



**OPERATION MANUAL**  
**150812D**

## **Introduction:**

Powering the latest generation of digital lie and loft measuring and bending gauges in the Auditor® range, the Auditor  $\pi$  Engine (A.P.E.) is designed for simultaneously taking 2 angular measurements using precise optical encoders capable of generating up to 4,000 pulses per revolution (equivalent to a 0.1 resolution).

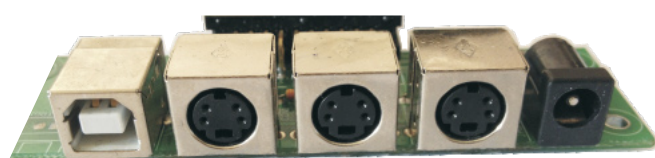
To accelerate the fitting process and initial putter evaluation, the A.P.E. has been designed with a pre-mapped matrix to sequentially store lie and loft angle measurements for putters. Stored data for each individually measured club can be recalled by simply toggling the Page Up and Page Down functions.

For clubmakers and clubfitters accustomed to recording club specifications, the A.P.E. is fitted with a bi-directional USB port to be used in conjunction with complementary data collection software to improve efficiency around the fitting bay.

## **Functions and Features at a glance:**

- Large high resolution LCD matrix display
- Instantly measures up 2 displacements
- High precision 4,000 step 0.1 resolution optical encoders
- Data matrix stores up to 20 clubs
- Instrument dependent external calibration
- SPC data collection software for WIN 7
- 9 VDC 500 mA adapter center pin positive
- 9-VDC C-type battery pack (included)

## **APE Connection ports**

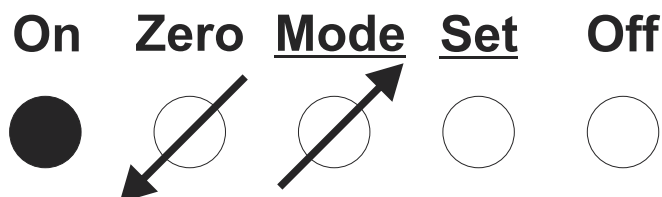


USB   Lie   Loft   Face   DC In

## **A.P.E. Version**

When the A.P.E. is turned on, the instrument model and firmware version numbers are displayed on the screen.

If the A.P.E. displays the incorrect instrument number, your device will not function as intended. Should this occur, please report the anomaly to your customer service representative or contact us by e-mail at [sales@golfmechanix.com](mailto:sales@golfmechanix.com).



**AUDITOR**  
**150812D V**

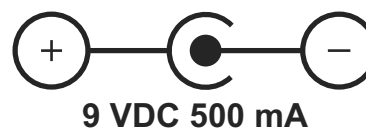
## **Special Note:**

The A.P.E. is for clubmakers that actively collect golf club specifications. To ensure data integrity and to minimize rework, the A.P.E. memory map makes it easy to read and store measurements for up to 20 putters. That data can then be downloaded to a PC further use.

Please familiarize yourself with the A.P.E. "P" and "M" modes prior to engaging in data collection.

## **AC/DC Adapter:**

The A.P.E. AC/DC power adapter is rated at 110V~240 AC 50/60 Hz. Should the need arise to have it replaced please specify 9VDC 500mA center pin negative.



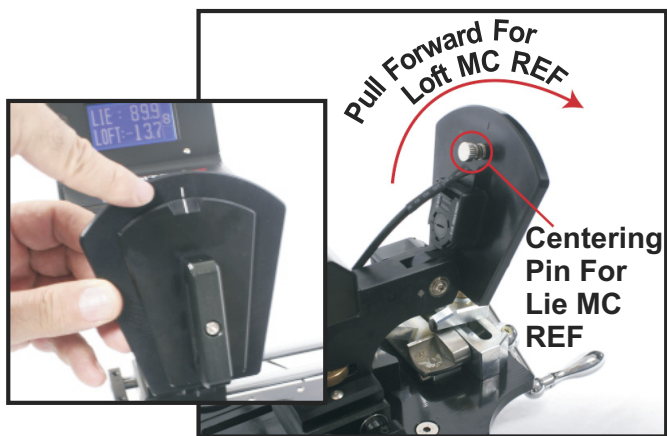
## 1. Connect Power Cord

- Plug in the adaptor/battery pack under the Auditor PI unit.



