

# NDX Scanner

## Quick Start Guide for the NDX Scanner System



# Unpacking your system: Identifying the components in your system



- 1 NDX Scanner
- 2 Main Cable Assembly
- 3 PC Computer
- 4 Flash drive with Software
- 5 X Controller
- 6a X Controller Standard Input Cord
- 6b X Controller BPS Input Cord\*
- 7 WS3 and BPS\*  
\*Optional

# Unpacking your system: Identifying the parts of your scanner

## Cable Ports

Plug in the cables and wires here.

## Magnets

Attach to the inside of the vessel allowing for hands-free scanning.

## Drive Shaft

Spins the probe head out along the length of the tube.

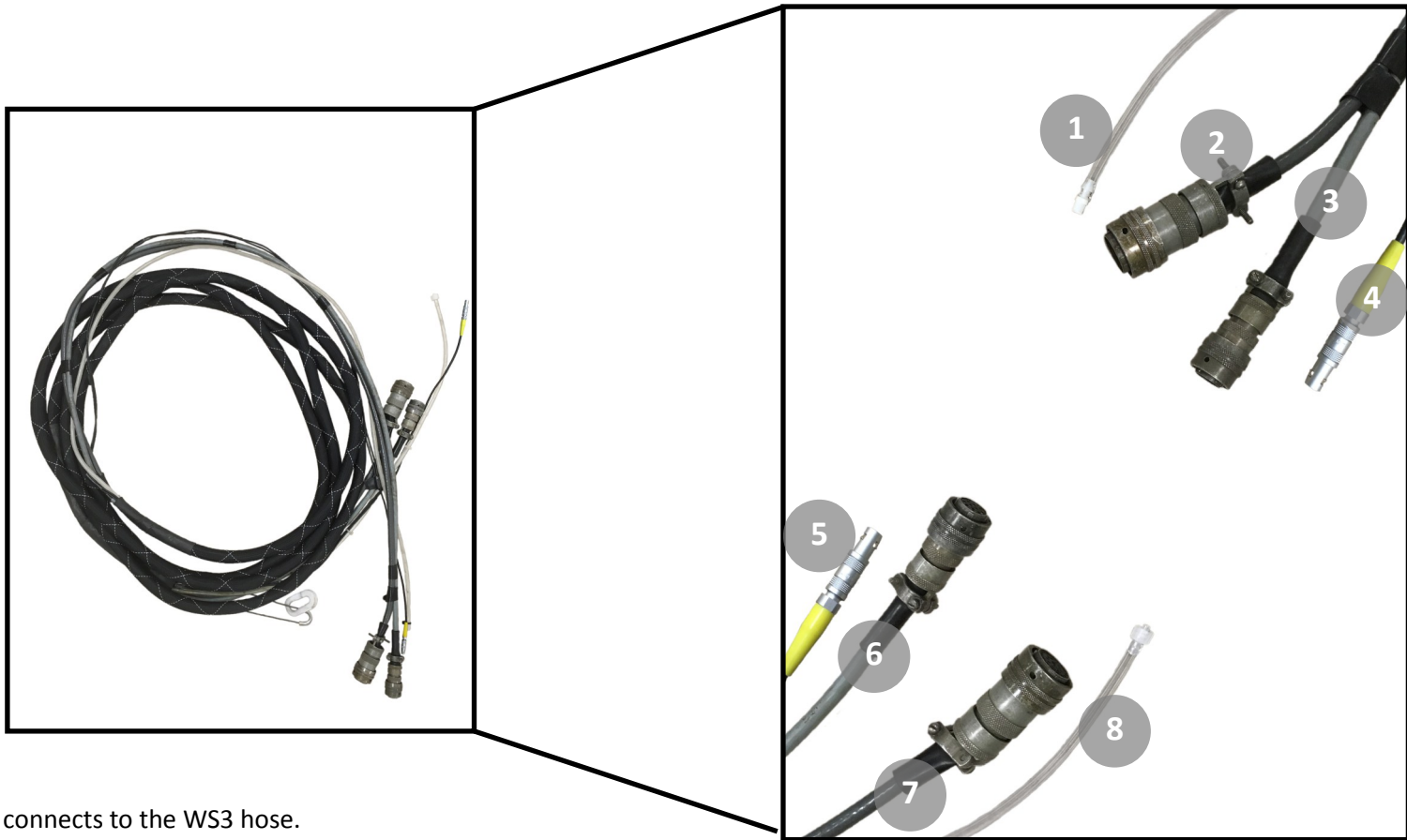
## Probe Head

Runs along the inside of the tube to read the thickness. Comes in a variety of sizes.

## Magnetic Release

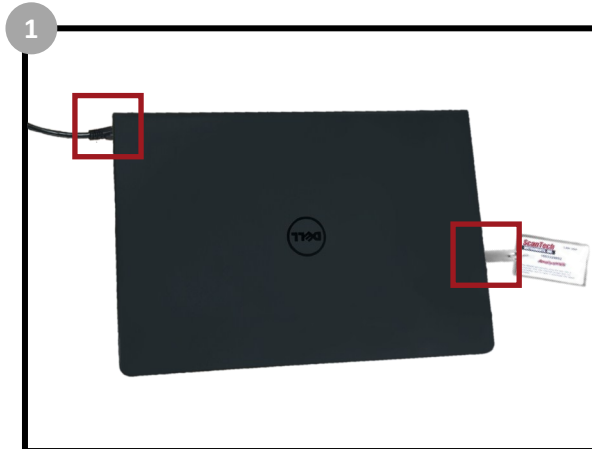
Engages and disengages the magnets.

