

Photocentric

UK - Cambridge House, Oxney Road, Peterborough, PE1 5YW. +44 1733 349937
USA - 2205 West Parkside Lane, Phoenix, 85027, AZ. (623) 581-3220



www.photocentricgroup.com

Liquid Crystal
MAGNA

Photocentric



The Liquid Crystal Magna delivers the ideal combination of a large build volume with accurate printing making it the right tool for custom mass manufacture. Casting, prototyping, dental aligners, automotive, figurines and more! Offering highly accurate and detailed parts in a record time at a revolutionary scale, the LC Magna is tailored for every industry.

Build Volume

Revolutionise your custom mass manufacturing with the LC Magna's breath takingly large platform design, maximise your 3D potential with the LC Magna at your disposal. Build Volume 510 (W) X 280 (D) X 350 (H) mm.

Liquid Crystal Display

LC Magna's 4K Ultra HD screen offers unparralled precision and detail for high resolution mass manufactured prints. Turn mass manufacturing on its head with the LC Magna's rapid cure times of just 3-8 seconds (dependent on resin). These unbelievably fast times will provide a disruptive change to the custom mass manufacturing of every industry.

Simple and easy to use Vat

The LC Magna vat offers countless features that will make your experience simpler. The built in handles, easy pour spouts and depth gauge all help you to say goodbye to wastage and make the most out of your resin.

Performance and Engineering

The LC Magna is a pristine tool that is built to last, the robust linear rail and patented peeling system is stress tested to withstand the solid printing of 15kg of resin. With state-of-the-art electronics throughout, the LC Magna is designed to perform flawlessly every time to maintain a consistent level of custom mass manufacturing for every industry.

GUI

Sleek, smooth and stylish – with an interactive user interface the LC Magna makes printing simplified. To make the process even more user friendly there are three different methods of data transfer: Wi-Fi, Ethernet and USB.

Industries

Dental- 46 Dental Arches, in 2 hours

Revolutionise your dental production line with the mass manufacturing capabilities of LC Magna, with the ability to deliver 100% of scanned models to an accuracy of less than 100 microns this game changer has something for every industry. With this next generation 3D printer at your disposal you can produce anywhere from 46 to 80+ models in one print!

Custom Mass Manufacture

Enable your custom mass manufacturing potential now by utilising the LC Magna's monstrous build volume, with the ability to print a vast selection of functional parts in record time the LC Magna will remove the delays caused by traditional tooling and enable the ability for continuous custom mass manufacturing.

Modelling- High Detail Production

Conceptualise and revolutionise your 3D printing capabilities with the combination of LC Magna and Concept Green resin - this dynamic combination not only removes the need for messy silicone moulds but also showcases an impressive ability to bring to life 36 intricate models that offer details to rival even the smallest of desktop printers.

Engineering- With LC Magna, size does not compromise quality.

Create prototypes in a wide selection of sizes at resolutions ranging from 25um to 200um without the need to compromise on depth or detail. Providing industries with the ability to prototype parts small and large alike at an affordable price point, the LC Magna has a firm place in every industry.

Transform your industry with high-grade LC Magna resins

With an array of high-grade resins at your disposal the LC Magna has the ability to revolutionise every industry laying the path for truly innovative custom mass manufacture.

SPECS

LCD specification	23.8" (3840x2160 px)	Connectivity	USB, Wireless, Ethernet.
Build Volume	510 x 280 x 350 mm 20 x 11 x 13.8 in	Dimensions	850 x 650 x 950 mm 33.4 x 25.6 x 37.4 in
Layer Thickness	25, 50, 100, 150, 200 microns 0.001, 0.002, 0.004, 0.006, 0.008 inches	Weight	100 Kg (220 Lbs)
XY Pixel Density	137 microns	Software	Photocentric Studio
Cure Speed (at 100 micron and dependant on resin)	3-8 sec/layer	Power requirements	100-240 V, UK/USA/EU plug

1 Year warranty

Pack contents

USB stick- 16Gb (Photocentric License key included on USB), 2kg of Magna Dental White Resin, 2kg of Magna Black Hard, 1x Pozi1 Screwdriver, 1x Pozi2 Screwdriver, 2x Vat film + 2x set of Vat gaskets, 5x Paper Filters, 1x Funnel, 1x Scraper, 1x Soft Spatula, 2x Blue Nitrile Gloves- Medium, 1x Vat cleaning mat, 1x Vat cleaning tool, 1x Power Cable, 1 x Wi-Fi Dongle, 1 x Extraction Spigot 100mm

Daylight Magna Resins



Daylight Magna Dental white

Accurate, high resolution models especially for dental work can be created using Magna Dental Model resin. Ideal for Orthodontic, study, and working models and created in collaboration with Dental Technologists to ensure optimal colour, feel and working characteristics.

5kg Daylight Magna Dental White. For use with the LC Magna only.



Daylight Magna Concept

Bring your model figurines and other designs to life with the Magna Concept Green resin. Print jewellery prototypes or detailed figurines with high strength, durability, and most importantly high accuracy with finished smooth surfaces. Figurine prints can be shown as is or easily painted by airbrush.

5kg Daylight Magna Concept. For use with the LC Magna only.



