



Stepper Drivers

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Stepper Drivers

The gMax 2 Pro uses TMC2130 stepper drivers. The drivers have an adjustable potentiometer on the top for adjusting the maximum current. **NEVER set the max current higher than the default from the LCD screen (machine parameters) or you risk damaging your machine.**

Make sure you have **proper cooling** in the electronics case or the drivers can and will overheat. When the drivers overheat the firmware will automatically reduce the power to the drivers, in 50mm increments, to avoid damage but this could lead to lost steps.

NOTE: Whenever you are adjusting any of the electronics, **turn off the printer**, unplug it and wait a few minutes to ensure the power has drained from the system.

Refer to the wiring diagram for more information on which axis is controlled by which driver.

Adjusting the Power

We recommend using a ceramic screwdriver when adjusting the stepper drivers to avoid damage to the electronics.

The potentiometer will have a small flat spot on it which should be turned to about a 45-degree angle.

Turn Clockwise to increase current (power) and counterclockwise to decrease it.

Note: The driver current is also set via the firmware. See "Driver Current" in the "LCD Breakdown > Parameters" section of this guide. **NEVER set higher than the factory defaults or you risk damage.**



Replacing a Stepper Driver

If you need to replace a stepper driver, it can be pulled out of its socket. You may need to loosen the bolt holding the electronics to the frame to allow you to swing out the electronics for easier access.

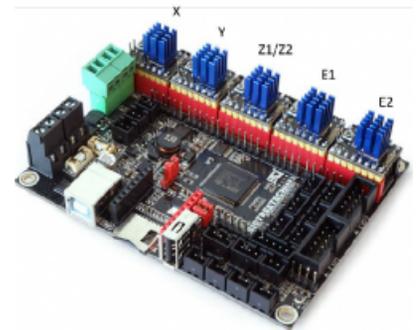
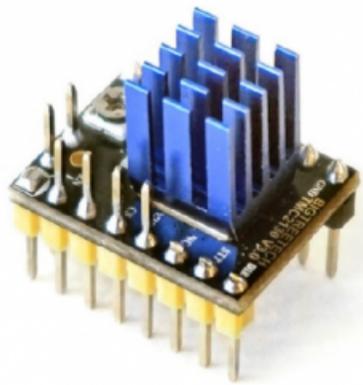
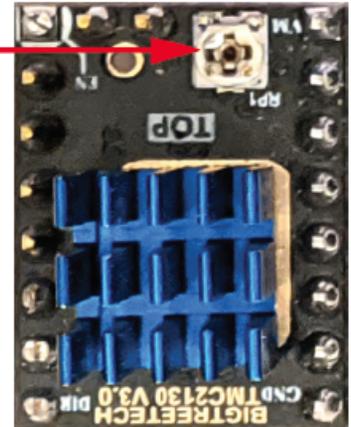
We recommend gently rocking the driver slightly back and forth while pulling it out.

If you need to unplug the motor wire for easier access, make sure to pull on the plastic connector and not the wires or you risk pulling the wires out.

Install the new driver in the same orientation or you risk damaging the machine.

Adjustable Potentiometer
(Current to Motors)
Clockwise to increase
Counterclockwise to decrease

Note:
Flat spot on potentiometer should be at about 45 degrees when viewed from the top



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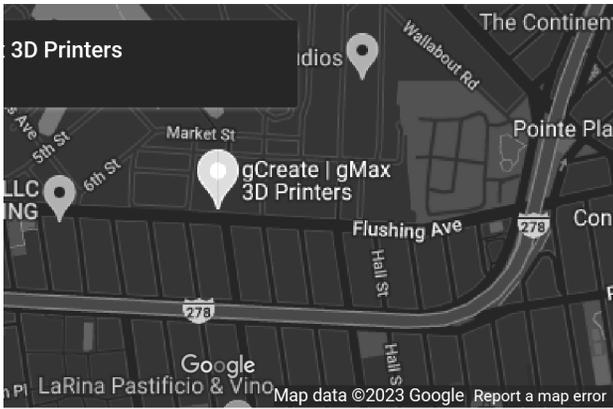
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