



**MANUAL - Quick Guide**  
**PMV MODEL #3001**

**Sigma**  
**OMetalytics**

# ***PRO-Mini***

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## ***Find enclosed:***

- PMV Pro- Mini model #3001
- Wand (optional)
- USB- C Cable for charging- or use with Windows Tablet or PC

This instrument is used to assist in the determination of validity of precious metals.

The use of this instrument and its results are for informational purposes only.

Determination of the validity of samples is strictly the responsibility of the operator, and should be combined as necessary by the user with other methods of measurement or inspection.

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# Getting Started

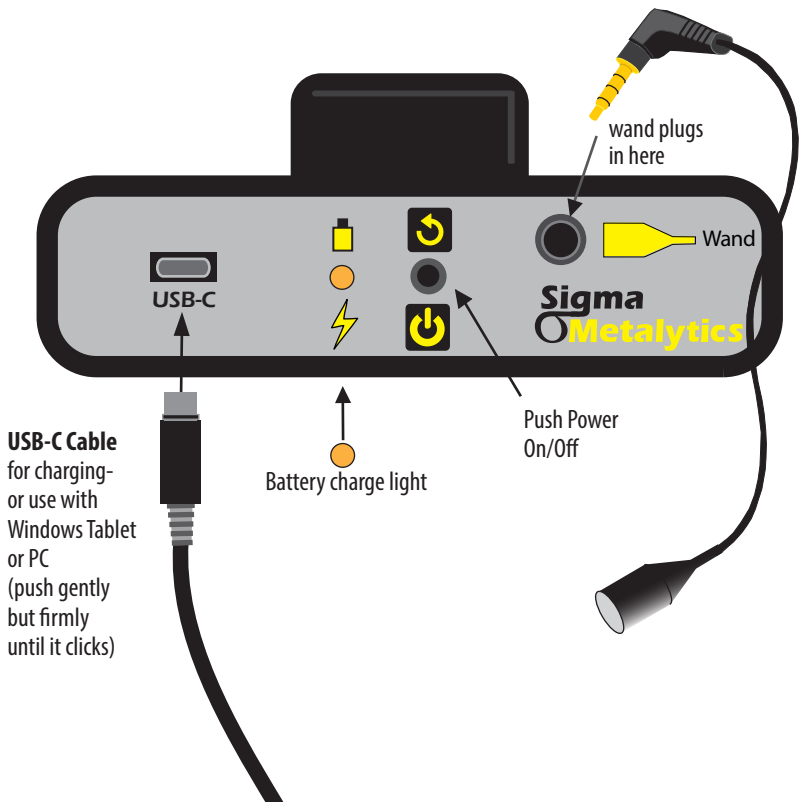
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## Charging the PRO-Mini:

1. **Plug in USB-C Cable** Charging is much more rapid if instrument is off. Charging light will come on dimly while battery is being charged, even if instrument is off.

## Turning ON/OFF & Calibrating:

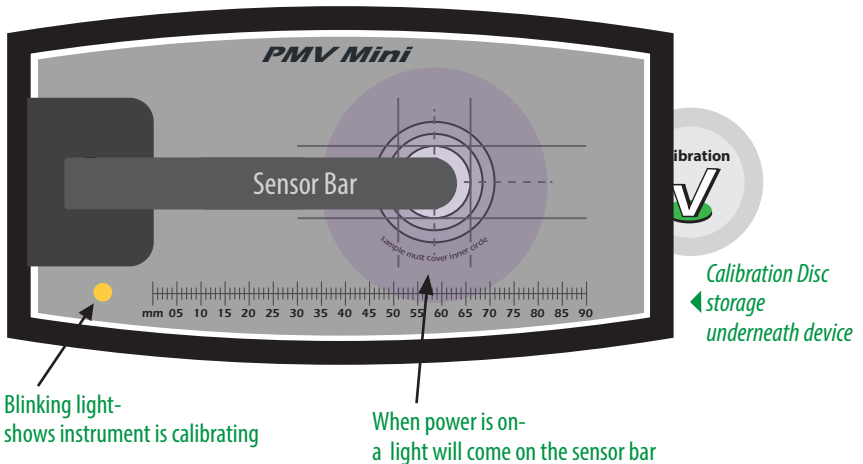
2. **Turn ON the PRO - Mini** briefly push the small black button on the endplate- a white sample illumination lamp under the Sensor bar will light, showing the power is on.



