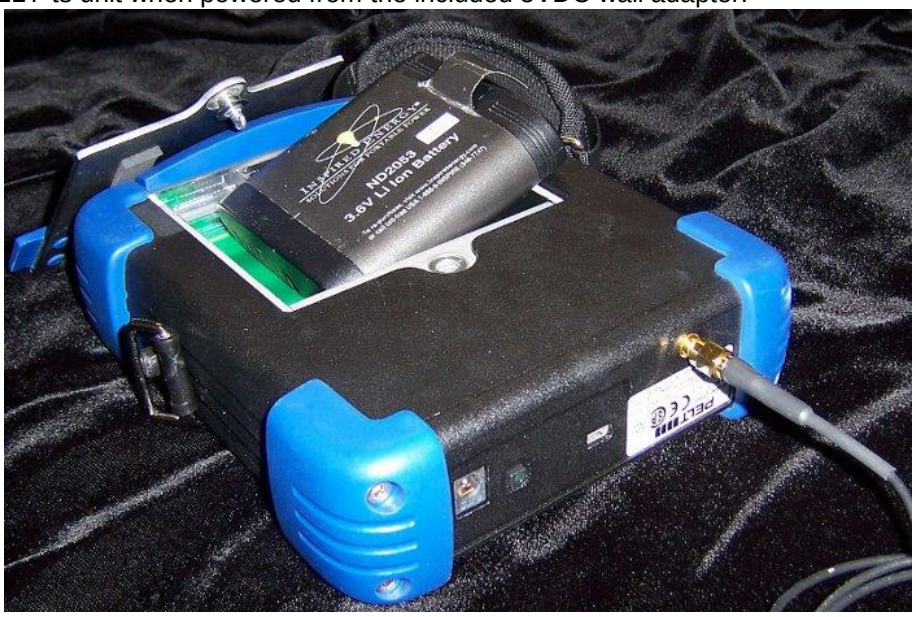
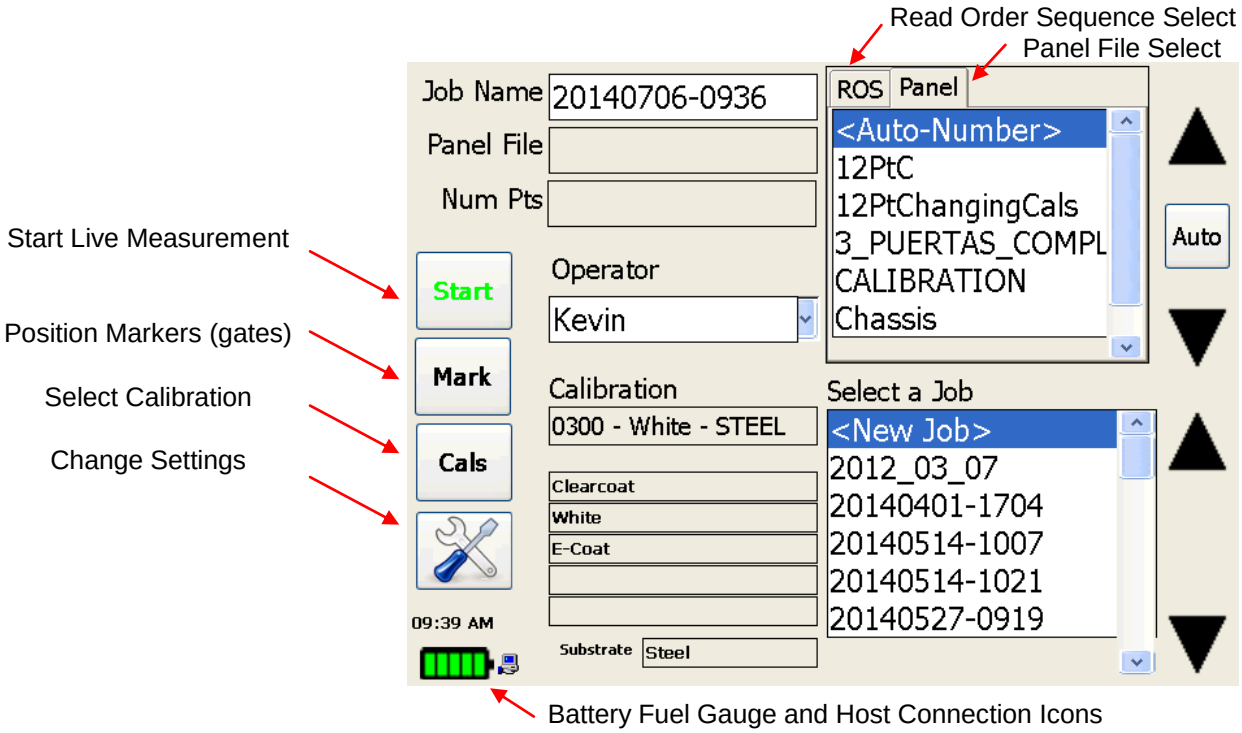
# uPELT-ts Quick Start Guide

1. Insert a charged battery by opening the battery compartment door on the bottom of the gauge. A flat blade screw driver or similar tool (a thin coin) is needed to unlock & lock the latch.
2. The battery can be charged before use in the charger kit included with the PELT system. The battery will also be charged in the uPELT-ts unit when powered from the included 5VDC wall adapter.

