



# TeraUV Curing Machine

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## Instruction Manual



<b>Equipment</b>	TeraUV Curing Machine
<b>Model</b>	TeraUV
<b>Electrical Requirements</b>	110-220V (50/60Hz)
<b>UV Wavelength</b>	365nm
<b>Manual Revision Date</b>	December 16, 2025



## **WARRANTY**

Terms and Conditions apply to all PACE Technologies Products.

### **1. LIMITED WARRANTY AND DISCLAIMER**

PACE Technologies Products are warranted for two years from the purchase date to be free from defects in material and workmanship under correct use, normal operating conditions, and proper application. PACE Technologies' obligation under this warranty shall be limited to the repair or exchange, at PACE Technologies' option, of any PACE Technologies Product or part that proves to be defective as provided herein. PACE Technologies reserves the right to either inspect the product at the Buyer's location or require it to be returned to the factory for inspection. The buyer is responsible for freight to and from the factory on all warranty claims. The above warranty does not extend to goods damaged or subjected to accident, abuse, or misuse after release from PACE Technologies' warehouse, nor goods altered or repaired by anyone other than specifically authorized PACE Technologies representatives. PACE Technologies shall not in any way be responsible for the consequences of any alteration, modification, or misuse unless previously approved in writing by an officer of PACE Technologies. **Note: Corrosion is considered a maintenance issue and not a warranty issue.**

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### **3. DELIVERY**

Customer assumes and shall bear the risk of all loss or damage to the Products from every cause whatsoever, whether or not insured, and title to such Products shall pass to Customer upon PACE Technologies delivery of the Products to the common carrier of Pace Technologies choice, or the carrier specified in writing by Customer, for shipment to Customer. Any claims for breakage, loss, delay, or damage shall be made to the carrier by the Customer, and Pace Technologies will render the Customer reasonable assistance in prosecuting such claims.

#### **4. ACCEPTANCE**

Customer shall inspect the Products promptly upon receipt of delivery. Unless the customer objects in writing within thirty (30) business days thereafter, the customer shall be deemed to have accepted the Products. All claims for damages, errors, or shortages in Products delivered shall be made by Customer in writing within such five (5) business day period. Failure to make any claim timely shall constitute acceptance of the Products.

#### **5. PAYMENT**

Customer agrees to provide timely payment for the Products in accordance with the terms of payment set forth on the reverse side hereof or in any proposal submitted herewith. If any payment is not paid on or before its due date, Customer shall pay interest on such late payment from the due date until paid at the lesser of 12% per annum or the maximum rate allowed by law.

#### **6. DEFAULT**

If Buyer is in default (including, but not limited to, the failure by Buyer to pay all amounts due and payable to Seller) under the work or purchase order or any other agreement between Buyer and Seller, Buyer's rights under the warranty shall be suspended during any period of such default and the original warranty period will not be extended beyond its original expiration date despite such suspension of warranty rights.

#### **7. MISCELLANEOUS PROVISIONS**

This agreement has been made in and shall be governed by the laws of the State of Arizona. All disputes arising under or relating to the purchase of the equipment shall be brought and resolved solely and exclusively in the State of Arizona, Pima County. These terms and conditions and the description of the Products on the reverse side hereof or in any proposal submitted herewith constitute the entire agreement and understanding of the parties concerning this sale and supersede all prior and contemporaneous agreements or understandings, inducements or representations, expressed or implied, written or oral, between the parties with respect hereto. Any term or provision of this Agreement may be amended, and any observance of any term of this Agreement may be waived, only by a writing signed by the party to be bound. The waiver by a party of any breach shall not be deemed to constitute a waiver of any other breach. Should suit be brought on this Agreement, the prevailing party shall be entitled to recover its reasonable attorneys' fees and other costs of suit including costs and attorneys' fees incurred on appeal or in collection of any judgment., errors, or shortage in Products delivered shall be made by Customer in writing within such five (5) business day period. Failure to make any claim timely shall constitute acceptance of the Products.

#### **8. RESTOCKING FEE**

All returns are subject to a restocking charge equal to 15% (fifteen percent) of the Invoice, unless the Goods are proven to be non-conforming by PACE Technologies.

