



## 75-H Transit Square

### Multi-purpose Transit with Optical Square

Please note that the 75-H is no longer a production item, but is often available as a refurbished unit. The 75-H has been replaced by the 76-RH.

The 75-H has precision telescope optics mounted on a solid-cast bronze horizontal axle which combine to produce a well-balanced instrument with feather-touch controls. Patented ball bearing mounts permit accurate sweeping of both horizontal and vertical planes.

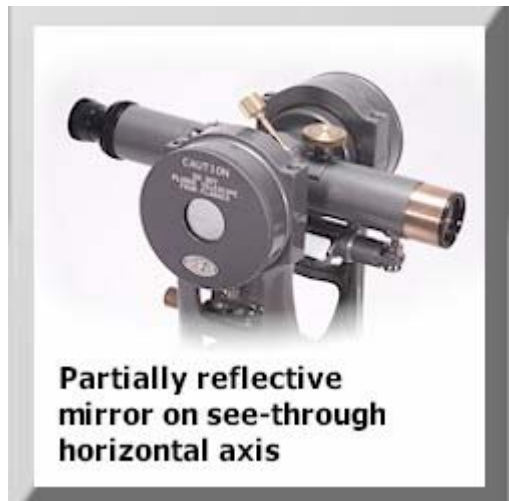
The defining characteristic of the 75-H, which distinguishes it from the 76-RH, is the hollow horizontal axis. A partially coated, optically flat mirror is mounted inside the horizontal axis and rotates with it. The hollow axis allows you to view the mirror with a second instrument from either side of the 75-H, in order to turn precise optical right angles. This feature gives you the power to use several instruments on the same optical reference line without disturbing their positions. It also provides a right angle check of the telescope's line of sight relative to the horizontal axis.

The 75-H also contains one of Brunson Instrument Company's original technological accomplishments - a see-through hollow vertical axis which allows plummet shots straight down. This is essential when it is necessary to mount the instrument directly above a particular reference point.

The model 75-H possesses the remarkable ability to "prove" each shot as it is made, removing any possibility of error due to maladjustment from rough handling, extreme temperature changes and other harsh environmental conditions. Optical technicians no longer need to rely on the optical bench of a calibration laboratory. They can verify the instrument's accuracy themselves where it counts the most - on the job.

The instrument comes equipped with a 194-TM coincidence level for precision leveling. The 194-TM has a 360-degree rotating turret to view the magnified bubble image from any position.

**Comes with or without a micrometer.** Measurements from the optical reference line are taken by using a telescope-mounted optical micrometer. The 75-H comes standard with a model 190 optical micrometer. In event that you do not want this micrometer, or would like to replace it with another one, the 75-H may be ordered without a micrometer, by using part number 2301-G6.



The 75-H also comes with a case, set of adjusting pins, instruction booklet, and plastic cover.

For additional general information about this instrument, read about our transits on our website.

## Specifications

**Telescope length:** 14" (measurement includes micrometer)

**Reticle:** Glass, filar/bi-filar pattern (others available)

**Magnification:** 20X at 2" from objective; 30X at infinity

**Focusing range:** 2" to infinity

**Field of view:** 1 degree

**Bearings:** Ball type with a runout of 0.000025" of an inch or less

**Image:** Erect

**Approximate weight:** Instrument, 34 lbs (15.4 kg); instrument and case, 54 lbs (24.5 kg); shipping, 56 lbs (25.4 kg)

**Optics:** Low reflective, protective coating

**Effective aperture:** 1.34"

## Accessories...

- 160-x Series Coordinate Optical Micrometers
- 186 Plastic Autoreflexion Target
- 188 Glass Autoreflexion Target
- 190-x Series Optical Micrometers
- 191 Combination Reticle Projection, Fixed Right Angle Eyepiece Unit (discontinued)
- 192 Auto-Collimation Unit (discontinued)
- 193 Right Angle Swivel Eyepiece (discontinued)
- 193-L Right Angle Swivel Eyepiece, Illuminated Adapter
- 196-1 Combination Projection, Auto-Collimation, Fixed Right Angle Eyepiece Unit