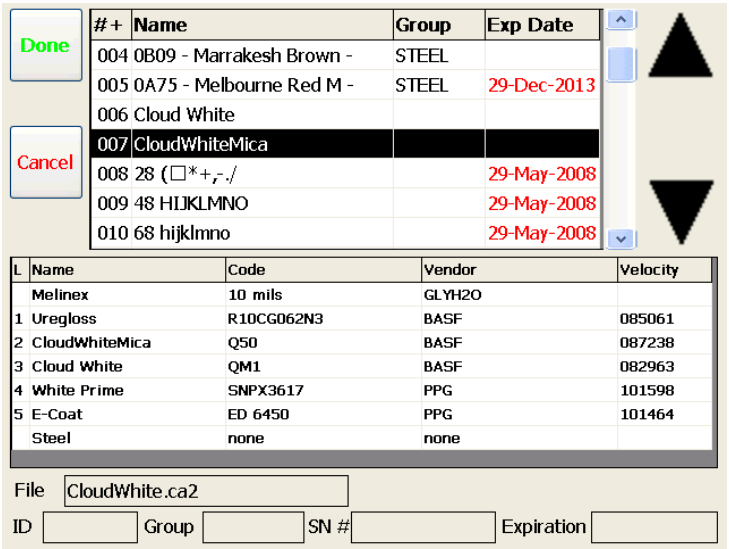



3. Connect the PELT-uPts-CBL150 coax cable to the brass connector and attach the desired transducer and WearCap to the other end of the cable.

4. Power ON the gauge entering the **Job Start** touch screen shown below.

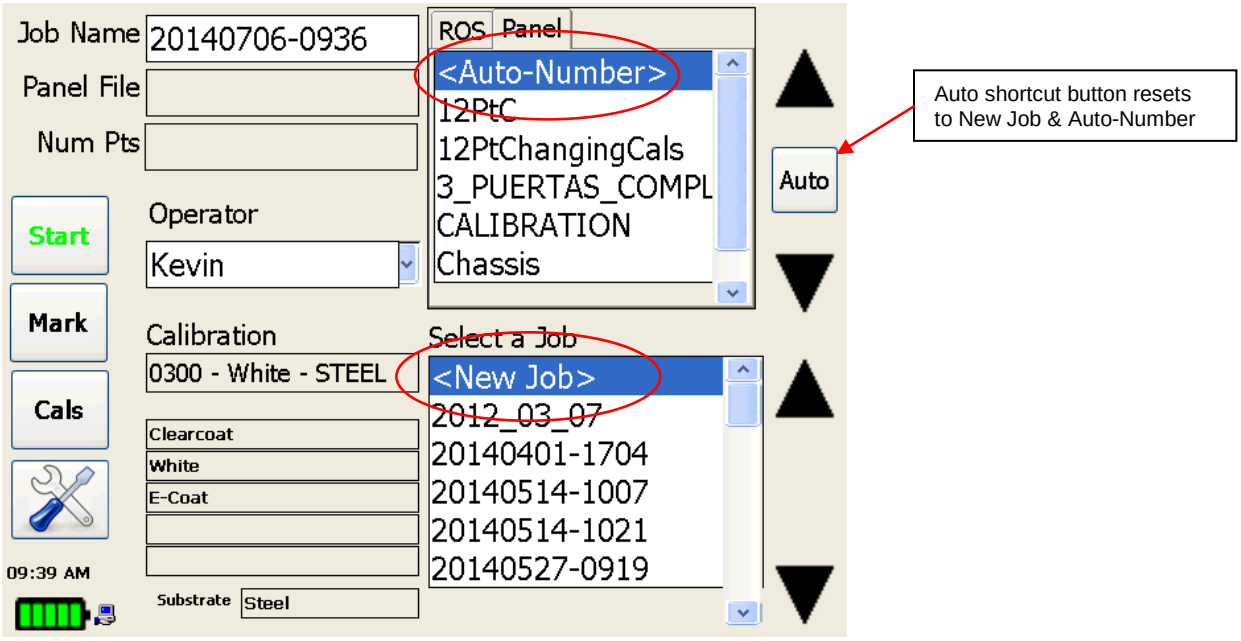



5. Tap the **Cals** button to enter the **Calibration Select** screen.

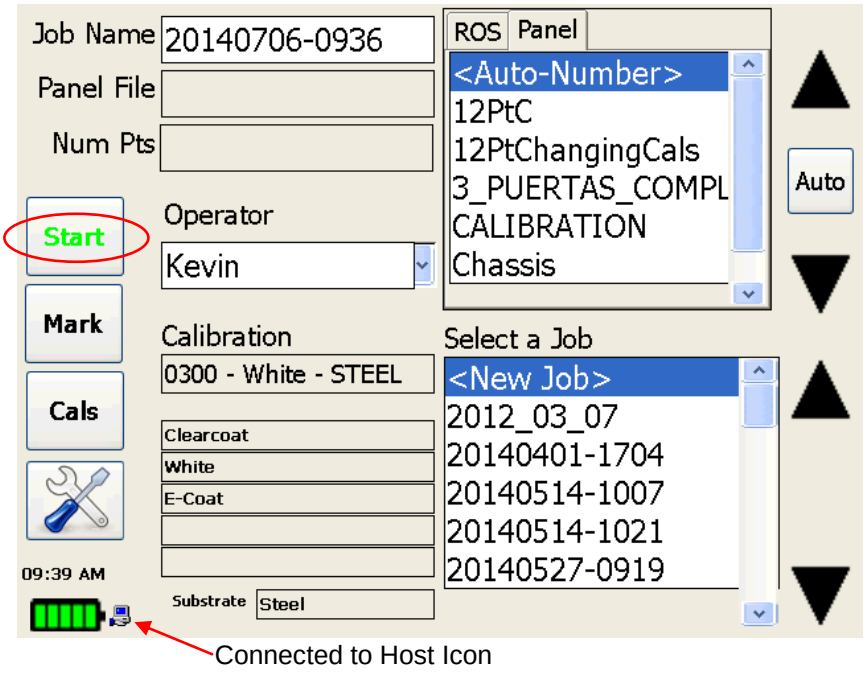



6. Select the desired Calibration Record by tapping on the desired coating name. The selected cal record will highlight. Tap **Done** to return to the Job Start screen.

