THE GOLFWORKS®

Instructions For:

Auditor Integra Digital Loft & Lie Bending Gauge

Code: **GM1037**

Auditor Digital Lie and Loft Bending Gauge

OPERATION MANUAL
150330D

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Introduction

The Auditor Digital Lie and Loft Bending Machine was designed for and built around the modern iron and hybrid head, with an emphasis on usability, reliability, and precision. Fitted with our latest Auditor π Engine (A.P.E.) and coupled with a unique design, this bending machine and measuring gauge provides an ideal mix of accuracy and ease.

The A.P.E.'s high precision digital encoder is capable of generating 3600 pulses per rotation which translates to a resolution of 0.1 degree per pulse. With that kind of accuracy you are capable of measuring and bending clubs to the same exact standards demanded by today's Tour players.

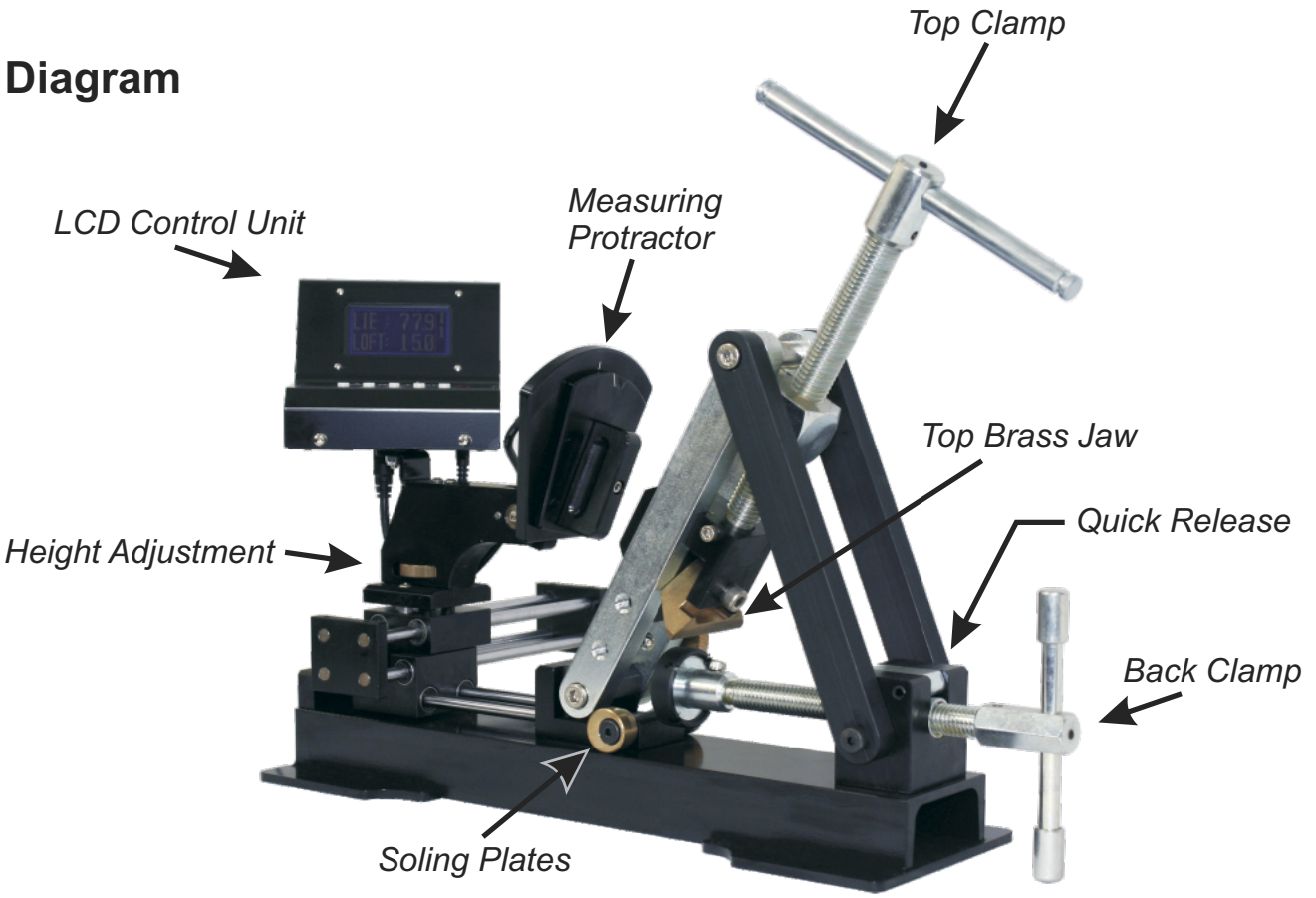
For ease-of-use and to minimize errors, lie and loft are measured simultaneously in a single setup and displayed on a large blue LCD screen.

