



SHAPE THE WORLD, MAKE IT REAL.

# Phrozen Sonic

## Key Benefits You Will Get with Sonic



### Print Fast

- » Using Mono-LCD with 4 Times Transmittance
- » ParaLED™ 3.0, Specially Designed for Mono-LCD
- » Fast Moving Single Linear Rail



### Less Maintenance

- » Tailor-Made Mono-LCD
- » 2000+ Hour Longer Life Time
- » Better Thermal Stability: Less Dead Pixels for Long Use
- » Compression Resistant: Tolerance for Operation Error

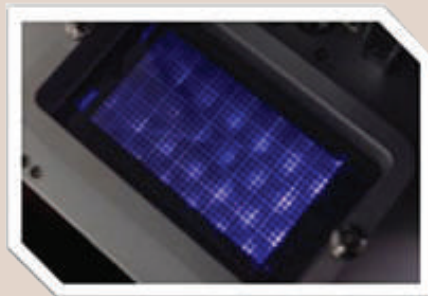


### Easy Operation

- » Equipped with 15.6" High Resolution Touch Panel
- » Pre-installed Phrozen OS with better User Experience
- » PZSlice Pro, professional slicer powered by FormWare

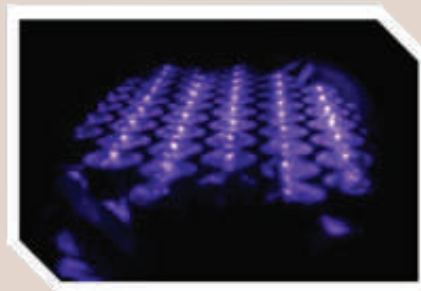


## Why Sonic Is Fast?



Mono-LCD Made For 3D Printing  
4 times Higher Transmittance at 405nm

ParaLED™ 3.0 Module  
Metal-Core PCB with most Efficient UV-LED



**Cure at 0.5 sec  
At Fastest**



Fast Moving Single Linear Rail  
Increase Moving Speed by 50%



**Moving Faster  
for Each Cycle**





## Easy Operation



5" High Resolution  
Touch Panel  
One Click Control  
For Better Operation



Pre-Installed  
Phrozen OS  
User Friendly with Multi-Functions



ChiTuBox  
A slicer software specialized  
for SLA/DLP/LCD 3D printer users  
to prepare, edit and slice 3D models.



## Less Maintenance



2000+ hour  
Long Life Time for LCD



Thermal Stability  
Less Dead Pixels



Compression Resistance  
Tolerance for Operation Error

## Technical Specification

General	
Type of Technology	LCD
Printer Size	28*28*37cm
Printer Weight	11.5 kg
LED Wavelength	405nm
Voltage	100-240V
System Power	60W
Print Speed	60mm/hr
Print Size	12*6.8*17cm
XY Resolution	62 um
Z Resolution	10 um

Hardware	
Z-Axis	Single Linear Rail
	Lead Screw
	All Aluminium CNC Structure
Optical Design	ParaLED 3.0 Module With 405nm UV-LED
LCD	5.5" mono-LCD 2000hr Life Time, customized for 3D Printing
Touch Panel / OS	5" IPS High Resolution Touch Panel with Phrozen OS
Cooling System	Multi-Fans Cooling
Connection	WiFi, Ethernet, USB
Slicer	ChiTuBox



The Sonic XL 4K 3D printer is engineered with Monochrome LCD technology with 4K resolution offering speed, precision, and build area empowering professionals across 3D printing industry.

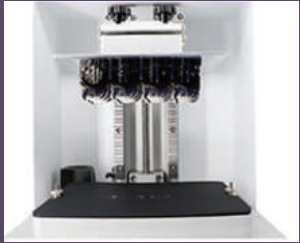


## **Sonic XL 4K LCD 3D Printer**

**Fast Printing | Easy to Use | High Precision**

# Phrozen Sonic XL 4K

## Engineered for Speed



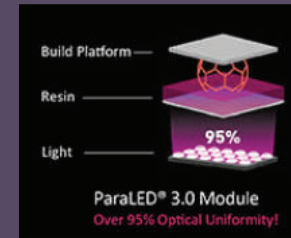
The monochrome LCD design amplifies transparency, curing at up to 0.2 seconds for maximized speed.

