



# Liquid Crystal MAGNA

## NEW FOR 2021



DATASHEET



AVAILABLE ON  
THIS PRODUCT  
EXTENDED  
WARRANTY

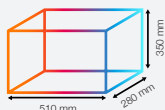
## Overview

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

## Why Daylight?

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")



Incredible 16mm per hour enabling  
large volumes of parts to be printed  
quickly, accurately and consistently.



Incredibly fast cure speed of 2-8  
seconds per layer at 100µm layer  
thickness.



1000's of units successfully  
deployed around the world.



Photocentric's patented 'Blow-Peel'  
release technology ensures reliability  
over large surface area printing.



Supports layer thicknesses between  
25 to 250 microns, delivering the  
optimum balance of speed and  
resolution.

## Photocentric

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# Liquid Crystal MAGNA

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## Construction

Meticulous attention to detail has been taken with the component selection for this new version of the Magna. We work with carefully chosen suppliers and, where required, will 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 of the LC Magna is undertaken at our UK manufacturing facility.

## Highlights

- A significant investment has been made in Cree LEDs which have been selected for their performance and reliability ensuring consistent and repeatable performance.
- Total Internal Refraction (TIR) lenses have been selected delivering a far more collimated light cure.
- The light arrays have been laser levelled with each optic placed by a robot. This ensures light uniformity and facilitates even light curing.
- 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.

## Operation

Whether it's small batch, on-demand or full production the LC Magna 3D Printer is your perfect partner to consistently deliver accurate end-use parts at scale. A simple 'plug and play' operation complemented with Photocentric's intuitive STUDIO software, means that LC Magna is suitable for both experienced and novice users in a wide variety of applications.

## Highlights

- A trusted production partner with 1000's of units successfully deployed around the world.
- Calibrated in the factory facilitating a quick installation on site.
- RGB indicators display production status.
- Brand-new quad-core processor with a large 7" capacitive touch screen with new GUI.
- Platform optimised for peel forces deliver quicker print speeds and better washing.
- Innovative Photocentric STUDIO software provided free for print preparation and workflow management.
- Interchangeable platforms enable rapid turnaround ideal for full production environments.
- Safety-rated interlock switches within platform assembly and build chamber.
- A revised and updated control system delivers even greater levels of reliability and performance.

# Photocentric

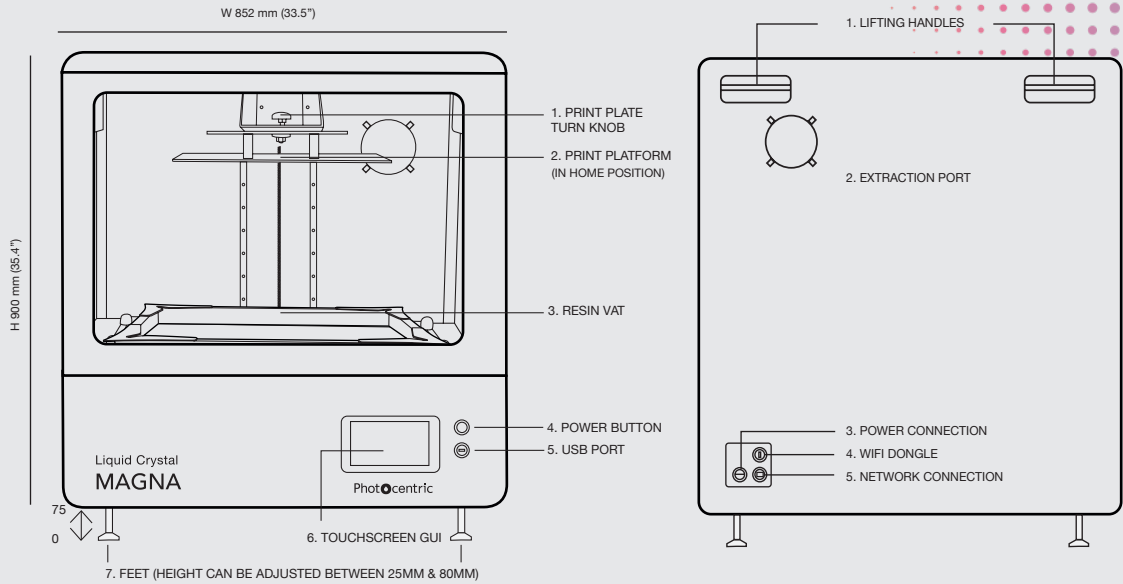
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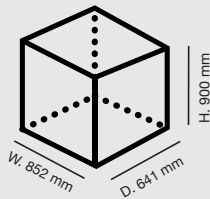


# Liquid Crystal MAGNA

## Product Dimensions



**Weight:**  
110kg  
(242.5 lbs)



The diagram of this cube illustrates the basic dimensions of the LC Magna. 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

Performance	User Interface and Operation	Software
<ul style="list-style-type: none"> <li><b>Build volume:</b> 510 x 280 x 350mm (21.1 x 11 x 13.8")</li> <li><b>Print layer thickness:</b> 25, 50 and 100µm. Layer thickness of &gt;100µm is dependent upon resin properties.</li> <li>4K screen 3840 x 2160 px</li> <li><b>Print Speed:</b> 16mm per hour (0.62" per hour).</li> <li><b>Cure Speed:</b> 2 seconds per layer at 100µm</li> <li><b>Light output wavelength:</b> 460nm</li> </ul>	<ul style="list-style-type: none"> <li>Calibrated in the factory enabling quick set-up and installation on site.</li> <li>Large capacitive touch 7-inch screen.</li> <li>Integrated Photocentric control system for optimum performance and in-field updates.</li> <li>Easy clean platform and chassis featuring robust double-sealed vat construction with practical carry handles.</li> <li>Power input: 110-240 VAC</li> </ul>	<ul style="list-style-type: none"> <li>Equipped with our free STUDIO software licence</li> <li>Photocentric Additive software available as a separate licence.</li> </ul>
<b>Connectivity</b>		
<ul style="list-style-type: none"> <li>Wi-Fi</li> <li>Ethernet</li> <li>USB 3.0 for fast file transfer</li> </ul>		
<b>Construction</b>		
<ul style="list-style-type: none"> <li>Rugged steel construction with solvent resistant paint.</li> <li>4k screen(3840 x 2160px with a pixel density of 314.7 PPI)</li> <li>Incredibly flat, high tolerance glass.</li> </ul>	<ul style="list-style-type: none"> <li>Aluminium platform with Teflon coating.</li> <li>Precision engineered components including HIWIN linear rails.</li> <li>Trinamic motor drivers deliver extremely quiet and robust performance.</li> </ul>	<ul style="list-style-type: none"> <li>Weight: 110Kg (242.5lb)</li> </ul>
<b>Warranty</b>		
<ul style="list-style-type: none"> <li>Warranty period of 12 months</li> </ul>		



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