BPI Lens Reflectometer™
REFLECTION METER
US PATENT # 5148041

For use only by qualified personnel in a laboratory environment.

Specifications

The BPI Lens Reflectometer™ (Reflection Meter)is an invaluable aid for quality control of lenses that have received A/R and Reflective coatings. (110v: BPI#119505).

The BPI Lens Reflectometer™ (Reflection Meter) features a microprocessor controller that at a push of a button calibrates the meter for a 4 percent reflectance. No matter what happens to the intensity of the visible light, auto-calibration is guaranteed because of the meter's new circuitry that contains an automatic-gain controller stage that accommodates itself to any possible variations in the AC line voltage, as well as, to any gradual decay of the intensity of the visible light bulb over long periods of time. Components are UL & CSA recognized.

HEIGHT	WIDTH	LENGTH	VOLTAGE	WEIGHT	FUSE	AMPERAGE
6 in.	7 in.	7.25 in.	110v or 220v.	6 lbs.	1 A/ 250 v.	1 amp
15.24 cm	17.78 cm	18.41 cm		2.72 kg		

Unpacking

When unpacking your BPI Lens Reflectometer™ (Reflection Meter), 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

To set up your Reflection Meter, just connect the power cord to a standard electrical outlet (105-125 v. 60hz) convenient to your work area but away from the immediate vicinity of the lens coloring operation, since excessive heat and humidity may adversely affect your Reflection Meter.

Note: For safe operation never bypass the ground connector or wire on the power cord.

Introduction

The meter's digital display indicates the percentage of reflectance of visible light (in the band from 400 to 710nm) from a lens. The reading is displayed on the liquid crystal display (LCD). The display will continue until a new reflection reading is taken, or until a new calibration procedure is requested by the meter's computer (indicated by three dashes in the display).

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Operation

The Reflection Meter has an ON/OFF switch (located in the back of the unit), and two momentary push buttons labeled CALIBRATE and READ.

Step 1: **Turn the unit ON.** (ON/OFF switch is located on the back of the unit, near the fuse holder).

Step 2: **Calibration.** Lift the lens holder knob and place the 4% calibration lens into position on the rubber mat, under the housing and into the optical path of the visible light. Momentarily push the CALIBRATION button. A reading of 4% will appear on the LCD for the visible light reflection. The unit is now calibrated. Remove the calibration lens.

Step 3: **Reflection Measurement.** Place the lens to be tested on the rubber mat and slide it under the sensor housing and into the optical path of the Visible light. Push the READ button. The Visible Reflection will appear on the LCD.

Note: Your unit calibration period is limited to about 5 minutes to assure maximum accuracy, since it is normal for the light to drift somewhat in intensity and color after a while. For most accurate results, the calibration procedure (Step 2) should be performed just before any transmission measurement is taken.

Trouble Shooting Guide

If you turn on the unit and nothing happens, the unit may not be connected properly or a fuse may be blown. Check that the power cord is properly connected. Check the electrical outlet and/or the circuit breaker. If not, try replacing the fuse with the specified type and rating. (1 AMP/250v. fuse-BPI #59905).

If you get a reading of "E2" it is possible that the lens is beyond the calibration limit, or the visible light bulb is burned out. Simply adjust the calibration potentiometer - behind the hole on the left side of the unit, or replace the visible bulb.

Note: If you experience any other difficulties not listed in this Trouble Shooting Guide, please contact your BPI Service Personnel.

Questions? Ordering...

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# 119505 (115v)
BPI# 219507 (220v)