NEW AND IMPROVED FOR **2022**!

2002-2022

Liquid Crystal

MAGNA

Size does matter…

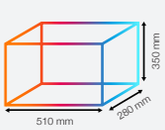
Overview

From the inventors of LCD 3D Printing, this brand-new revision of the Photocentric LC Magna 3D printer, the v.2, builds on the success of the original, delivering fast, highly accurate large scale prints, suitable for a huge variety of industries and applications. The versatility of the new daylight LC Magna supercharges product design enabling you to move from prototyping to production volumes in hours.

The Benefits of Daylight Technology

Daylight is far better for screen life, lower in energy usage and safer, but it also makes printing more reliable, delivering a more even cure than higher intensity UV with its greater depth of penetration. It is much more effective to use daylight with dark coloured or particle rich formulations as the longer wavelength travels further.

Product Highlights



Impressive build volume of 510 x 280 x 350mm (21.1 x 11 x 13.8”)

Brand-new hydrophobic platform boosts productivity and further reduces material waste.

Print speeds are significantly faster when compared to the original LC Magna.*

*depending upon material and print.

Photocentric

UK Titan House, 20 Titan Drive, Peterborough, PE1 5XN.
USA Avondale 107 - Building ‘A’ 855 N. 107th Ave., Suite A110, Avondale, Arizona 85353
www.photocentricgroup.com

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Construction

Informed by extensive feedback from existing customers, this new version has undergone significant re-engineering to further improve reliability and performance. We work with carefully chosen suppliers and specify components to meet our exacting requirements to ensure that the LC Magna delivers reliable and repeatable performance every time. Every element of the design and manufacture is undertaken by us - the Photocentric LC Magna is built to last!

Highlights

- Six brand-new PWM fans provide quiet, efficient cooling, enabling faster production timescales particularly for those models with small footprints.
- A brand-new build platform with a revolutionary hydrophobic coating increases processing speed, increases yield and enables easier platform cleaning.
- Total Internal Refraction (TIR) lenses have been selected delivering a far more collimated light cure and as a result far greater accuracy across the build plate.
- Advanced thermal cutoffs protect the LC Magna and your work from damage.
- Trinamic motor drivers provide smooth and quiet operation.
- Precision engineered mechanical components support reliable and consistent performance.
- Rugged construction designed for daily use in industrial environments including tough crack-proof door.
- Brand-new and improved PCB design and construction.

** Further information on print speeds and layer thickness can be found on the Photocentric website.*

Operation

The LC Magna 3D Printer is your perfect partner to consistently deliver accurate end-use parts at scale. Simple to control and supplied with Photocentric's intuitive STUDIO software, the LC Magna is suitable for a wide variety of applications. The innovative Photocentric Additive software suite, which delivers almost limitless textures and surface finishes, is available separately as a licence-based package.

Highlights

- A revised and updated control system delivers even greater levels of reliability and performance with regular updates and revisions provided.
- New software integration enables communication with the OPC-UA Machine Tool (Umati) protocol, further enabling integration with MES systems such as 3YOURMIND.
- Brand-new quad-core processor with a large 7" capacitive touch screen with new GUI.
- Photocentric's patented 'Blow-Peel' release technology ensures reliability over large surface area printing.
- Calibrated in the factory facilitating a quick installation on site.
- RGB indicators display production status.
- Brand-new custom screen driver.
- Interchangeable platforms enable rapid turnaround ideal for full production environments.
- Safety-rated interlock switches within platform assembly and build chamber.
- A trusted production partner with 1000's of units successfully deployed around the world.