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## 1.0 Product Overview

The TeraUV is a cold-mounting system designed for rapid specimen encapsulation using ultraviolet (UV) light-curable resins. Simply pour the resin into a transparent mold, place it inside the curing chamber, and within seconds, a clear, hardened mount is produced.

The process is fast, efficient, and minimizes air bubble formation, ensuring high-quality sample preparation suitable for precise metallographic analysis.

### 1.1 Features

Machine features below:



- **Automatic door operation:** Electric open/close mechanism for convenient access.
- **One-touch operation:** Initiates the complete curing and ejection process automatically.
- **4.3-inch touchscreen interface:** Intuitive controls with real-time process display.
- **Adjustable curing time:** Four programmable timer presets.
- **Dual UV light sources:** Upper and lower lamps provide full 360° irradiation with no shadow zones.
- **Uniform curing:** Ensures complete polymerization from the inside out.
- **Low thermal output:** Maximum temperature below 194°F (90 °C) and sample temperature below 140°F (60 °C).
- **Dual-fan cooling system:** Maintains stable internal temperature and system longevity.

## 1.2 Technical Specifications

<b>Sample Tray</b>	Total Dimension: 11.5 x 9.1 in (291 x 230 mm) Curing Area: 9.1 x 7.1 (230 x 180 mm)
<b>Maximum Curing Time</b>	0-999 seconds
<b>UV Light Wavelength</b>	365nm
<b>Power Supply</b>	110-220V at 50/60Hz
<b>W x D x H</b>	Closed: 15.7 x 15.9 x 7.6 in (400 x 405 x 195 mm) Open: 15.7 x 25.1 x 7.6 in (400 x 639 x 195 mm)
<b>Weight</b>	46 lb (21 kg)

## 2.0 Equipment Handling & Setup

### 2.1 Unpacking

Carefully remove the TeraUV from its packaging and inspect it for any visible damage. Retain the packaging materials until installation is complete.

Verify that all accessories (molds, power cord, manual) are included and that the model label matches your order.

Place the unit on a stable, level surface capable of supporting its weight (46 lb / 21 kg). Connect it to a suitable grounded power outlet and proceed with startup.

### 2.2 Installation

Before installing the unit, confirm the following:

- (1) The power outlet is properly grounded and rated for 110/220V AC.
- (2) The work surface is stable, level, and free of vibration or dust.



## 3.0 Safety Guidelines

### 3.1 General Precautions

Carefully read this manual thoroughly before operating the TeraUV. Improper operation, unauthorized modification, or electrical alteration may cause damage or personal injury and will void the warranty.

Only trained personnel should operate or service the unit. Proper operator training is recommended for the safe operation of the TeraUV. Any unauthorized mechanical and electrical change, as well as improper operation, can void warranty claims. All service issues need to be reported to the manufacturer/supplier. Please always observe the following safety guidelines:

**Read the Manual Thoroughly:** Before using the device, all users must read and understand the operation manual. Improper use or failure to follow the manual may result in equipment damage or personal injury and is not covered under warranty.

**Electrical Safety:** Use a grounded outlet that meets the voltage and current requirements.

**Resin Compatibility:** Only use approved UV-curable resins. Ensure molds are intact to prevent leaks. Condition to avoid spills in the cure chamber and possible damage to the equipment.

**Mechanical Safety:** Do not force, block, or manually push/pull the tray. Avoid contact while the tray is moving; its motion will not stop automatically if obstructed. Mishandling may cause injury or glass breakage.

**Routine Maintenance:** Operators should follow the recommended maintenance routines to ensure safe and efficient operation (e.g., cleaning debris, inspecting noise, and belt tension).

**Emergency Stop:** Familiarize yourself with start/stop controls. If abnormal noise, smell, or vibration occurs, stop the operation immediately and disconnect power.

**Personal Protective Equipment (PPE):** Always wear protective eyewear, gloves, and a lab coat when operating or performing maintenance on the equipment.

