

# MESUR™ Lite Software

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## ***User's Guide***

**M A R K - 1 0**®

## WELCOME

MESUR™ Lite software is a basic data collection program designed to acquire data from a Mark-10 force or torque gauge with data output. Continuous or single readings may be acquired, and saved data from compatible Mark-10 gauges may be downloaded. Data can then be exported to *Microsoft® Excel*.

This User's Guide provides detailed operating instructions. For additional information or answers to your questions, please do not hesitate to contact us. Our technical support and engineering teams are eager to assist you.

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## 1 STARTUP

### 1.1 Computer Requirements

A personal computer running *Microsoft® Windows* 2000 or later operating system, with screen resolution of 1024 x 768 minimum, is required to run MESUR™ Lite software. A USB or RS-232C serial port ("COM" Port) is required to communicate with a gauge. A CD-ROM drive is needed for software installation, or the program may also be downloaded from the Mark-10 website.

### 1.2 Installation Instructions

Insert the Mark-10 Resource CD into the computer's CD-ROM drive. Navigate to the MESUR Lite folder, locate and click the file *setup.exe*, then follow the prompts.

### 1.3 Running MESUR™ Lite Software

When the installation is complete, run MESUR™ Lite by clicking the Windows **START** button, locating "MESUR Lite by Mark-10" under "Programs", and then clicking "MESUR Lite".



**You must enable full Administrator privileges on your PC to ensure proper functioning of MESUR Lite.**

### 1.4 Windows Security Settings

#### Procedure for Windows 7 & 8

1. Log on to *Windows* as an administrator or as a user with administrator privileges.
2. Right-click on the MESURgauge software icon on the Desktop, select *Properties*, and then click the *Compatibility* tab.
3. At the bottom of the screen, check the box *Run this program as an administrator*. Then

click the button below it, labeled *Change settings for all users*. Then, click OK.

### Procedure for *Windows XP*

1. Log on to *Windows* as an administrator or as a user with administrator privileges.
2. Right-click the MESUR™ Lite software icon on the Desktop, select *Properties*, then click *Find Target*. Navigate to the program folder directory in *Windows Explorer* where MESUR™ Lite was installed (default location is C:\Program Files\Mark-10 Software).
3. Right-click the *Mark-10 Software* folder and select *Properties*. In the *Security* tab click *Advanced*, then click on all of the users or groups desired and click *Edit*. Check the *Allow Full control* box. Then click OK three times to close the dialog boxes.

If further instructions are required, consult your IT administrator.

## 1.5 Menu Items (available in all tabs)

### File

*Factory Defaults* – Click to restore the factory default settings.

*Close* – Click to exit MESUR™ Lite .

### Help

*Show Tip Strips* – Check this box to show “tip strips” (also known as “tool tips”). These are text boxes that appear when the cursor hovers over an object or area of the screen. Right click on an object, then click “Description and Tip...” for more detailed information.

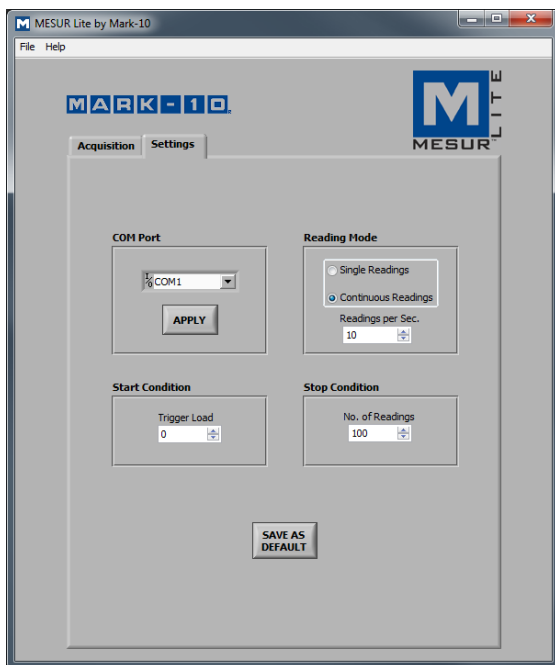
*MESUR™ Lite User's Guide* – Click to open the user's guide PDF document.

*Mark-10 Website* – Click this to link to the Mark-10 website.



Click the logo to display general software information.

## 2 SETTINGS TAB



Use this screen to select the PC's COM port number, reading mode, and start and stop triggers. These settings can be saved as default.

### 2.1 Compatible Gauges

Any Mark-10 gauge with RS-232 or USB output may be used with MESUR™ Lite, as long as the communication parameters match the following settings:

**9,600 baud**  
**8 data bits**  
**1 stop bit**  
**No parity**

If the gauge settings do not match, a communication error message will be displayed.

### 2.2 COM Port

Select the appropriate COM port from the drop-down list. Clicking **REFRESH** updates the list with all installed ports. The COM port associated with the gauge can be identified under the *Ports* sub-section of *Device Manager* in *Windows*.

**APPLY**

Click after changing the COM port number or after making any communication setting changes in the gauge while MESUR™ Lite is running.

