

BINOCULAR GAUGE

JT-01



Development intention: to allow optometrists to leave the comprehensive optometry and examine visual functions and ADD in an routine (realistic) environment.

About materials: This Binocular gauge is made of aluminum magnesium alloy, and its surface is treated by sandblasting oxidation process, with comfortable grip and fingerprints free.

Advantage 1: fast and accurate. Optometrist can always truly observe the changes in the customer's eyes. Without any age limitation.

Advantage 2: Prevention and control of myopia in children, and explain the examination process and results.

Advantage 3: read the measurement value directly (position of near-point, amplitude of accommodation and the correspond age) to save the calculation time.

Advantage 4: Progressive lenses' matching experience is excellent, quantitative, accurate and fast.

Advantage 5: A good assistant for dynamic skiascopy optometry or pressure skiascopy optometry examination.

Corresponding functions:



1

2

3

4

1. Near Point of Convergence Measurement
2. Amplitude of Accommodation Measurement
3. Visus / Amplitude of Accommodation Measurement
4. Binocular Polarized Balance Measurement

Instruction for use:

Near Point of Convergence Measurement



1. Gaze at the point simultaneously in both eyes after refractive correction.
2. Move the chart box towards the nose from a far distance of about 33cm.
3. Stop when the line or dot becomes two (diplopia) for the first time.
4. The value of stop distance on front scale plus 2.7cm will be the distance of near point of convergence, and the recommended reference value is 8cm.

Amplitude of Accommodation Measurement



1. Examine the amplitude of accommodation in single eye after refractive correction, so that to remove the interference of binocular visus on the accommodation.
2. Move the chart box towards the nose from a far distance of about 33cm.
3. The lowest letter shall be selected as the fixation object if a vision above 0.6, and large size letters are selected as the fixation object with poor vision.
4. Stop when the fixation object is blurred for the first time.

5. The front scale is the near point of adjustment, and the right side is the corresponding amplitude of accommodation which can be read directly without calculation.
6. The left side corresponds to the corresponding age, check whether the measured results are consistent with the actual average age or not.
7. Presbyopic customers shall preset ADD in advance to match their ages, decreasing the preset ADD after the measurement, then you will get the amplitude of accommodation of the customers.

Visus / Amplitude of Accommodation Measurement



1. Monocular and binocular visual acuity examination at close range 40cm after refractive correction.
2. The chart box shall be placed at the distance of 40cm scale.
3. The visual acuity value below the horizontal line is 0.6-0.8-1.0, and the above is 0.5-0.4-0.3.
4. It can also be used for amplitude of accommodation measurement, which is in the same way as above. But the young children can report the literal direction E of vision during the measurement process.

Binocular Polarized Balance Measurement



1. After refractive correction, put the polarized lenses for both eyes, with a direction of R at 135 degree and L at 45 degrees.
2. The chart box shall be placed between 30 to 40cm. (keep the top lamp on)
2. See whether both charts can be seen. It will be deemed as inhibition if only one chart can be seen.
3. Let customer observe whether both charts are equally clear. If not there should be the following situation:

- ① It indicates that refractive quantitative correction may be wrong, and needs to pay attention to astigmatism examination.
- ② Inaccurate convergence (insufficient or excessive). The wrong eye cannot accurately bring the object to the central macular recess
- ③ Insufficient accommodation, the corresponding amplitude of the fuzzy side may be low.