The A.P.E. engine can store loft and lie measurements for up to 17 clubs. Or, for those technicians who seek increased storage for record keeping or data analysis, a USB port with the provided Auditor π software allows you to transfer your readings directly to a host computer.

The 100% milled construction is uniquely designed to free the leading edge and bounce of the iron head while providing two stable support points. Moderate clamping pressure from the upper clam is all that is needed to secure the clubhead while avoiding mars or nicks.

A back clamp with a quick-release toggle offers additional clamping support when required. The Auditor Digital Lie and Loft Bending Machine is suitable for measuring and bending irons and hybrids – both right and left hand.

Diagram



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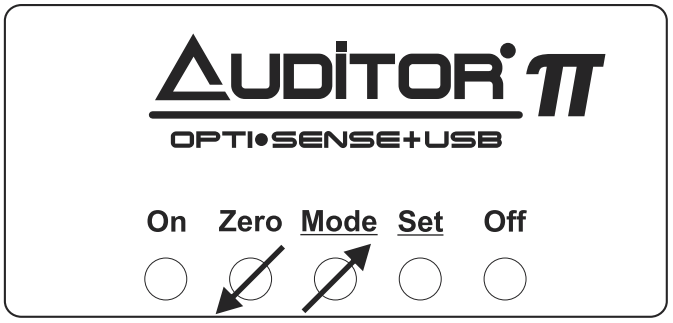


Key Board Functions

ON Turns power On.

Zero Invokes the instrument's origin setup routine.

Also invokes the differential measurement function for comparing clubs.

When in Page mode, the **Zero** key toggles down to the next club in the set; from the shortest to the longest club.

Mode Activates the paging function. When the paging function is active a " **P** " is displayed in the bottom right corner of the screen.

Toggles up to the next club in the set; from the longest to the shortest club.

Set Activates the Memory function. When the memory function is active " **M** " is displayed in the bottom right corner of the screen.

Commits the values displayed to memory; including club type, club number, lie, loft, and face angle, when applicable.

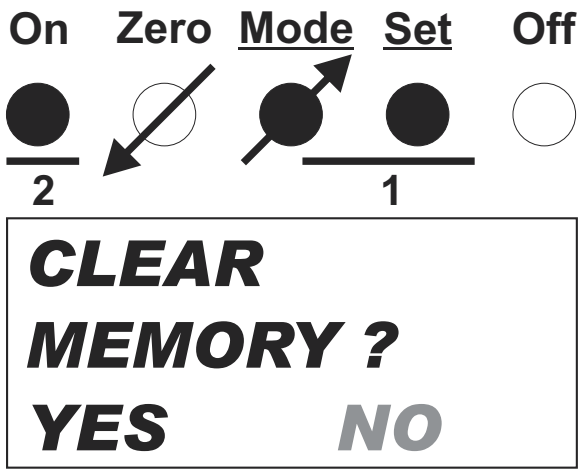
Off Puts the instrument to sleep. If provided; disconnect the battery power pack to prolong battery life.

1. Clearing data stored in memory

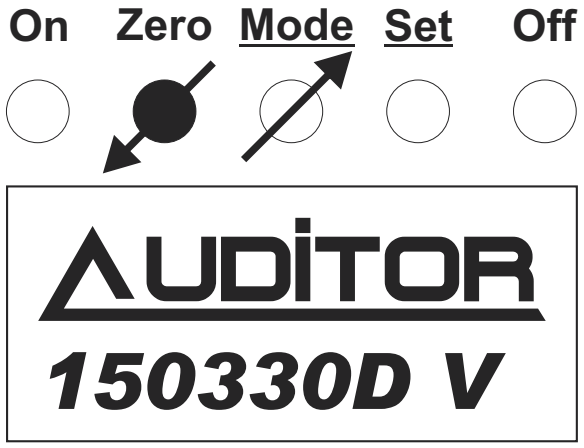
The A.P.E. memory is pre-mapped to save data for most common club head denominations, eliminating manual data gathering. When applicable, it is suggested to transfer stored data from the A.P.E. to a host PC. Once transferred, data can be cleared from the A.P.E. to free up additional memory.