## Main Cable Assembly: Connecting the main cable assembly

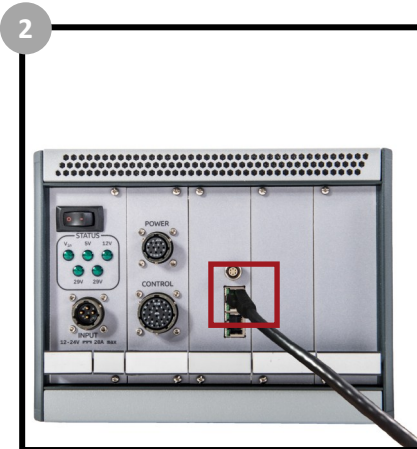


- 1 Water hose connects to the WS3 hose.
- 2 Control cable connects to the rear of the controller box
- 3 Power cable connects to the rear of the controller box
- 4 Wire connects to the front of the controller box
- 5 Wire connects to the front of the scanner
- 6 Power cable connects to the front of the scanner
- 7 Control cable connects to the front of the scanner
- 8 Water hose connects to the front of the scanner

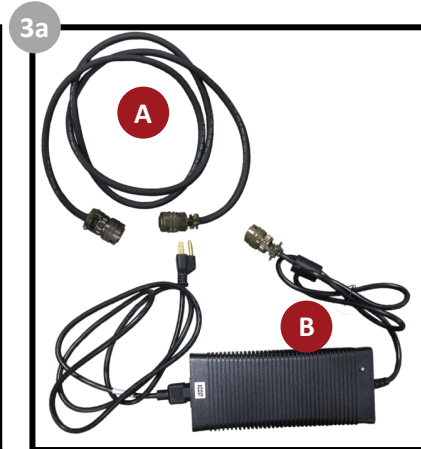
# Setup: Connecting the laptop, controller box, and optional BPS



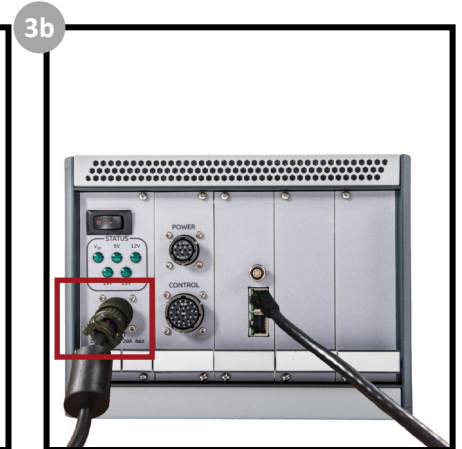
Connect the laptop to the controller box using the ethernet cable, and plug in the software key. Turn on the computer.



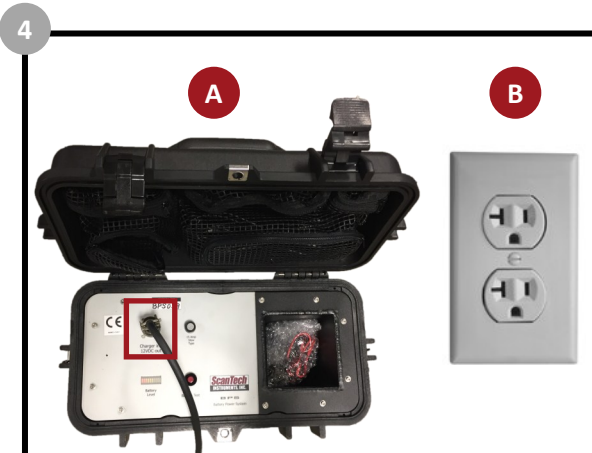
Connect the other end of the ethernet cable to the rear of the controller box.



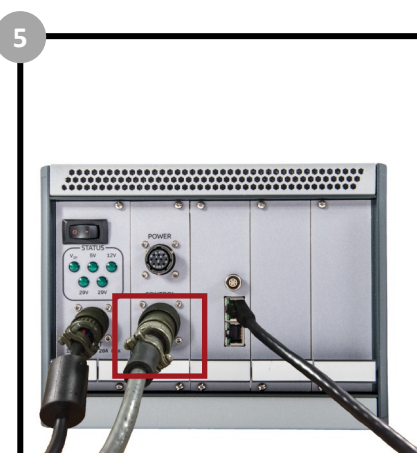
If your system includes the BPS, you will be using cable A. If your system does NOT include the BPS, you will be using cable B.



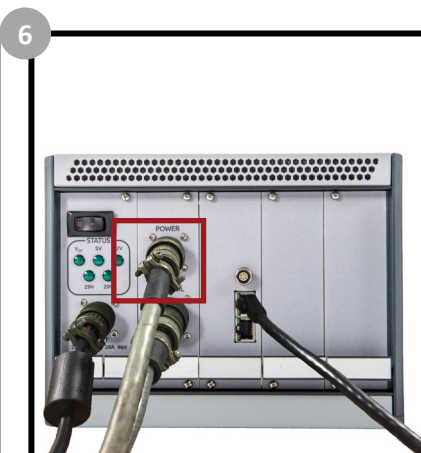
Plug the input cord into the rear of the controller box.



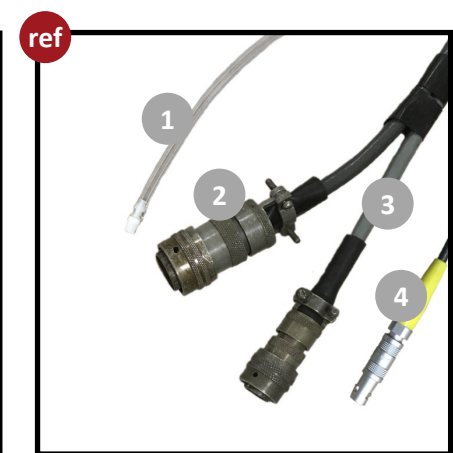
If you used cable A: plug the other end of the input cord into the BPS.  
If you used cable B: plug the other end of the input cord into a wall socket.



Connect the control cable (#2 - refer to the main cable assembly diagram) to the rear of the controller box.



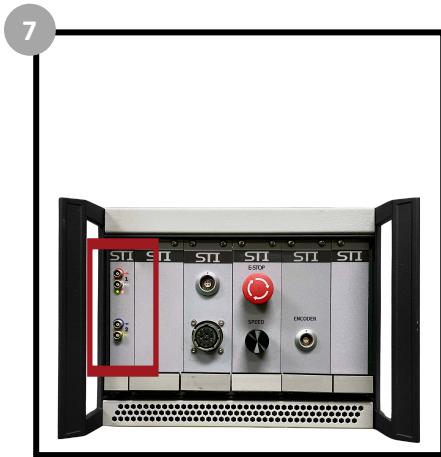
Connect the power cable (#3- refer to the main cable assembly diagram) to the rear of the controller box.



