

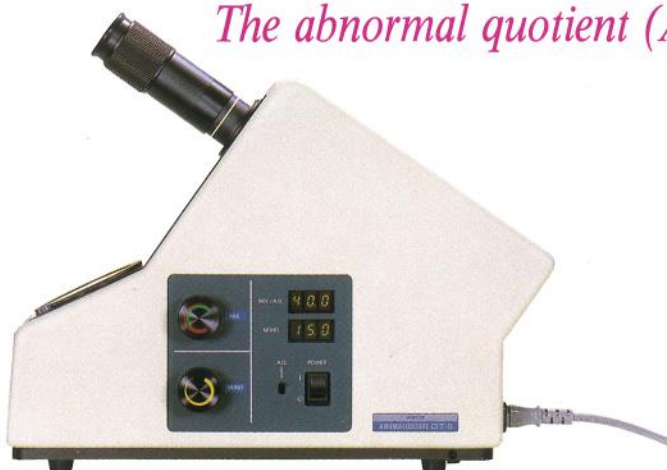
**NEITZ**

# Anomaloscope

# OT-II



*The abnormal quotient (A.Q.) is displayed digitally.*



- Its more compact size (appr. 20% less than former model OT), and lighter weight (40% less), make it more portable, conserving valuable table space.
- Since both light-emitting diodes and interference filters are used for producing color-mixture field (red and green) and monochromatic field (yellow), wave lengths of the three colors are constant. This is the big advantage in comparison with the method of using direct vision spectroscopy.
- No increase of temperature even after over periods of extended use as light-emitting diodes are used as light source. No cooling fan is needed.
- High reliability of color-mixture and monochromatic control done by the special electric circuit which controls the brightness of light-emitting diodes without a complicated slit mechanism.
- Digital display of color-mixture and monochromatic figures helps easy scale reading and avoid misreading.
- Test results have been proved to coincide with those of Neitz Anomaloscope OT. (Ohta, Y, Professor of Tokyo Medical College and others: The test results of Anomaloscope obtained by use of both light emitting diodes and interference-filters. Acta Soc. Ophthalm. Jpn., 83:12, 1989)

# NEITZ Anomaloscope OT-II

## SPECIFICATIONS

- **The diopter adjustment:** -8D to +7D. 0 at the white line
- **Apparent field of view:** 2°10'
- **The upper half circle of visual field:** By rotating the Color Mixture knob, the upper half circle looks pure red, pure green, or a mixture of both colored lights. The wave length of pure red is 671nm ( $\pm 2$ nm) and pure green is 546nm ( $\pm 2$ nm). The ratio of amount of red light and green light is indicated by the numbers of 0 to 73 on the Color Mixture Scale digitally.

Scale Figure	Ratio		Observed Color
	Pure Red	Pure Green	
0	0	73	Pure Green
a	a	73 - a	Greenish Yellow → Yellow → Raddish Yellow
73	73	0	Pure Red

The ratio of the two colored lights can be changed continuously as shown above.

- **Lower half circle of the vision field:** You can choose either complete dark or pure yellow by rotating the Monochromatic control knob. The wave length of pure yellow is 589nm ( $\pm 2$ nm). The brightness of yellow is indicated by the numbers of 0 to 87 on the Monochromatic Scale. At 0, it becomes completely dark and brightness increases when the number is getting increased. Maximum brightness is obtained at 87.
- **Color constancy:** Since each color is obtained through the interference filter, the waves of the three colors maintain constant, regardless of the Color-Mixture or Monochromatic Scale figures.
- **Color Mixture knob:** Red, green, and yellow lines are indicated on the Color Mixture and Monochromatic control knobs. Change in the width of these red, green and yellow lines indicate the change in the amount of the corresponding colored lights.
- **Adapter:** Uses white opal glass, and as the light source a specially designed long-life bulb.
- **Power Source:** The primary side: 100, 120, 220, 240V — 50-60 Hz. (Should be used within  $\pm 10\%$ )
- **Fuse:** 0.5A (100/120V) 0.25A (220/240V)
- **Size:** Approximately Depth 125 Width 371 Height 323mm.
- **Weight:** Approximately 4.5kgs.
- **Accessories:** Adapter spare bulb, Fuse, Test Chart, Dust Cover.