1.1 To clear data saved in memory, the A.P.E engine must be turned off first. Then to clear the memory:

Simultaneously press and hold **MODE** and **SET** keys. While still holding **MODE** and **SET,** press the **ON** key**.** Release and you will be prompted with **CLEAR MEMORY** screen.



1.2 To select YES press the **Zero** key**.** The A.P.E. will restart with a clear memory buffer. Press the **Set** key to select NO.



1.3 When prompted for **MC REF** proceed as directed in section 2.

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2. Getting Started – Setting Machine Reference / MC REF

The A.P.E. engine performs lie and loft measurements using an optical encoder that measures displacement relative to frame of reference. The frame of reference is called the "Machine Reference" or MC REF.

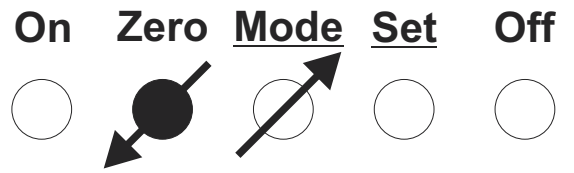
Before doing any lie/loft measurements, you must first set your device's MC REF to the correct base coordinates – (Lie=90, Loft=15)

When you turn on the A.P.E. you will be prompted to set the MC REF.

At the machine reference **MC REF** prompt, set your measuring gauge so that all scales are fixed to their respective origin: Lie=90, Loft=15.

2.1 For Loft; Pull the measurement protractor all the way forward until it stops. For Lie; Use the centering pin to align the two white lines on the protractor

With the guage set up as directed, select YES (ZERO) to set **MC REF.**



SET
MC REF ?
YES **NO**

3. Measuring Mode

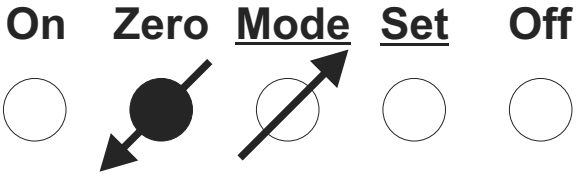
The A.P.E. offers two measuring modes: Standard and Differential. In Standard mode the device measures standard club loft and lie.

Differential mode allows the user to set a target specification to memory. Once set, all future measurements will be displayed as a differential value relative to the target. For example, if the target LOFT is set at 56° and your SW measures at 57°, in Differential mode the LOFT data will be displayed at 1°, indicating it is 1° above the target.

4. Using Differential Mode

Choose a club with the loft and lie specifications you want to target. While in Standard mode, mount and measure it.

When the lie and loft measurements appear on the screen, press "ZERO". This will prompt you to SET ORGIN. Press "ZERO" again for YES.



SET
ORIGIN ?
YES **NO**

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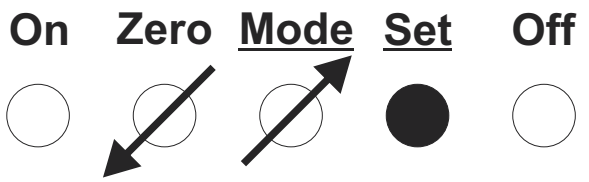
When prompted to SET MC REF press "Set" for No. Your target lie and loft specifications are now saved to memory. Any future measurement will be in differential format, relative to the target measurement.



5. Saving club-head measurements

The **save mode** "**M**" is activated by pressing **SET.** While in "**M**" mode, **SET** is used to overwrite existing data or to jump to the next club in the sequence.

To maintain data integrity and eliminate errors, remember:

a. To **clear** the A.P.E. **memory** of previously saved data as described in 1.0.