## All about the fine print



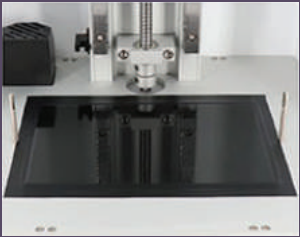
4K resolution technology specifically designed for 3D printing offering microscopic precision.

## Excellent Accuracy and Print Quality



Unlike conventional COB LED design, Phrozen uses ParaLED 3.0 Module (parallel UV LED matrix back light system) giving the Sonic XL 4K the ability to pass light through resin with complete uniformity.

## Reliability = Less Maintenance



The thermally stable mono-LCD is highly heat resistant, increasing lifetime to over 2000 hours! No more panic about maintenance.

## Open Material System



Compatible not only for ALL LCD resins but also for DLP resins including bio-compatible materials.

## 3D Printing Made Easy



Start printing within 5 minutes: Attach the building platform, fasten the resin vat, and upload the file with 3 clicks. The Sonic XL 4K will allow you to jump start your printing.

## Technical Specification

### General

Type of Technology	LCD
Printer Size	33*29*47cm
Printer Weight	11 kg
LED Wavelength	405nm
Voltage	100-240V
System Power	160W
Print Speed	200mm/hr
Print Size	19*12*20cm
XY Resolution	50 um
Z Resolution	10 um