**3. CALIBRATING** - After a few seconds the yellow light on top of the mini will blink a few times, during which the instrument is calibrating.

**NOTE:** No sample should be present during calibration, and the moveable sensor bar should be in raised position. Otherwise calibration will be incorrect and will have to be repeated with these conditions met.

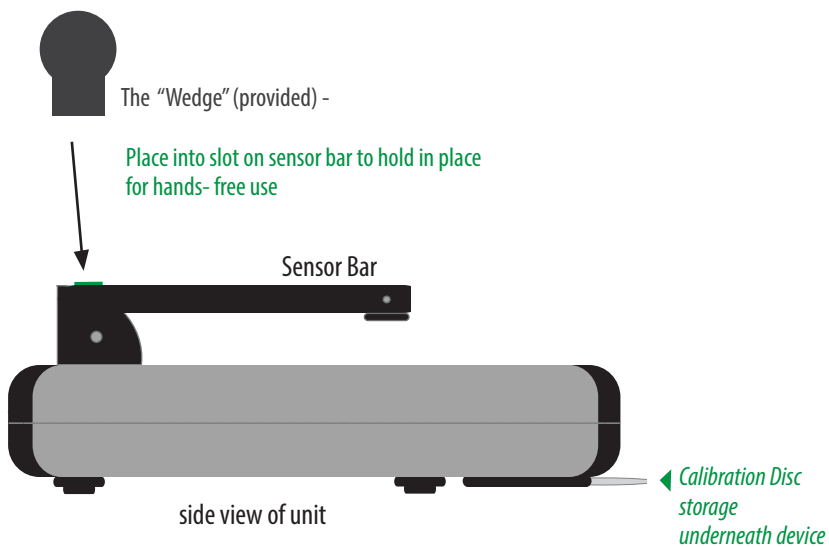
-If Calibration is desired during use of instrument, press power button briefly, and the yellow light will indicate calibration is under way.



**4. TURN OFF**- hold button down for more than 1 second. The instrument will go off when button is released

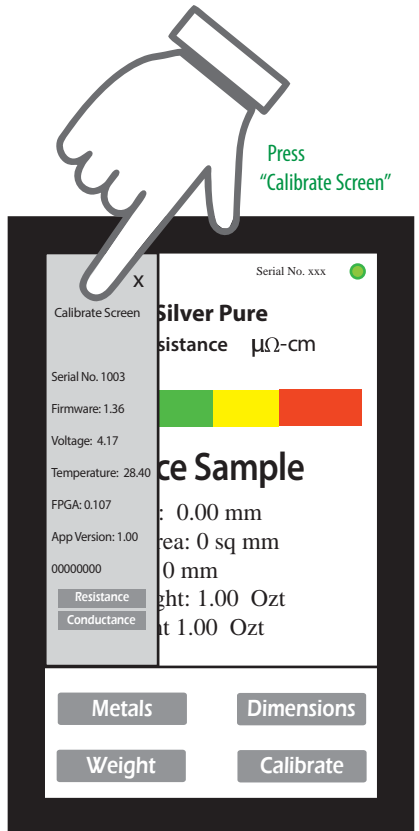
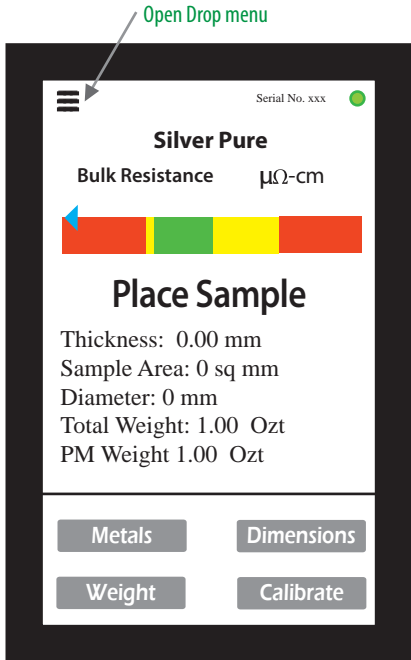
# ***Hands Free Use - the Wedge***