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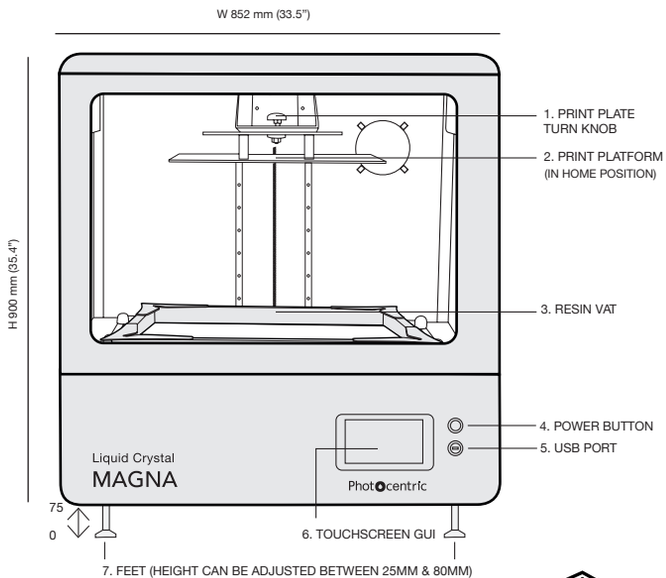
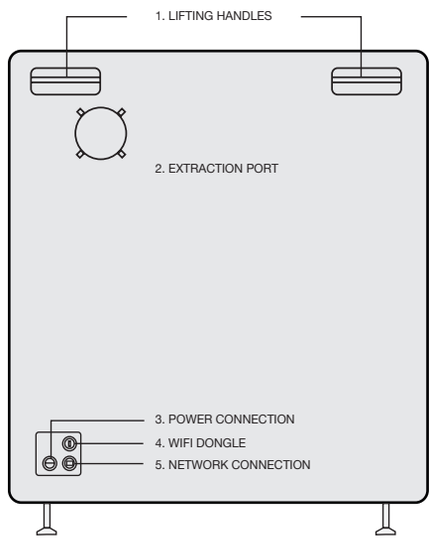
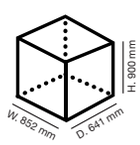
Product Dimensions - LC Magna v.2





Weight:
110kg (242.5 lbs)



The diagram of this cube illustrates the basic dimensions of the LC Magna v.2.
These dimensions do not take account of the adjustable feet on the base of the machine.
Given the weight of the LC Magna, care must be taken when lifting and moving the machine.

Full Technical Specifications - LC Magna v.2

Performance

- **Build volume:** 510 x 280 x 350mm (21.1 x 11 x 13.8")
- **Print layer thickness:** 25, 50 and 100µm. Layer thickness of >100µm is dependent upon resin properties.
- **4K screen.** 3840 x 2160 px
- **Print Speed:** 16mm per hour (0.62" per hour).
- **Cure Speed:** 2 seconds per layer at 100um (selected resins).
- **Light Output intensity - LCD screen:** 2mW/cm^2
- **Light output wavelength:** 460nm

User Interface and Operation

- Calibrated in the factory enabling quick set-up and installation on site.
- Large capacitive touch 7-inch screen.
- Integrated Photocentric control system for optimum performance and in-field updates.
- Easy clean platform and chassis featuring robust double-sealed vat construction with practical carry handles.
- Brand-new Raspberry Pi4 quad-core processor.
- Comprehensive accessory box provided containing tools, spare consumables and cleaning equipment.

Software

- Equipped with our complementary STUDIO suite via licence.
- Photocentric Additive software available as a separate licence.

Connectivity

- Wi-Fi
- Ethernet
- USB 3.0 for fast file transfer

Construction

- Rugged steel construction with solvent resistant paint.
- Incredibly flat, high tolerance glass.
- Six brand-new PWM fans provide quiet, efficient cooling enabling even faster production timescales.
- Aluminium slotted build platform with industrial grade non-stick platform.
- Precision engineered components including HIWIN linear rails.
- Trinamic motor drivers deliver extremely quiet and robust performance.
- Weight: 110Kg (242.5ib)
- Power input: 110-240 VAC.

Warranty and Certification

- Warranty period of 12 months as standard.
- UL Certification: File Reference E517008

Liquid Crystal MAGNA
AVAILABLE ON THIS PRODUCT
EXTENDED WARRANTY

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