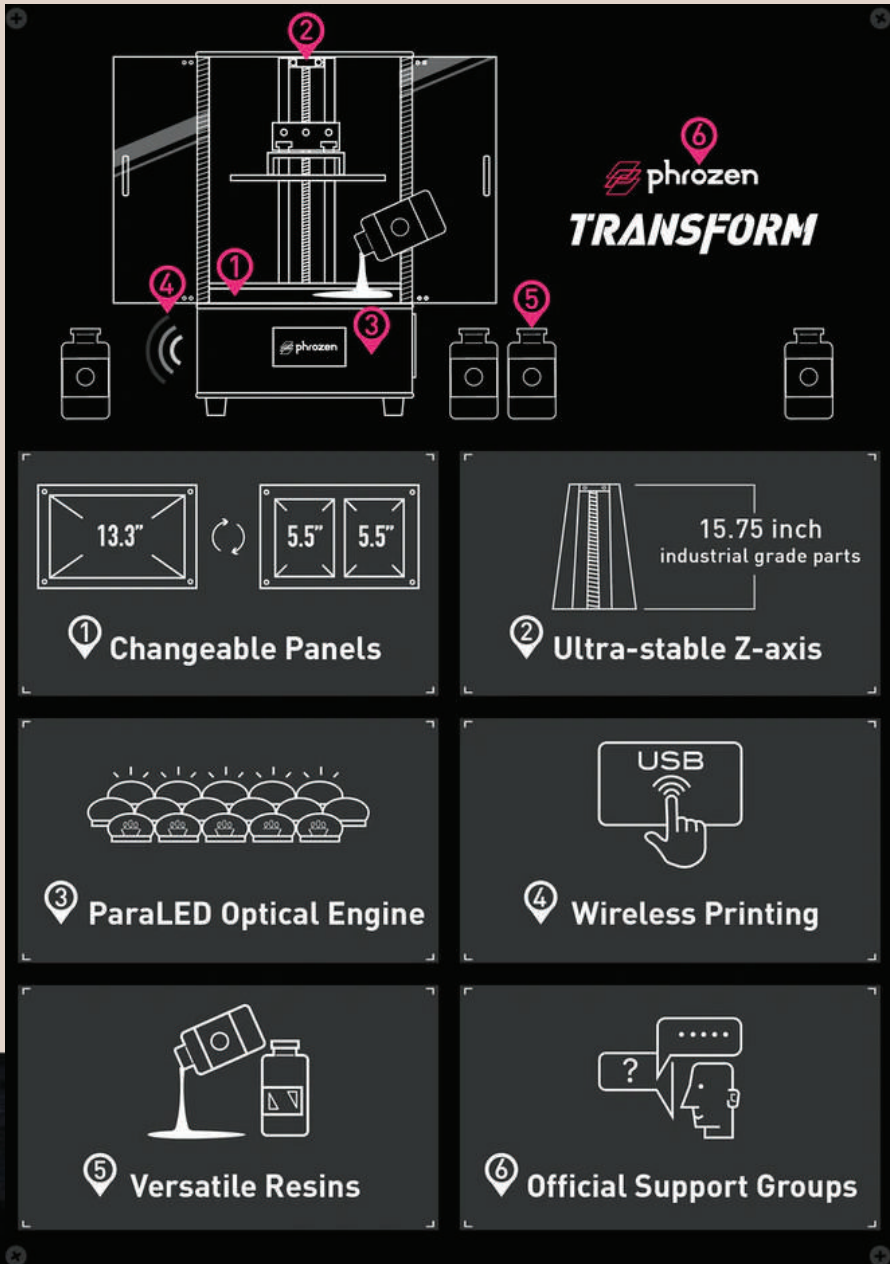
### Hardware

Z-Axis	Dual Linear Rail Ball Screw Optical Switch
Optical Design	ParaLED 3.0 Module With 405nm UV-LED
LCD	8.9" 4K LCD over 2000hr Life Time, customized for 3D Printing
Touch Panel / OS	5" IPS High Resolution Touch Panel with Phrozen OS
Cooling System	4 Fans Cooling
Connection	WiFi, Ethernet, USB
Slicer	ChiTuBox



# Phrozen Transform Fast

## HIGHLIGHTED FEATURES





## Key Benefits You Will Get with Transform Fast

# Phrozen Transform Fast

### #01 BIG

Groundbreaking Large Build Volume with 13.3" Panel and 15.75 inch Z-axis.

### #02 EFFICIENT

Dual 5.5" Panels for Twice the Efficiency at 47-micron XY Resolution. Two prints at a time to cut printing time in half.

### #03 MULTIPURPOSE

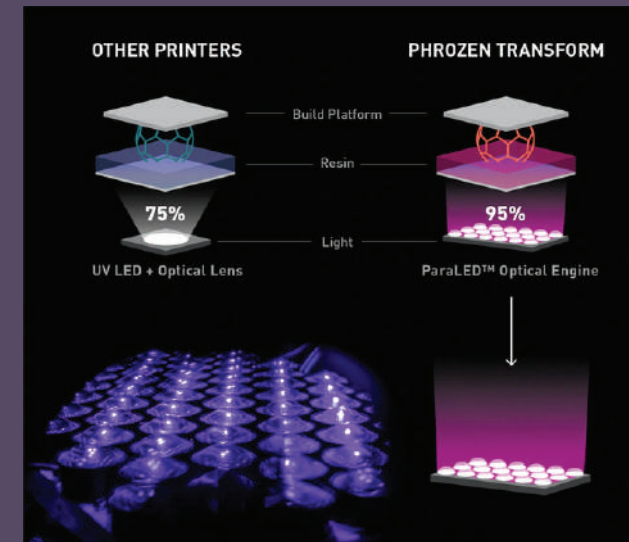
Change 2 Panels in 30 Seconds with Fast LCD Adoptor

### #04 UNIFORM

ParaLED™ Optical Engine - Uniform Exposure for 95% of Surface Area. This gives a uniform exposure for 95% of the surface area.

### #05 STABLE

Ultra-Stable Z-axis for High-Resolution Printing.