## 2.3 Reading Mode

**Single Readings**

When this option is selected, the currently displayed reading on the gauge is sent every time the gauge's **DATA** button is pressed, or when the **READ** button in the **Acquisition** tab is pressed (this button appears only when *Single Readings* is selected).

**Continuous Readings**

When selected, readings are continually requested from the gauge at a rate set in the *Readings per Second* field. Data transmission starts and stops according to the programmed start and stop conditions (see below).

**Readings per Second**

This numeric box sets the data capture rate. Available range is 0.1 to 10 readings per second.

## 2.4 Start Condition

Data transmission will start when a load trigger has been reached. Type the desired load into this field. The unit of measurement matches the unit set in the gauge. Setting a value of 0 will start data acquisition as soon as the **START** button is pressed in the **Acquisition** tab (refer to the next section for details).

**Note:** The start condition applies for *Continuous Readings* only.

## 2.5 Stop Condition

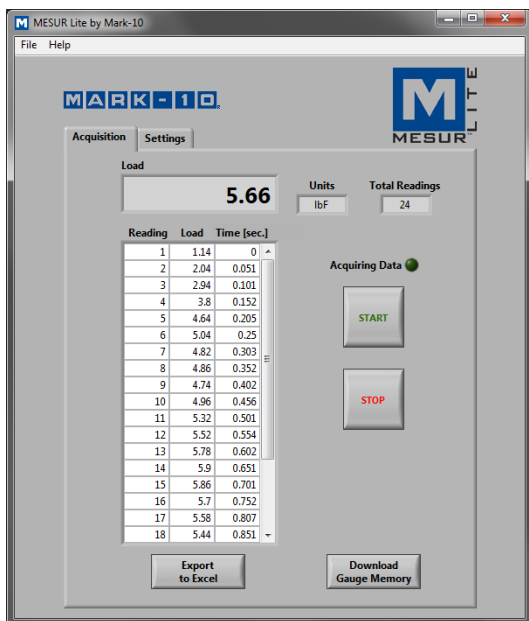
Data transmission will stop when the programmed number of readings have been collected. Up to 5,000 readings may be set.

**Note:** The stop condition applies for *Continuous Readings* only

## 2.6 SAVE AS DEFAULT

All parameters in the **Settings** tab are saved as default. They are restored any time MESUR™ Lite is launched.

### 3 ACQUISITION TAB



Use this tab to start and stop the test and observe the collected data in tabular format. From this tab, it is also possible to download saved data from a compatible Mark-10 gauge's memory, and also to export data to *Microsoft® Excel™*.

**Note:** To communicate with MESUR™ Lite, the gauge must be in the main operating mode, not in a menu or configuration area. A communication error message will appear if an incompatible gauge is used (i.e. a gauge which does not have the Memory Storage function).

#### 3.1 START

Arms MESUR™ Lite to start collecting data. For *Continuous Readings* mode, data transmission will start when the start condition in the **Settings** tab is met. For *Single Readings* mode, individual data points must be manually sent from the gauge, or requested from MESUR™ Lite by pressing the **READ** button (appears only when *Single Readings* mode is selected). When **START** has been pressed, the "Acquiring Data" green indicator is illuminated.

#### 3.2 STOP

Stops the test and disarms MESUR™ Lite. For *Continuous Readings* mode, data transmission will stop automatically when the stop condition in the **Settings** tab has been met. For *Single Readings* mode, **STOP** should be pressed after all desired data has been received. When the test is completed, the "Acquiring Data" indicator will turn off (dark green).

### 3.3 READ



Requests the currently displayed value from the gauge.

**Note:** This button is only visible when *Single Readings* mode is selected. It is located below the **STOP** button.

### 3.4 Load

Displays the current load requested from the gauge.

### 3.5 Unit

The unit of measurement received from the gauge. The gauge must be configured to send data with units, otherwise this field will be blank. Refer to the gauge's user's guide for details.

### 3.6 Table

Contains the reading number, load reading from the gauge, and relative time stamp (only if the Reading Mode is set to *Continuous Readings*) for each data point.

### 3.7 Total Readings

The total number of readings taken during the test.

### 3.8 Export To Excel

Clicking this button launches *Excel* (if installed, sold separately) and populates a worksheet containing reading numbers, load, and relative time stamp (only if the Reading Mode is set to *Continuous Readings*) directly into a worksheet.

### 3.9 Download Gauge Memory

Downloads saved data from a compatible gauge.



*Mark-10 Corporation has been an innovator in the Force and Torque measurement fields since 1979. We strive to achieve 100% customer satisfaction through excellence in product design, manufacturing and customer support. In addition to our standard line of products we can provide modifications and custom designs for OEM applications. Our engineering team is eager to satisfy any special requirements. Please contact us for further information or suggestions for improvement.*



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**Mark-10 Corporation**

11 Dixon Avenue  
Copiague, NY 11726 USA  
1-888-MARK-TEN  
Tel: 631-842-9200  
Fax: 631-842-9201  
Internet: [www.mark-10.com](http://www.mark-10.com)  
Email: [info@mark-10.com](mailto:info@mark-10.com)