

## BLUECAST \_ MODEL HR - For all LCD n DLP 3dp

### PRODUCT FEATURES

High Resolution Resin for LCD and DLP printers.

Matte finishing and extra smooth surfaces.

Great for prototypes, miniature and jewellery masters.

Suitable for RTV rubber moulds and vulcanising moulds.

Doesn't need primer to be painted.

Model HR resin ( High Resolution) have an incredible resolution and a matte finishing. The new resin is very detailed and stable. The shrinkage is negligible thanks to the inside nano ceramic and high level of detail suitable for rubber moulds and silicone moulds. The resin available in dark gray color has been developed according to the digital artists.

The chemical formulation don't contain dangerous monomers and has not been classified as carcinogenic under EU legislation. The resin is odorless and it is safe to print when used in accordance with our MSDS instructions.



## QUICK START GUIDE FOR LCD PRINTERS

**Model HR resin** is fully compatible with all LCD printers like Phrozen Shuffle, Phrozen Sonic, Phrozen Shuffle XL, Anycubic Photon,, Anycubic Photon S, Elegoo Mars, Elegoo Mars pro, Wahnaho D7, D8, Micromake 2017 L2, EAST Micromake L2, X-CUBE LCD, Vodainfo Tech. LCD, Xayav Model V, etc (405nm).

For best results we suggest to use a resin tank provided with high quality FEP (FEP 100 OR 127 HD are suggested).

In case of particular climatic conditions (such as in case of room temperature inferior to 18°C) it is suggested to preheat the resin. If the resin has been sitting in the tank, use the putty knife to ensure it is thoroughly mixed.

It is suggested to filter the resin before each use, in order to avoid any damage to LCD screen.

The platform adhesion is perfect and permit to print multiples files in the same time.

## HOW TO PREPARE THE PRINTING FILE

With BlueCast Model HR resin you can easy arranging the models directly on the platform: you will save resin and time.

It is also possible to print allowed models. When you do this remember to make the drains holes to permit the resin exit and avoid the suction effect.

For the supports is suggested to use a medium preset: pilar size 1mm (diameter) / tip size 0.6mm (diameter). Minimum suggested size is 0.3 mm (diameter)



## SUGGESTED PRINTING SETTINGS

Pay attention, the suggested settings can slightly change according to the machines maintenance conditions, the life time and fep used

### Phrozen Shuffle

BURN IN LAYER

NUMBERS OF LAYERS: 5

LAYER THICKNESS: 50u

CURE TIME: 60 SEC

WAIT BEFORE PRINT: 5 SEC

WAIT AFTER PRINT: 0.5 SEC

LIFT AFTER PRINT: 5 mm

WAIT AFRER LIFT: 0.1 SEC

NORMAL LAYER

LAYER THICKNESS: 50u

CURE TIME: 10/12 SEC

WAIT BEFORE PRINT: 1.5 SEC

WAIT AFTER PRINT: 0.1 SEC

LIFT AFTER PRINT: 4 mm

WAIT AFRER LIFT: 0.1 SEC

MOTOR SPEED 150 u/SEC

### Phrozen Shuffle 2019 and Shuffle with Paraled V2

BURN IN LAYER

NUMBERS OF LAYERS: 5

LAYER THICKNESS: 50u

CURE TIME: 50 SEC

WAIT BEFORE PRINT: 5 SEC

WAIT AFTER PRINT: 0.5 SEC

LIFT AFTER PRINT: 5 mm

WAIT AFRER LIFT: 0.1 SEC

NORMAL LAYER

LAYER THICKNESS: 50u

CURE TIME: 9 SEC

WAIT BEFORE PRINT: 1.5 SEC

WAIT AFTER PRINT: 0.1 SEC

LIFT AFTER PRINT: 4 mm

WAIT AFRER LIFT: 0.1 SEC

MOTOR SPEED 150 u/SEC

### Phrozen XL

BURN IN LAYER

NUMBERS OF LAYERS: 5

LAYER THICKNESS: 75u

CURE TIME: 50 SEC

WAIT BEFORE PRINT: 5 SEC  
WAIT AFTER PRINT: 0.5 SEC  
LIFT AFTER PRINT: 5 mm  
WAIT AFRER LIFT: 0.1 SEC

NORMAL LAYER  
LAYER THICKNESS: 50u  
CURE TIME: 9 SEC  
WAIT BEFORE PRINT: 1.5 SEC  
WAIT AFTER PRINT: 0.1 SEC  
LIFT AFTER PRINT: 4 mm  
WAIT AFRER LIFT: 0.1 SEC