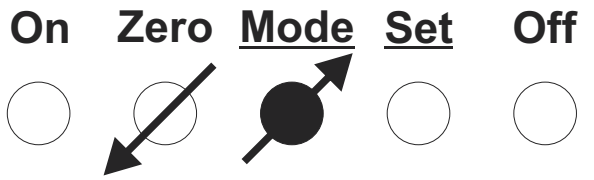
b. To **navigate** to the club for which data is to be saved **prior to** taking the measurements.

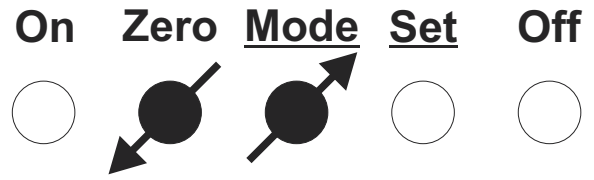
c. To find a **previously saved** a club:

i) Switch to "**P**" mode to navigate to the club-head of interest.
ii) Switch back to "**M**" mode.
iii) Take your measurement and save it.

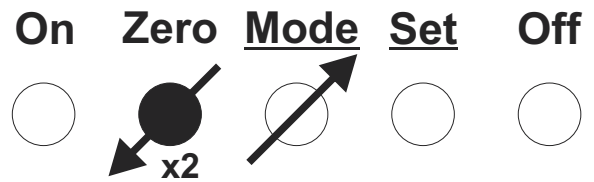
6. Paging Mode

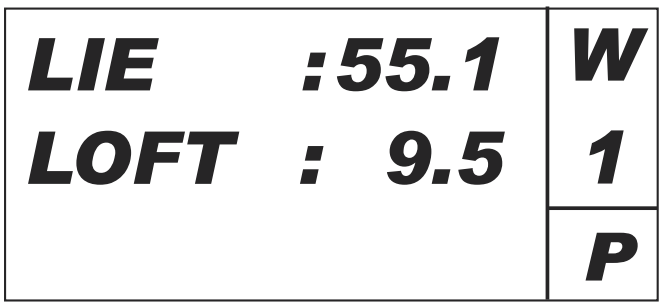
To access saved measurements, press the Mode button until a **"P"** appears. Use the up or down arrow to cycle through data. Clubs with no data are marked **"-.-".**





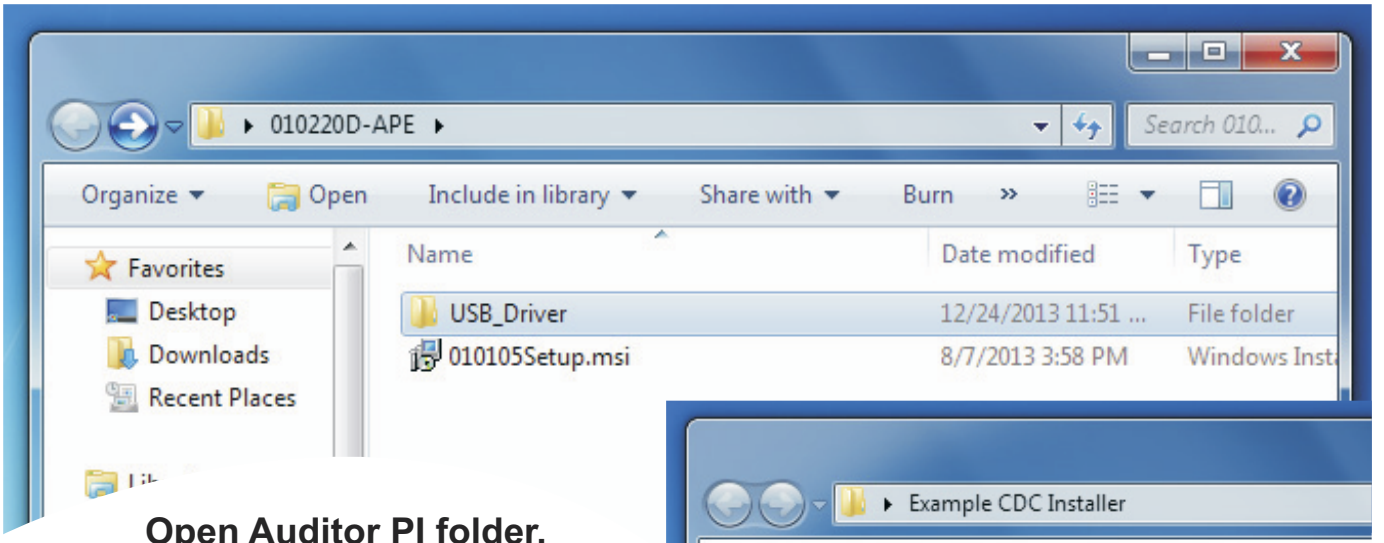
"-.-" Indicates that the 5W has no data. Press **Zero** twice to toggle down to **W1.**



