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# NDX Scanner

## Quick Start Guide for the NDX Scanner System



## Unpacking your system: Identifying the components in your system





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## 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



- Bower cable connects to the rear of the controller box
- 4 Wire connects to the front of the controller box
- <sup>5</sup> 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 (#3refer 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.

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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

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

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



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# Analyst NDX<sup>™</sup>

# Quick Start Guide for *Analyst NDX*<sup>™</sup> Software



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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
É	or manually input the values by clicking the button "Manual Colormap
Sett	ings".

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0.2460	Adjust the Velocity slider to remove red or purple colors	
	Apply new Velocity and IFComp dimensions when asked.	
	New settings will ONLY apply to future scans.	
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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.



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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".

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



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.



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".



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.



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Optional: To update your company's logo, move to the "Utilities/Maint" tab and click the sub-tab "Logo". Load the logo from a file or paste it from the clipboard.	Optional: To export the tubesheet data, sync up multiple systems, or import or export tube data structure information, move to the sub-tab "Import/Export".	i

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

# Data Acquisition: Function keys

Кеу	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

Кеу	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