

# BPI® Production Turbo Tinter 1™

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® Production Turbo Tinter 1™

## Specifications

The BPI® Production Turbo Tinter 1™ (BPI# 209809) is a one tank dye system geared for high 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 protected by a 20 amp circuit breaker switch. Components are UL and C SA recognized.

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

## Unpacking

When unpacking your lens tinting 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	CIRCUIT BREAKER	TRANSFER FLUID
1 x 13.7 qt	15 in.	22 in.	25 in.	220v.		20 amps. 250v.	0
2 x 12.4 L	38.1 cm	55.9 cm	63.5 cm			Circuit Breaker Switch	0

**THE SET-UP KIT INCLUDES THE FOLLOWING PRODUCTS:**

- BPI Lens Prep II™
- BPI MSDS Booklet
- Manual & Instructions
- Magnetic Stirring Rods (4)
- Stirring Rod Cover (1)

## Operation

Place your system on a LEVEL work surface convenient to an electrical receptacle. Make certain all switches are OFF.

Allow a 2" (5 cm) space between this unit and the nearest wall.

Place the 4 Teflon coated spinners on the bottom of the tank and cover with the stirring rod cover. The circular gaps in the cover give the spinner locations.



The tank can hold ten 3 oz (88 ml) bottles of tint mixed with 10 quarts (9.46 L) of distilled water. Or, 1 quart bottle of tint (946 ml) mixed with 10 quarts (9.46 L) of distilled water. Thoroughly shake the bottle(s) of BPI® tint and add the entire contents to the tank. Rinse out any remaining tint out of the bottle(s) with distilled water into the tank. Fill the tank with 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 220v. electrical receptacle. The system has a main power ON/OFF circuit breaker switch and separate ON/OFF switches for heating the tank and stirring the tank. It also has a display and a tank heater indicator.

Turn the main circuit breaker power switch ON.

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

Be sure that the temperature probe is in the tank.

## Heating Up

Set the temperature by 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.

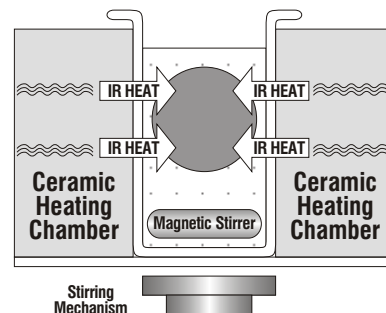
Turn ON stirrer. If no stirring action is observed after a minute, turn stirrer OFF and then turn the stirrer back ON.

The unit will heat up to operating temperature in 40 minutes and will remain within a few degrees of the set temperature.

If the display does not show a temperature rise for the tank 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 the 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 (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® Lens Rack. It is important that the lens rack be clean to prevent contamination of the tint.

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

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

## UV Dyes

USE ONLY high flash point UV dyes like BPI® UV Crystal Clear™

## 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. (See the BPI® catalog).

## 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, or to change the read-out temperature from °C back to °F, press the "OPTIONS" button and follow the instructions on the screen.

To re-calibrate the tank's temperature probe (as when a new probe is installed), bring that tank (with probe installed) to a hard boil, press the "OPTIONS" button and follow the instructions on the screen.

If you are located at an altitude other than sea level, use the table to find your boiling temperature and change the calibrating temperature to the closest possible (nearest degree) temperature. Then follow the instructions on the screen.

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