BLUECAST X-ONE V2 V2®

Please read and understand these Guidelines before opening and using X-One V2 resin.

PRODUCT FEATURES

- ONE resin for ONE thousand applications
- Improved resolution, especially for the new 12k printers.
- Enhanced printability, particularly for DLP technology (no need for additives).
- Better accuracy and reduced bleeding.
- Increased stability at low temperatures.
- Improved meltability for micro-details and engravings.
- Printing profiles identical to the V1 version.
- Perfect casting results with any kind of investments and burnout cycles. Low temperature burnout compatibility (even if we recommend 750°C last stage, everything is burned out at 680°C).
- Low temperature melting polymer ensures smooth surface finish and perfect lettering.
- The first real meltable resin at low temperature.
- Excellent dimensional stability in time. No shrinkage (natural shrinkage will be compensated during print making polymer expand chemically).
- Low viscosity (easier to clean, easier to get back from patterns).
- Strong adhesion to platform (adhesion layers are exposure layers x4 or even x3), no need to primer.
- Toxic and carcinogenic component free, Low fumes emission during burnout. Very low VOC and negligible smell.
- Low fumes emission during burnout

- Finally, you can cast in any casting house/service every kind of pattern with text, engravings, micropavè etc.

- You can choice for chemical postcuring (longer washing in alcohol make a chemical reaction with X-One V2) or for traditional washing and UV oven oven postcuring. After chemical postcuring the color resin change from dark green to gray/white to permit you to check if the procedure was correct

QUICK START GUIDE FOR LCD PRINTERS

Before use X-One V2 please read these instructions with attention.

Following informations are suitable only for X-One V2 resin and will not apply to other BlueCast resins.

BlueCast X-One V2 resin is fully compatible with the new monochromatic LCD Generation and DLP printers.

On old RGB LCD machines the exposure times are much more longer than standard resins. With some COB LED machines the resin may not work.

In order to get the maximum details use of HD FEP / NFEP / PFA is strongly suggested. A bad quality FEP compromise the resin printability.

Perform z-axis calibration following the manufacturer's instructions.

Due to the low temperature melting polymer used the resin is solid under 18°C. Before use please heat the resin to a temperature range of 35 to 45°C. Best operating range is from 20 to 30C°. It will remain liquid at temperatures above 18° C. You can heat the resin by microwave ovens (NEVER OVER 30 SECONDS), ultrasonic cleaner, hot air, etc.

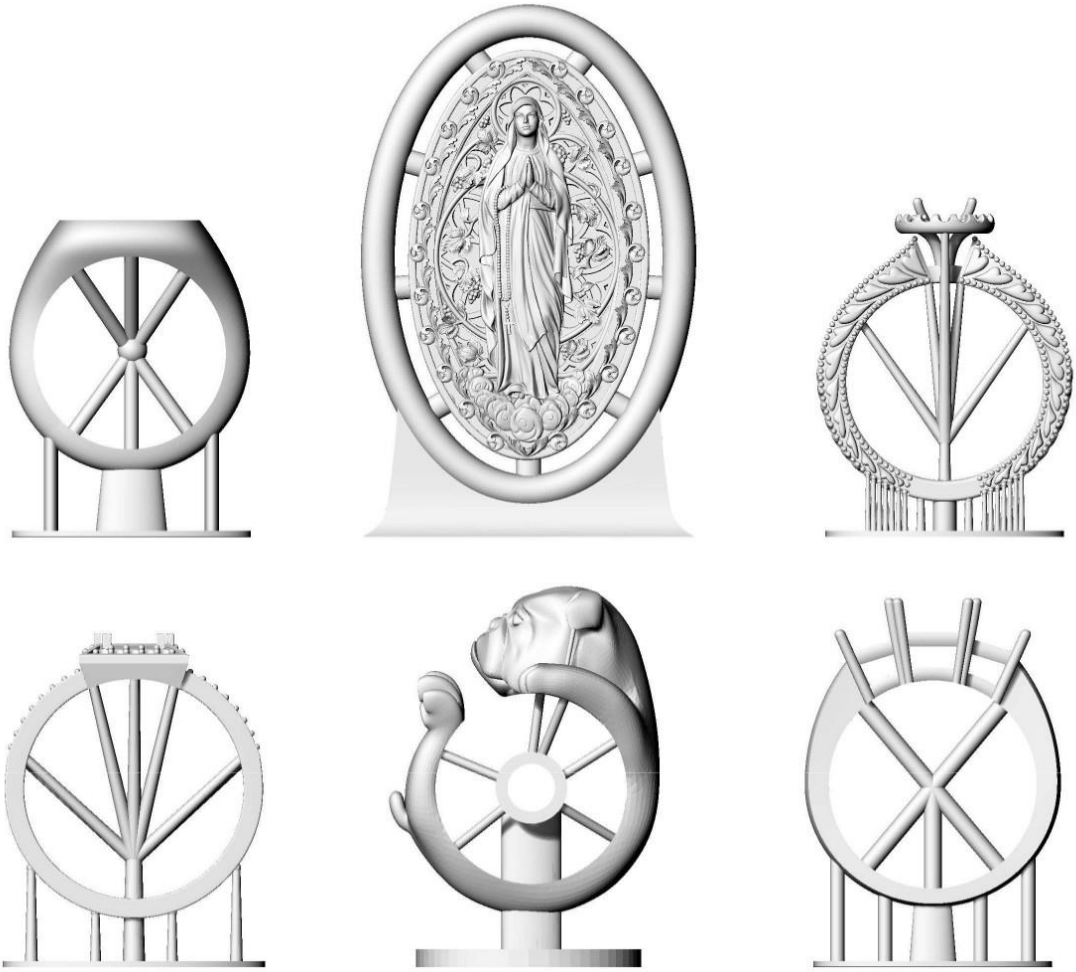
Before pour the resin into the resin tank shake the bottle for one minute.