## 2. Set Machine Reference

- Loft, Pull measurement protractor all the way forward.
- Lie, Use the centering pin to align the two white lines on the protractor.
- Press "ZERO" to set MC REF.
- Correct MC REF is "LIE 90, LOFT 15".



**SET  
MC REF ?**

**YES**

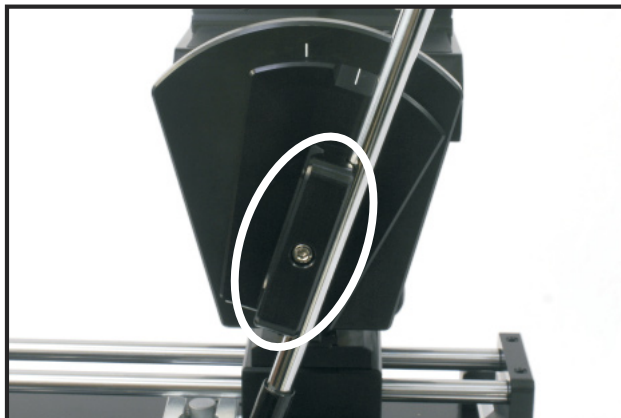
**NO**

On   Zero   Mode   Set   Off

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## 3. Measuring Lie/Loft

- Mount putter in machine.
- Move protractor so that the putter shaft is firmly aligned with protractor.
- Read lie/loft measurements.



## 4. Differential Mode

- Measure target putter/model.
- Press "ZERO". When "SET ORIGIN" appears, press "ZERO" again.

**SET  
ORIGIN ?**

**YES**

**NO**

On   Zero   Mode   Set   Off

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TARGET



DIFFERENTIAL

- When “SET MC REF” appears, press “SET”.
- All following clubs measured will show relative to the target.

<b>SET ORIGIN ?</b>				
<b>YES</b>	<b>NO</b>			

On   Zero   Mode   Set   Off

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### 5. Saving Measurements

- When desired data is displayed, press “SET”.
- When prompted to save, press “ZERO”. The screen will automatically switch to the next club to be saved.



<b>LIE        : 55.1</b>	<b>1</b>
<b>LOFT     : 9.5</b>	

On   Zero   Mode   Set   Off

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**SAVE ?**

**YES**

**NO**

On   Zero   Mode   Set   Off

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### 6. Paging Through Club Readings

- Press “MODE” until you see a “P” in the lower right side of the screen. The club number is shown above the “P”.

**LIE        : 55.1**

**LOFT     : 9.5**

**1**

**p**

On   Zero   Mode   Set   Off

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- Use the “ZERO” or “MODE” buttons to page through the saved club readings.

**LIE        : 45.6**

**LOFT     : 7.5**

**3**

**p**

On   Zero   Mode   Set   Off

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or

- To replace a saved reading, measure the club and press “SET”.

- Then press “ZERO” to save the new reading.