Main Cable Assembly Diagram



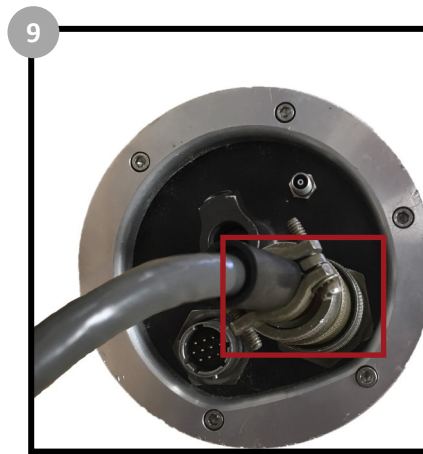
## Setup: Connecting the controller box, scanner, and WS3



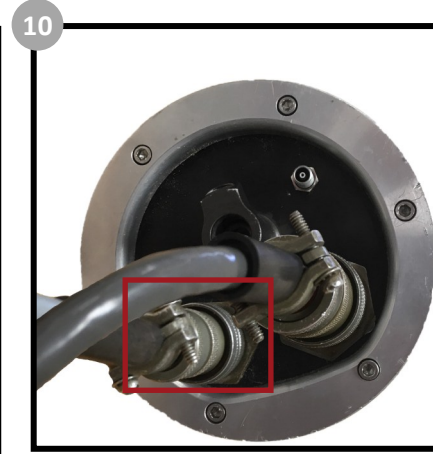
Connect the main cable wire (#4 - refer to the main cable assembly diagram) to the front of the controller box.



Locate the connection ports on the scanner for the main cable assembly.



Connect the control cable (#7 - refer to the main cable assembly diagram) to the connection port on the scanner.



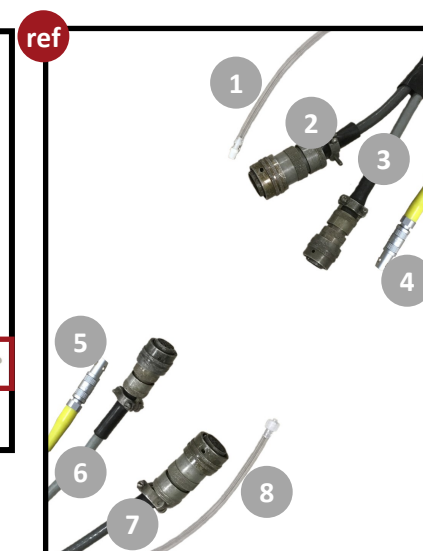
Connect the power cable (#6 - refer to the main cable assembly diagram) to the connection port on the scanner.



Connect the main cable assembly wire (#5 - refer to the main cable assembly diagram) to the connection port on the scanner.



Connect the water hose (#8 - refer to the main cable assembly diagram) to the scanner.

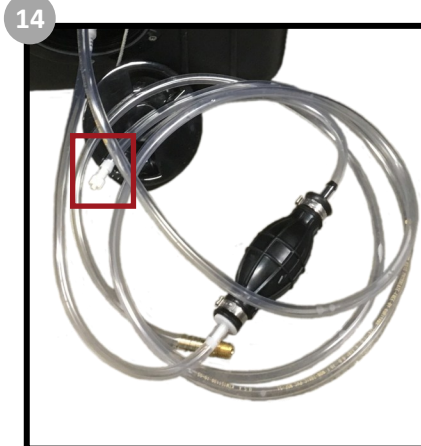


Main Cable Assembly Diagram

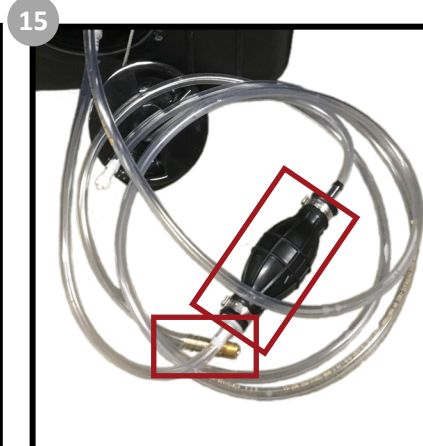
# Setup: Connecting the WS3 and contact information



Remove the front panel of the WS3 and connect the hoses as shown.



Connect the top hose to the main cable assembly hose (#1 - refer to the main cable assembly diagram)



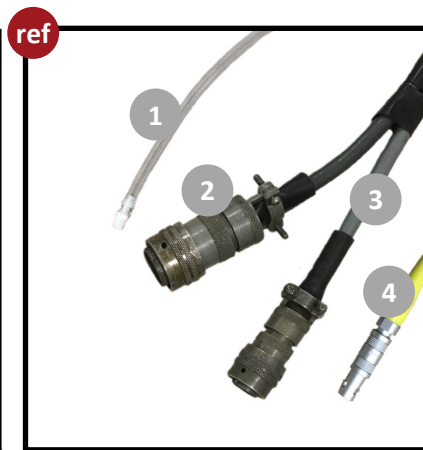
Connect the bottom hose to your water source. Turn on your water source and squeeze the pump to start the flow.



Open the lid and connect the power cable to the WS3 and connect the other end to a wall socket or to the battery pack. Flip the switch to turn the pump on.



Turn on the controller box. The green lights beneath the power switch should all light up.



