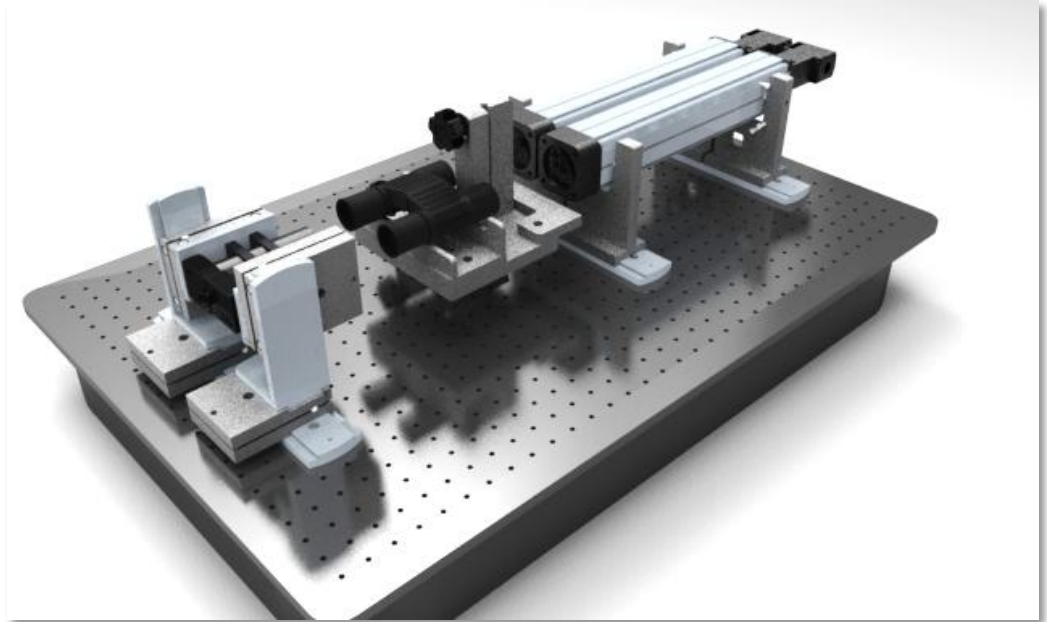


Model BIN100-48 | Binocular Bench

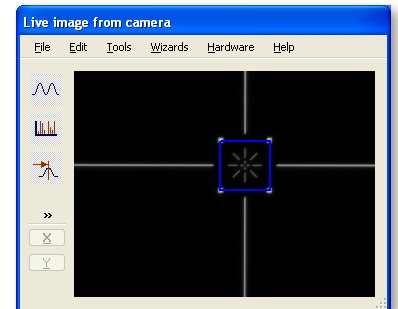
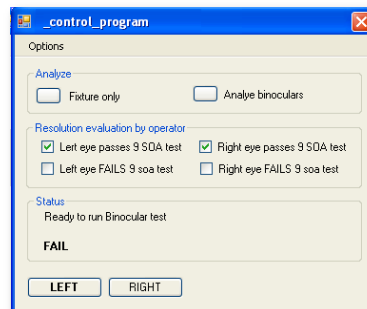


Primary purpose

The BIN-100 is designed for on-axis testing of high performance binoculars. Dual paths support both in-line and porro-prism type binoculars

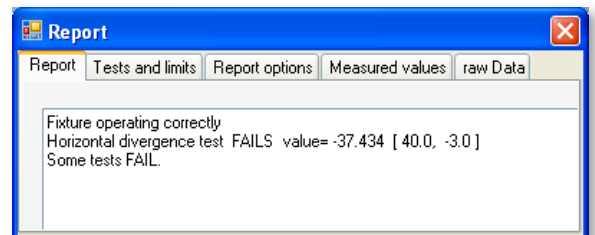
Tests Performed

- Collimation in both x and y planes
- Image quality
 - MTF
 - 3-bar contrast
- Magnification, image rotation
- Distortion, field Curvature
- Parallax, exit pupil



Typical test procedure

- Load binoculars into fixture, enter serial number
- Focus each eye for sharpest image
- Report is automatically generated



Parts List

Video Telescopes

- Two video telescopes, with 45 mm EFL objectives
- Two monochrome CCD cameras with 1280 X 96px resolution, 3.75 um pixels

Computer and software

- Laptop computer with OpticStudio software preloaded
- PixelScope OpticStudio analysis program
- Macro program to assist operator
- USB “dongle” required to run software

Sample Binoculars for Setup

- Pair of commercial M24 size binoculars
- Mounting nest for sample binoculars

Support

- 2 year warranty
- Perpetual software license
- 2 year software maintenance and support

Collimator Pair

- Two collimators, each with 400 mm EFL, 48 mm CA
- High precision tip/tilt stand for each collimator

Optical Table

- 600 X 900 mm (2 X 3 ft) optical breadboard table

Alignment Flat

- 200 X 50 X 10 mm flat for set up

Test Reticle

- Target with 9 SOA pattern (for 7X binocular)
- 3 other reticles for debug, including USAF

Binocular Nest

- Optional nest designed to fit customer binocular
- Tip/Tilt stand under binocular for easy set up