Daylight Magna High Tensile

When strong parts are required, our unique Magna High Tensile is the resin of choice. Capable of producing incredibly detailed parts along with great strength, higher than that of injection moulded Polycarbonate with similar mechanical behaviour. Our 3D High Tensile Resin enables you to 3D print extremely strong and durable parts while maintaining an incredibly high accuracy.

5kg Daylight Magna High Tensile. For use with the LC Magna only.



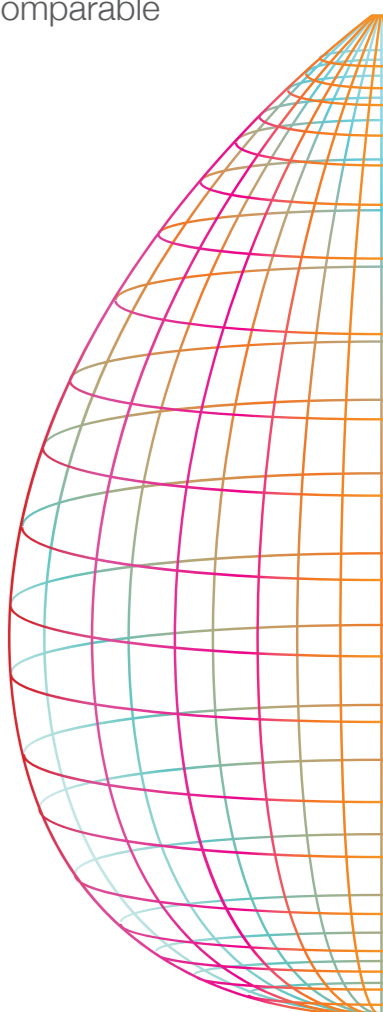
Daylight Magna Hard

Strong, accurate parts with low shrinkage are made using our Magna Hard resin. This 3D printing resin produces stiff parts that cannot be easily deformed with compression or tension. Great for large scale applications where large models or even short run parts are required. The parts will display mechanical behaviour comparable to Polycarbonate/ABS blends.

5kg Daylight Magna Hard. For use with the LC Magna only.

COMING SOON!

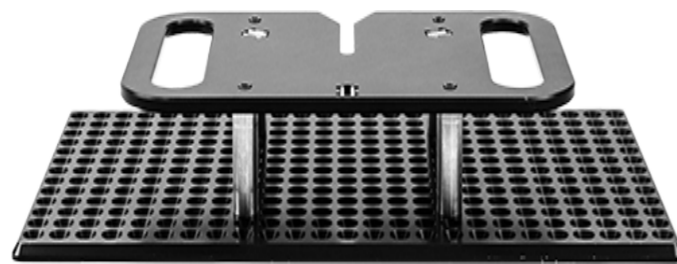
BASF's ST 45 resin is designed for industrial use where accuracy and mechanical strength is key; the finished parts perfectly reflect high-end parts suitable for functional applications. These parts will offer the ideal combination of toughness, good elongation, high impact strength and a high modulus.



Ancillaries

LIQUID CRYSTAL MAGNA PLATFORM ASSEMBLY

Liquid Crystal Magna replacement platform assembly; you can order this item when you want to have a spare platform or if you have damaged the current platform.



LIQUID CRYSTAL MAGNA VAT ASSEMBLY

Liquid Crystal Magna replacement vat assembly; you can order this item when you want to have a spare vat or if you have damaged the current vat.



LIQUID CRYSTAL MAGNA VAT FILM X 5 WITH GASKETS

This pack contains five sheets of 100 micron FEP film, cut to the correct size for your Liquid Crystal Magna vat. We recommend that you re-skin your vat after 10 times of printing, or if any visible damage is detected. Also included in this pack are five vat gaskets and five vat edge seals. We recommend that you change both each time you re-skin your vat.



BOX OF 25 FILTERS

Box of 25 filters. Use to filter resin when pouring back into container of origin after use.



Photocentric STUDIO



Photocentric Studio is a complete and comprehensive solution for all users from hobbyists to professionals. Now, Liquid Crystal users have everything readily available in one user-friendly package; where you can prepare and edit 3D files, slice and directly control your machines all from just one software. Photocentric Studio software offers an array of excellent features, including

an extensive variety of support modification and types, fast processing of large heavy files, personal customisation and customer friendly interface, autodetect of critical angles and much, much more. With 1 perpetual license you can operate 2 PC's and never have to renew your license again!

License number is included on the USB provided in the accessory box of the printer.

SOFTWARE FEATURES

- Perpetual license which can be activated on 2 PCs
- Multiple option for support generation
- High quality print surface finish
- Fast processing of large files. Suitable for all applications, from hobbyists to professionals
- Automatic software notifications
- User interface modification
- Auto detect of critical areas for support generation
- Layers preview
- Integrated printer controller
- Slice Preview
- User friendly interface
- Various control options of 3D models (such as orientation, scaling and copying)
- Able to open stl, obj and p3d files.
- Able to save in stl, cw and p3d formats.
- Extensive list of keyboard shortcuts to save time
- Anti-aliasing option
- Incorporated instruction guideline within software environment
- Advanced instructions provided in the software

Minimum PC Requirements:

- Windows 7, 8 or 10
- Minimum 2.0 Ghz processor speed 2 cores. Recommended 4 cores
- GPU capable of running opengl version 3.0 or higher
- .net framework version 4.0
- 64bit system: minimum 2 GB of RAM, recommended 4 GB
- 32bit system: minimum 1 GB of RAM, recommended 2 GB