
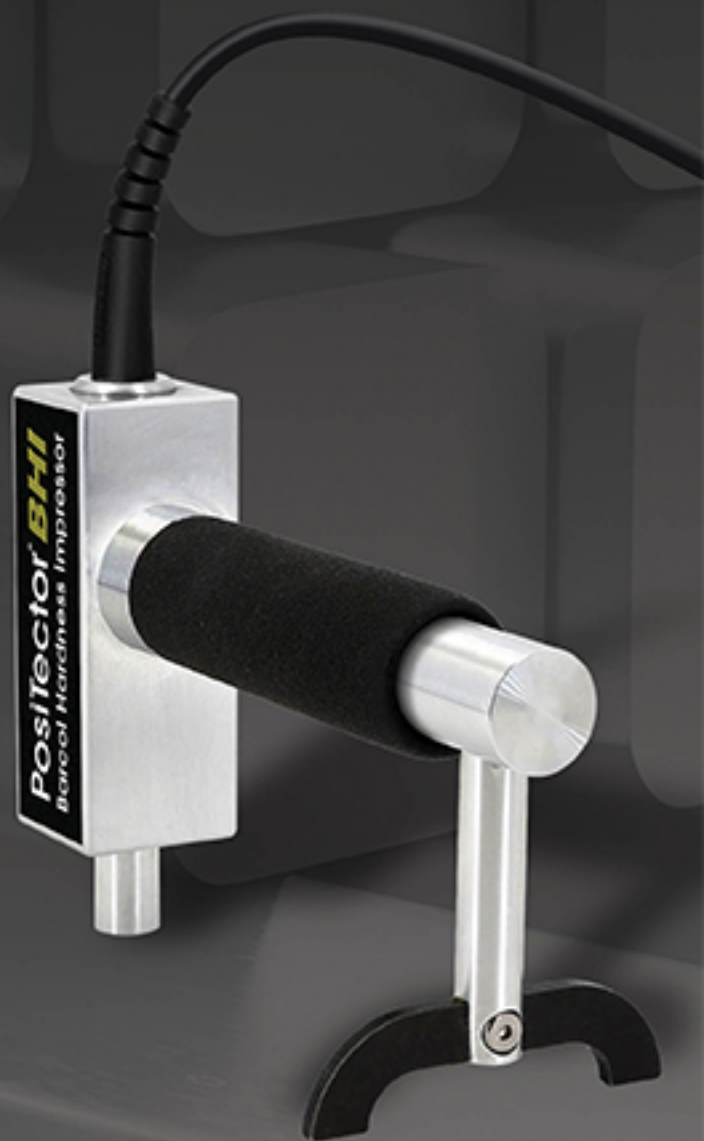


# PosiTector® **BHI**

## *Barcol Hardness Durometer*

 On-Gage Help Reference

Ayuda en el Medidor | On-Gerät-Hilfe | Aide sur l'instrumentation



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# Introduction

This Reference is a compilation of the On-Gage Help that is available on your PosiTector gage. To view these help items on the gage, enter the gage menu and touch the  icon or press the  button with the desired menu item selected.

For an overview of the use and operation of your instrument, refer to its included Instruction Manual or download a digital PDF at [www.defelsko.com/manuals](http://www.defelsko.com/manuals).

Update your gage to ensure your PosiTector includes these latest help references. Instructions are available at [www.defelsko.com/updates](http://www.defelsko.com/updates).

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# Memory

The PosiTector BHI Standard has internal memory storage for recording measurement data. Stored measurements can be reviewed on-screen or downloaded to a computer. Measurements are date and time-stamped. Store up to 1000 readings (per probe) into a single batch.

The memory icon appears and basic statistics are displayed when the Gage is set to store measurement data.

## NOTE:

Remove the last reading by pressing (-).

# View

Use the Up or Down buttons to scroll through information, statistical summary, and a list of each reading in the currently opened batch. Press the center navigation button to exit.

# Off

Turns memory off and stops recording (stored readings remain in memory)

# On

Turns memory on and begins recording measurements.

# Clear

Removes all stored readings from memory.

# Statistics

Menu option for configuring Statistics and HiLo Alarm modes.

## Statistics

Statistics mode continually displays/updates average, standard deviation, min/max thickness and number of readings while measuring.

When selected, the statistics icon and statistical summary will appear on the display.

Ignore the last measurement by pressing the (-) button. Press (+) to clear statistics.

## Clear

Clears all on-screen Statistics and HiLo tabulations.

## HiLo Alarm

Allows the Gage to visibly and audibly alert the user when measurements exceed user-specified limits.

When HiLo Alarm is selected, the current Lo setting is displayed. Adjust using the (-) or (+) buttons. Select Next to accept this value. The current Hi setting is now displayed. Repeat to adjust the Hi setting.

Each measurement will be compared to the defined Hi and Lo limits. The Gage beeps if results are within those limits. A single low tone will sound if the reading is below the Lo limit, and a high tone if it is above the Hi limit. Press (+) to clear HiLo readings.

The Statistics icon will appear on the display.

