

# MESUR Lite Software

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## User's Guide

**MARK - 10**®

## 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.

### 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".

### Important Note About Windows Security Settings

For full functioning of MESUR Lite, the permissions of the default installation folder must be set to *Full Control*. To access these settings, browse to the installation folder in *My Computer* or *Windows Explorer* (default is C:\Program Files\Mark-10 Software\). Right-click the folder, select *Properties*, select the *Security* tab, then enable *Full Control* for the appropriate Group or User Name. If further instructions are required, consult with an information technology administrator.

## 1.4 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. (Note: Adobe Reader is required and is downloadable at [www.adobe.com](http://www.adobe.com)).

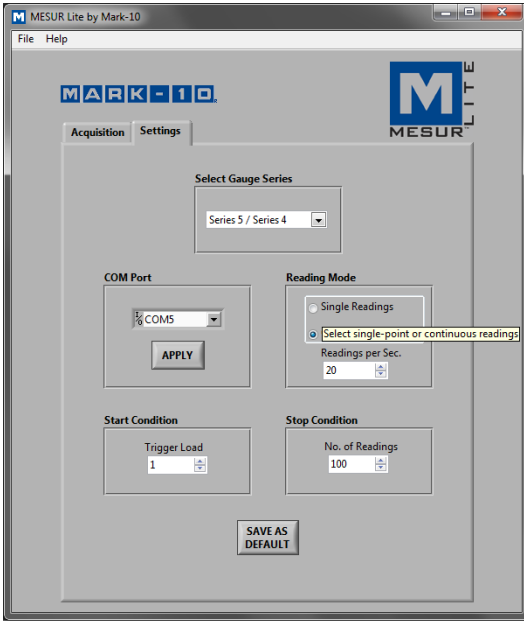
*Mark-10 Website* – Click this to link to the Mark-10 website. (**Note:** An internet connection and a browser is required).



Click the logo to display general software information.

## 2 SETTINGS TAB

Use this screen to select the gauge series being used, the PC's COM port number to which the gauge is connected, reading mode, and start and stop triggers. These settings can be saved as the default. They will be restored anytime MESUR Lite is launched.



### 2.1 Select Gauge Series

Select the appropriate gauge from the drop-down list.

**Note:** If using a Mark-10 Series 5 or 4 gauge, be sure to select USB or RS-232 in the gauge's *Serial/USB Settings* menu, depending on whether a USB cable or RS-232 cable will be used for communication. Refer to the gauge's user's guide for details.

### 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 or after making any communication setting changes in the gauge while MESUR Lite is running.

**Note:** COM port settings in MESUR Lite are fixed as follows:

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

Ensure that the gauge's communication settings match these settings. If the settings do not match, a communication error message will appear. Refer to the gauge's user's guide for details.

## 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 taken from the gauge at a rate set in the *Readings per Second* field. Data transmission is initiated and terminated according to the programmed start and stop conditions (see below).

### *Readings per Second*

This numeric box sets the number of readings per second MESUR Lite requests readings from the gauge. Available range is 0.1 to 10 readings per second.

## 2.4 Start Condition

Data acquisition 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 threshold 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).

## 2.5 Stop Condition

Data acquisition will stop when the programmed number of readings have been collected. Up to 1,000 readings may be set.

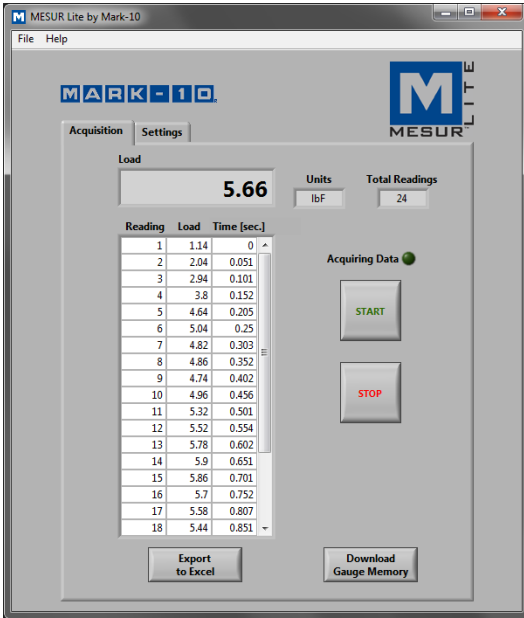
## 2.6 SAVE AS DEFAULT

All parameters in the Settings tab are saved as default upon opening MESUR Lite.

### 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, and also export data to *Microsoft® Excel™*.

**Note:** To communicate with MESUR Lite, the gauge must be in the main operating mode (i.e. not in a menu or configuration area). A communication error message will appear if an incompatible gauge is used or if a Series 5 or 4 gauge is not in the main operating mode.



#### 3.1 START

Starts the test. Readings from the gauge are captured when the start condition in the **Settings** tab is met. When **START** has been pressed, the “Acquiring Data” indicator above turns on (bright green).

#### 3.2 STOP

Stops the test. Data collection will stop automatically when the stop condition in the **Settings** tab has been met. When the test is completed, the “Acquiring Data” indicator will turn off (dark green).

#### 3.3 Load

Displays the current load requested from the gauge.

### 3.4 Units

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.

### 3.5 Table

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

### 3.6 Total Readings

The total number of readings taken during the test.

### 3.7 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 Data) directly into a worksheet.

### 3.8 Download Gauge Memory

Downloads saved data from a Series 5 or Series 4 gauge.



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*We make a measurable difference in force and torque measurement*

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