



# VeriLUX Curing Unit

# Making light work of Post-processing

User Manual

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# Introduction

Thank you for purchasing the VERILUX curing unit. VERILUX efficiently cures 3D printed parts using a smart UV-light management system. It is preloaded with an optimal curing time database for validated resins. To ensure that your VERILUX gives you the highest level of performance, review and follow the guidelines outlined in this User Manual and keep it for future reference.

Das Benutzerhandbuch ist auf www.whipmix.com in deutscher Sprache verfügbar.

Le manuel d'utilisation est disponible en français sur le site **www.whipmix.com**.

El manual del usuario se encuentra disponible en español en www.whipmix.com.

Il manuale utente è disponibile in italiano sul sito https://www.whipmix.com.

# Package Contents

- VeriLUX
- Power Cable
- Glass plate
- SD card
- Card reader
- Quick start guide

# **VeriLUX Overview**



# **Technical Specifications**

Size	200 (L) x 220 (W) x 160 mm (H)
Weight	3 Kg
Curing Time	One second to 20 minutes
Quantity of LEDs	31
Wavelength of LED	365, 385, and 405 nm
Power Supply	100-240 V AC, 50-60Hz
Power Consumption	75 W
Fuse	2A
Operating Environment	Indoor use only at ambient temperature and relative humidity.
	Ambient Temperature
	Relative Humidity
	Atmospheric Pressure
Storage and Transport Environment	Ambient Temperature
	Relative Humidity
	Atmospheric Pressure

# **Operating Instructions**

#### Operational Panel



- 1 Display: View the menu and related functions for Favorite, Material Library, Customize, and System Setting.
- 2 Back: Back to the previous page
- 3 START/STOP: Start/Stop curing process
- 4 Micro SD Card reader
- **5** Knob: Turn the knob in either direction to view the available options; Press the knob for entering and selecting from the menu

#### Settings Parameters

#### Intensity Output (P)

Select the light intensity according to the material characteristics, shape, and thickness. Level 1 is the lowest light intensity output; Level 16 is the highest light intensity output. Range of light intensity output:

LED current: 43.8 - 700 mA

Light intensity: 7018-112,295 mW/cm<sup>2</sup>

**NOTE:** For the best curing results for a flat and thin print, we strongly recommend using a lower intensity output and a longer curing time.

#### Duty Cycle (D)

It is the ratio of pulse duration and time gap. Select the period of illumination per cycle according to the characteristics of the print. Level 1 is 10% working cycle (shortest period of illumination); Level 10 is 100% working cycle (constant illumination).



**NOTE:** For the best results curing a small print, we strongly recommend using a lower intensity output and a longer curing time.

#### • Curing Time (T)

Select the duration of the curing process. The curing time can be set to any value between one second to 20 minutes.

#### • Bottom light (B)

Select if you want the light at the bottom of the unit to be turned ON or OFF.

### **Basic Operation**

#### Material Library

The Material Library contains programs for all resins that have been validated by Whip Mix. This enables the easy selection of the correct curing parameters. To select the curing parameters for a specific material:

1. Turn and press the knob to select Material Library.



2. Select a specific brand of 3D printing material.



**3.** Select a specific 3D printing material.

≡	CROWN	
	TEMP	Ц

The display shows the curing time for the selected resin

■ BEGO CROWN PLUS Curing Time 05:00

**4.** Press the knob to start the curing process. The display shows the time remaining for the curing process and shows when the curing process is complete.

#### Customize

In this feature, the customer can add their settings (curing parameters) by changing the Intensity Output (P), Duty Cycle (D), Curing Time (T), and by selecting ON/OFF for the bottom light (B) to turn it on or off. The end-user has five slots to customize and adjust the customized settings.

- 1. Turn and press the knob to select Customize.
- Turn and press the knob to select the value you want to edit. You can edit the value for Time (T), Intensity Output (P), Duty Cycle (D), and Bottom Light (B).



3. Press the knob to set the value and continue to select a different value.

4. Press the Back button to go back to the list of customized settings.

#### • Favorite

The Favorite feature is an option to save time when selecting commonly used curing programs. This feature will automatically add the 5 most recently used programs to the Favorites list.

You can clear the favorite list in the System Settings of the main menu.

- **1.** Press Clear Favorite.
- 2. Select YES to Clear All Favorites.
- 3. Press the knob for 5 seconds.
- 4. Message "COMPLETE".

#### System Settings

VERILUX is preloaded with the curing time and conditions for a list of validated resins, which are either Whip Mix resins or 3rd party resins such as Bego, Keystone, and Dentca. For future material settings, the customer needs to use the SD card and follow the following steps:

- **1.** Receive .dB file that has the curing time and condition "material setting" for the new resin.
- 2. Save the .dB file to the SD card. DO NOT CHANGE THE FILE NAME.
- **3.** Insert the card into the SD card reader.
- 4. Go to System Settings, Update Material, and press Yes for 5 seconds.

### Packaging

- **1.** Take care when opening.
- **2.** Keep your packaging.
- 3. Use the original box when sending for service.

### Warranty

Whip Mix Corporation offers a one-year warranty for VERILUX, starting from the date of purchase. Whip Mix Corporation warrants the VERILUX free of all defects in material and workmanship. Refer to the separate warranty agreement at www.whipmix.com for warranty coverage and service details.



Distributed by: Whip Mix Corporation 361 Farmington Avenue Louisville, KY USA 40209 whipmix.com

For technical support, please contact us via **productsupport@whipmix.com** or phone number **800-626-5651**, extension 1437