7. Select <**New Job>** from the 'Select a Job' field.
8. Tap **<Auto-Number>** or select existing panel file from the list in the 'Panel' field.

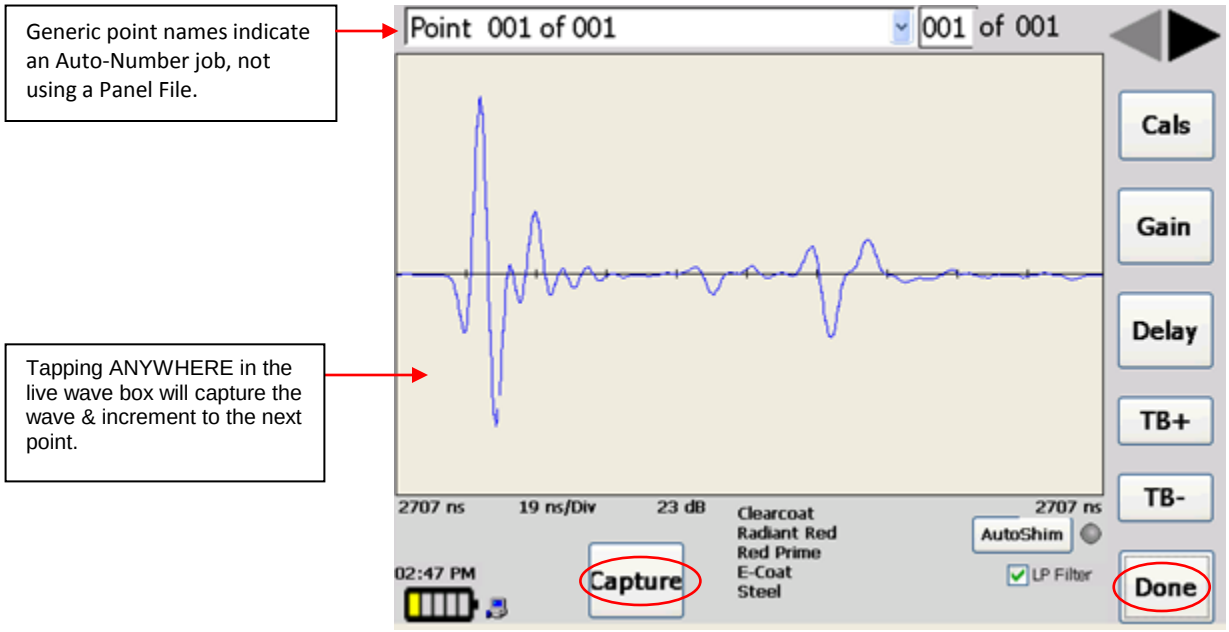



9. Tap the **Start** button to start the live PELT waveform.



10. Tap the **Capture** button in the **Capture Screen** to acquire the waveform and to advance to the next measurement point.

**NOTE:** Tapping anywhere inside the live wave box is the same as tapping the Capture button.




11. Any setting can be changed during live waveform viewing by tapping the desired button (ie: Gain, Delay, selecting a new Cal, etc.)
12. Select the **Done** button when the job is complete.

**NOTE:** Captured waveform data will be lost if the 'Done' function is not completed after capture(s).

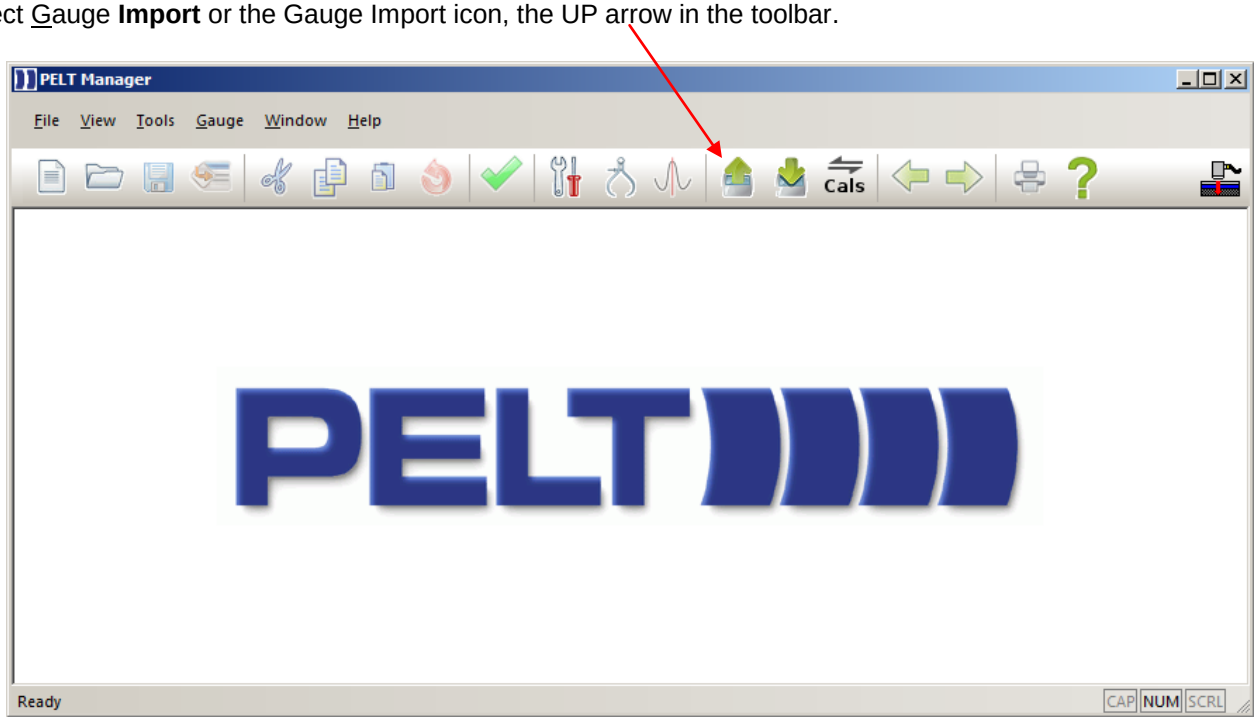
Other features in the Capture screen (see Operator Manual for more detail):

