

WAVELINK

WL-1160

The Value Leader In Manual RF Probing

The WL-1160 is ideally suited for Wireless and Bluetooth applications, and like all WAVELINK probe stations incorporates independent wafer and calibration chucks, eliminating the tedious realignment step after cal. With 4-Point platen lift and support, 1.5" of platen travel, and non-resonant .5" steel platen, saving money doesn't mean accepting compromises. 6 and 8 inch models are available.



PERFORMANCE, QUALITY, VALUE

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Advanced Microprobing Solutions Since 1968

WAVELINK

Features & Benefits

1. Linear Platen Lift

This allows the platen to be raised up to .375" in a linear/planar motion for safe probe tip contact/separate. A friction clutch permits pausing the platen at any point in the travel, keeping the probe tips relatively in focus when moving the D.U.T. yet insures a hard "down-stop" to maximize over-travel correlation between calibration and test. An independent platen height adjustment (see #7) offers 1.75" of travel to support all your testing applications.

2. Vacuum Ports & Signal Connections

The standard WL-1160 supports up to 6 vacuum positioners per side, and includes color-coded electrical connectors terminated on the back apron. Banana connections are standard, with Triax or BNC connectors available as an option.

3. Large Steel Platen

The large steel platen is ground flat, planarized to the chuck, and provides bolt-down mounting of up to four 4-axis RF positioners, with room for additional vacuum and magnetic positioners for bias and control probes. An optional platen insert can be added for even more positioner flexibility.

4. 4 Point Platen Support & Lift

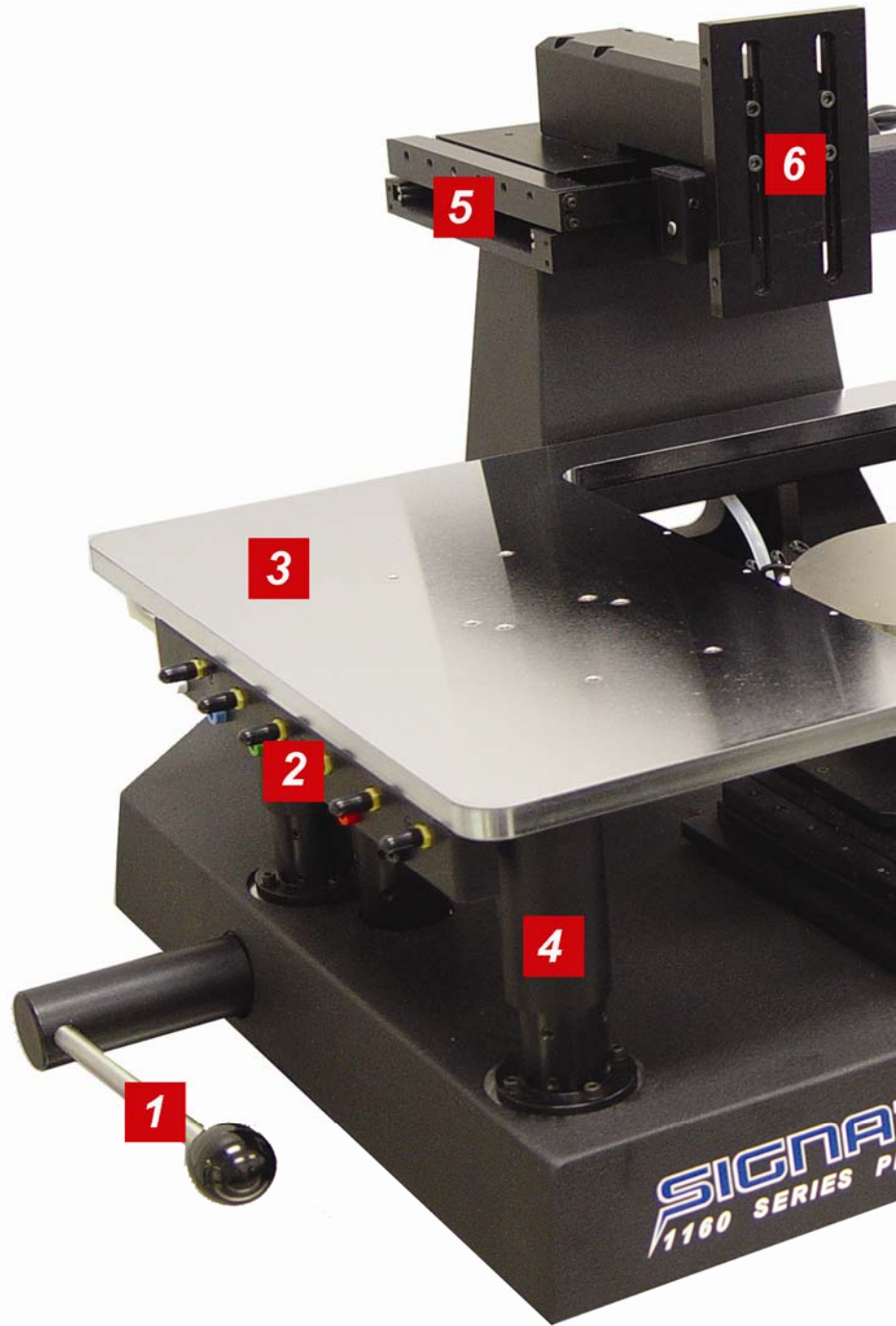
Designed to insure planarity of probe contact and to eliminate the resonance problems of cantilevered implementations. Four leadscrews are slaved together to insure that the platen remains planar throughout its 1.75" Z travel range.