## SAVE ?

**YES**
**NO**

On   Zero   Mode   Set   Off

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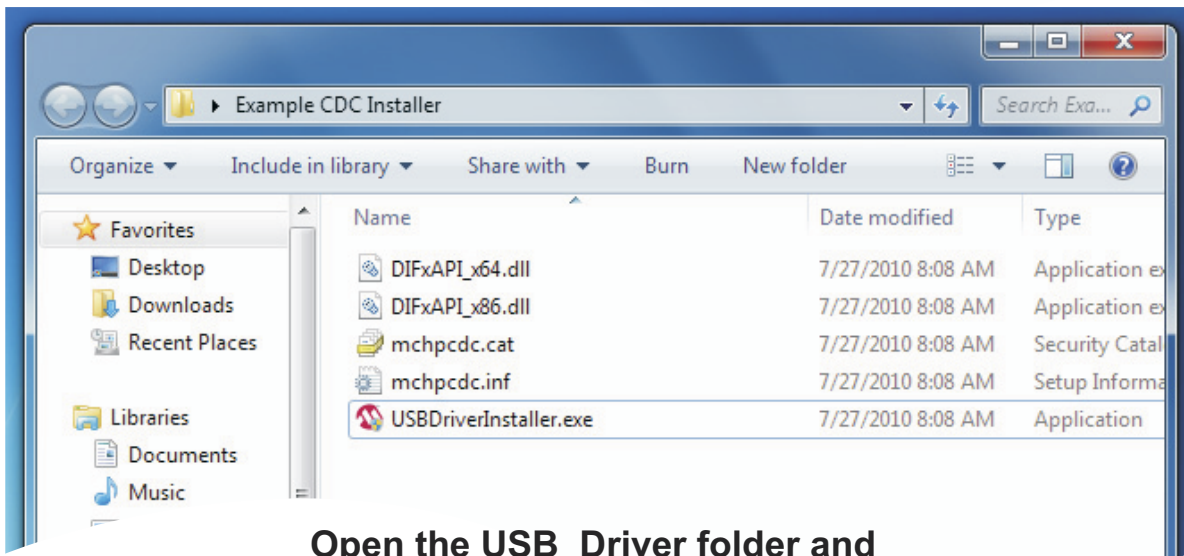
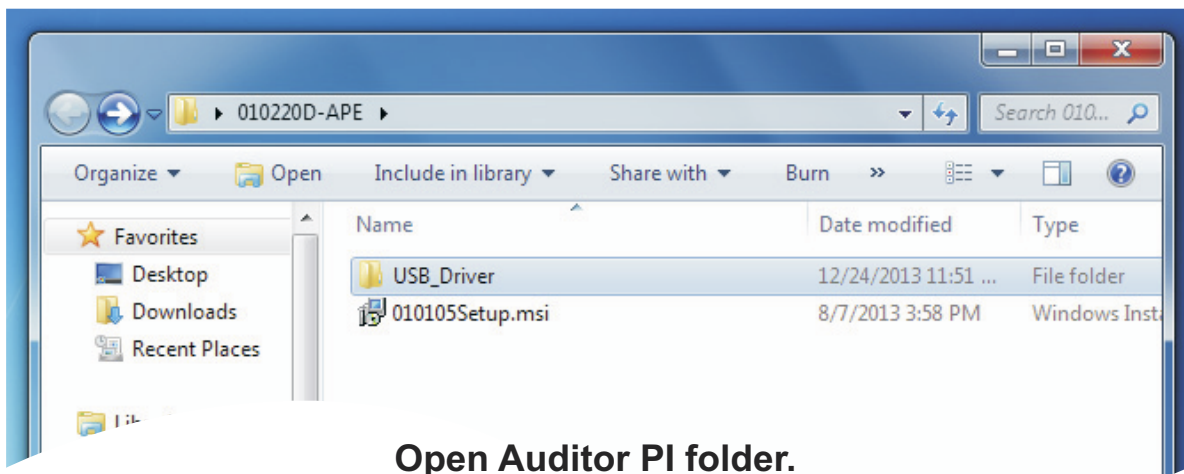
## SAVE ?

