

BPI Turbo Tinter 4™

For use only by qualified personnel in a laboratory environment.

Due to high operating temperature, access should be restricted.

BPI® does not warrant the use of non-BPI® products in this instrument.

Turn off the unit when you have finished tinting for the day. Never allow the tanks to run dry. Do not leave unattended.



BPI Turbo Tinter 4™

Specifications

The BPI Turbo-Tinter 4™ is a four-tank dye system geared for modest volume requirements of lens tinting. The chassis and spill containment pan are all stainless steel.

The system requires 220 volt, 50/60 Hz and is fuse protected by a 20 amp, 250 volt ceramic fuse. Components are UL and CSA recognized.

NOTE: Be sure always to use the ground prong on the power cord for safe operation; never bypass it.

Unpacking

When unpacking your dye system, please check to ensure that no concealed damage occurred in transit.

If such is noted, save the shipping carton and immediately notify the shipping company's damage control inspector in your area so a claim may be processed. Failure to do this may void any future claim and replacement.

Also, call BPI Customer Service so arrangements for a replacement may be made.

You should have received all the items listed in the chart at the top of the page.

| TANKS | HEIGHT | WIDTH | LENGTH | VOLTAGE | WEIGHT | FUSE | AMPERAGE | TRANSFER FLUID |
|-------------|----------|----------|----------|------------|--------|----------------|----------------|----------------|
| 4 x 1.58 qt | 12 in. | 30 in. | 13.5 in. | 220v Only. | | 20 amps. 250v. | 17 amps. 220 v | 0 |
| 4 x 1.5L | 30.48 cm | 76.20 cm | 34.29 cm | | | | | 0 |

THE SET-UP KIT INCLUDES THE FOLLOWING PRODUCTS:

- BPI Lens Prep II™
- BPI MSDS Booklet
- BPI Dual Lens Holder II™
- Manual & Instructions
- Beakers (Four)
- Magnetic Stirring Rods (Four)
- Perforated Stirring Rod Covers (Four)

Operation

Place your system on a LEVEL work surface convenient to an electrical receptacle. Make certain all switches are OFF. Check to be sure that the 20 amp fuses are in the fuse-holders located at the front of the machine near the power cord.

Place the Teflon coated spinners in the center, bottom of the tank and cover with the stirring rod cover.

Before placing the beakers in the Turbo Tinter™, position the rubber gasket halfway down the beaker so that it will seal tightly with the mating surface as the beaker slides down into the unit.

Fill one beaker with BPI Lens Prep II™ (diluted to 1 part to 32 parts water). Fill the other beakers full with DISTILLED water and BPI dye. **Thoroughly shake** the bottle of dye and add the entire contents to the distilled water.

For more information about coloring lenses, please refer to our pamphlet, "The Practical Guide to Lens Tinting".

Plug the unit into a properly grounded 220 volt electrical receptacle. The system has a main power ON/OFF switch and separate ON/OFF switches for heating each tank and for stirring each tank, a temperature display and a SET indicator.

Turn the main power switch ON. The light in the switch comes on when the switch is turned ON and is merely an indicator that power is reaching the unit.

The temperature read-out indicates the temperature in each tank. When tank temperatures are below 100°F, the temperature display shows '----'.

Be sure that the correct temperature probe is in its respective beaker.

Heating Up

Set the temperature by first selecting the tank (Tank 1 is on the left) and then pressing the UP or DOWN arrow key. The display will show the set temperature. The default temperature is 205°F. Use UP or DOWN to change the set temperature.

Turn ON stirrer. If no stirring action is observed after a minute, turn stirrer OFF and twist the beaker around one complete revolution. (This will capture the stirring rod). Turn the stirrer ON.

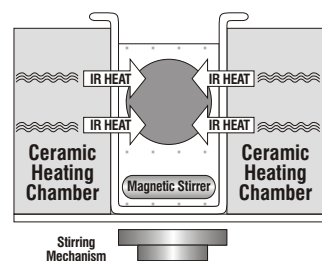
The unit will heat up to operating temperature in 20 minutes and will remain within a few degrees of the set temperature.

If a beaker is not being used, the switch for that tank may be left "OFF".

If the thermometer does not show a temperature rise for a beaker in 15 minutes (as would occur if the probe were left out of the tank!) The set temperature of the tank is set to zero, thus shutting off the tank.