## **3.2 Emergency Procedure**

### **Immediate Shutdown**

- Turn off the main power switch located on the rear panel to shut down the unit.
- If any abnormal odor, smoke, or unusual sound occurs, immediately disconnect the power cord from the electrical outlet.
- Do not attempt to open the chamber or remove covers while the unit is powered.

### **Evacuate if Necessary**

- If smoke or burning odor persists after shutdown, evacuate the area and allow sufficient ventilation.
- Do not touch the unit if it appears hot, damaged, or sparking.

### **Report on the Incident**

- Notify your lab supervisor or safety officer of the incident.
- Record any observed symptoms (e.g., odor, smoke, overheating) for follow-up inspection.

### **Medical Assistance**

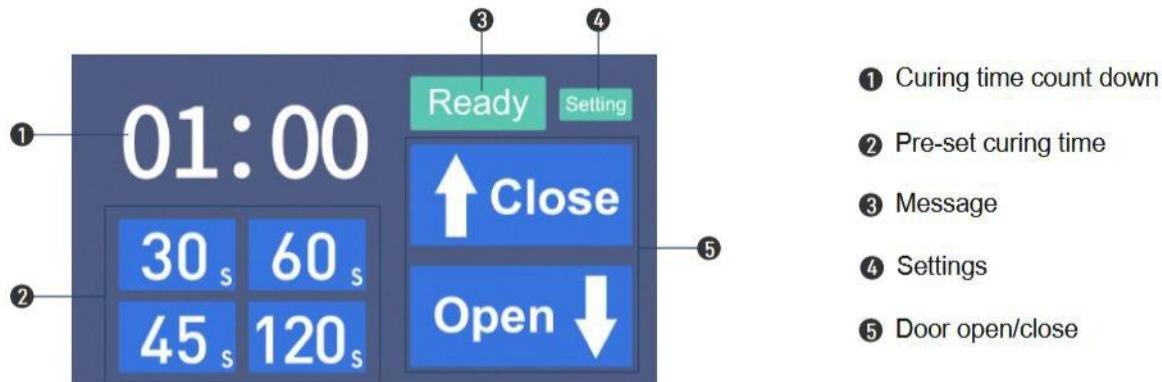
- In the unlikely event UV resin ingestion or electrical shock, disconnect power and seek immediate medical attention.
- Provide the operator's manual and product identification label to medical or safety personnel if requested.

### **Post-Incident Action**

- Do not attempt to restart or service the unit until it has been inspected and cleared by qualified personnel or the manufacturer.
- Document the event and file a safety report according to your organization's procedures.

## 4.0 Start-Up and Operation

### 4.1 Main Menu



- Default timer values can be modified by pressing and holding the timer for 5 seconds. A settings window will appear where the desired curing time can be entered.

**Note:** Do not attempt to manually open the tray during operation; this may damage the motor or internal mechanism. To manually open the tray, select the correct settings.

## 5.0 Maintenance

The TeraUV requires minimal maintenance to ensure consistent curing performance and long service life. Regular care should focus on keeping the unit clean, well-ventilated, and free from resin buildup or dust accumulation.

### Routine Cleaning

- Always disconnect the power cord before cleaning.
- Wipe the chamber interior and exterior surfaces with a soft, lint-free cloth
- lightly dampened with isopropyl alcohol or a mild detergent solution.
- Do not use solvents, abrasives, or pressurized air inside the unit, as these may damage the optical components or fans.

### UV Lamp Inspection

- Inspect the UV lamps monthly for discoloration
- If the curing time noticeably increases, contact the manufacturer.
- Use only manufacturer-approved resin to maintain curing consistency.

### Cooling Fans and Vents

- Check that both rear cooling fans are operating smoothly and free from obstruction.
- Remove accumulated dust or debris from ventilation grilles using a soft brush or low-pressure air.
- Ensure airflow is unobstructed around the rear of the unit.

### Power and Electrical Checks

- Verify that the power inlet and switch are secure and free of dust or corrosion.
- Inspect the power cord periodically for signs of wear or damage and replace it immediately if defects are found.

## 6.0 Consumables

Our consumables are available for purchase directly from our online store at [shop.metallographic.com](http://shop.metallographic.com).