## Technical Specification

### General

Type of Technology	LCD
Printer Size	38*35*61cm
Printer Weight	27.5 kg
LED Wavelength	405nm
Voltage	110-240V
System Power	200W
Print Speed	200mm/hr
Print Size	29*16*40cm
XY Resolution	76 um
Z Resolution	10 um

### Hardware

	Dual Linear Rail
	Ball Screw
Z-Axis	100% Aluminium CNC Structure
Optical Design	ParaLED 2.0 Module With 405nm UV-LED
LCD	13.3" 4K Monochrome LCD over 2000hr Life Time
Touch Panel / OS	5" IPS High Resolution Touch Panel with Phrozen OS
Cooling System	4 Fans Cooling
Connection	WiFi, Ethernet, USB
Slicer	ChiTuBox



UV-RESINS from

**phrozen**

*Excellent Mechanical Design with Optical Profession*



# Phrozen Resins

## ABS-like, Matte Gray Standard Resin



### General

Color >> Matte Gray  
Density >> 1.1g / cm<sup>3</sup>  
Viscosity >> 67 CPS

### Mechanical

Elongation >> 3%  
Tensile Strength (Break) >> 10 Mpa  
IZOD Impact Strength >> 1.44 KJ/m<sup>2</sup>

### Surface

Water Contact Angle >> 60 degree  
Surface Hardness, Shore D >> 76 Shore D

## Wax-like Castable Resin



### General

Color >> Dark Green  
Density >> 1.04g / cm<sup>3</sup>  
Viscosity >> 192 CPS

### Surface

Water Contact Angle >> 50 degree  
Surface Hardness, Shore D >> 74 Shore D

### Mechanical

Elongation >> 3%  
Tensile Strength (Break) >> 8 Mpa  
IZOD Impact Strength >> 1.91 KJ/m<sup>2</sup>



# Phrozen Resins

## Phrozen Wash: Resin Cleaner



### Key Features

#### 【Applicable for Spraying & Soaking】

You can use Phrozen Wash either by spraying it on models or soaking models into it.

#### 【Low Odor】

Phrozen Wash is with low volatility so that it has little smell for long term use.

#### 【Excellent Washing Power】

Phrozen Wash can easily dissolve uncured resin. This is good for cleaning printed parts.

“ *pH Value: 7.0 Neutral*      *Halogen free* ”

## Water-Washable Rapid Resin



### Key Features

#### 【Water-Washable】

Unlike standard resin, Phrozen Water-Washable Resin is highly hydrophilic, that is, easily to be cleaned by water. (DO NOT dump waste water directly. Cure the waste water by sunlight OR add 10% Waste Disposal Agent and filter residues before dumping).

#### 【Low Viscosity & Odor】

Phrozen Water-Washable Resin is easy to be printed and post processed due to its low viscosity. Meanwhile its low odor will not make your place smells.

#### 【Fast-Printing】

Phrozen Water-Washable Resin is customized for 405nm LCD printer. Cure time per layer: 7 sec on Shuffle & 1.5 sec on Sonic (50μm).

#### 【Tough & Non-Brittle】

Typical water-washable resin is brittle, but not the case for Phrozen's Water-washable resins. Printed parts from Phrozen Water-Washable Resin are with good hardness and certain toughness. It is perfect match not only to models and prototyping.

# Printing Accessories

*"Compact Aluminium Mechanical Structure"*





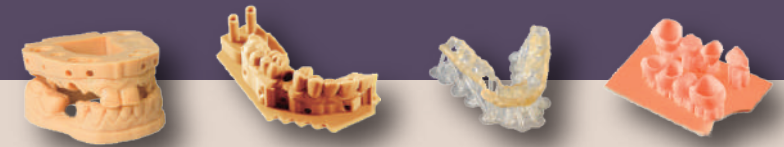
# Printing Accessories

## Ultra-Sonic Cleaner



### Key Features

- » Best post-treatment cleaning partner for SLA/DLP 3D printing items.
- » Product Size: 180 x 165 x 240 mm
- » Inner Dimension: 140 x 130 x 90 mm
- » Weight: 2.5 Kg
- » Interior Material: SUS 304 at 1.1mm thickness
- » With heating control system (100W). Controlling range: 20 - 80 degree C
- » Digital control ultra sonic time. Controlling range: 1 - 30 min
- » Safety first. We have double fuse for power system
- » Voltage: AC100-120V, 50/60Hz
- » Phrozen will take care of 1 year warranty in Taiwan.