**YES**
**NO**

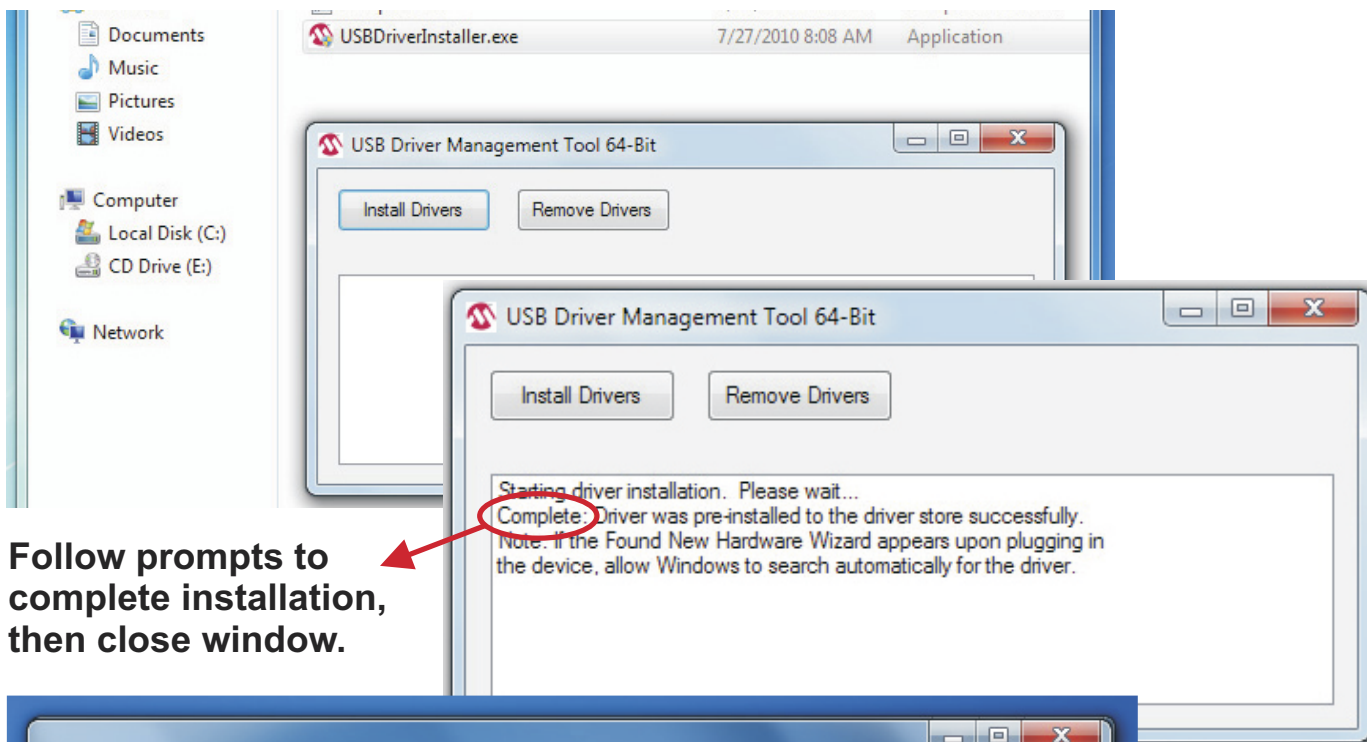
On   Zero   Mode   Set   Off

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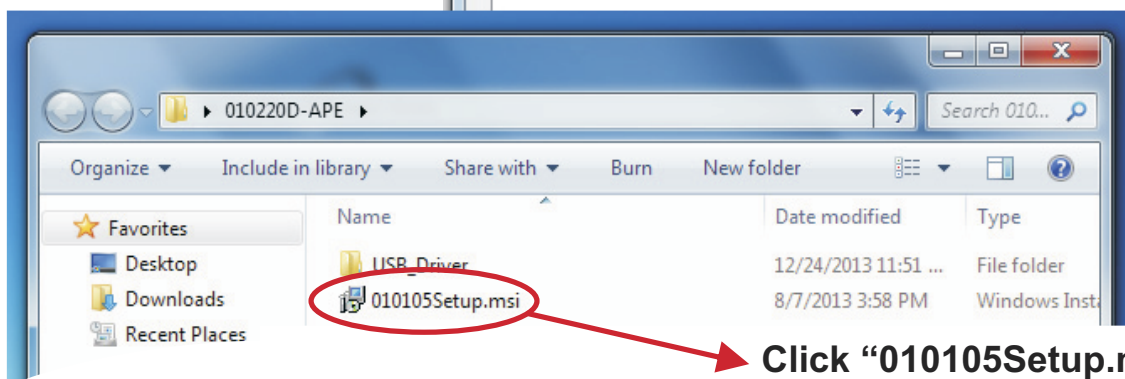
## Auditor PI Software Installation