Main Cable Assembly Diagram

**CI**

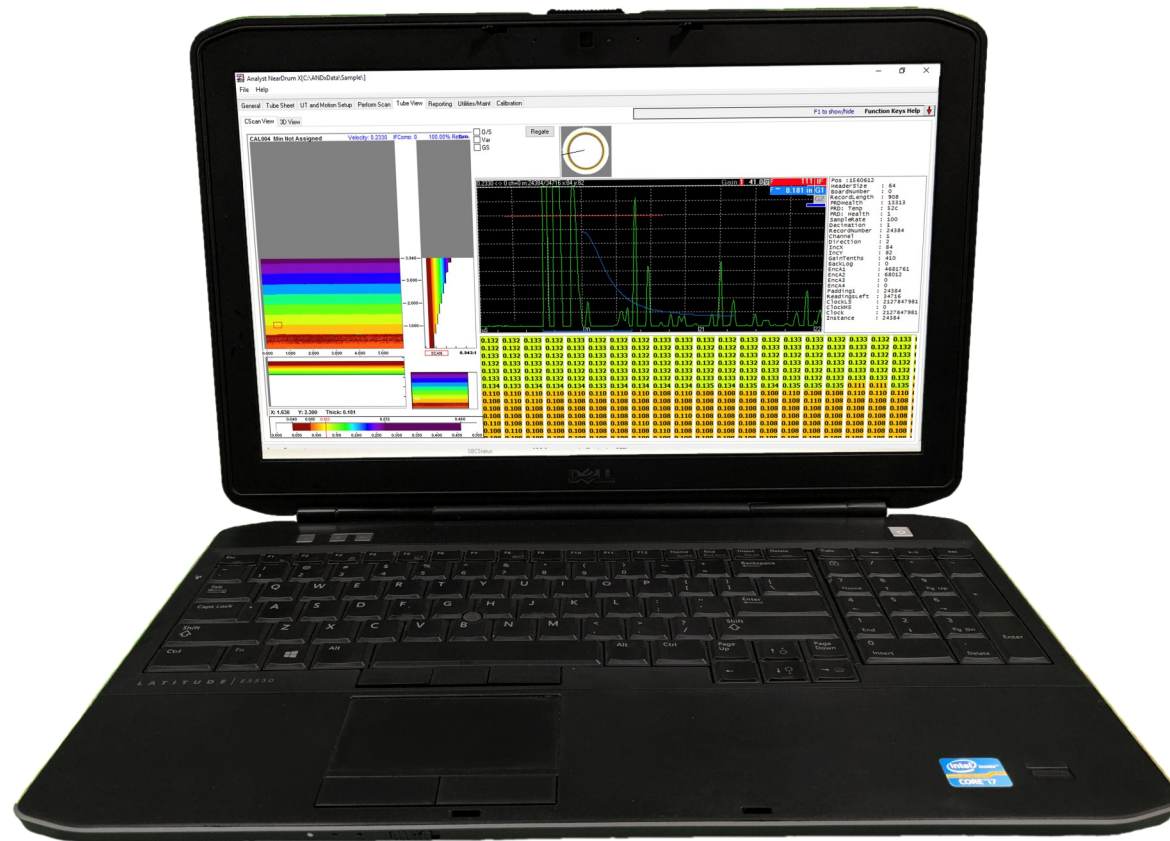
Contact Information:  
**Phone:** 1-903-234-2025  
**Email:** sales@scanndt.com  
**Fax:** 1-903-234-2033

**Or visit us on the web:**  
[www.scanndt.com](http://www.scanndt.com)

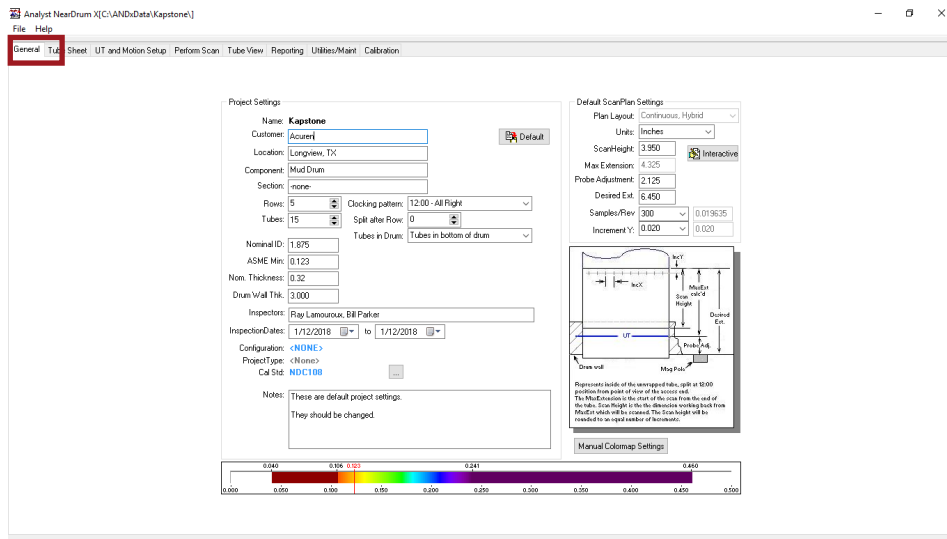
Should you have any questions or concerns, please do not hesitate to contact us!

# Analyst NDX™

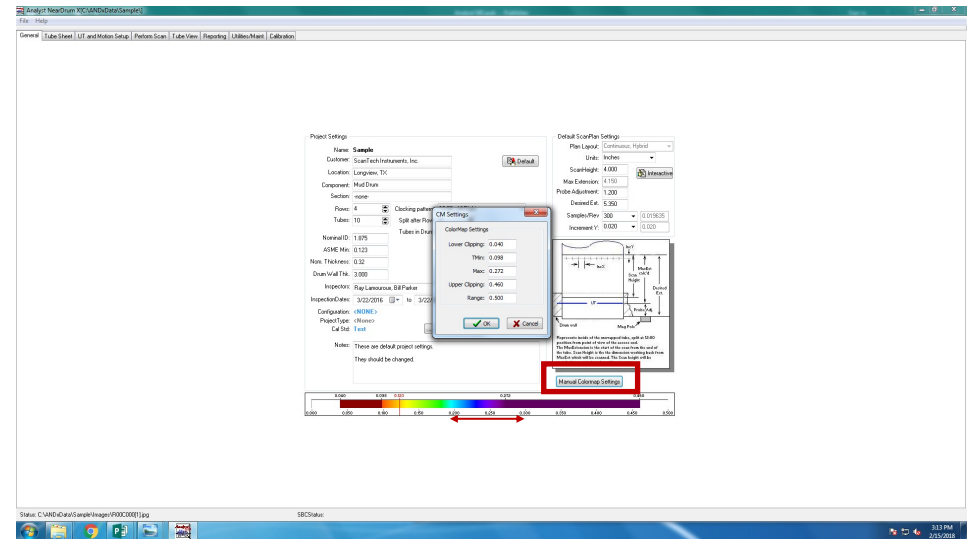
## Quick Start Guide for Analyst NDX™ Software