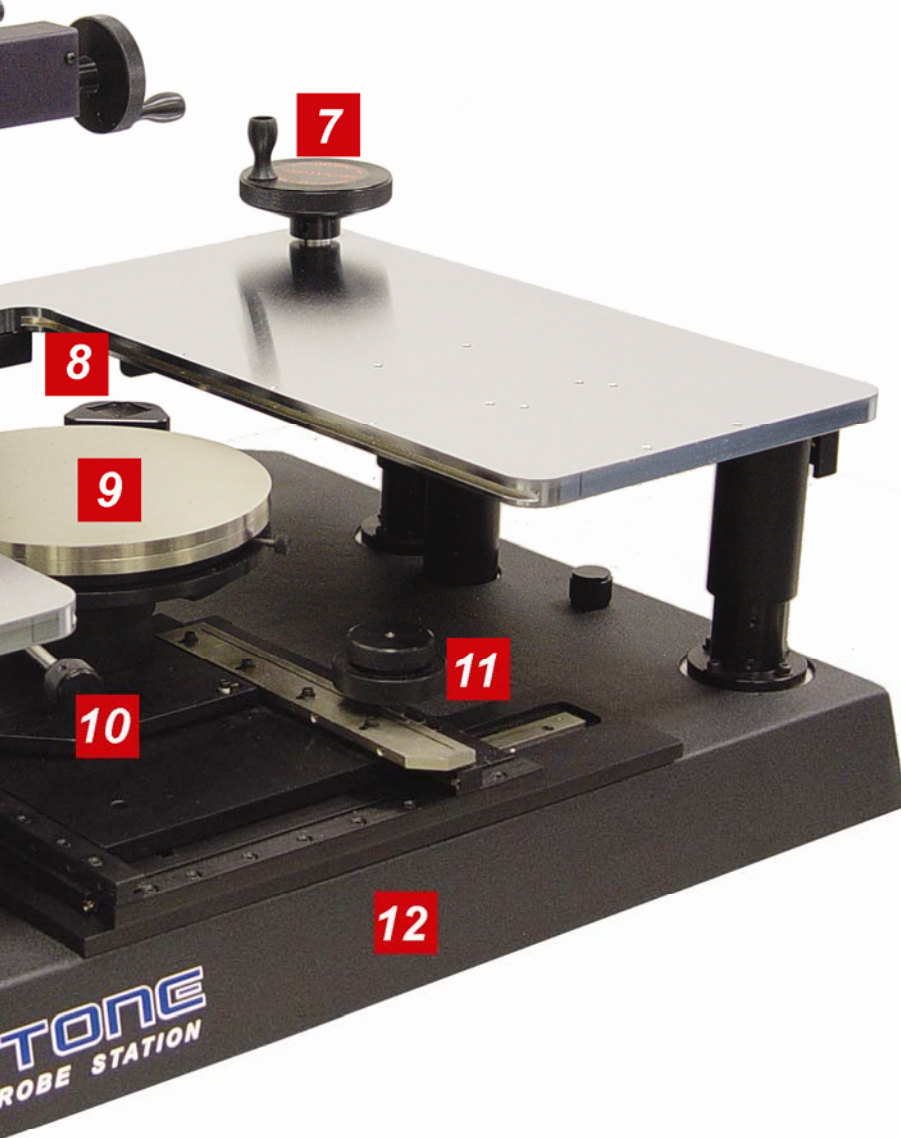
5. X-Y Microscope Transport

The standard WL-1160 microscope transport features independent X and Y knobs for true rectilinear control, rather than the more common and inconvenient boom-stand. The base configuration incorporates a rigid cast aluminum support tower for improved image stability and strength.

6. Microscope Mount

The WL-1160 offers 4 variants for mounting a wide range of optics. These cover the range from a simple fixed mount for stereo zoom microscopes, up to a 6" X 6" large-area transport X-Y with 2" X 2" fine motion for high-power optics.





7. Fine Platen Adjustment

This control knob enables the platen to be set for the desired fixture height, allowing for probe card setup, hot chucks, or fixtures for packaged parts and MCM's.

8. Calibration Chuck

The calibration chuck allows the user to perform calibrations without removing the wafer under test. Both portrait and landscape format substrates are supported, and the chuck is made from a non-resonant polymer for use at frequencies up to 110GHz.