# Calibration Settings

## Calibration and Verification

Two steps ensure best accuracy:

1. Calibration - typically performed by the manufacturer. All probes include a Certificate of Calibration.
2. Verification of Accuracy - typically performed by the user on known reference standards such as the included Test Disk.

### Calibration

Calibration is the high-level, controlled and documented process of measuring traceable calibration standards over the full operating range of the probe, and verifying that the results are within the stated accuracy of the probe. Calibrations are performed by the manufacturer, their authorized agent, or by an accredited calibration laboratory in a controlled environment using a documented process.

### Verification

Verification is an accuracy check performed by the user on known reference standards. A successful verification requires the Gage to read within the combined accuracy of the probe and the Test Disks. Instrument operation may be verified with the included Test Disks and Leveling Plate. Position the Leveling Plate under the Leg and place the Test Disks on a flat, hard surface. Take three to five readings on each disk. The measurement points should be at least 6 mm (0.24 inch) apart. If the average of those readings is outside the combined accuracy of the Test Disk and gage, service may be required.

Some causes for the gage to not read properly are the indenter being damaged, incorrect pressure being applied to the test block or temperatures beyond normal conditions.

Verify accuracy at the beginning and the end of each work shift. During the work shift, if the Gage is dropped or suspected of giving erroneous readings, its accuracy should be re-verified.

## 1 Pt Adjust

Adjusts the Gage to a known material hardness.

Press the (+) button to select the number of readings to be used to obtain an average, typically 3 to 10 readings. The greater the variation between readings, the more readings should be taken to obtain an average.

Repeatedly measure the known hardness sample using the on-screen green arrows as a guide. After the final reading, the Gage will calculate and display an average

measurement value of all readings taken on the sample. If the expected hardness value is not obtained (within tolerance), adjust the displayed value up (+) or down (-) to the known hardness value and press the center navigation button to save the value.

## Zero

Zeroing the Gage may be necessary after indenter replacement or when the indenter is worn. For best accuracy, the Gage should be zeroed on the included glass plate.

Press the (+) button to select the number of readings.

Measure on the glass plate, ensuring that both the indenter foot and leg are resting on the glass plate. After the last measurement, the Gage will calculate a Zero which represents the average of all the Zero readings taken.

## Cal Reset

Restores the gage back to factory calibration. The factory calibration icon will appear on the display.

## 2 Pt Adjust

Adjusts the Gage within a range of two material hardnesses.

Press the (+) button to select the number of readings to be used to obtain an average for the first point, typically 3 to 10 readings.

Repeatedly measure the known hardness sample using the on-screen green arrows as a guide. After the final reading, the Gage will calculate and display an average measurement value of all readings taken on the sample.

Repeat above for second point.

# Setup

Set configuration options for the Gage.

## Set Clock

All measurements are date and time stamped (24 hour format) when stored into memory. It is therefore important to keep both the date and time current using this menu option. Use the Up and Down buttons to scroll, and the (-) and (+) buttons to adjust value. The Gage's date and time can also be viewed in Gage Info and on top of the main menu.

## Reset

Restores factory settings and returns the Gage to a known condition. The following occurs:

All batches, stored datasets, batch names and screen captures are erased.

Calibration adjustments are returned to the Gage's factory settings. The factory calibration icon will appear on the display.

Menu settings are returned to the following:

Memory = OFF  
Auto Sub-Batch = OFF  
Statistics Mode = OFF  
HiLo Alarm = OFF  
Bluetooth & Stream = OFF  
BLE Keyboard = OFF  
WiFi & Access Point = OFF  
USB Keyboard & Stream = OFF  
Auto Dim = ON  
Hi Res = OFF

Perform a more thorough Hard Reset by powering down the Gage, waiting several seconds, then simultaneously holding both the center navigation and (+) buttons until the Reset symbol appears. This returns the instrument to a known, out-of-the-box condition. It performs the same function as a menu Reset with the addition of:

Bluetooth Pairing info is cleared. Menu settings are returned to the following

Bluetooth Smart = OFF



Test Time = 1 second  
Sound = Medium  
Touch = ON  
Flip Lock = OFF  
Auto Sync .net = ON  
USB Drive = ON  
Language = English  
Battery Type = Alkaline

## NOTE:

Date, Time and WiFi are not affected by either Reset.

## Battery Type

Selects the type of batteries used in the Gage from a choice of Alkaline, Lithium or NiMH (nickel-metal hydride rechargeable). The battery state indicator symbol is calibrated for the selected battery type. No damage will occur if the battery type used in the Gage does not match the selected battery type.

## Sound

Adjusts the volume of built-in speaker (Off, Low, Medium, High).

## Continuous Reading

When enabled, the Gage will continuously display probe readings. Ideal when a test timer is not required or when performing a calibration verification. Continuous Reading is not available when Memory, Statistics, or HiLo Alarm modes are enabled.

## Touch

Allows the touch screen functionality to be disabled. All gage functions can also be controlled using the navigation buttons.