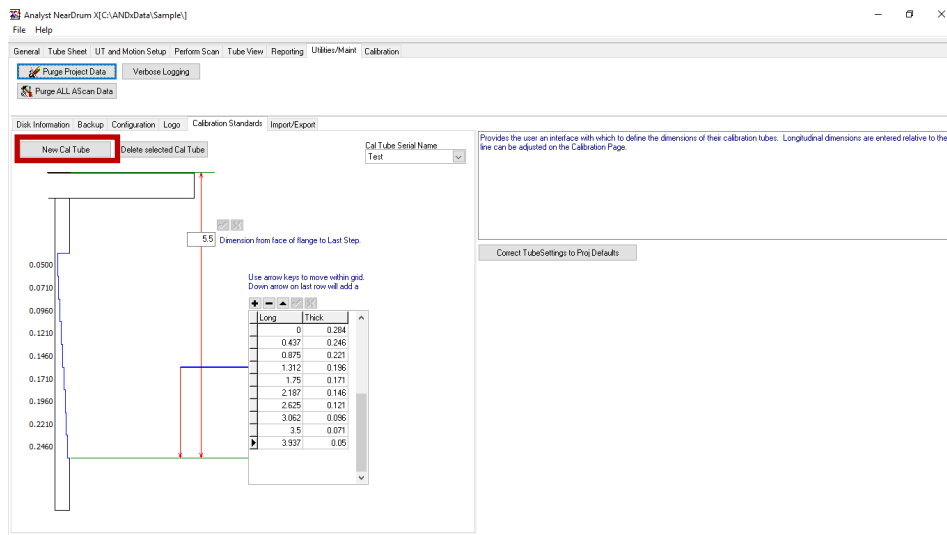




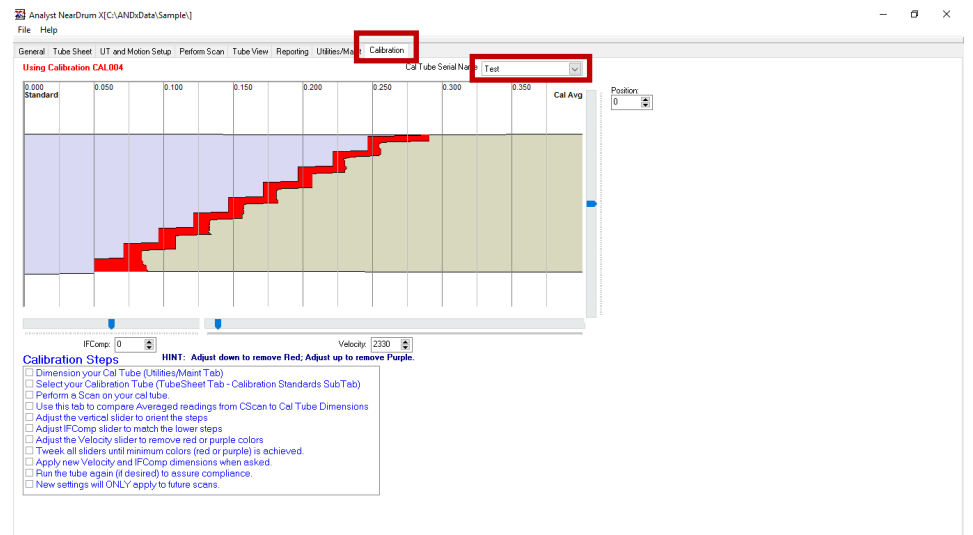
- 1 Begin on the “General” tab. Fill in the information about your scan including the customer information, number of rows and tubes, nominal inner diameter, and additional scan settings.



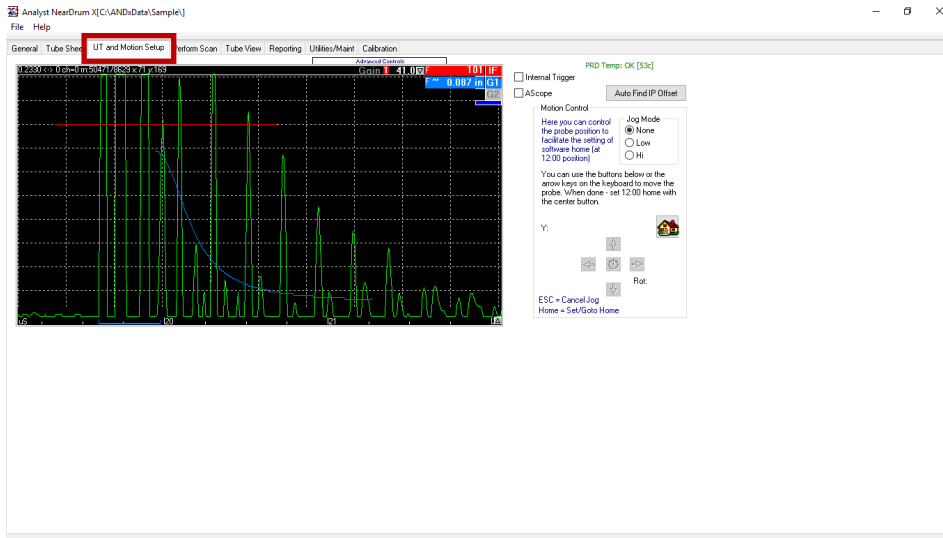
- 2 Optional: Edit the color map settings by clicking and dragging the colors or manually input the values by clicking the button “Manual Colormap Settings”.



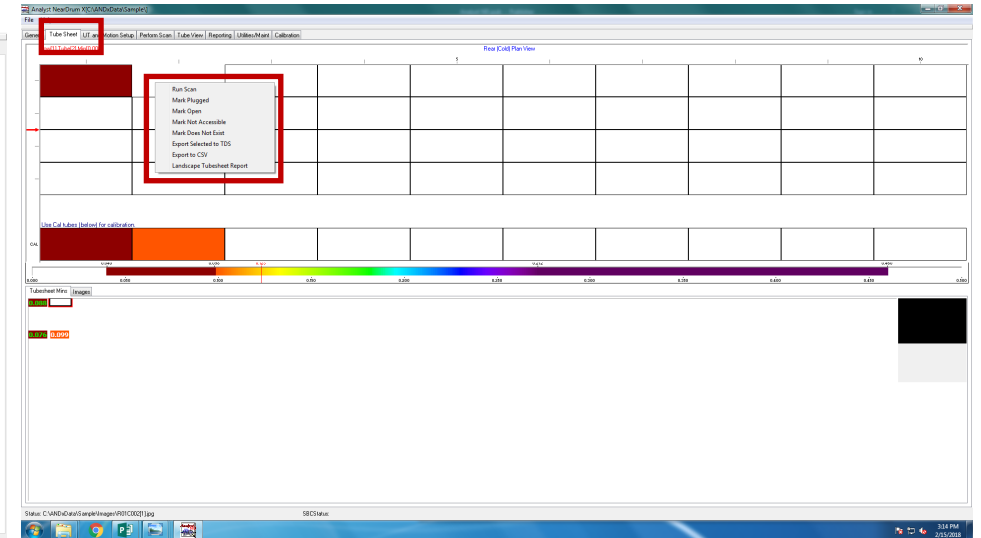
- 3 Move to the “Utilities/Maint” tab. Create a “New Cal Tube” and add a name for the “Cal Tube Serial Name”. Input the thicknesses and distances of the calibration tube in the chart.