- Cals: reselect a calibration record at any time.
- Gain: increase or decrease the system gain on the live waveform.
- Delay: change the starting time (delay from initial pulse) of the live waveform.
- TB+/TB-: increase or decrease the time base, ie. shrink or expand the live waveform.
- LP Filter: apply noise filter to the live or captured waveform (will NOT change raw data saved).
- AutoShim: automatically locate the waveform, set gain and delay for best view. The transducer/WearCap must be placed on the component in test before running AutoShim.

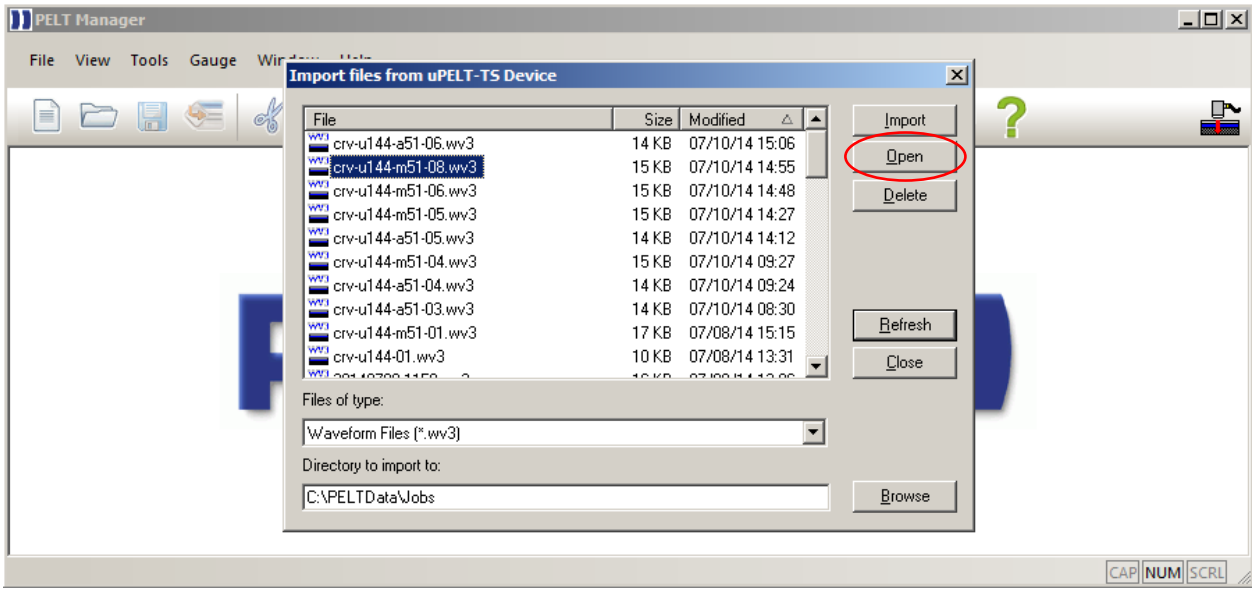
## Using PELTManager

1. Run the PELTManager installer from the included CD.
2. Power ON the PELT gauge, returning to the Job Start screen.
3. Connect the 1m CBLU001-2401 cable from the gauge to the host computer USB port. The Host Connect icon in the lower left of the gauge Job Start screen will change to indicate the PC is connected.
4. Start the PELTManager application on your host PC via the Start menu or by double clicking the desktop icon.