Pace Product Name	Catalog No.	Qty
Silicone Rubber Molds	Blue Molds	Clear Molds
1.0-inch	RMOUNT-0100	RMOUNT-0100C
1.25-inch	RMOUNT-0125	RMOUNT-0125C
1.5-inch	RMOUNT-0150	RMOUNT-0150C
2.0-inch	RMOUNT-0200	RMOUNT-0200C
2.75 X 1-1/2 X 7/8-inch	RMOUNT-315R	RMOUNT-315C
3 x 2 x 7/8-inch	RMOUNT-302R	RMOUNT-302C

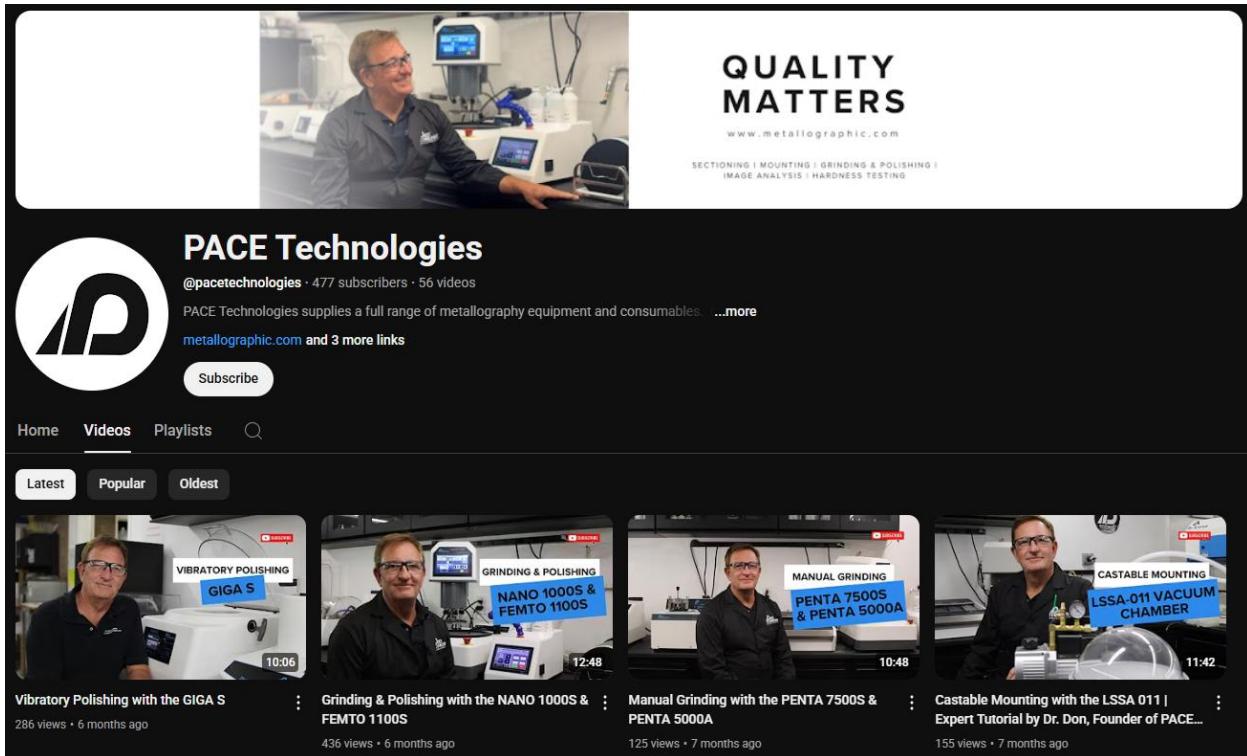


Pace Product Name	Catalog No.	Qty
ULTRAVIOLET Curing Resin	UV-1L	1L



## 7.0 YouTube Video Tutorial

YouTube Tutorials at [youtube.com/@pacetechnologies](https://youtube.com/@pacetechnologies) or click on the image below:



## 8.0 Additional Resources

Scan the QR code below for updates, tips, and industry insights:



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