If, at any time, the unit fails to function or the computer freezes, press the RESET button. This should restore normal function and reset temperature settings to their default value (205°F).

If a heater light stays on constantly but the tank does not heat, the over temperature cut-off may have tripped. To reset it, remove the spinner motor plate for that tank (on the bottom the of the unit) and press the red reset button on the cut-off.



Lens Tinting

Clean lenses thoroughly and place in a clean BPI Dual Lens Holder II™. It is important that the lens holder be clean to prevent contamination of the dye.

Immerse lenses in heated Lens Prep II™ for 10 or more seconds. Immerse lenses in dye solution. Timing will vary according to the previous usage of the solution and the hardness of the lenses.

The times are somewhat reduced by the stirring action. Do NOT leave lenses in the dye bath longer than 3 hours. Remove lens holder with lenses from the solution, rinse in clean Lens Prep II™ solution, and then rinse in cool water. Dry with a soft lint-free cloth such as a Kaydry™.

UV Dyes

ONLY BPI Turbo-UV™ may be used in this system.

Neutralizer

ONLY BPI H2O Neutralizer™ may be used in this system. BPI H2O Neutralizer™ is for removing color from plastic lenses. Read precautions below.

Precautions

Use BPI H2O Neutralizer™ in a well ventilated area or with a vent hood. NEVER USE ON OPEN FLAME! Do not exceed 210°F. Dip lenses to be neutralized into the heated solution until the desired amount of color has been removed. Remove lens and rinse in cool water. Lens may now be immersed in BPI Len Prep II™ and re-tinted.

If fluid contacts eyes, immediately wash with water. If irritation persists, contact physician. Harmful or fatal if swallowed.

Product is combustible and may become flammable if directions and precautions are not followed.

Lens Tinting Tips

1. 93 - 96° C (200 - 205°F) is critical. This is the optimum temperature for tinting lenses and allows the correct migration of the different size pigments that make up a typical BPI tint. The lens material will not accept the tints correctly unless this temperature level is maintained.

2. Some evaporation is typical and will not harm the tints. Just add more water and wait for the tint temperature to stabilize.

3. You may lower the temperature to 82°C (180°F) when not actively tinting. (Remember to raise the temperature when you resume tinting).

4. Lens materials vary slightly. (Manufacturer, composition, age, and or coatings). Tinting can be affected. This can be minimized or eliminated by using correct temperatures. If variances occur, refer to the BPI Color Correction Chart.

Questions? Ordering....

If you have any questions about the use of your lens coloring instrument, please refer to our pamphlet, "The Practical Guide to Lens Tinting". For information about any BPI product and to order supplies, please give us a toll-free call on the number shown for your area.

BPI Altitude vs Water Boiling Temperature Chart

| Altitude (feet) | Temperature (°F) | Altitude (Meters) | Temperature (°C) |
|-----------------|------------------|-------------------|------------------|
| 0 | 212.0 | 0 | 100.0 |
| 1,000 | 210.9 | 305 | 99.4 |
| 2,000 | 209.7 | 610 | 98.7 |
| 3,000 | 208.5 | 915 | 98.1 |
| 4,000 | 207.3 | 1,220 | 97.4 |
| 5,000 | 206.1 | 1,525 | 96.7 |
| 6,000 | 204.9 | 1,830 | 96.0 |
| 7,000 | 203.6 | 2,135 | 95.3 |
| 8,000 | 202.3 | 2,440 | 94.6 |
| 9,000 | 201.0 | 2,745 | 93.9 |
| 10,000 | 199.6 | 3,050 | 93.1 |
| 11,000 | 198.2 | 3,355 | 92.3 |
| 12,000 | 196.7 | 3,660 | 91.5 |

Advanced Options

To change the read-out temperature from °F to °C, press the "SELECT" and "UP" buttons together, then press "SELECT" again when prompted or press "UP" to cancel.

To change the read-out temperature from °C to °F, press the "SELECT" and "DOWN" buttons together, then press "SELECT" again when prompted or press "UP" to cancel.

To re-calibrate a tank's temperature probe (as when a new probe is installed), bring that tank (with probe installed) to a hard boil, "SELECT" that tank and then press the "UP" and "DOWN" buttons together.

If you are located at an altitude other than sea level, use the table to find your boiling temperature and use the "DOWN" button to change calibrating temperature to the closest possible (nearest degree) temperature. Then press "SELECT" to calibrate to that temperature or press "UP" to cancel.

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