



# Digital Durometer & SmartCable™ Instructions



Made In U.S.A.



## OPERATING INSTRUCTIONS

### Choice of Three Power Sources...

#### 1. Batteries

The lithium battery used in this indicator is an IEC standard, type CR2450.

**Note:** This indicator has an **AUTO OFF** feature to conserve battery life. After 10 minutes of "no activity" (no key presses), the gage will turn itself off. This feature may be disabled if continuous operation is desired; see AUTO-OFF On/Off instructions on this page.

**Installing Batteries**-Using a narrow screwdriver, gently pry under the tab on the left side of the plastic bezel and slide out the battery tray as you turn the indicator face side down.

Insert two batteries, "+" side up, into tray cavities, then slide the tray back into its bezel slot, taking care that the batteries stay in proper position.

**2. AC Adapter 110V #G11-0012** First insert the mini-plug into the socket on the lower right side of the bezel, then plug the adapter into a wall outlet.

**3. AC Adapter 220V #G11-0014**

## BUTTON FUNCTIONS...

OFF/MODE	<b>Off</b> -turns indicator off <b>MODE</b> -controls absolute numbers & display setup
ON/CLR	On-turns indicator on <b>CLR</b> -resets the <i>Lock Toggle, Data I/O Type, gage resolution and Display setup mode</i>
HOLD	Allows you to hold the value on the display according to the specified Mode ( <i>MAX, MIN, FRZ</i> )
IN/MM	Controls the display units (default is English)
2ND	Controls the <i>Lock Toggle, I/O Type, gage resolution, Travel Reverse, Auto Off and Display setup mode</i>
TOL	Controls <i>Low, High and On</i> tolerance settings

**Power On/Off** - To turn the unit on, press and hold **ON/CLR** unit indicator turns on. To turn off, press **OFF/MODE**. **Auto-Off Toggle**-To turn the **Auto-Off** function on or off, press the **2ND** button (**2ND ICON** should appear on the display). Press the **OFF/MODE**.

An hour glass appears at the left side of the display if **Auto- Off** is active. If **Auto-Off** is active the indicator will power off in 10 minutes with no activity.

**Hold Mode**-Allows you to hold the value on the display according to the specified mode. **MAX**-Holds and displays the highest reading attained. **MIN**-Holds and displays the lowest reading attained. **FRZ**-Holds and displays the reading displayed when **HOLD** is engaged.

To select type of **HOLD (MAX, MIN, FRZ)**: Press **HOLD** until desired feature is flashing, then release **HOLD**.

**Note:** Pressing **ON/CLR** button resets indicator to spindle position except in **FRZ**; resets to zero.

**Tolerance On/Off** - Press **TOL** to toggle tolerance mode on and off. If no tolerances are programmed into the gage, then **tol** is displayed to indicate an invalid tolerance setting and the **HIGH** and/or **LOW** icons flash on and off.

When the tolerance settings are incorredt (high, low or both) the corrrponding icon or icons will flash.

**Tolerance Settings** - Continuously press the **TOL** button to activate the tolerance menu (**LOW, HIGH, ON**) and view the low and high tolerance settings. If no preset tolerance number is set into the gage then zero will be displayed. When viewing low or high, that icon will flash.

**Set High Tolerance Number** - To change to high tolerance settings: Press **2ND** button (**2ND** icon should appear on the display). Press the **TOL (CHANGE)** button. High icon will be flashing. Use the secondary function buttons, **CHANGE** and **MOVE** to set your tolerance setting, After you have set your high tolerance setting, press **APPLY** to store numbers to memory.

**Set Low Tolerance Number** - To change to low tolerance settings: Press **2ND** button (**2ND** icon should appear on the display). Press the **TOL (CHANGE)** button. Low icon will be flashing. Use the secondary function buttons, **CHANGE** and **MOVE** to set your tolerance setting, After you have set your low tolerance setting, press **APPLY** to store numbers to memory.

**Note:** Once high and low tolerances are set, the numeric readings will flash when your readings are out of tolerance.

**Lock Toggle** - When the **LOCK** is on, a key icon is displayed. When the **LOCK** is on, all of the setting modes are disabled, and all 2nd and 3rd functions are disabled except the lock/unlock sequence. Press the **2ND** button (**2ND** icon should appear on the display). Press **ON/CLR**. Press **TOL**. A key symbol will appear on the display when the features are locked.

**Lock Combination** - Press the **2ND** button (**2ND** icon should appear on the display), then press **ON/CLR**. Continuously press **TOL** until **000** appears on the display. Use the **CHANGE** and **MOVE** button to set your lock combination. After you have set your 3 digit lock combination press **APPLY**. A key symbol will appear on the display and your 3 digit combination is stored in memory.

**Warning:** To change functions after the indicator has been locked with a combination, the correct combination must be applied.

**Reset to Factory Defaults** - This will set all features and functions back to the factory default settings. Press the **2ND** button (**2ND** icon should appear on the display), followed by **ON/CLR**, then press **IN/MM**.

**Note:** Factory defaults cannot be reset if the **LOCK** feature is on.

**USB: Digital Durometer SmartCable™ 511.600**

See reverse side for SmartCable™ instructions.





# Digital Durometer SmartCable™ Instructions



## PTC's Digital Durometer SmartCable™

The output of the Smart Cable is a standard USB 2.0 keyboard signal. Connecting the Smart Cable to a PC will allow the Smart Cable to be identified as a USB keyboard device that can send data to any Microsoft Windows application from the Digital Durometer.

When the Smart Cable is plugged into the computers USB port, it provides power to the Durometer. As a result there is no need to use the Durometers batteries or AC power adapter.

### ***Starting Operation***

Connecting the Smart Cable to the computer for the first time with "Plug and Play" enabled, the Microsoft operating system will report " new hardware found" and display a message stating that it is a USB keyboard device. This refers to the integrated circuit within the Smart Cable.

### ***Getting Ready for Durometer Hardness Readings***

Open a new file in Excel or any Microsoft supported application. In Excel place the cursor in the cell in which you want to record the data. The Durometer will then send data directly into an Excel spreadsheet. Start by pressing either the Foot or Hand Switch.

### ***Options for instantaneous or timed hardness readings permitted by ASTM D2240.***

The Smart Cable will be in a mode where it is always ready to read the durometer gage with the instantaneous reading followed by a 10 second delay.( Rotary Switch set at 6. ) In this case, the LED will be steady green. Readings can be triggered by a Foot or Hand Switch.

Readings can be sent to any Windows application's cursor point or highlighted cell.

Rotary Switch Setting. ( Internal )

6- Timer Delay Mode- instant reading followed by 10 seconds between readings

8- Continuous Readings

9- Continuous Readings with an interval of 10 seconds between successive readings intervals

Batteries or AC power are not required when Smart Cable is attached to the computer.

**NOTE\*** The PTC® SmartCable™ requires the Hand Switch or the Foot Switch to send the signal to the PC. Be sure to order one or both.

Hand Switch Part #511.351 6 ft.

Foot Switch Part #511.350 6 ft.

20' cable available upon request.

