BPI® Spectrometer Software for Windows

BPI® Spectrometer™

	BPI# 19501 (110v)	BPI# 219501 (220v)
Weight:	6 lbs	2.72 kg
Lens Clearance:	0.75 in	19.05 mm
Tests lenses only. (Remove lenses from frames).		
Test Range (UVA):	350nm to 400nm	
Test Range (Visible):	400nm to 700nm	
Amperage:	1 amp	
Fuse:	1 amp/250v.	
Calibration method:	Automatic. (Press calibration button)	
UL listed components. Meets or exceed CE standards		

VIS 70	Red 25	YLLW 26
UV 3	GRN 32	BLUE 32

L*	+ 53.70
A*	- 7.42
b*	+ 10.65

Display on unit alternates between these two screens

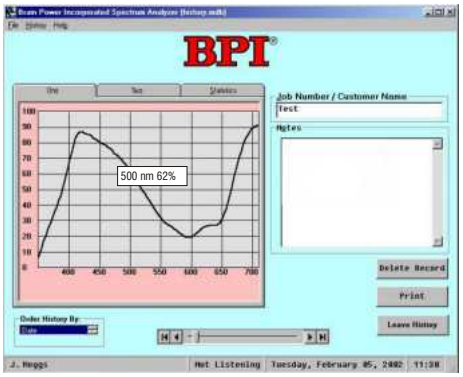
Set-up Kit:	Calibration lens Instruction manual	Patient brochures & Stand CD-ROM with software

The BPI® Spectrometer™ covers wavelengths from 350nm to 710nm with a resolution of better than 10nm.

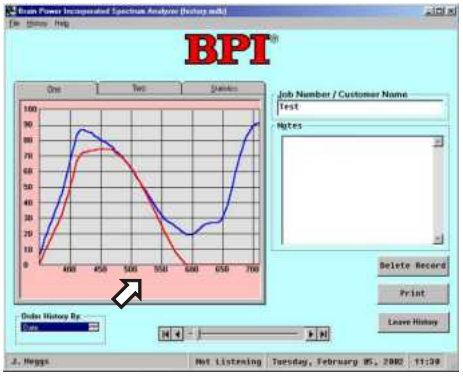
The transmittance spectrum results may be used for quality control purposes, such as comparing tinted lenses as well as providing information about what tints need to be added to match the color of another lens or a customer-supplied sample spectrum.

The unit is a free-standing spectrometer with light sources that can also be attached to a PC via the computer's RS232 port. The supplied software requires Microsoft™ Windows™. The test results can be saved to an integrated database and also can be printed out to any compatible printer.

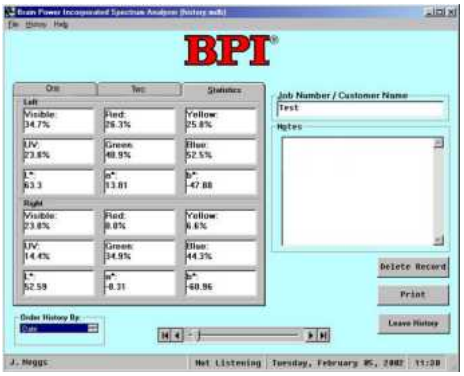
The BPI® Spectrometer™ provides information on the visible transmittance (Tv) as well as the UVA transmittance of the material being tested along with the numerical color characteristics. (L*, a*, and b*). This provides a means for numerical color description. L*, a* and b* are the familiar CIELAB coordinates. L* is brightness (or lightness) ranging from 0 (black) to 100 (white). The a* value goes from about -80 (green) to +100 (red), while the b* value goes from about -80 (blue) to +100 (yellow). The PC software displays a transmission curve and allows one curve to be overlaid upon another.



Holding the cursor over any part of the curve will give a transmission reading for that point.



View two curves simultaneously. Holding the cursor over any part of curve border and clicking will display both curves.



Numerical Display. Each database record has a complete set of numerical test results including CIELAB coordinates.

BPI® Spectrometers utilize a spectrometer chip (micro spectrometer mounted on a linear CCD detector array) to produce a survey type spectrometer with a resolution of about 10nm. The 'entrance slit' is a 300 micrometer optical fiber. The reflection grating has 625 lines/mm with a blaze wavelength of 560nm. The dispersion is 0.12nm/micrometer. The wavelength reproducibility is about 0.1nm. The 'exit slit' is a 256 pixel linear photodiode array. The visible light source is a high temperature incandescent bulb. The UV source is a phosphor broadened mercury vapor tube.

Software requires Microsoft Windows and PC. (Not included in purchase).

BPI® UV Blocking Dyes™

BPI® manufactures five different kinds of UV blocking dyes for plastic lenses.

BPI® UV Diamond Dye™ 400nm. 400nm protection with enhanced scratch resistance.

BPI® UV Only™ 400nm. 400nm protection in less time.

BPI® UV Crystal Clear™. ANSI Z80.3 standard protection in about 2 minutes.

BPI® UV 400 Plus™. The UV treatment for lenses that receive an AR coating.

BPI® The Pill® UV-400™. UV protection in a pill package to reduce shipping costs.

BPI® UV Source™

A compact source of UVA illumination for any UV fluorescence application. It can demonstrate the photochromic properties of a lens by darkening them in only a few seconds. As a safety feature, the unit remains illuminated for only one minute after being turned on.
BPI# 109508 (110v. only).

BPI# 60302	Visible Bulb
BPI# 60303	Ultraviolet Bulb 6"
BPI# 60306	Small Ultraviolet Bulb
BPI# 60305	UV Source Board
BPI# 81502	UV Calibration Lens
BPI# 60940	LCD Display
BPI# 60939	Photocell
BPI# 60941	UV Bulb Socket
BPI# 60936	Starter
BPI# 60937	Starter Holder