

MSLA-Modeling – Clear (MMD-R001CR)

Check:

- Vat and LCD are clean
- Shake resin (60 sec)
- Vat and platform are locked
- Do not overfill vat max line

Print Settings:

Below table is the reference settings for MSLA printers (Each printer is unique, light intensity varies from printer to printer even with the same model and make. Please fine-tune normal layer exposure time from below settings by ± 3 seconds to best fit each printer):

Printer	Layer Thickness (μm)	Normal Layer Exposure Time (sec)	Bottom (Burn-in) Layers	Bottom (Burn-in) Layer Exposure Time (sec)	Scale for x and y(%)
Photon S	50	8	8	20	104~100
Photon S	100	10	10	23	104~101
Shuffle	50	13	8	40	105~102
Shuffle	100	15	10	45	105~102
Shuffle XL	50	11	8	40	105~101
Shuffle XL	100	14	10	45	106~102
Sonic	50	2.0	8	8	103~101
Sonic	100	3.0	10	12	104~101
MiiCraft M125	50	1	8	6	102~100
MiiCraft M125	100	1.3	10	7	104~101

Print Size Tuning:

Depending on the actual printed size, when printed model is smaller than actual stl file, one can scale up x & y to increase print size.

Examples:

The size of stl. file X axis = 4mm
 The printed size X axis = 3.85mm
 The ratio is $(4/3.85) \times 100 = 103.90\%$

The size of stl. file X axis = 20mm
 The printed size X axis = 19.8mm
 The ratio is $(20/19.8) \times 100 = 101.01\%$

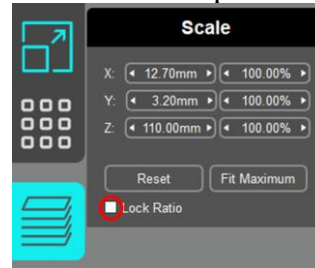
Note: Large object has smaller scale percentage

Click to download calibration cube:

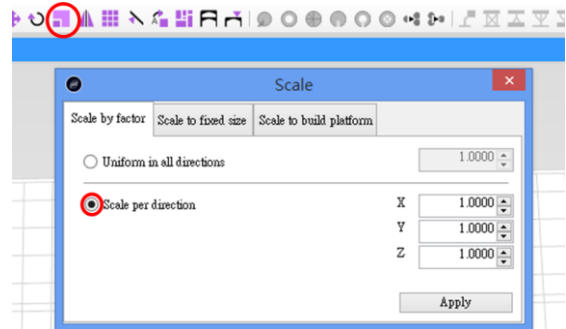
[XYZ Cube](#)

3x2, 10x8, 19x17(mm)

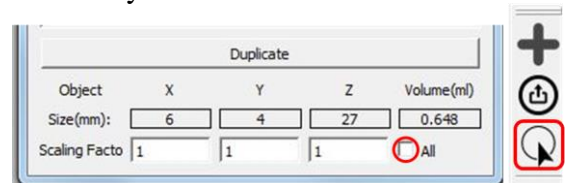
Unlock Ratio: AnyCubic Photon S via Photonworkshop v2.1.19



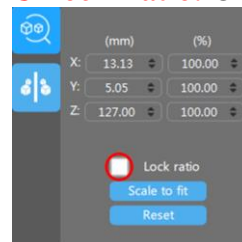
Unlock Ratio: Phrozen 3D printer via Phrozen 3D version 1.0.2.8



Unlock Ratio: MiiCraft M125 via MiiUtility Ver:6.0.0.t11



Unlock Ratio: Chitu 2.0



Washing

Submerge print in clean IPA, maximum for up to **5 minutes**, gently shake-off / blow-off excess IPA quickly, set print in a shaded airy place to dry before curing. Extended time in IPA causes deformation. Dried print might be a little tacky to touch.

Stl files – *click below to download stl file*

- [3 x 2 stl file](#)
- [10 x 8 stl file](#)
- [19 x 17 stl file](#)

Post-curing

For optimal material performance:

FormCure: 60°C / 30 mins.

Other Light Power: 385~405nm

Light Power (mW/cm ²)	Curing Time (min)
3 (suggested)	33
10	10
15	6.5

Maintain curing chamber temperature between: 50~60°C / 122~140°F

Light Power is the amount of energy strength received on the curing object surface, power strength decreases as the distance between light to curing object increases (NOT stated light power output on the device). Adjust curing time accordingly.

Slight yellowing after post cure will subside in a few days. Thick wall objects have more yellowing effect..

Note: To minimize yellowing, avoid high power UV light for post-curing.

Storage

Don't keep resin in the vat for more than **2 days**.

Filter out all debris in the case of fail print.