## Phrozen Cure: UV Post-Curing Lamp



### Key Features

- » High intensity UV light (390 - 410 nm) for post curing, with intensity at 40 mw / cm<sup>2</sup>.
- » Can finish post cure within 10 mins, depending on your thickness.
- » Use LED as light source. The lifetime is over 50,000 hours (Can sustain over 30 years with 4 hr daily use).
- » 3 memory setting with time selection up to 9 hr 50 mins.
- » Machine Size: 21.6cm x 20cm x 15cm
- » Tray Size: 12.7cm x 17cm x 7cm
- » Tray design with light filter. Easy to use and protect your eyes.
- » Power Output: 65W, Power Input: 100-240 V AC / 50-60Hz.

# Printing Accessories

## Phrozen Cure (V2): UV Post-Curing Lamp



### Key Features

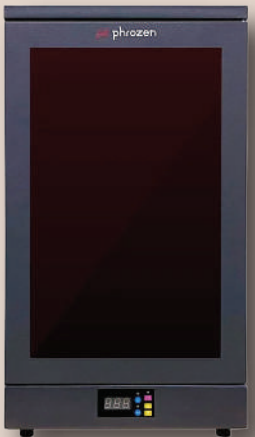
- » 【Great Inner Capacity】 17.5 x 14 x 18.5 cm inner capacity, which fits build volume for Phrozen 5.5" Printers.
- » 【Fast Curing by UV-LEDs】 We use 365nm, 385nm, 405nm UV-LEDs (W in total) to cure inner, middle, and outer layers, respectively.
- » 【360 Degree All-Around Curing】 The plate will rotate 360 degree and makes models cured all-around without any blind spots.
- » 【Stable Power Supply & System Cooling】 Stable power supply and makes no surge. Dual-fans cooling also makes system stable for long-term use.
- » 【Easy Operation】 Phrozen Cure comes with digital control system. One-click finishes all setup.
- » 【Safety Interlock Design】 Cure lamp with safety interlock design. Applicable for 100-240V 50-60Hz full voltage.

### Classification

- » Machine Size: 21.5 x 19.5 x 28.5 cm
- » Machine Weight: 4.2Kg
- » Inner Capacity: 17.5 x 14 x 18.5 cm
- » LED Specification: 365nm, 385nm, and 405nm. 60W in Total.
- » Voltage: 100-240V 50-60Hz



## Phrozen Cure XL: UV Post-Curing Lamp



### Key Features

- » 【Super Large Inner Capacity】 29.5 x 29.5 x 45 cm inner capacity, which fits build volume for all Phrozen models.
- » 【Fast Curing by UV-LEDs】 We use 365nm, 385nm, 405nm UV-LEDs (150W in total) to cure inner, middle, and outer layers, respectively.
- » 【360 Degree All-Around Curing】 The plate will rotate 360 degree and makes models cured all-around without any blind spots.
- » 【Stable Power Supply & System Cooling】 Stable power supply and makes no surge. Dual-fans cooling also makes system stable for long-term use.
- » 【Easy Operation】 Phrozen Cure XL comes with digital control system. One-click finishes all setup.
- » 【Safety Interlock Design】 Cure lamp with safety interlock design. Applicable for 100-240V 50-60Hz full voltage.

### Classification

- » Machine Size: 33 x 33 x 60 cm
- » Machine Weight: 11Kg
- » Inner Capacity: 29.5 x 29.5 x 45 cm
- » LED Specification: 365nm, 385nm, and 405nm. 150W in Total.
- » Voltage: 100-240V 50-60Hz





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