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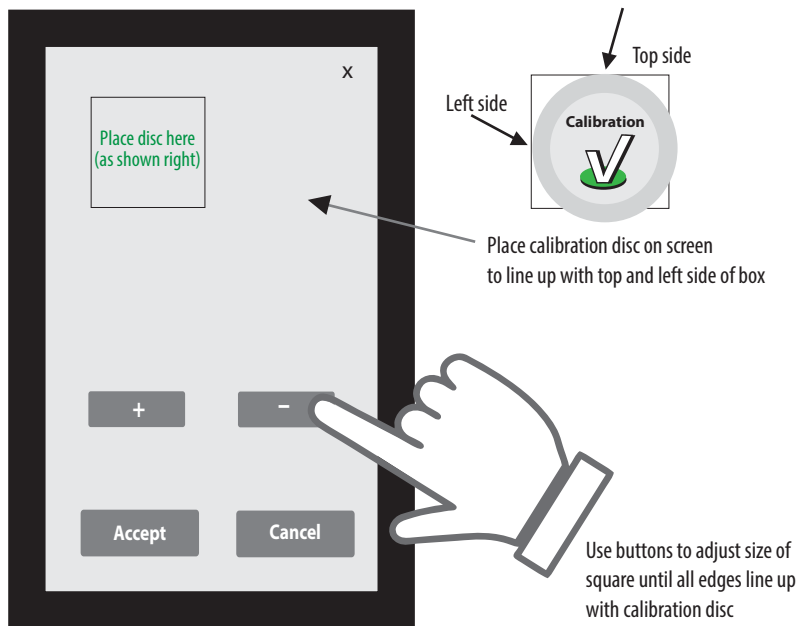


# Calibrating the Host Screen

1. Open the drop menu
2. Press "Calibrate Screen"



1. A box will appear on the screen. Place the *Calibration Disc* on the screen so that the edge of the disc aligns with the top and left edges of the box, see below:



2. Adjust the **width and height**, using the **+ / -** buttons on the screen to adjust the square size until the bottom and right edge of the calibration disc are also lined up.

**You are done when all 4 edges of the boxes are aligned with the calibration disc**

3. Hit **"Save or Accept"** button. The instrument will save the screen scale so when measuring samples they will be sized correctly.



# The Measure Screen

The **measure screen** will appear on the host (as shown below) and you are ready to measure

**NOTE:** A green lamp will be blinking in the upper right hand corner of the measure display on the host, indicating it is connected and getting messages from the PRO-Mini.

