
F	Set speed for movement
I	X-offset for arcs
J	Y-offset for arcs
K	Z-offset for arcs
R	Radius of circle for arcs, e.g., G02 X+2.00 Y+0.00 R2.00

The special M codes for the INKREDIBLE(+) 3D Bioprinter

M712 to M732 are used to set the offset between the printheads. Printhead 1 and 2 are the cartridge holders and printhead 3 is the LED.

Note: This will not place the chosen printhead in the active position

M712	Set offset from 1 to 2
M713	Set offset from 1 to 3
M721	Set offset from 2 to 1
M723	Set offset from 2 to 3
M731	Set offset from 3 to 1
M732	Set offset from 3 to 2

M750	Homes the printheads
------	----------------------

This needs to be done before any automatic switching of the printheads can occur. After this command, Printhead 1 will be in the active position.

M751	Places Printhead 1 in the active position
M752	Places Printhead 2 in the active position
M753	Retracts both printheads, making way for the LED to be used

T1	Change extruder
----	-----------------

M760	Opens the valve for Printhead 1
M761	Closes the valve for Printhead 1
M762	Opens the valve for Printhead 2
M763	Closes the valve for Printhead 2
M764	Turns on the UV LED
M765	Turns off the UV LED