5. Select Gauge **Import** or the Gauge Import icon, the UP arrow in the toolbar.




6. Select any destination folder on the host computer using the **Browse** button or leave the default.




7. Choose the desired job file from the displayed list, and select the **Open** button.

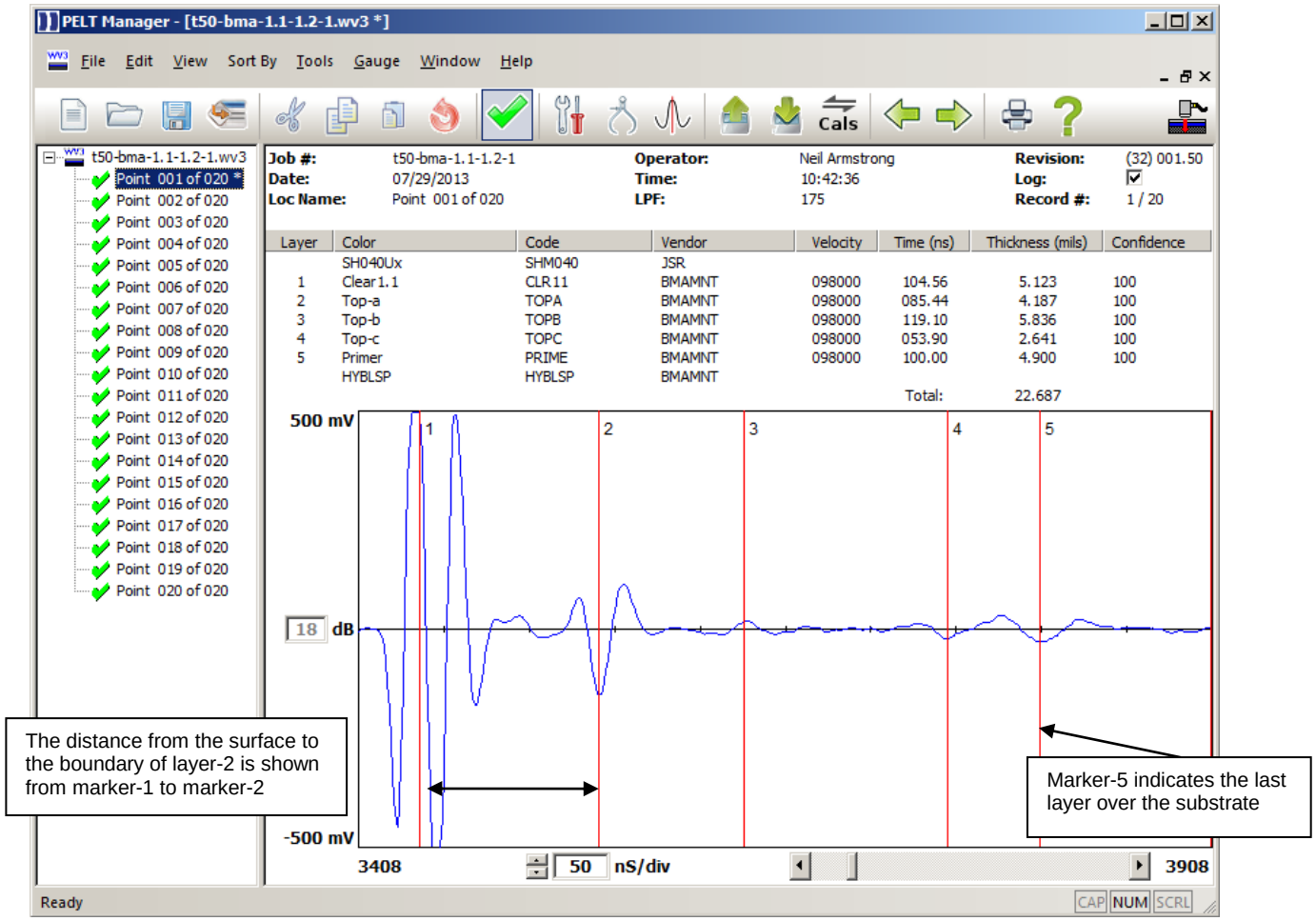
**Open** will download the file to the shown directory and automatically display the wave file in a PELT Manager window.

**Import** will download the file into the listed directory only.

## Placing Markers in PELT Manager

1. The Marking Screen is used to position markers (gates) on features that indicate layer boundaries for each selected wave point. Reviewing the proper guide wave found in the Calibration File will help identify the proper peaks.
2. Select the desired red marker (gate) by pressing the mouse left button or typing the corresponding marker number on the keyboard. The selected marker will appear as a dotted line.
3. Move the selected marker by dragging with the mouse or using the right and left arrow keys.
4. Continue to the next wave by pressing on the down arrow key or clicking on the next record from the listing shown in the file index panel on the left.

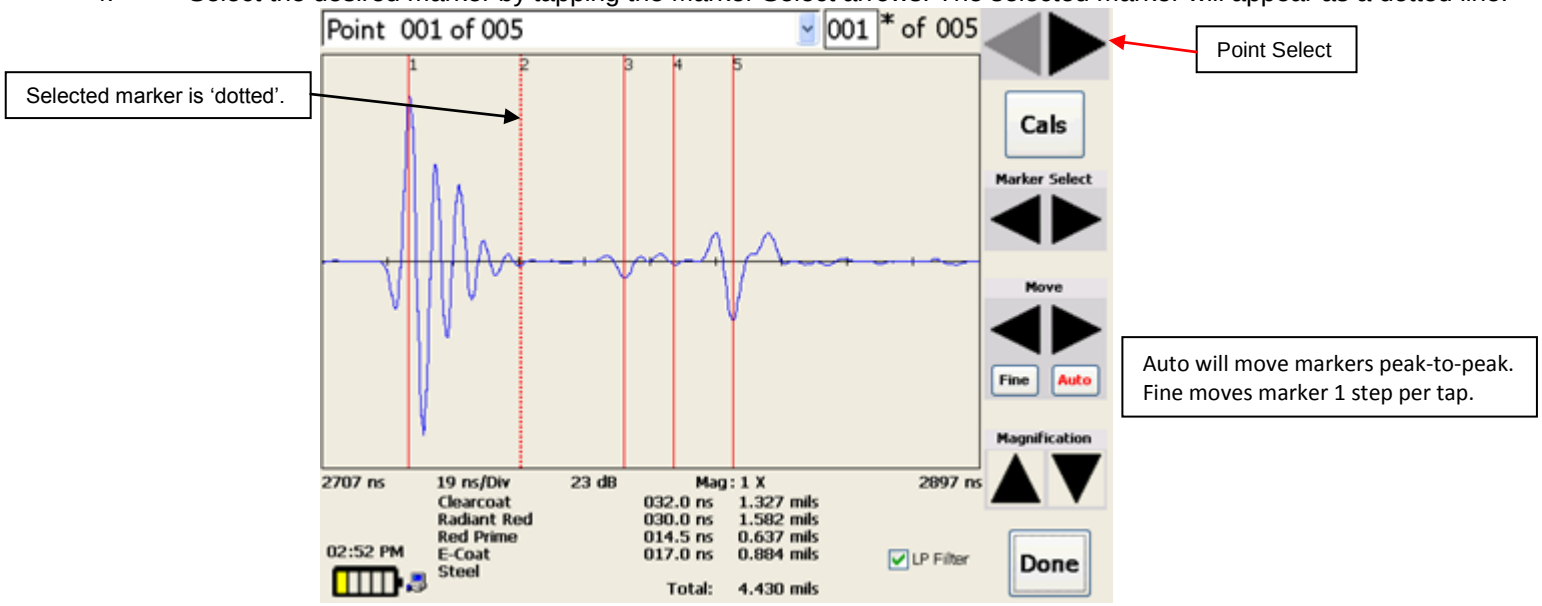
The waveform shown is a 4 layer measurement using 5 markers to determine thicknesses. Velocities, times and thicknesses are automatically calculated and displayed in the chart over the selected point waveform.