-Green blinking or solid light shows host is connected

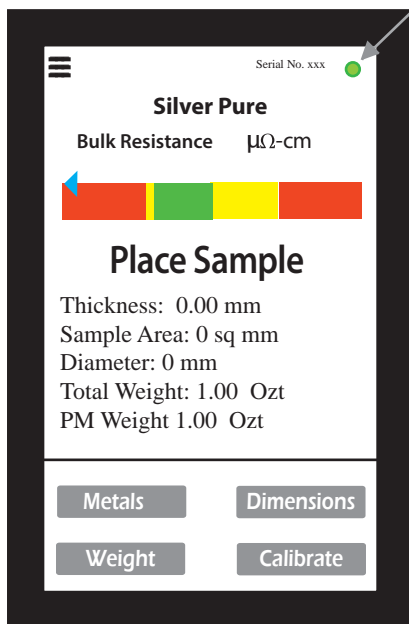
**Thickness** = Sample thickness

**Sample Area** = Area of the sample  
with the weight & thickness shown

**Diameter** = Diameter if sample is round

**Total Weight** = User entered weights

**PM weight** = User entered weights



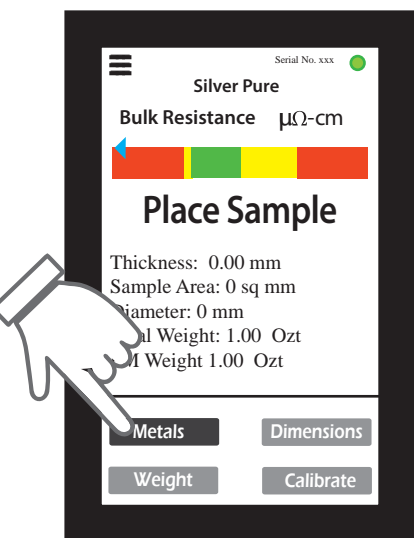
# Ready to Enter Information

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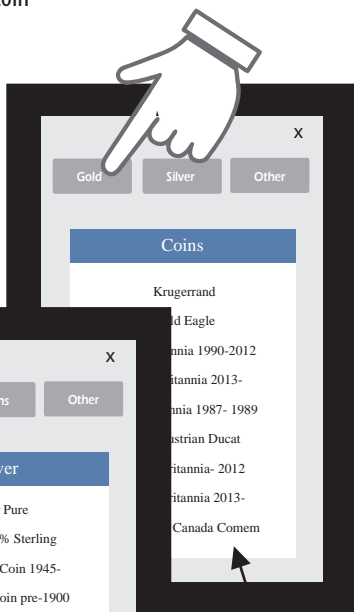
## Switching between Conductance and Resistance



# Entering Sample Alloy



1. From the measure screen press the “Metals” button.
2. Select **Gold**, **Silver**, **Other** or **Coins** based on the main element, or whether the sample is a specific coin

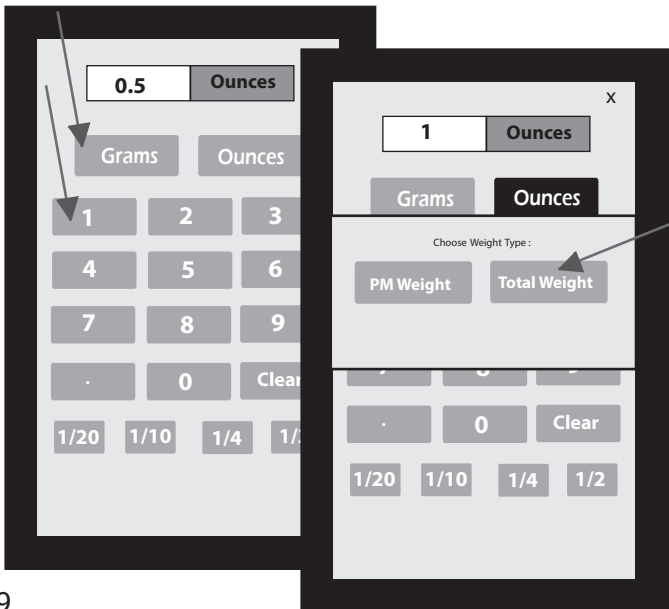
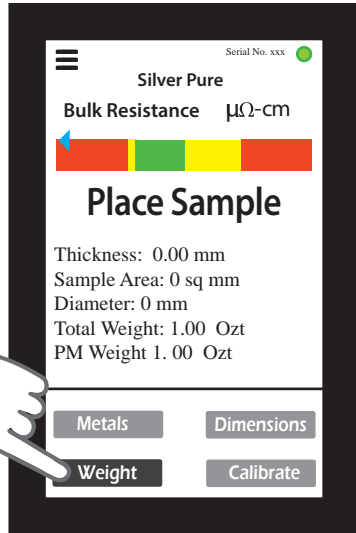