**Follow prompts to complete installation, then close window.**

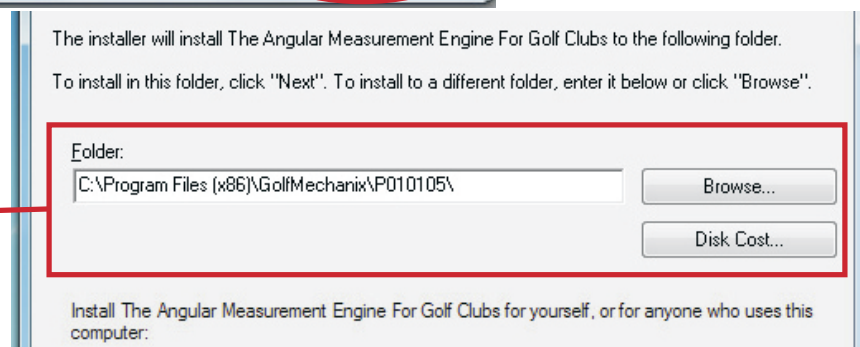


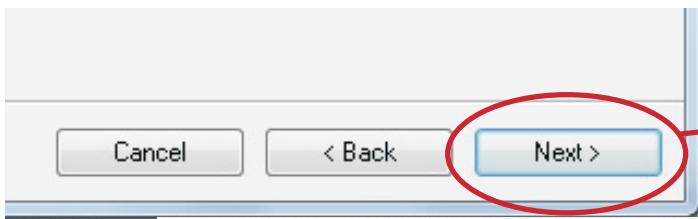
**Click "010105Setup.msi" to install the Auditor PI software.**



