



DIYELECTRONICS PRESENTS:

3D PRINTER MOD GUIDE

We at DIYElectronics are eager to share our knowledge. We hope these guides will allow you to get the most out of your 3D Printers and electronics.



NOZZLE - BEGINNER

Replacing the nozzle of your 3D Printer is one of the easiest upgrades to do, and with such a wide range of nozzles to choose from, you can choose to equip your 3D Printer for high speed, high precision, high abrasion resistance, or even resistance against sticky melted plastics.



PRINT SURFACE - BEGINNER

If you're having trouble with first layer adhesion, or just love getting that first layer to absolute perfection each and every time, then consider upgrading your print surface. Different polymers often work best on specific surface materials, so to get the best possible chances for first layer perfection, you need the right print surface for the job.



TLSMOOTHERS - BEGINNER

TLSmoothers are a subtle but impressive upgrade for a 3D Printer, often hidden out of sight in the body of the printer itself when installed. They are designed to smoothen the electrical waveforms sent to the stepper motors and drivers, and are fairly simple to install, offering a noticeable improvement to print quality while also reducing some of the noise.



ENCLOSURE - BEGINNER

3D Printer enclosures offer a range of benefits that can greatly improve your 3D Printing experience. An enclosure will keep your printer free of dust, keep plastic microparticles and odours from spreading, and maintain a consistent temperature for printing with specific filaments. And while there are a variety of enclosures on the market, you could even make your own with various materials to ensure a snug custom fit for your particular 3D Printer.



LEVELLING PROBE - INTERMEDIATE

Slightly warped beds that require constant leveling can be frustrating; luckily there are many bed leveling probe options that address this. Once installed this device will probe various points on your bed and remember any height variances, this is then taken into account while those all-important first layers are being extruded.

TIPS TO PREVENT OR AVOID OVER-EXTRUSION



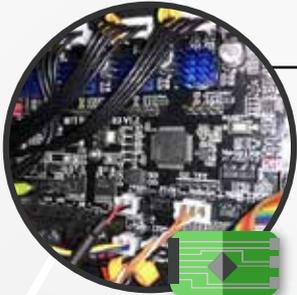
HIGH QUALITY FAN - INTERMEDIATE

The stock fans that come with your 3D Printer may be noisy and may not provide the best cooling or airflow possible. By upgrading your fans, you can improve the quality of your prints while also reducing noise output during printing. Just remember to check the type, size and voltage of the fans you wish to install to make sure they work well with your printer.



EXTRUDER - ADVANCED

This is one of the more advanced upgrades on this list, but upgrading your extruder body can provide various amazing benefits. Replacing the extruder body requires some disassembly and as well as post assembly calibration, so a bit knowledge is required. This upgrade can not only improve your general print quality, but also allow you to print with some more advanced filament types depending on the type of extruder you choose.



CONTROL BOARD - ADVANCED

The control board is the heart of your 3D Printer, although we recommend this for more advanced users due to the more complex nature of the installation and setup. The benefits vary depending on the brand and type of board, but can include things such as faster control chips, increased stepper driver compatibility, extra integrated functions, as well as support for different displays and other awesome accessories.