3. Select the alloy or coin type from the list

# Entering Sample Weight

1. From the measure screen press the "Weight" button.

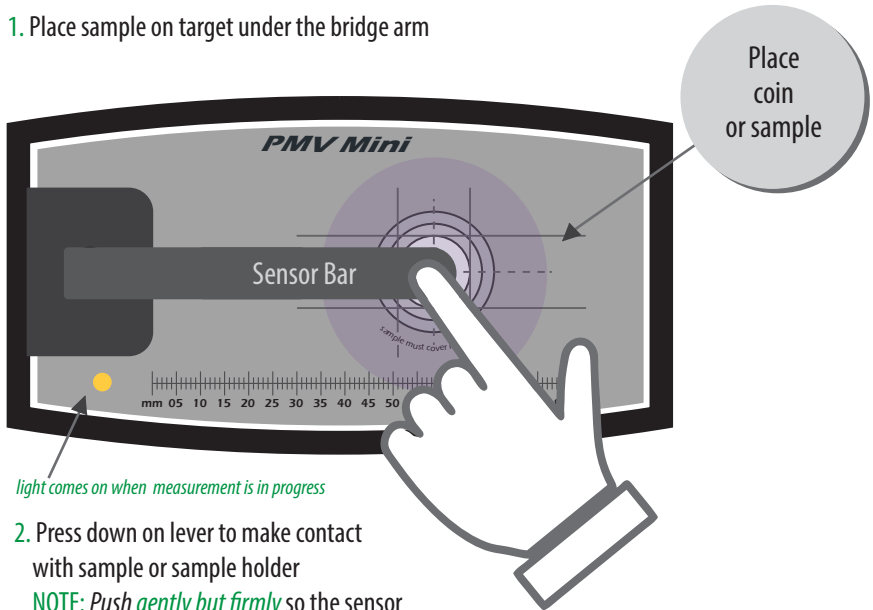
2. Enter the weight either in grams or troy ounces using the number pad



3. Select either **Total Weight** or **PM Weight**  
Default is PM Weight and shown as highlight either on the Total Weight or PM Weight button

# Place Sample

1. Place sample on target under the bridge arm



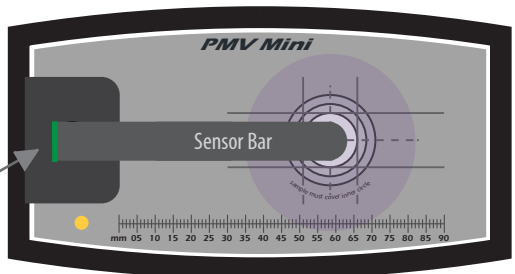
*light comes on when measurement is in progress*

2. Press down on lever to make contact with sample or sample holder  
**NOTE:** Push *gently but firmly* so the sensor in the arm rotates to be in *flat contact* with the sample



Wedge (included) -

3. For "Hands Free" ( see page 3) Insert *wedge* into slot at the base of sensor bar



# Making a Measurement - basic reading

1. In 1 to 4 seconds the numeric value and the arrow on the measurement screen will stabilize, this is the reading value.  
The thickness, diameter and sample area will also be displayed
2. If the arrow is *pointing to the green or yellow portion* of the graph display, then the reading is **within bounds** for a valid alloy.  
If the arrow is **pointing to the red area** of the graph, the sample is **not** within bounds for a valid alloy