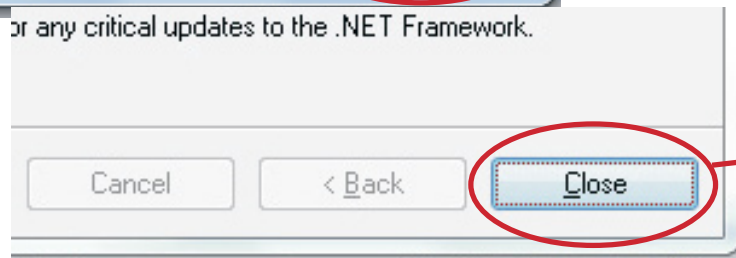
**Click "Next".**

**Install the Auditor PI software to the default folder location.**

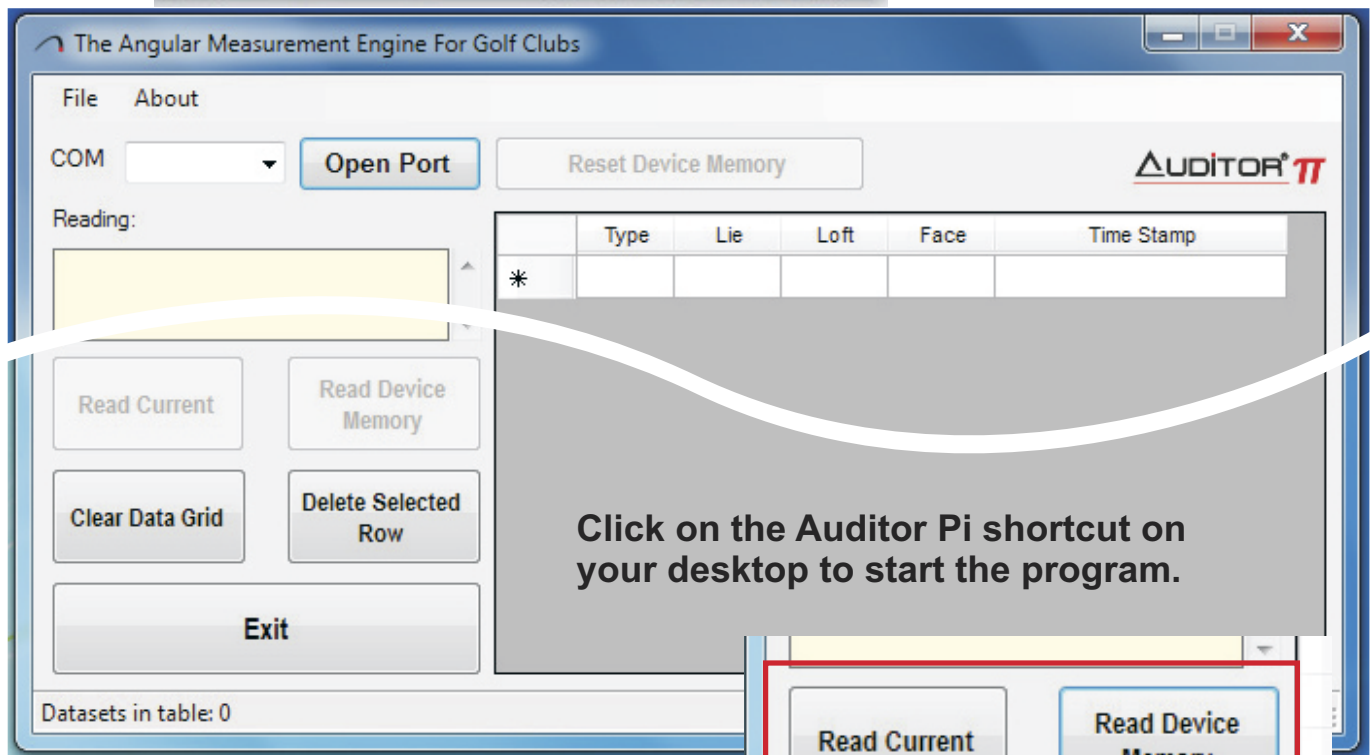




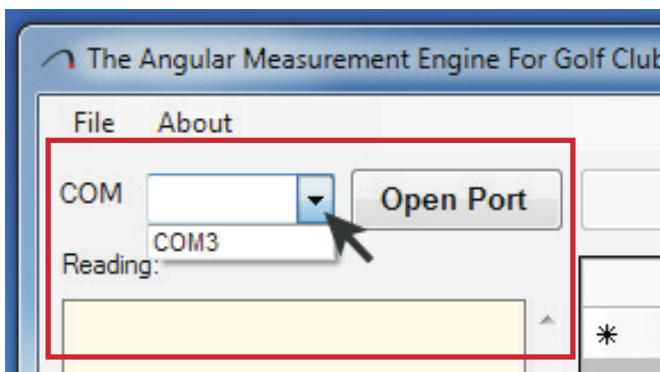
Click "Next" to start the installation.



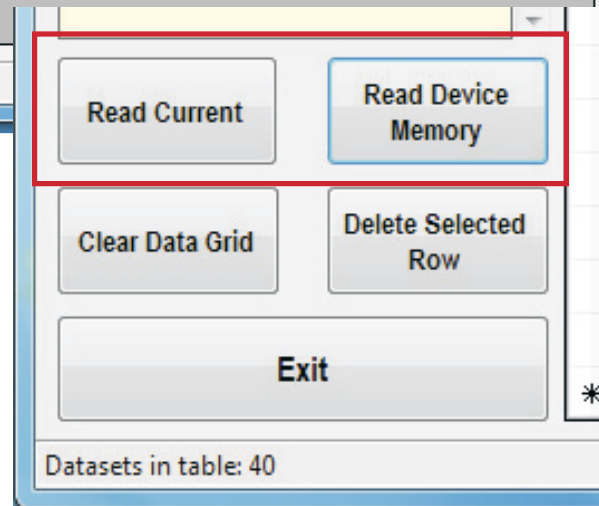
Click "Close" to complete the installation.



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