5. Select any point and position markers as desired. As mentioned above, reviewing the proper guide wave is helpful in determining the correct peaks for marker placement.

## Placing Markers on the Gauge

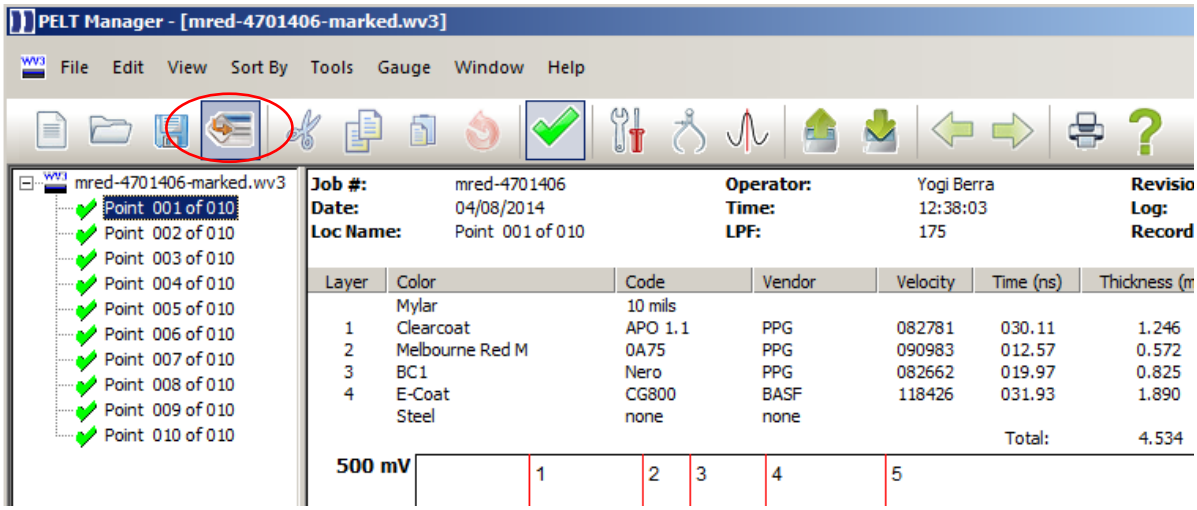
1. Select a Job to be marked from the **Job Start** screen. Jobs must be previously captured and saved before they can be marked.
2. Select the Job to mark in the Job Start screen and tap Mark.
3. The markers associated with the Cal Record used will be displayed in the Place Markers screen.
4. Select the desired marker by tapping the Marker Select arrows. The selected marker will appear as a dotted line.




5. Move the marker to the desired peak using the Move arrows.
6. Select the next (or previous) point using the point select arrows in the upper right corner.
7. Select **Done** to save the new marker positions. This is required to save marker positions.

## Exporting Measurement Data

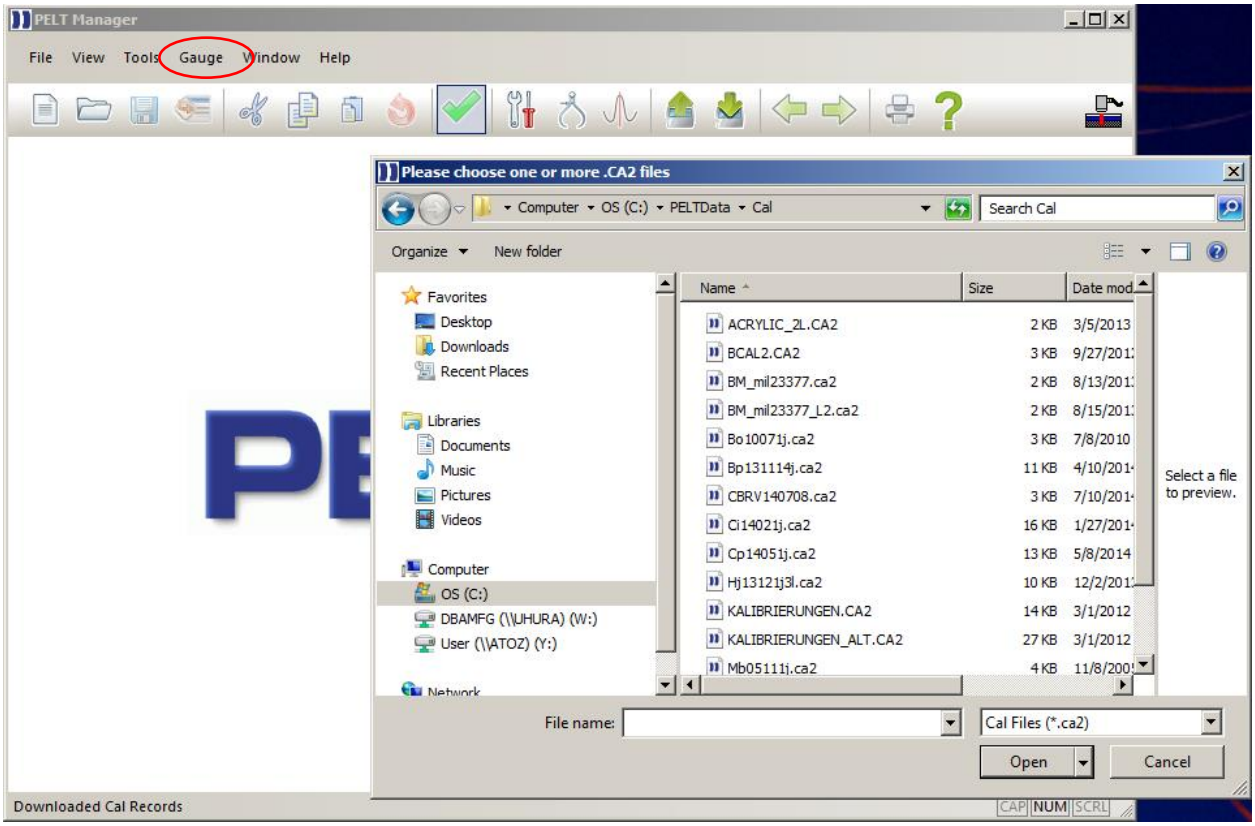
1. To convert the marked waves into a text file (prn file), select **File Export Measurement Data** or the **Export to PRN** icon in the tool bar.