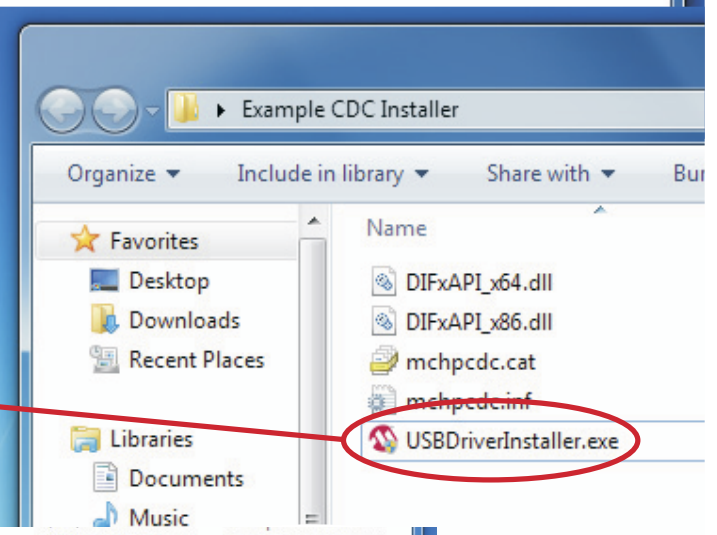


The data for this club head was previously saved and is displayed accordingly.

