# FORM 2 & 3 PRINTER Laser Modeling – Clear (MD-R001CR)

### Check:

- UV optical pathways are clean
- Vat is free of defect
- Resin is well shakened

### **Open-Mode (Form2):**

Printer at idle 1. Tap touchscreen "Gear" icon, open "Settings" menu

- 2. Select Open Mode
- 3. Select On

## Cartridege (Form2 & 3):

Refill corresponding cartridge e.g.FormLabs Clear version 4 cartridge. Open air vent, turn cartridge upside down, drip dry through air vent for 10 mins to minimize cross contamination, refill, shake well for 2 mins, insert & print (may work up to 2 refills before locked by FL software)

Warning: Cross contamination of resins could cause size inaccuracy or wavy line.

Alternative Solution: : <u>North America</u>, <u>Other Regions</u>

#### **PreForm Setting:**

Select Printer: Form2 or Form3

Material Select: Clear V4(FLGPCL04)

Suggest Layer Thickness 100~25

JOB SETUP		×	
Printer			
VIRTUAL PRINTER		$\sim$	
Material			
Resin	💧 Clear	•	
Version (i)	V4 (FLGPCL04)	•	
Layer Thickness		(microns)	
Fastest Print	н	Highest Resolution	
100	50	25	
Cancel		Apply	

### Washing:

IPA 95%, maximum for up to 5 minutes, gently shake-off / blow-off excess IPA quickly, set print in a shaded airy place to dry comopletely before curing.

Extended time in IPA causes deformation. Dried print might be a little tacky to touch.

#### **Post-curing:**

For minimizing yellowing: FormCure 35 °C / 30 mins.

For mechanical strength: FormCure 60 °C / 30 mins.

#### Other Light Power: 385~405nm

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

Maintain curing chamber temperature between: 35~60°C / 95~140°F for balanced performance of color and mechanical strength. 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.

#### **Storage:**

- Clear Resin is not recommended to leave in the vat (general or LT) for more than one day.
- Keep resin away from heat & light.
- Not accessible to children.
- Filter out all debris in case of failed print.

#### Note:

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

## **Design Concept Series**