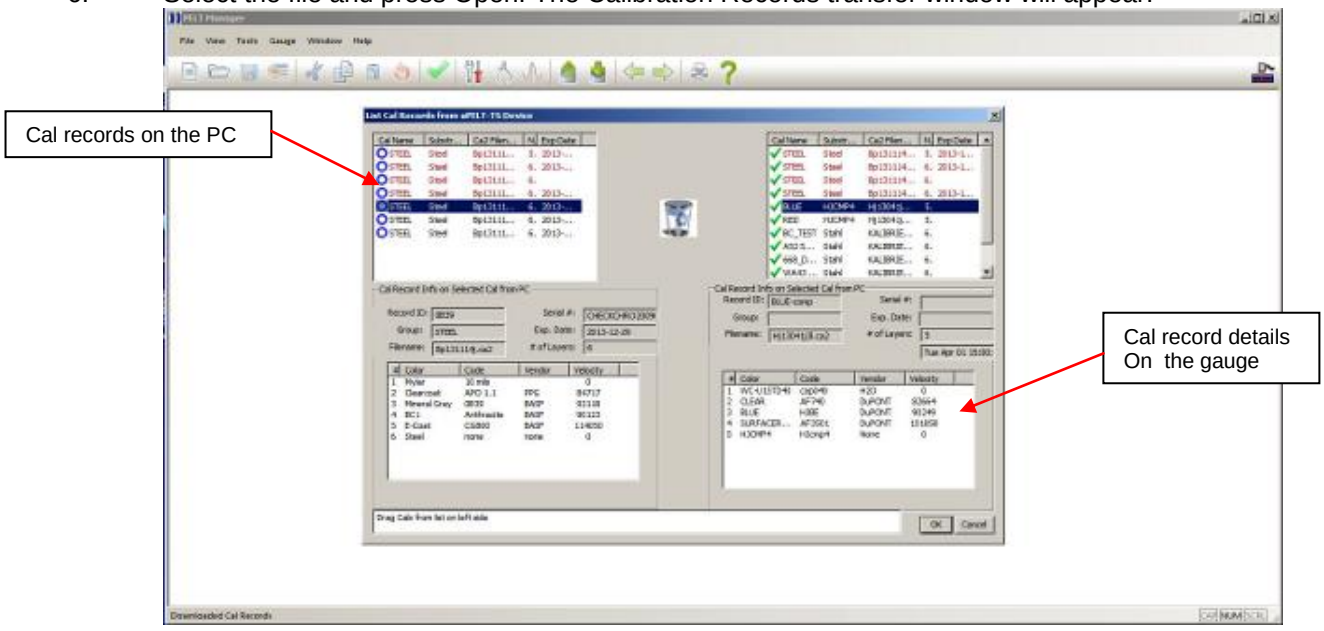

2. A browse window will appear and give the option to save the .PRN file in the desired directory on the host PC. This file can be printed or analyzed as needed.

## Copy a Calibration Record to the Gauge from the Host Computer

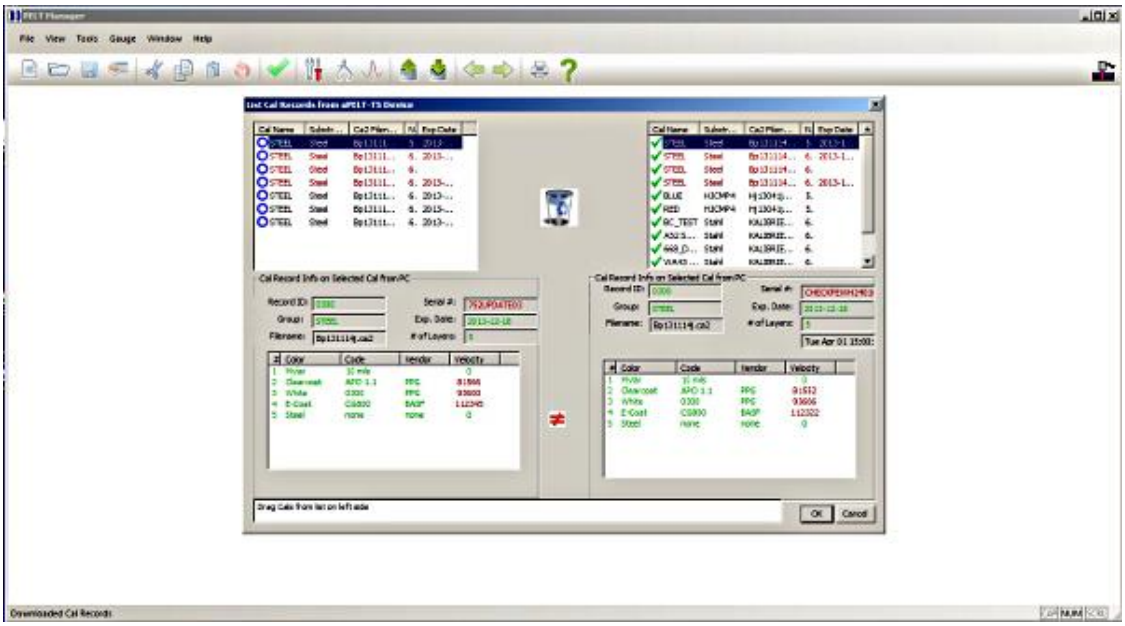
1. Power ON your gauge and return to the Job Start screen.
2. Connect the uPELT gauge to the host PC.
3. Start PELTManager on the host. Close all waveform windows if the application is already open.
4. Select **Gauge\Cal Records** from the menu bar pulldown.