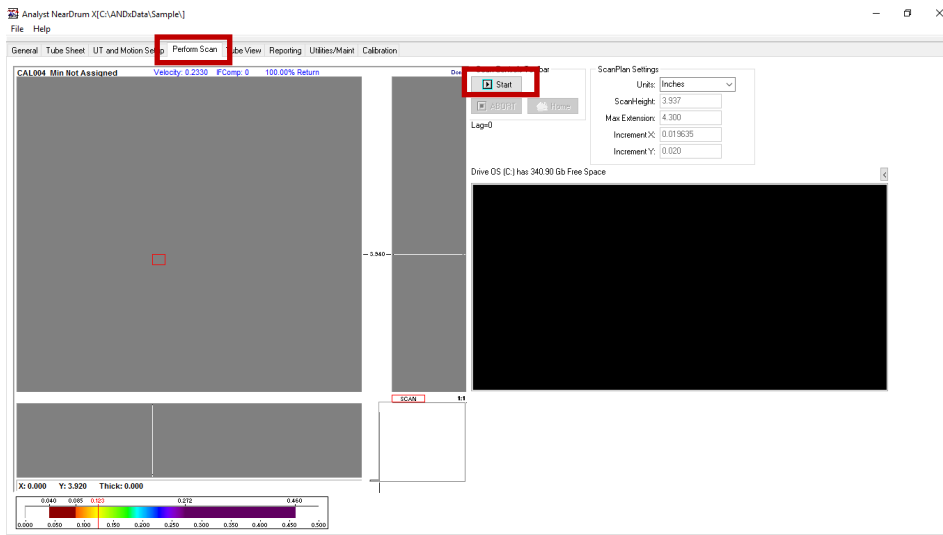
- 4 Move to the “Calibrate” tab. Select the calibration tube serial name from the drop down listing. Using the calibration tube, follow the steps given at the bottom of the page to calibrate the scanner.



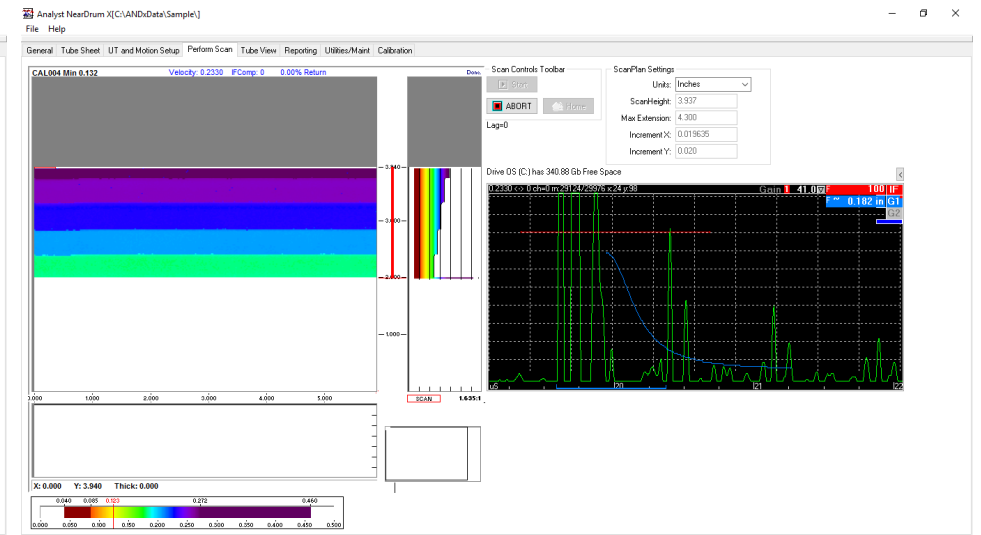
- 5 Move to the “UT and Motion Setup” tab. You can set the home position and auto find the IP offset.



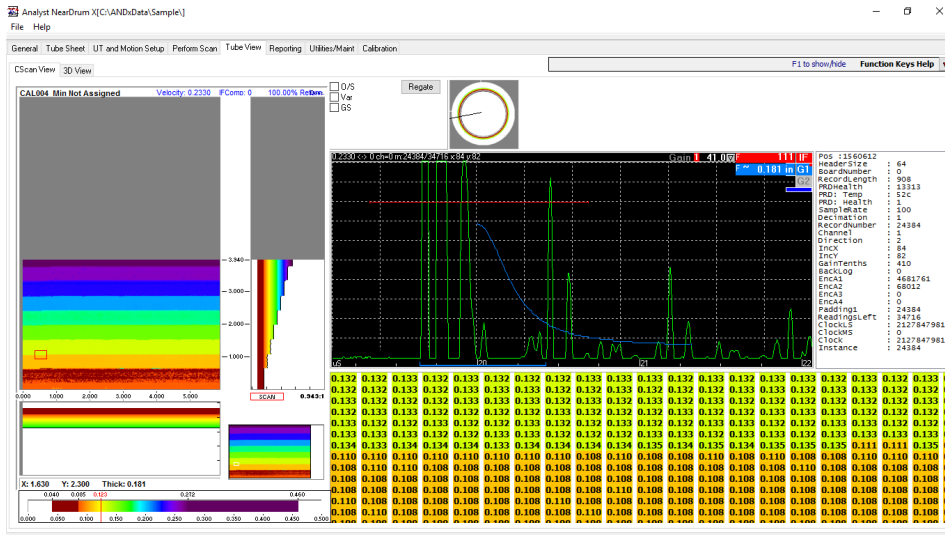
- 6 Move to the “Tube Sheet” tab. Right-click on the selected tube and choose whether to run the scan or mark it.