9. RF/Microwave Chuck

Micro-machined vacuum holes avoid the resonance problems of vacuum ring designs. Chucks are available in 6", and 8" diameters, and are electrically isolated from the base station. A variety of chuck electrical connection methods may be employed to support your specific application.

10. Chuck Rotation Lever

The rotation lever will rotate the chuck 360° making it very easy to align with probe cards installed. An optional rotation lock (**SRL-160**) is available for locking the chuck in place once the D.U.T. has been properly aligned. The **SRL-160** is required for thermal chuck applications, and is strongly recommended for RF/Microwave applications.

11. XY Stage Control Knobs

The X-Y stage utilizes a rack & pinion drive for high precision positioning. The compound knobs permit easy chuck movement in both axes simultaneously. 6" and 8" versions are available and are field-upgradeable as your needs change. An optional fine-pitch drive assembly (**FS-160**) provides even greater precision in controlling the X-Y stage.

12. Rigid Cast Aluminum Base

The WL-1160 is built on a cast aluminum base with internal stabilizer ribs, resulting in a low-profile prober with internal mechanisms for platen support and lift, without sacrificing strength.

Features & Benefits

The WL-1160 RF/Microwave probe station has been designed for high-frequency, high-power, and millimeter-wave applications where non-resonant operation is critical.

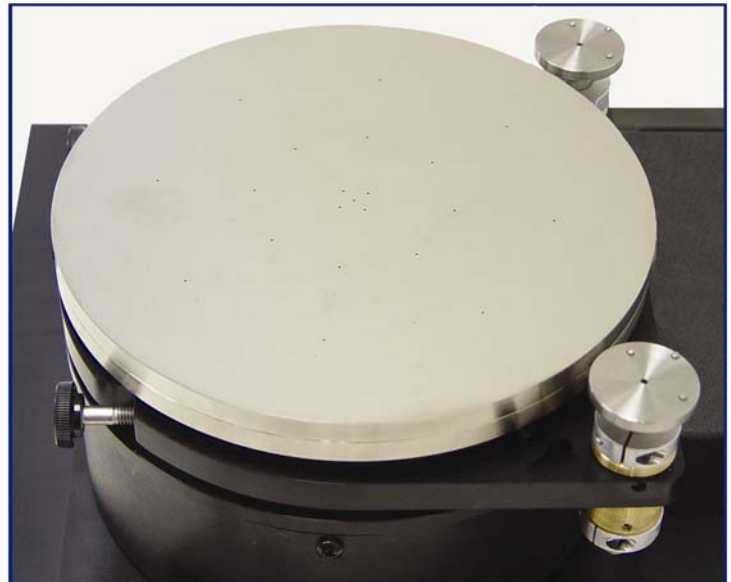
Intended for holding a wide variety of devices under test, the WL-1160 is available in either 150mm or 200mm configurations. The isolated calibration chucks are independently adjustable for theta, sparing you the need to realign the wafer after each calibration cycle. This eliminates a significant error term, improving calibration and test correlation at higher frequencies. The WL-1160 comes with a single calibration chuck, with a second chuck optionally available (as shown).

The base configuration includes a 2" X 2" microscope transport for optimal viewing of the test area. The WL-1160 supports most StereoZoom and high-powered microscopes in use today.

The WL-1160 uses the same stable platform as its sister product, the S-1160 multipurpose probe station. The S-1160 and WL-1160 share the same versatility that allows the use of probe cards, magnetic, vacuum, and bolt-down base micropositioners, thermal chucks, light-tight enclosures, and many more essential accessories that give users the tools they need to do their work.

Features:

- 150mm & 200mm manual X-Y motion control
- 50mm X 50mm microscope stage control
- Separate contact/separate and platen height control
- Up to 30mm Z motion control of platen
- Holds up to four S-96MW microwave micropositioners
- Vacuum and DC manifolds standard



The calibration chucks offer independent theta adjustment, eliminating the need to realign the wafer after calibration.

SPECIFICATIONS

Width.....	27 inches
Depth	22 inches
Height (with microscope) ..	19.5-22 inches
Shipping Weight.....	125 pounds
Vacuum Chuck	6" or 8" diameter - supports single die through 8" wafers
X-Y Stage Resolution.....	X motion @ 1.125" per knob revolution Y motion @ 1.6" per knob revolution
Coarse Platen Lift	3/8" linear with continuous friction stop
Fine Platen Lift.....	1 1/3" @ .025" per knob revolution
X-Y Microscope Stage	2" X motion @ .1" per knob revolution 1.8" Y motion @ .1" per knob revolution
Facilities Required.....	Vacuum: 20" Hg @ .1 CFM, Power for Microscope: 120V/60 Hz, 20 Watts

CONFIGURATIONS

ORDERING INFORMATION - Select the WL-1160 best suited for your application

WL-1160 [] - []

Microscope Mount Type
A = High-Powered Optics Mount
B = StereoZoom Optics Mount
C = StereoZoom Boom Stand

Chuck & Stage Range
6 = 6 inch (150mm)
8 = 8 inch (200mm)

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