Ulendo

Vibration Compensation Software

For
Additive Manufacturers
3D Printing Service Bureaus
3D Printer OEMs

DOUBLE the throughput of your 3D printers without sacrificing quality

www.ulendo.io

In the Chidhewa language, “Ulendo” means “journey” or “voyage.”

Born out of the Mechatronics Program at the University of Michigan, our team at Ulendo is on a voyage or “Ulendo” to use software to enable manufacturing machines to achieve their full potential as a ubiquitous tool for modern manufacturing.

Learn more about our patented algorithm for vibration compensation and download a copy of our whitepaper.

Ulendo

Vibration Compensation Software

For
Additive Manufacturers
3D Printing Service Bureaus
3D Printer OEMs

DOUBLE the throughput of your 3D printers without sacrificing quality

www.ulendo.io

For Additive Manufacturers and 3D Printing Service Providers

Improve the ROI of your investment in 3D printers

Squeeze even more productivity out of your additive manufacturing machine investment. Let Ulendo implement **our software-only solution** to address vibration so that you can DOUBLE the output of your existing 3D printers.

Increase your manufacturing capacity at low cost

Increase the capacity of your additive manufacturing operation without the high cost of additional hardware.

For 3D Printer OEMs

Accelerate your product innovation

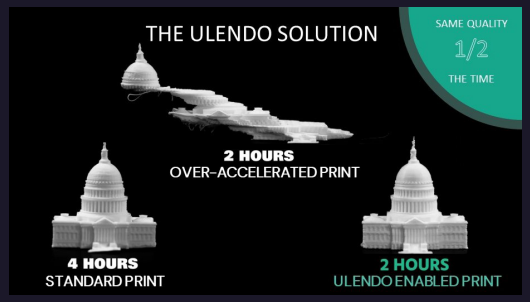
Are you frustrated by the slow, costly and minimal progress of addressing vibration by making mechanical changes? Let Ulendo implement our **software-only solution** to address vibration quickly without extended product development times.

Offer your clients better machines

Improve your competitive edge by offering 3D printers that maintain high quality at advanced speeds.

Supercharge Your 3D Printer

Improve the reliability of high-speed printing while eliminating problems such as ghosting, ringing and layer shifting.



Higher Quality than input shaping

Have you tried implementing input shaping just to discover that this technique creates quality problems like rounded corners? Use Ulendo's superior collection of algorithms to avoid these quality issues while still increasing the printer's speed.

Broad Compatibility

Ulendo is best suited for additive manufacturing machines that require fast motion of a printhead of some sort using a mechanical drive system:

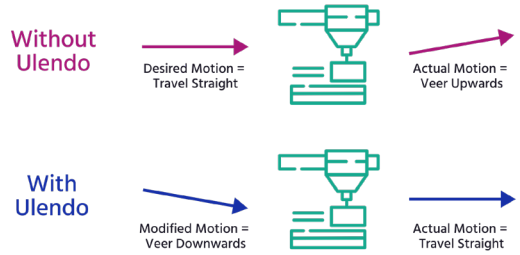
- FDM/FFF/FGM
- DED
- Some PBF systems

Independently verified results on a variety of machines:

- Industrial
- Desktop

What is Ulendo?

Ulendo offers vibration compensation software that is integrated onto the controller of a 3D printer. It enables higher speed operation by compensating for vibrations which affect the part quality. Our software modifies stepper commands in real time to reduce vibration, enabling 3D printers to operate at 2x their normal rate.



How Does Ulendo Work?

Using an accelerometer, data about the vibration behavior of your printer is captured. That data is converted into a calibration map and integrated onto your printer's controller alongside your firmware. When your Ulendo-enabled printer is then operated, the software anticipates a vibration and changes the low-level print commands to compensate for it.