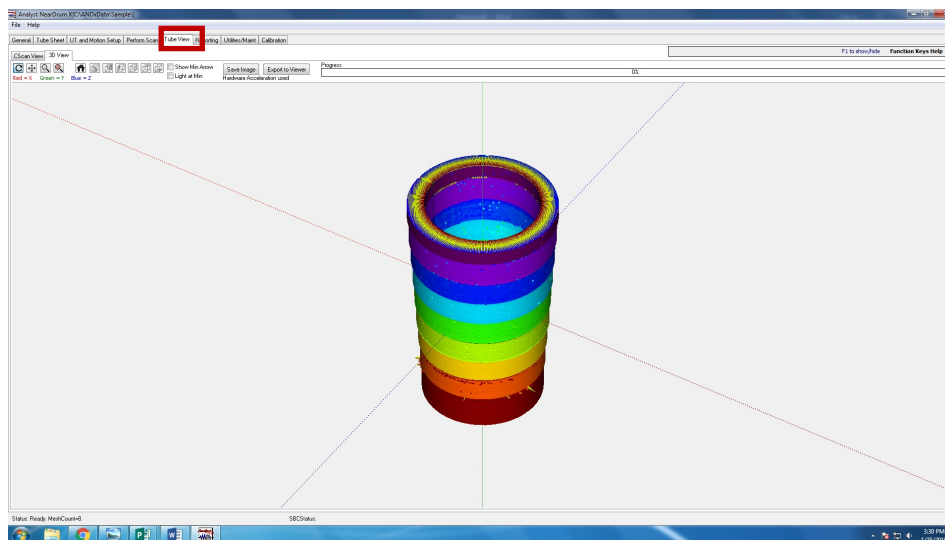
- 7 By clicking “Run Scan” on the tube sheet, it will automatically switch to the “Perform Scan” tab. Click the “start” button to begin the scan. Should you need to stop the scan, you can click “abort”.



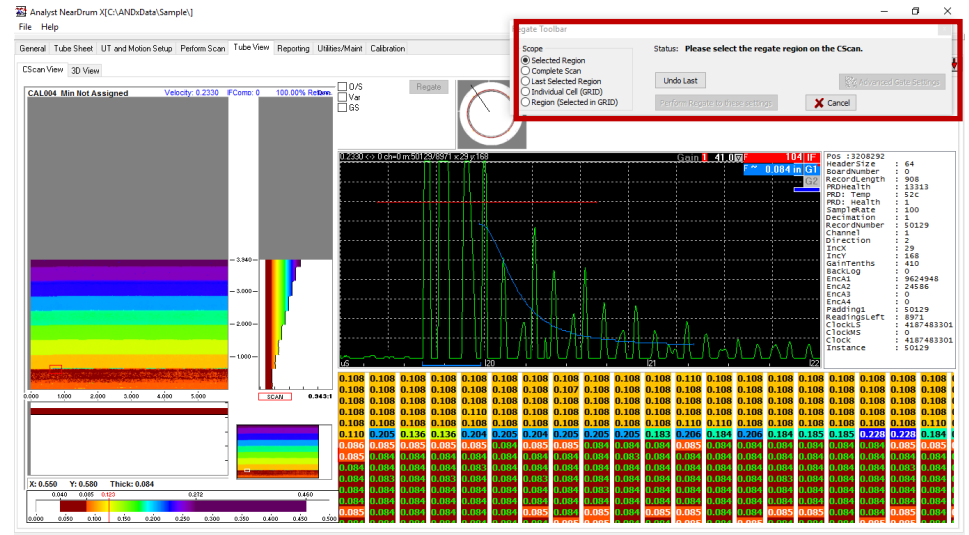
- 8 You can watch the scan in real-time and make adjustments to the gain as necessary.



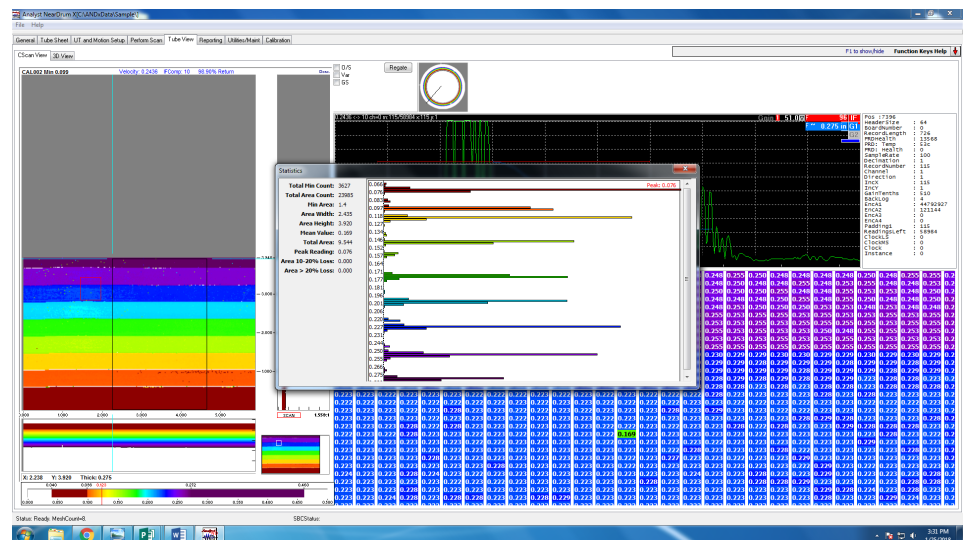
9 Next move to the “Tube View” tab. On this tab, you can re-gate the data, adjust the colormap, or see a 3D view of the tube.



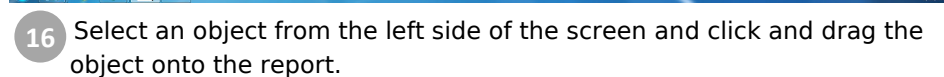
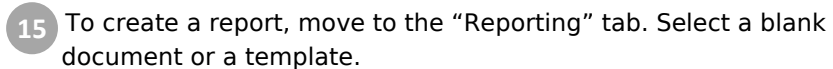
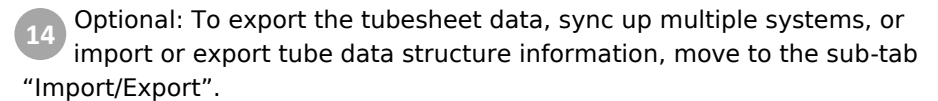
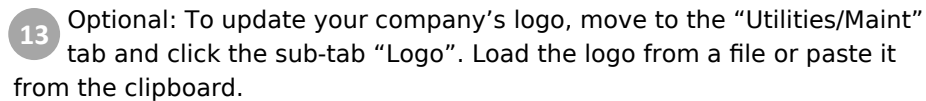
11 Optional: Move to the 3D view of the tube. You have the option to save a picture of the tube or export the data to an external viewer.