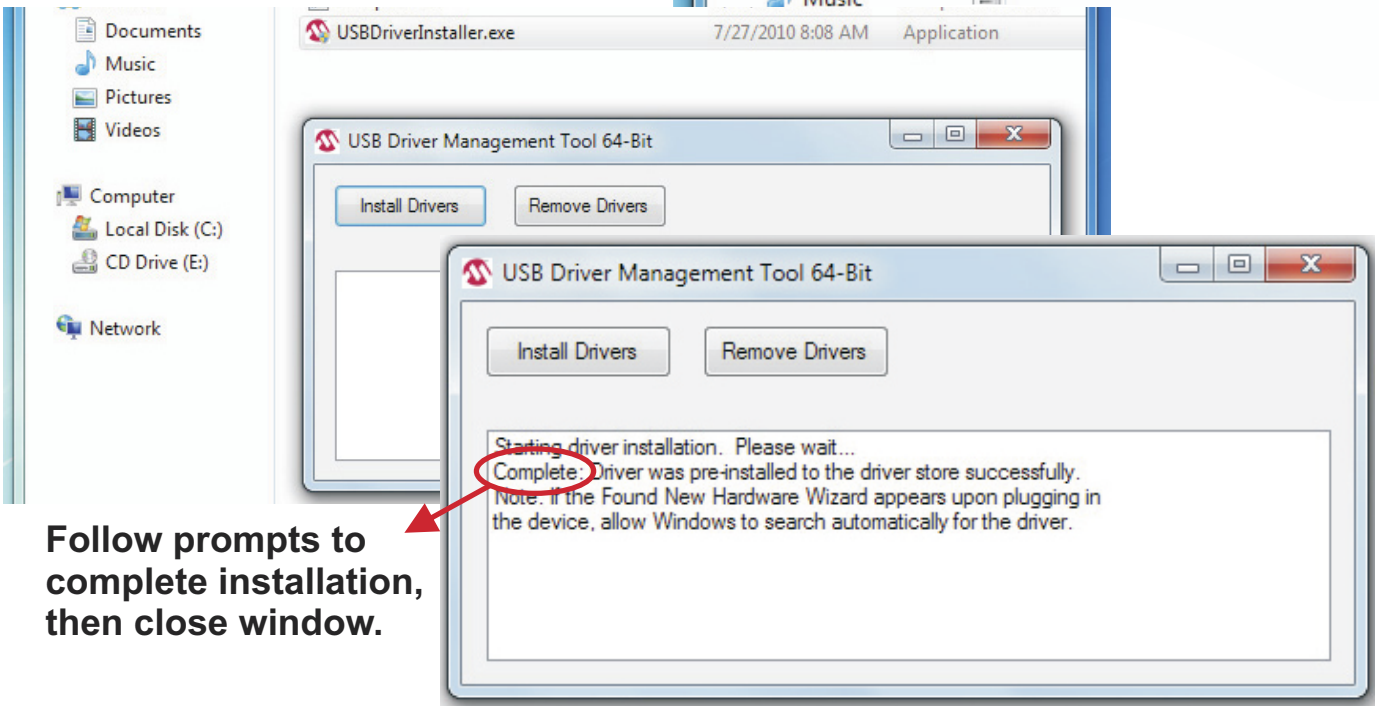
Auditor PI Software Installation



Open Auditor PI folder.



Open the USB_Driver folder and install USB_DriverInstaller.exe



Follow prompts to complete installation, then close window.

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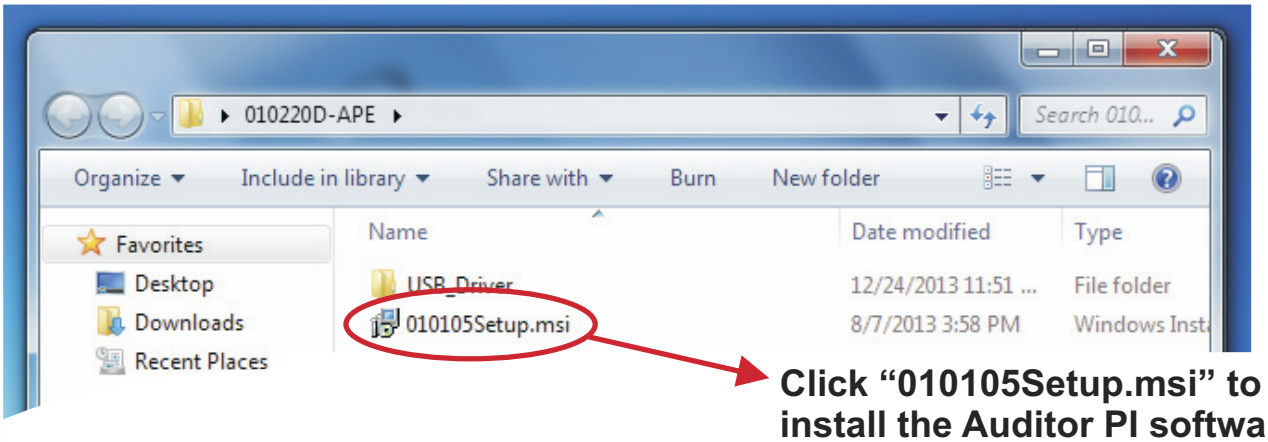
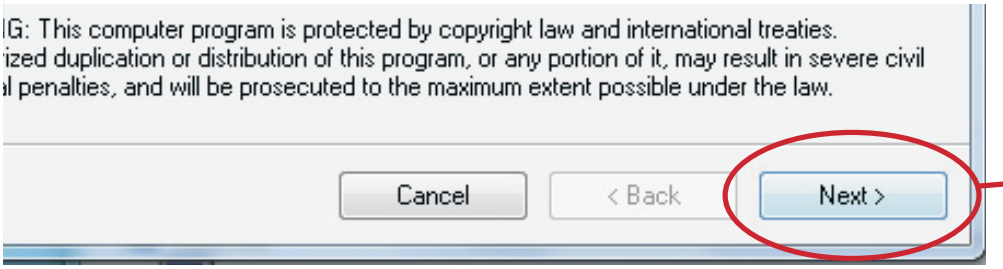
Auditor PI Software Installation Continued