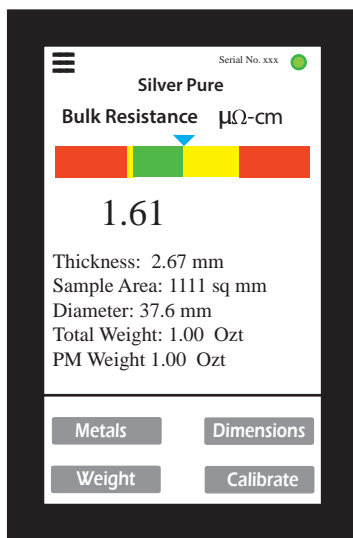
**Thickness** = Sample thickness

**Sample Area** = Area of the sample  
with the weight & thickness shown

**Diameter** = Diameter if sample is round

**Total Weight** = User entered weight

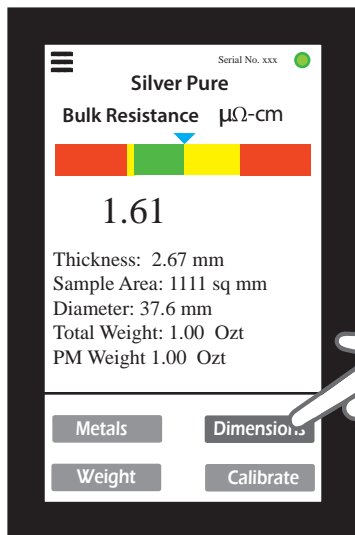
**PM Weight** = User entered weight



*Sample reading of a pure silver coin*

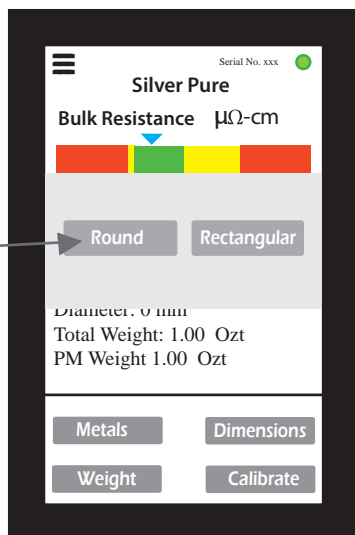
# Measuring Sample Dimensions

When the reading has stabilized, you are ready to measure the sample **Dimensions**



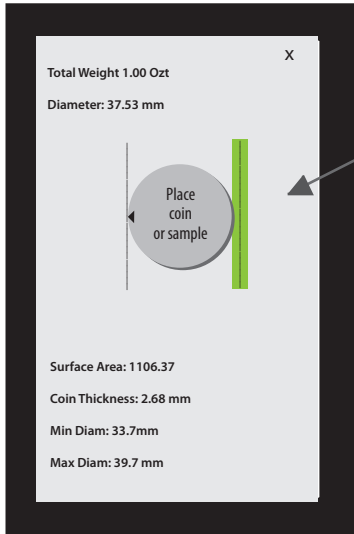
1. Leaving the coin in place, press "Dimensions" button

2. Select "Round" or "Rectangular"

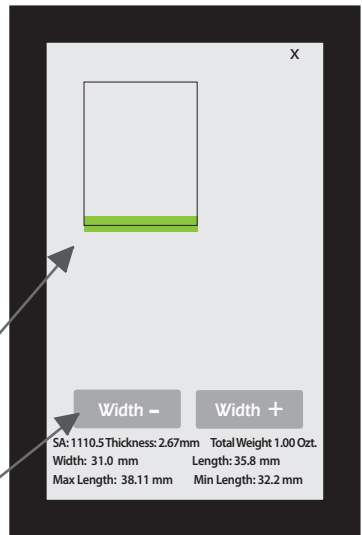


2. If the sample is **round**, 2 lines will appear on the screen.

Place the sample on the host screen so that the **left edge** of the sample is aligned with the **left line**



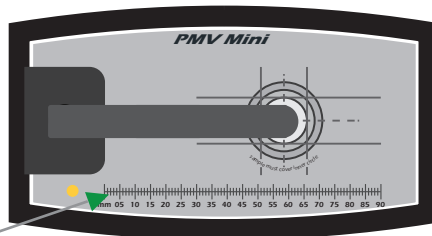
The right edge of the sample should be aligned with the right line, close enough so that the edge of the sample is in the **green bar**