## Backlight

Selects display brightness (Sun, Normal or Night). If Auto Dim is enabled (default), the display dim slightly after a period of no activity to conserve battery life. Press the Down button to brighten the display.

## Flip Lock

Disables the Auto Rotate feature by locking the display in its current orientation.

## Language

Converts displayed and printed words to the selected language.

## Gage Info

Displays the model number and serial number, probe type and serial number, PosiSoft.net registration key, the amount of remaining memory for storage of readings, date and time, and software packages.

For security purposes, the registration key is required to add the Gage to your free PosiSoft.net account.

## Hi Res

Increases the displayed resolution. Accuracy is not affected.

## Test Time

The PosiTector BHI has an on-screen timer to measure the hardness of a material after a given period of time.

Use the (-) and (+) buttons to adjust the test duration. When taking a reading, the timer starts automatically once the indenter is on the surface and the Down arrow symbol appears on the display.

# Connect

Configure communication and connection options for the Gage.

## USB

Connect the Gage to a PC/Mac using the supplied USB-C cable. View and print readings and graphs with universal web browsers/file explorers or using PosiSoft Desktop.

### NOTE:

While connected, power is supplied through the included USB-C cable. The batteries are not used and the body will not automatically power down.

## Sync.net Now

When selected, the Gage immediately synchronizes stored measurement data to PosiSoft.net (USB connection required to a computer running PosiSoft Desktop).

Alternatively, select Auto Sync.net from within the USB connect menu to automatically synchronize upon connection to a PC. Additional measurements added to memory while connected are synchronized only when the USB cable is disconnected and reconnected, or when the Sync.net Now option is selected.

### NOTE:

PosiSoft Desktop is required when using USB connections to synchronize measurements with PosiSoft.net.

## USB Drive

When USB Drive is enabled, the PosiTector is recognized as a USB mass storage device which provides a simple interface to retrieve stored data in a manner similar to USB flash drives and digital cameras. USB Drive is also required to import stored measurements into PosiSoft Desktop. Once connected, any computer can view measurements stored in memory by navigating a virtual drive labeled PosiTector using the supplied USB-C cable.

### NOTE:

While connected, power is supplied through the included USB-C cable. The batteries are not used and the body will not automatically power down.

## JSON Files

When enabled (default), JSON schema files will be available in PosiSoft USB drive. Files can be parsed in to databases and custom software applications.

### NOTE:

Disabling this option may reduce the time required for the computer to recognize the PosiTector when first connected via USB.

## HTML Report

When enabled (default), a formatted HTML report is viewed by selecting the index.html or START\_HERE.html file found in the root directory. Optionally, text (.txt) files located in each batch folder provide access to measurement values. Stored readings and graphs can be viewed or copied using universal web browsers or file explorers.

### NOTE:

Disabling this option may reduce the time required for the computer to recognize the PosiTector when first connected via USB.

## Auto Sync .net

When enabled, measurements will automatically synchronize with PosiSoft.net when connected to a computer running PosiSoft Desktop. Additional measurements added to memory while connected are synchronized only when the USB cable is disconnected and reconnected, or when the Sync.net Now option is selected.

### NOTE:

PosiSoft Desktop is required when using USB connections to synchronize measurements with PosiSoft.net.

## Updates

Determines if a software update is available for your Gage.

To perform an update the Gage must be connected to an internet connected computer running PosiSoft Desktop.

See [www.defelsko.com/update](http://www.defelsko.com/update)

### WARNING:

The Gage will perform a Hard Reset after an update. All stored measurements will be erased from memory.

# Help

When a Menu option is highlighted, the (i) icon indicates on-gage help is available. Press (+) or touch the (i) icon to display the help. Update your gage to ensure that you have the latest on-gage help information.

A formatted PDF containing all on-gage help items is available at [www.defelsko.com/help](http://www.defelsko.com/help).

## Menu Operation

To access the Menu, power-up the gage, then press the center navigation button. Either the keypad or touch screen can be used to navigate the menu. If desired, touch screen functionality can be disabled within the Setup > Touch menu.

Select a menu option by touching it, or use the Up and Down buttons to highlight the desired option and press the center navigation button to select it.

On menus longer than one page, the current page number is displayed below the menu name. Navigate between pages using the Up button when the first menu item is selected, or Down button when the last menu item is selected. If using touch, navigate between pages by touching the left or right arrow, or by swiping up or down.

Press the (-) button or swipe right to return to a previous screen. Select Exit to close the Menu.

A menu option with a > indicates that a sub-menu exists for the Menu option. Select the option to display its sub menu.

## Screen Capture

Press both (-) and (+) buttons simultaneously to save an image of the current display. The last 100 screen captures are stored in memory and can be accessed when connected to a computer via PosiSoft USB Drive.

## Power Off

To conserve battery life, the gage will automatically go to sleep after 5 minutes of inactivity and enter Sleep Mode. While in Sleep Mode the gage powers up significantly faster— convenient when moving between parts or locations. The gage will completely power off after 4 hours of inactivity. Alternatively, select Power Off from the main menu. All settings are retained.

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