

BPI® Digi-Master Color™ System

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.

Specifications

The BPI® Digi-Master Color™ System (Product #211102) is the largest of the multi-tank series. It has ten half-gallon tanks and a built-in lighted Color Analyzer and Comparator™ and a digital temperature controller. 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 wire 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.

Setting Up

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 fuse is in the fuse-holder located at the rear of the machine by the power cord.

Pour all 10 quarts (2.5 gallons) of BPI® heat transfer fluid over the heating elements into the base unit BEFORE turning ON any switches. If heat is turned on before the HTF-90™ is added and the tint tanks are in place so that the elements are submerged, element failure may result due to excessive temperature of the element.

TANKS	HEIGHT	WIDTH	LENGTH	VOLTAGE	WEIGHT	FUSE	AMPERAGE	TRANSFER FLUID
10 half gal. tanks	8.5 in.	17 in.	42.5 in.	220v.	84 lbs.	20 amps. Circuit Breaker.	16 amps.	2.5 gal.
10 x 1.89 L tanks	21.59 cm	43.18 cm	107.95 cm		38.2 kg			

THE SET-UP KIT INCLUDES THE FOLLOWING PRODUCTS:

- BPI® Lens Prep II™
- BPI® Neutralizer II™
- BPI® Heat Transfer Fluid
- Tanks and thermal tank lids
- BPI® Molecular Catalytic™ tints (3 6-packs) (3 each: gray, blue, yellow, brown, pink, & green)
- Manual & instructions
- BPI® Lens Holder II™
- Adapter plate
- Precision thermometer
- HTF siphon pump

SYSTEM LAYOUT

TEN HALF GALLON TANKS (10 x 1.89 LITERS) Integrated Digital Temperature Controller

Place stainless steel dye solution tanks into the main unit. Reserve one tank for BPI® Neutralizer II™ and another tank for BPI® Lens Prep II™. Fill the remaining tanks half full with water (distilled is preferred for grays and browns) and add one color of tint to each tank. BPI® tints are sold in concentrated solutions and are to be diluted to obtain the working solution (this size tank will require two 3 oz. bottles of tint for normal use).

FOLLOW the instructions that come with the tint for proper mixing. Add a little water to each tint bottle and shake well to remove residual pigment in the bottle; add to the corresponding tint solution. Add water to the tint tanks to achieve the correct working level. Pour BPI® Neutralizer II™ (full strength) into one of the reserved tanks and BPI® Lens Prep II™ (diluted 1 part to 32 parts water) into the other reserved tank.

The right side of this system will typically be a few degrees hotter than the left side of the unit. Since BPI® Neutralizer II™ and certain colors (such as grays and browns) work better at higher temperatures we recommend keeping these tanks at or near the right hand end (as viewed from the front) of the system.

Heating Up

The system has an ON/OFF switch and an indicator lamp. 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 lamp above the temperature control dial also indicates when power is being applied to the unit.

Plug the unit into a properly grounded 220 volt electrical receptacle (This 220 volt model is shipped without a plug and requires a qualified technician for installation). Turn the switch ON. The lids may be in place at this temperature to speed the initial heat up, but

must be removed when the tank temperature reaches 150°F. (65.5°C)

The digital temperature controller will regulate the temperature of the tank in which the probe is affixed. This must be one of the tint tanks. The other tanks will be at nearly the same temperature.

Changing the Set Temperature

To change the set temperature, press the 'UP' or 'DOWN' button. The new set temperature will be displayed for several seconds, then the display will return to displaying the actual tank temperature. Temperature settings are usually 200-210°F (93-98°C) or 190-200°F (88-93°C) for gradients and light tints). If there is going to be a time lapse between batches, the unit may be idled at 150°F (65.5°C) and the lids placed on the dye tanks to minimize evaporation and reduce the time it takes to attain operating temperature for the next batch. Since the pigment does not evaporate, you may simply add water from time to time to replace evaporative losses.



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Temperature Calibration

When a new temperature probe is installed, the controller must be calibrated. Heat the tank with the probe installed until it boils. Press and hold down the '°F/°C' button for ten seconds until the display shows a rapid count. Release the '°F/°C' button and press the 'UP' and 'DOWN' buttons simultaneously. The temperature sensed by the probe at that time will be called '212°F'.