For a correct debubbling let the resin rest in to the resin tank for 5 minutes before start the print. To speed up the operations you can also filter the resin in order to remove the air bubbles or or vacuum the opened bottle.

Due to low temp melting polymer used the minimal supports (the first pattern supports) must be bigger than usual. You can design the ring sprue in your model and use it as main support. Never use contact points under 0.4 mm and take care to support the shank of the rings.

Not filter the resin after each print and not heating the resin before each print may lead to printing failures. Do not store the resin in to the tank. Please remove the resin from printer tank, filter it and store in to the original bottle.

PLEASE NOTE THE EXPOSURE TIME CAN CHANGE BY 30% IN ACCORDING TO THE MANUFACTURER LED CALIBRATION, TO THE USED FEP AND TO THE PRINTER EFFICIENCY



POST-PRINTING CLEANUP AND TREE PREPARATION

For a video tutorial, please open this link: BlueCast - YOUTUBE

Patterns are more fragile respect other BlueCast resin especially extreme patterns like filigree and prongs. Handle it with care.
Patterns are moderately softer because the resin contain wax inside.

Clean the prints into 91%/99% ethyl alcohol.

- With Ultrasonic cleaner run a cycle of 5 minutes (SUGGESTED PROCEDURE)
- With resin washer machine run a cycle of 5/10 minutes approx.

- With simple immersion in an alcohol bath wait 10 minutes approx.

After washing dry the patterns with compressed air. The resin color will start to change from dark gray to light gray/white. More the patterns will become white better will be the castability.

If you don’t have compressed air you can dry the pattern with a hair dryer. The whitening will require longer times.

The resin whitening time is strongly related to the alcohol used and to the washing procedure. More the alcohol is bad quality and exhaust, more time is required.

After the washing procedure you have to give to the alcohol the time to evaporate before invest. Postcuring can speed up the alcohol evaporation and make the patterns more rigid and stiff.

If you want to avoid the whitening procedure you can wash very fast the patters as usual (1 min max) but the resin postcuring (15 minutes minimum) will be require.

Same as wax, use sand paper to make welding zone rough, apply a drop of wax, stay on for some seconds, weld wax sprue.

Due to the real meltability and to the wax property, forget about surface tension of X-One V2 is proper and there is no reaction/interaction resin/investment.

X-One V2 is suitable for fast /production wax burnout, if you want to use it mind you need to apply for extra wax sprues around pattern; wax will melt away quickly leaving routes for resin exit.