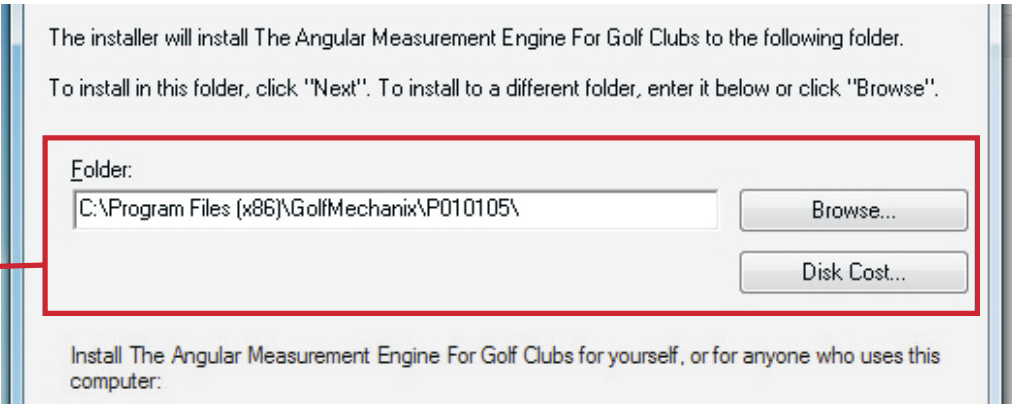


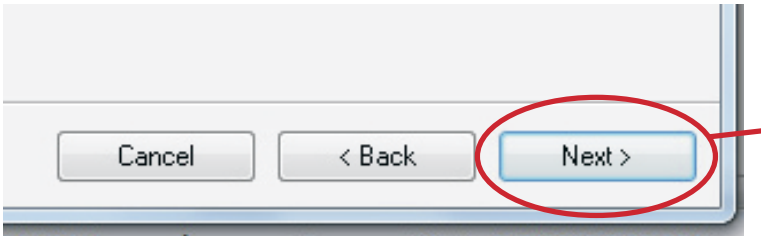
Click "010105Setup.msi" to install the Auditor PI software.



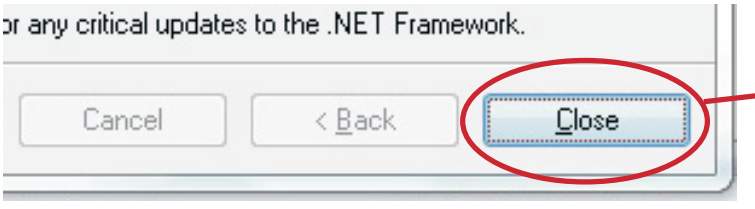
Click "Next".

Install the Auditor PI software to the default folder location.





Click "Next" to start the installation.



Click "Close" to complete the installation.