Memory Loss

If the unit has lost temperature calibration, the factory temperature calibration can be restored by pressing the '°F/°C', 'UP' and 'DOWN' buttons at the same time.

Matching Plate

Rinse lenses before placing them on the white color matching plate.

Neutralizer

BPI® Neutralizer II™ is for removing color from CR-39® lenses ONLY. Read **Precautions**.

1. Heat BPI® Neutralizer II™ in an approved lens tinting system. Do not exceed 210°F.

2. Dip lens to be neutralized into the heated solution until the desired amount of color has been removed.

3. Remove lens and rinse in cool water.

4. Lens may now be immersed in BPI® Lens Prep II™ and re-tinted.

Neutralizer Precautions

Use BPI® Neutralizer II™ in a well-ventilated area or with a vent hood. NEVER USE ON OPEN FLAME OR ELECTRIC BURNERS! If fluid contacts eyes, immediately wash with water. If irritation persists, contact physician.

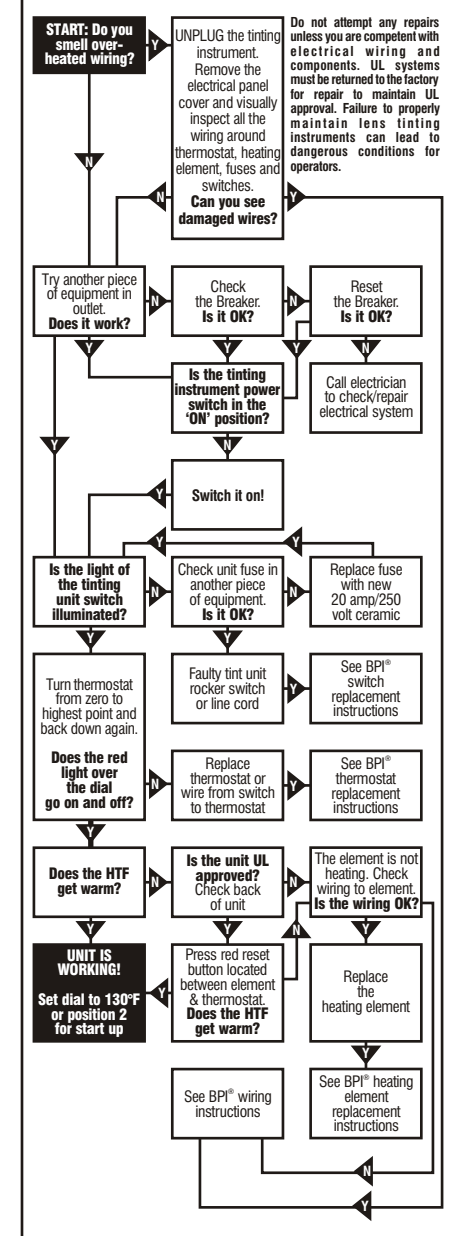
Harmful or fatal if swallowed. Product is combustible and may become flammable if directions and precautions are not followed.



Questions? Ordering

If you have any questions about the use of your lens coloring instrument, please refer to our website <http://www.callbpi.com> for general information. To place orders or to receive technical support, please call your local BPI® office.

Trouble Shooting Guide



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Lens Tinting Tips

1 SHAKE BPI red bottle for 30 seconds	2 EMPTY tint into a clean tank
3 RINSE remaining tint from bottle three times	4 FILL tanks to working level
5 RAISE temperature to 60 - 70°C. (140 - 160°F) Let stabilize	6 REMOVE all lids from all tanks
7 RAISE temperature to 93 - 96°C (200 - 205°F). Let stabilize*	8 IMMERSE lenses slowly and tint to required density
9 STIR TINTS FREQUENTLY When in doubt always check the temperature!	The correct temperature for tinting is 94-97°C. (200-208°F). Do not immerse lenses into the tint until this temperature is attained.

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. Lower temperature to 82° C (180°F) and cover tanks when not actively tinting. (Remember to raise 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.

*Use a lab thermometer to verify temperature. Water boils at 100°C (212°F). Tints will not boil if the temperature is verified correctly. Do not rely solely on the tint unit thermostat.