3. If the sample is **rectangular**, a rectangle will appear on the dimension screen.

Place the sample on the host screen so that the upper left corner of the sample is aligned with the upper left corner of the rectangle

4. **Adjust width** with + or - buttons until it matches sample width



Press **x** to return to measure screen

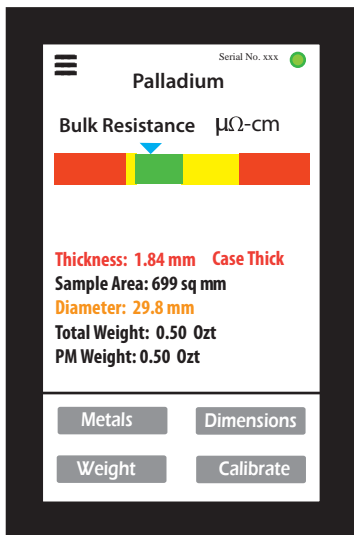
**NOTE:** Alternatively, the diameter can be measured using the **scale on the instrument** (see above) or by using calipers. *The millimeter diameter should be in the range of diameters displayed on the dimension screen*



# Error Messages

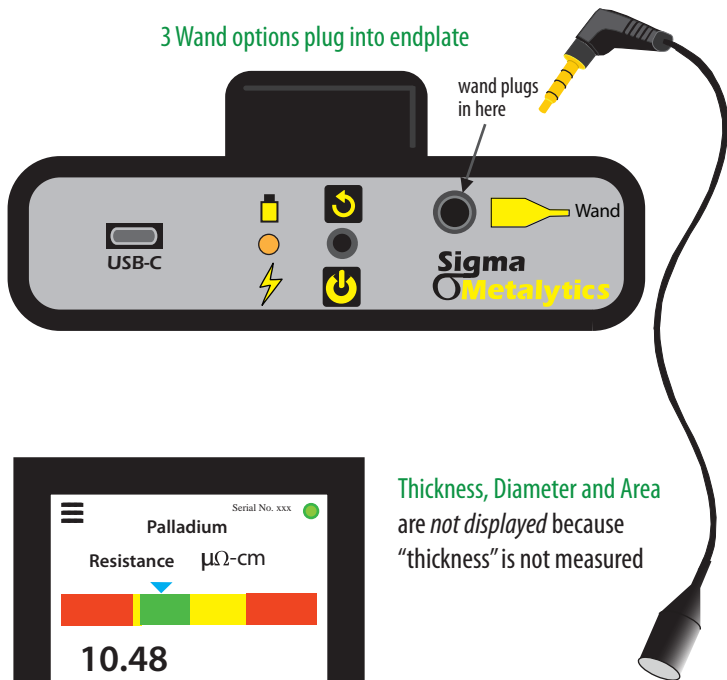
## Example of error messages

1. Case is *too thick*- **Case Thick**
2. Sample is *too thin*,  
reading will go from **yellow** to **red**
3. Diameter is *too small*, **it goes yellow**  
then **red**

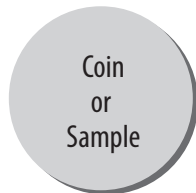
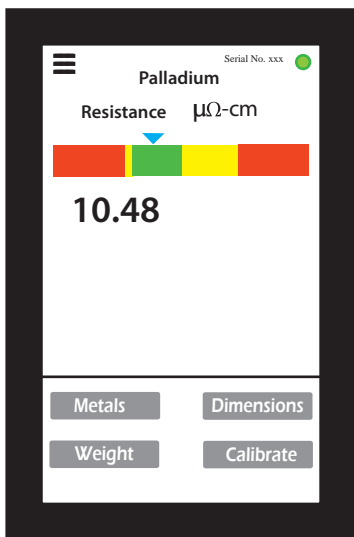


# Wand Use on the PRO-Mini

3 Wand options plug into endplate



Thickness, Diameter and Area are *not displayed* because "thickness" is not measured





 **Precious Metal**  
***VERIFIER - Mini***

PMV MODEL #3001

**Sigma**  
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