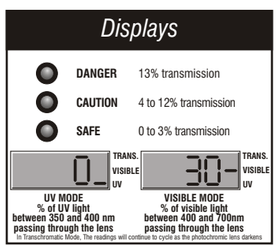
BPI Transchromatic Computer Cal III™

For use only by qualified personnel in a laboratory environment.

For maximum protection against UVA energy, wear UV safety glasses & avoid looking directly at UV light source.

Displays



Specifications

The Transchromatic Computer Cal III™ is an invaluable aid for quality control of lenses treated for UV absorption, for visible light treatments, and for checking photochromic transitions. The accompanying brochures educate your customer as to the harmful effects of UV light. The visible portion of the unit may be used for fashion tint control and for critical density adjustments on therapeutic tints such as BPI Diamond Dye™ 500/550 and Diamond Dye™ 540 .The transchromatic information demonstrates and checks the visible and UV absorption characteristics of photochromic lenses.
Variations in density and hardness of CR-39® lenses typically affect the ability to accept dye. Two lenses that have been in the same dye tank the same amount of time may not come out with equal UV protection. IT IS THE LENS PROCES SOR'S RESPONSIBILITY TO VERIFY UV PROTECTION and a meter such as this unit is a quantitative means of testing.
The meter's digital displays indicate the percentage of ultraviolet light (in the band from 320 to 400 nm) and the percentage of visible light (in the band from 400 to 710 nm) passing through a lens. It is a quick and accurate way to check the transmission characteristics of lenses.
The system requires 115 volt (BPI# 119513; 220 volt BPI# 219513), 50/60 Hz and is fuse protected by a 1 amp, 250 volt glass fuse. Components are UL and CSA recognized.
NOTE: Be sure to always use the ground wire on the power cord for safe operation; never bypass it. FOR MAXIMUM PROTECTION AGAINST UVA ENERGY, WEAR UV SAFETY GLASSES & AVOID LOOKING DIRECTLY AT UV LIGHT SOURCE.

HEIGHT	WIDTH	LENGTH	VOLTAGE	WEIGHT	FUSE	AMPERAGE
5 in.	6.25 in.	6.75 in.	115 or 220 v.	6 lbs	1 amp/250v.	1 amp
12.7 cm	15.87 cm	17.14 cm		2.72 kg		

LENS CLEARANCE	TEST RANGE	THE SET-UP KIT INCLUDES THE FOLLOWING PRODUCTS:
0.75 in. 19.05 mm	350 nm to 400 nm (UVA) 400 nm to 700 nm (Visible)	• Calibration lens • Instruction manual • Patient brochures • Patient brochure stand • Power pack

Unpacking

When unpacking your instrument, 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 Ser vice so arrangements for a replacement may be made.

Setting Up

To set up your Transchromatic Computer Cal III™, just connect the power pack to the unit and plug it into a standard outlet convenient to your work area but away from the immediate vicinity of the lens coloring operation. Although BPI's meters are stable and sturdy, they may be adversely affected by excessive humidity and heat. Your meter arrived with a lens taped to the back of the unit. This lens has been treated with BPI's Ultraviolet Diamond Dye™ 400 nm. Be sure to remove this lens before beginning operation.

Operation

NOTE: Avoid looking directly at the UV light source, as it may cause permanent eye injury. All three safety lights are lit during calibration.

1. The meter has an ON/OFF switch (in back), computer CALIBRATE and computer READ buttons. Turn the unit ON.

2. Momentarily push the CALIBRATE button. If the UV bulb and the visible lamp are properly lit, then readings of 100 will appear for both the visible and the ultraviolet. If a channel is unable to calibrate itself, a reading of E .1 will appear on that channel if the lamp is too bright or a reading of E .2 if the lamp is too dim (or off). On initial turn-on, the unit may read too dim on the UV channel due to an attempt to calibrate before the UV lamp comes on. Simply push the CALIBRATE button after the UV lamp is on.

3. Place the lens to be tested over the light aperture. Push the READ button, and the transmission readings will appear. When UVA is being displayed, the UV mark will be on; when visible is being displayed, the VIS mark will be on. The safety lights give a quick indication of UVA status:
Red: UVA>12%
Yellow: 12%>UVA>4%
Green: 4%>UVA

4. One minute after calibration the unit will shut itself off (display dashes); push the CALIBRATE button and you are back to step 2.
Lenses with moderate to high power may cause cross-talk between the UV and visible channels. Such cross-talk can be minimized by making sure that the optical center of the lens is over the light source opening in the black rubber pad.

5. For transchromatic readings, depress the READ button and hold it down until the indicator moves to the "photochromic" (as opposed to "visible" or "UV") position. The meter will now make a string of continuous UV and visible readings without the need to press the READ button. Insert the photochromic lens in the light path and observe the visible and UV transmission readings as the lens is darkened by the internal transchromatic light source.

Should the unit ever fail to function properly, press "Calibrate" to verify calibration. If the unit continues to malfunction, turn the unit off, wait a few seconds, then turn the unit back on.

UVA Emanation

The UVA energy (320 to 400nm) that is emitted by this unit is also emitted by the sun and sky light and is, therefore, a natural component of our environment. However, over exposure to UVA energy may produce eye irritations and permanent eye injury.
FOR MAXIMUM PROTECTION AGAINST UVA ENERGY, WEAR UV SAFETY GLASSES & AVOID LOOKING DIRECTLY AT UV LIGHT SOURCE

Replacement Parts

Visible Lamp: BPI# 60302
1 Amp, 250 Volt Fuse: BPI# 59905
Brochures (Pack of 100): #999901

Troubleshooting Guide

1. If nothing happens once the meter is turned on, check that the power cord is properly connected. Also check the electrical outlet and/or circuit breaker. Replace fuse with specified type and rating.
2. If you get a reading of E2 for UV, press CAL button again.
3. If the UV light fails to come on, the lamp module must be replaced.

Questions? Ordering...

For information about any BPI product and to order supplies, please give us a toll-free call at the number shown for your area.

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BPI# 119513 (115v)
BPI# 219513 (220v)