MOTOR SPEED 180 u/SEC

## **Phrozen Sonic – Sonic / Mini**

BURN IN LAYER  
NUMBERS OF LAYERS: 5  
LAYER THICKNESS: 50u  
CURE TIME: 30 SEC  
WAIT BEFORE PRINT: 5 SEC  
WAIT AFTER PRINT: 0.5 SEC  
LIFT AFTER PRINT: 5 mm  
WAIT AFRER LIFT: 0.1 SEC

NORMAL LAYER  
LAYER THICKNESS: 50u  
CURE TIME: 2.8 SEC  
WAIT BEFORE PRINT: 0.5 SEC  
WAIT AFTER PRINT: 0.1 SEC  
LIFT AFTER PRINT: 5 mm  
WAIT AFRER LIFT: 0.1 SEC

MOTOR SPEED 100 u/SEC

## **Elegoo Mars**

BURN IN LAYER  
NUMBERS OF LAYERS: 5  
LAYER THICKNESS: 50u  
CURE TIME: 60 SEC  
WAIT BEFORE PRINT: 5 SEC  
WAIT AFTER PRINT: 0.5 SEC  
LIFT AFTER PRINT: 5 mm  
WAIT AFRER LIFT: 0.1 SEC

NORMAL LAYER  
LAYER THICKNESS: 50u  
CURE TIME: 13 SEC  
WAIT BEFORE PRINT: 1.5 SEC  
WAIT AFTER PRINT: 0.1 SEC  
LIFT AFTER PRINT: 4 mm  
WAIT AFRER LIFT: 0.1 SEC

MOTOR SPEED 120 u/SEC

## **ANYCUBIC PHOTON**

LAYER THICKNESS: 0.05 mm  
NORMAL EXPOSURE TIME: 13 SEC  
OFF TIME: 2 SEC  
BOTTOM EXPOSURE TIME: 95 SEC  
BOTTOM LAYERS: 5  
SUPPORTS: preset medium

## **ANYCUBIC PHOTON S**

LAYER THICKNESS: 0.05 mm  
NORMAL EXPOSURE TIME: 9 SEC  
OFF TIME: 3 SEC (don t affect the printing – it is a fake parameters on photon S)  
BOTTOM EXPOSURE TIME: 45 SEC  
BOTTOM LAYERS: 5  
Z LIFT DISTANCE: 5 mm  
Z LIFT SPEED: 1.5 mm/S  
Z RETRACT SPEED: 1.0 mm/S  
SUPPORTS: preset medium

## **ZORTRAX INKSPIRE**

EXTRNAL MATERIAL – ADVANCED SETTINGS  
LAYER THICKNESS: 0.05 mm  
LAYER EXPOSURE TIME: 8 SEC  
BOTTOM LAYER EXPOSURE TIME: 48 SEC  
EXPOSURE OFF TIME: 2 SEC  
BOTTOM LAYERS: 4  
ADDITIONAL SUPPORTS EXPOSURE TIME: 1.0 sec  
Z LIFT DISTANCE: 5 mm  
PLATFORM SPPED (lower/lift): 75

## **SOLUS PRO**

LAYER THICKNESS: 0.03 mm  
LAYER EXPOSURE TIME: 2.3 SEC  
BOTTOM LAYER EXPOSURE TIME: 30SEC  
BOTTOM LAYERS: 4  
Z LIFT DISTANCE: 4 mm  
PLATFORM SPPED: 100



## POST-PRINTING CLEANUP

Clean the prints by pouring 91%/99% denatured alcohol (IPA) or ethyl alcohol 90%/99% (approximately 3 minute).

Dry and clean the pieces using a can of compressed air for best results.

UV Cure the models for 5 min with a 40 Watt lamp – 2 min with a 100 Watt lamp