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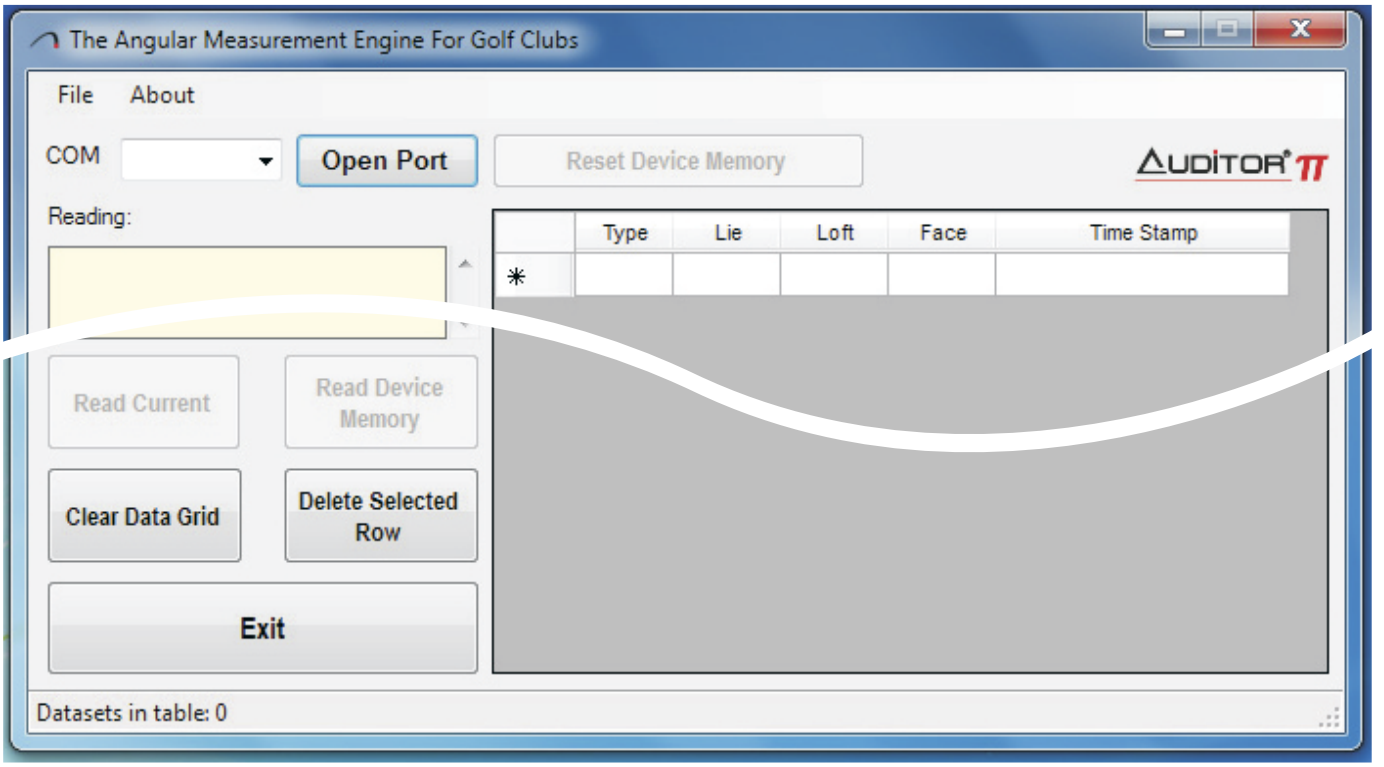
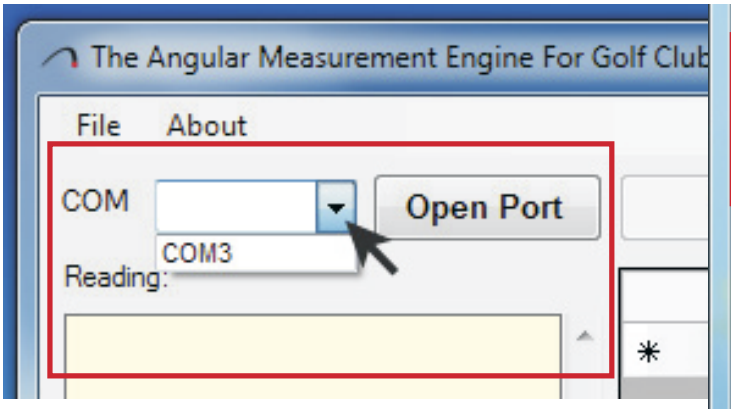
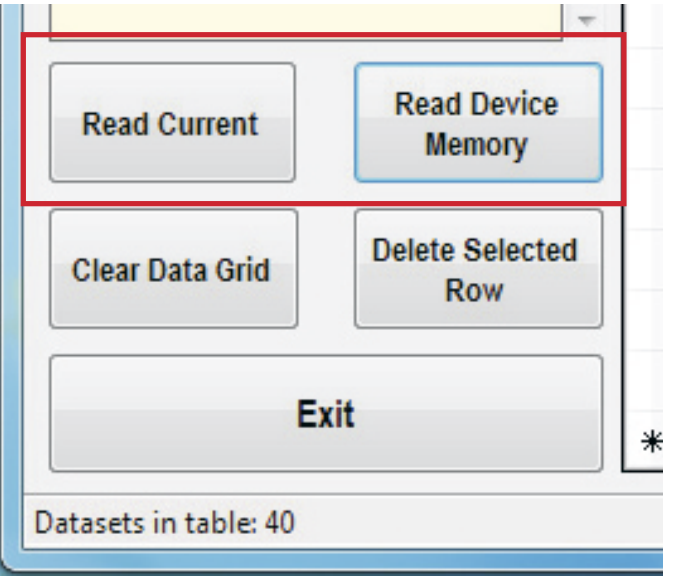
Auditor PI Software Installation Continued



Click on the Auditor Pi shortcut on your desktop to start the program.



With the machine plugged in and on, select the com port shown



Choose “Read Current” or “Read Device Memory” to retrieve club data from machine. Data can then be saved to a .csv file. File →Save

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