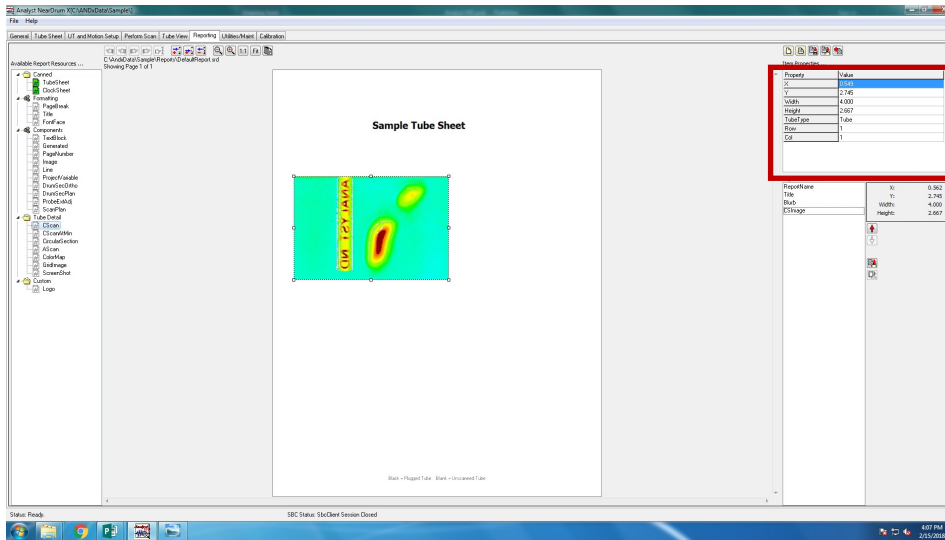
10 Optional: To re-gate the data, click the “Regate” button in the top right corner. Select which region to re-gate, move the gate to the new position, and click “perform regate to these settings”.



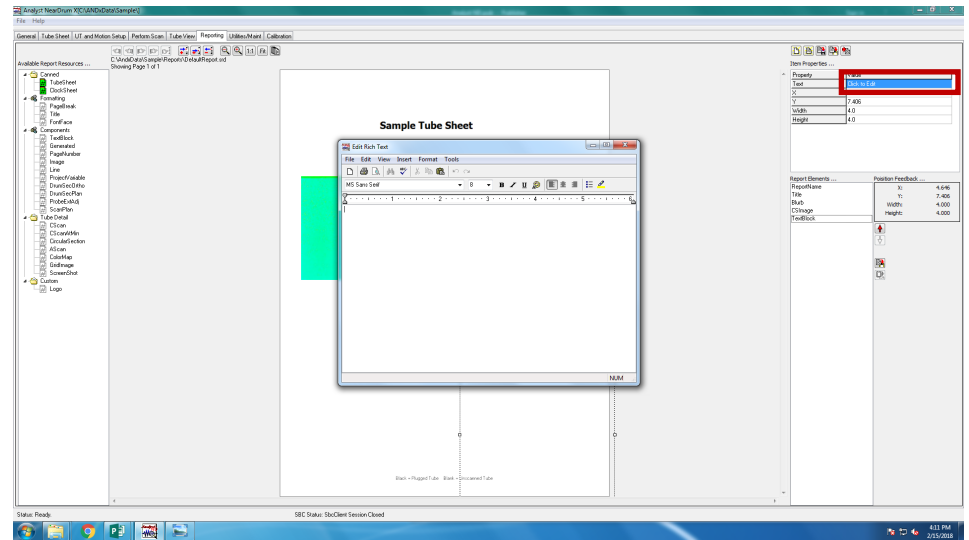
12 Optional: To view a histogram of a selected region, click and drag a box across the C-scan.



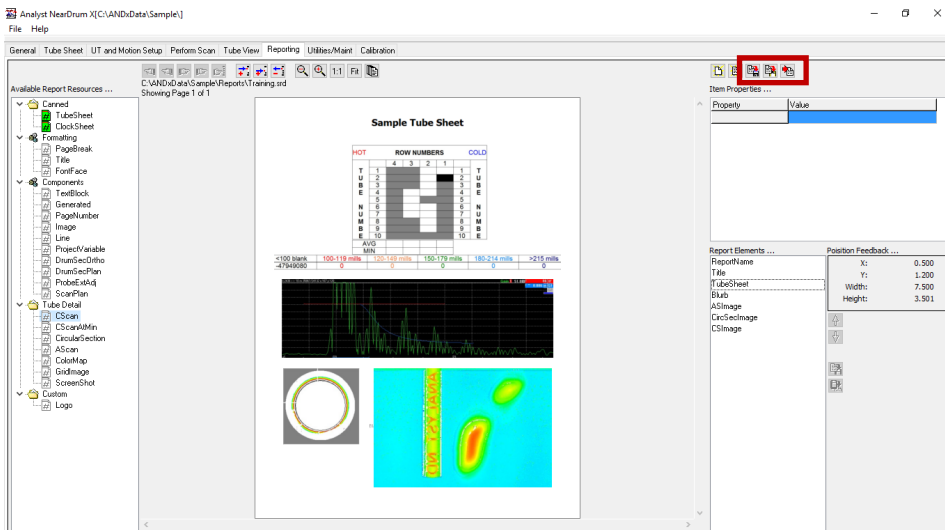




17 Modify the properties of the object by editing the values in the table.



18 To edit a text block, select the cell in the properties table that says "click to edit". This will bring up a text editor where you can edit the text, font, size, and color.



19 Once you are finished customizing the report, you can save and export the report.

## Data Acquisition: Function keys

Key	Function
F1	Show/hide listing of function keys
F2	Re-gate data
F3	Save custom (named) image
F4	Find next min. point
Ctrl F4	Back through min. points
F5	Toggle C-scan full width
F6	Toggle AmpBS/Grid
Ctrl F6	Toggle ABS/ADS
F7	Use gate settings for UT setup
F8	Move to position
F9	Set min and save images
F10	Crosshair to min position
F11	Toggle play/stop
F12	Locate min area

Key	Function
End	Fits C-Scan to window
Home	Scale of C-Scan 1:1
Ctrl Home	Zoom C-Scan to fit grid dimension
Page Up	Zoom in
Page Down	Zoom out
Arrow Keys	Move cross-hairs on C-Scan image
Ctrl Arrow Keys	Scroll window when zoomed in
Alt Arrow Keys	Scroll grid (red) box