Unlike conventional bifocals or trifocals, progressive addition lenses or "PAL's" feature laser engravings as a means to establish critical information such as fitting reference points, add power, lens material, manufacturer and specific model.

These engravings are often faint on new lenses, obscured by scratches on older lenses or difficult to recognize on tinted or anti-reflection coated lenses. Deciphering these engravings is often next to impossible with the naked eye, particularly for the less experienced technician or presbyopic observer.

Lens manufactures have periodically reduced or amplified the surface engravings on PAL's since the introduction of Progressive lenses. Both have proven to be unsatisfactory in some way. Very faint engravings are difficult to identify by the technician, while deeper engravings may be noticed by the wearer; in extreme cases by others looking at the wearer's glasses!

The PAL-ID is an instrument specifically designed for fast and effortless identification of all surface markings, regardless of the lens condition.

This sturdy instrument features an exclusive patented optical imaging system which is designed to illuminate, enlarge and enhance even the faintest engravings.

Once the engravings are visualized but are not immediately familiar to the observer they may compared to a comprehensive list of diagrams within the OLA Progressive Lens Guide (available from the OLA).

The PAL-ID makes it possible for even the least experienced operator to locate and accurately identify markings in a matter of seconds!
USER GUIDE

1. **Clean lenses** as well as possible with alcohol or lens cleaner.
2. Frame temples must be in the open position as not to obscure the light filter.
3. **Switch on power.** Two (2) high intensity fluorescent tubes will light in a few seconds.
4. Position the lens, with the **front surface facing you** (between the light source and the magnifying lens) hold the lens approximately **7.0 - 8.0 cm.** from the light source initially, then move the lens nearer or further from the magnifying lens to achieve optimum image resolution.

5. The operators eyes should be approximately **20 cm.** away from the magnifying lens.

***Important Note!*** Be sure to switch the units power "**OFF**" after use. Leaving the fluorescent tubes under power for prolonged periods results in excessive internal heat build up and may damage the unit, particularly the function of the **light filters.**

Helpful Hints

**Glass and Plastic Lenses**

- High minus, badly scratched or dark sunglass lenses can be more easily found when removed from the frame.
- Angling the lenses slightly may ease observing very faint markings, particularly those on high minus lenses.
- Anti-reflection coated lenses may have had their engravings etched away in preparation to coating.
- In some instances the nasal engraving may have been ground away, in the case of very narrow P.D.
- It is beneficial to be familiar with the general location of the engravings, see diagram.
- A few brands of PAL’s are not engraved, see OLA lens guide®.

**Glass Lenses  Require Nr.2 Light Filter**

- **Thoroughly** remove all fingerprints and oils from the surface of the lens.
- Glass engravings are **finer** than those in plastic lenses, and require a bit more practice by the operator.
- The engraved area should be positioned within white boundary along the edge of the black central disk, not directly above the perimeter light. The light source should only indirectly illuminate the engraving, with the marking contrasted above the black area of the filter.
TROUBLE SHOOTING

Symptom A

*One of the fluorescent tubes fails to light*

Reverse the tubes (see "maintenance" below for instructions). If the same tube fails to light after being reversed, it can be assumed that the tube is defective and will need to be replaced.

In the USA spare fluorescent tubes (OS-3300) may be ordered from Western Ophthalmics (800-426-9938).

If the tube *fails* to light it can be assumed that one of the two transformers has failed, and will need to be replaced. The unit will need to be sent in for repair.

Symptom B

*Both fluorescent tubes fail to light*

It's most likely that the main *on/off* switch has become inoperative. The unit will need to be sent in for repair.

MAINTENANCE

Changing Fluorescent Tubes

The PAL-ID contains two (2) high intensity fluorescent tubes, which are available only through the exclusive distributor who supplied the unit. Correct replacement tubes are *not* available through electrical or lighting fixture vendors in the USA, Bulb OS-3300 can be ordered directly from Western Ophthalmics (800-426-9938).

*Replacing one or both tubes*

1. **STEP 1: LIFT OUT AND REMOVE LIGHT FILTER.**
2. **STEP 2: DISCONNECT UNIT FROM LINE POWER (REMOVE PLUG FROM WALL OUTLET).**
STEP 3: REMOVE ALL FOUR (4) RUBBER CUSHIONS LOCATED ON THE UNDERSIDE OF THE UNIT

STEP 4: LOOSEN AND REMOVE ALL FOUR CONNECTING SCREWS WITH AN APPROPRIATELY SIZED PHILLIPS-HEAD SCREWDRIVER.

STEP 5: LOOSEN AND REMOVE CONNECTING SCREW NUMBER 5 (LOCATED NEAR THE ELECTRICAL CORD).

STEP 6: LIFT UPPER HALF OF THE BASE TO GAIN ACCESS TO LIGHT SOURCE COMPARTMENT.
STEP 7: PULL OUT AND REMOVE FAULTY FLOURESCENT TUBE.

STEP 8: REPLACE TUBE.

STEP 9: REPLACE AND ALIGN BASE COVER. MAKE SURE THAT NO ELECTRICAL WIRING IS CAUGHT BETWEEN THE EDGES OF THE TWO HALVES.

STEP 10: REPLACE AND TIGHTEN ALL FIVE SCREWS.
STEP 11: REPLACE THE RUBBER BASE CUSHIONS.
TECHNICAL SPECIFICATIONS

Dimensions

- Height: 11.75" (30.0 CM)
- Width: 5.50" (14.0 CM) Counter space footprint requirement
- Length: 10.00" (25.0 CM) Counter space footprint requirement

Weight

- 4.5 Lbs. (2.0 Kg)

Power Supply / Electronic Transformers (2)

- 120 Volt 60 Hz 19 W (USA Model)
- 230 Volt 50 Hz 19 W (CE Model)

Fluorescent Tubes (2)

- 7 Watt High Intensity

Magnifying Lens (1)

- 10 Diopter

Light Filters (2)

- Glass (mineral) lenses
- Plastic (organic) lenses