5. A file list window will appear. Browse to the desired calibration file, for example a CA2 file in the PELTData\Cal folder.
6. Select the file and press Open. The Calibration Records transfer window will appear.



7. The LEFT box indicates calibrations in the CA2 file on the host computer. The RIGHT box lists calibration records on the gauge. Selecting a record in either list will highlight layer details in the box below.
8. Drag the desired cal record from the LEFT box (computer) to the RIGHT box (gauge) to copy.
9. Drag any files from the RIGHT box (gauge) into the Trash Can to delete.
10. 



**NOTE:** Out of date cal records on the gauge will be identified with a red not-equal sign as shown. This means a newer calibration record is available on the host computer and can be replaced.

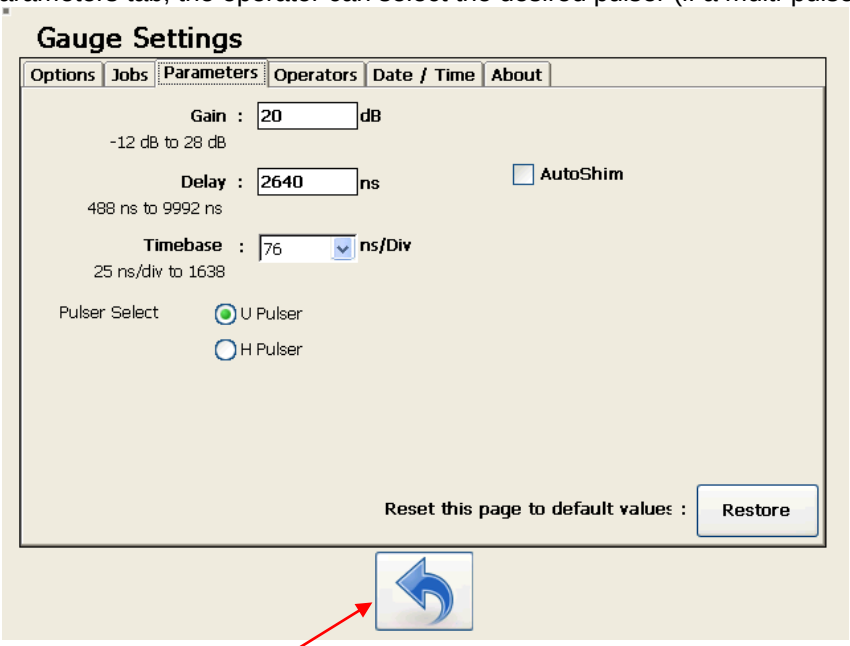
11. Select **OK** when the desired cal records have been copied to or deleted from the gauge. This is required to complete the operation.
12. Power OFF then power ON the gauge as directed in the Windows message box when complete.

## Important Settings Screens

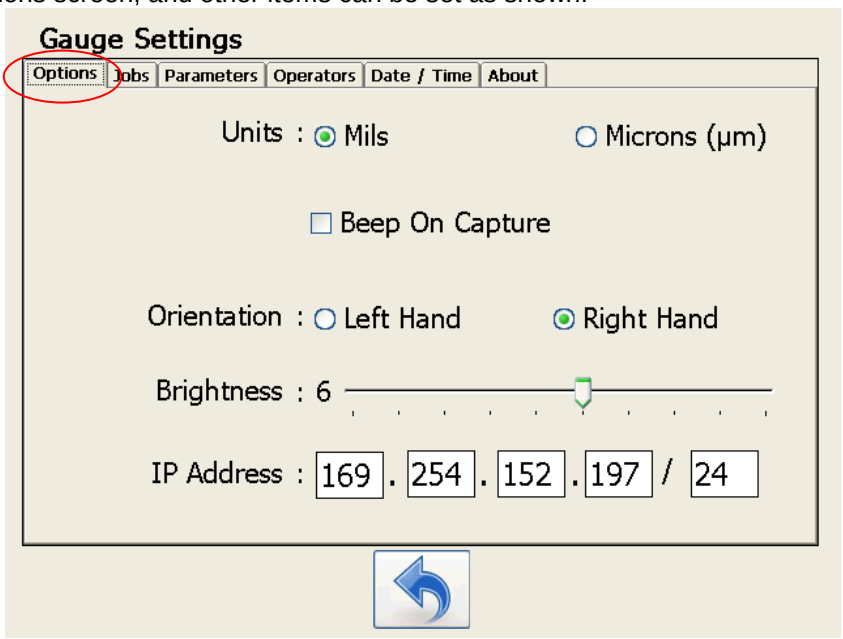
There are a number of gauge settings that are managed from the Settings screens, accessed with the 'Tools' icon at the Job Start Screen. These are arranged as tabs organized by basic function. In most cases, gauge settings are persistent. The last settings used will remain even after turning the gauge off. See Operator Manual for more details.

1. Return to the Job Start screen (the power-on boot screen).
2. Tap the Settings (tools) button to enter the last selected tab. Most gauge models will appear as shown.

In this parameters tab, the operator can select the desired pulser (if a multi-pulser unit), the starting gain, etc.




3. Tap the arrow at the bottom of any Settings screen to save any changes entered.
4. Other settings can be managed by returning to the Settings screen and tapping the desired tab at the top of the screen.
5. Tap to select the Options screen, and other items can be set as shown.




**NOTE**: moving to another tab before pressing the save arrow may lose any changes entered.