UTwin™ | Full Featured Ultrasonic C-Scan Software

UPGRADE FROM INDUSTRY PROVEN ULTRAWIN™ PLATFORM!

UTwin™ is a 3rd generation 32 bit, true Windows data acquisition, imaging and analysis software system.

Built from our industry standard UltraWin™, UTwin™ is user friendly with intuitive pull-down menus, independent C-Scan pages and feature icons. It’s packed with features such as multiple real time A, B and C-Scan displays, coupled with powerful post-processing modes like zoom, pan, size measure, RF replay, cluster characterization and export to MS Excel. Advanced features include multiple gates with individual velocities, raster or polar plotting, full contour following, slave gates, back wall followers, phase detection gates, feature ratio gates and many more.

UTwin™ supports up to 8 Ultrasonic channels from multiple GE approved AD-1210-IPR PCI cards, NDTA 4/8 channel multiplexers and other external pulser receivers. Display multiple gate outputs on individual C-Scans, mix zoomed plots, customized 3D and 4D views. It’s all built in! Need calls for a back wall follower? How about phase gate? Use your imagination and let UTwin™ do the work! Mix any combination of C-Scans, B-Scans, numeric plots and even 3D views! Just click, add and size. Running out of room? Just add another page! It’s that easy to build your own custom display and it’s only possible with UTwin™.

Never do without the display data you need again. MISTRAS designs its own systems and software. Need turn key? Simply ask your representative.

KEY FEATURES

- Windows / Windows 7 ready
- Flexible hardware configuration for new systems, upgrades and even custom NDTA installations
- Multiple pulser/receiver (P/R) support (including AD-IPR1210, external PR 60 MHz/JSR, & expanding, with our AD-IPR-EXPRESS-4 board family
- Multiple Analog to Digital (A/D) converter support (including AD-1210-PCI, AD-81G, and expanding) with resolutions up to 16 bits
- Multiple axis scanner support (stepper, servo)
- 32 axes motion control (X, Y, Z axes and turntable axis) with or without encoders and optional motorized manipulator support
- Real time display and acquisition of A-Scan, B-Scan and C-Scan, +++
- Multiple gate settings (currently up to 4 for standard UTwin™, custom systems can provide even more)
- Powerful post-processing features like zoom, cursors, etc.
- Easy file handling capabilities
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GRAPHING CAPABILITIES INCLUDE:

- Exceptional 2D and 3D graphing capabilities. Display multiple graphs on a screen, limited only by the resolution of the screen itself.
- Graphs are individually sizable on a screen, making for a very flexible arrangement. Set up one or more large graphs for visualization with multiple supporting small graphs alongside or around the main graph.
- Arrange multiple graphs on a screen. Set up multiple screens and access each by selecting a user-labeled tab. Set up themes for screen layout (e.g. A-Scan, feature monitoring B-Scan, real-time C-Scan, replay analysis, themes, etc.).
- Set up many different types of graphs including; A-Scan Zoomed A-Scan, Spectrum, 2D C-Scan image, 3D C-Scan image, multiple plots on a single graph with coloring options and more.
- Easily enlarge all graphs to full screen (maximized) by the touch of a button.
- All graphs have full cursor readout capability, either one or double cursors.
- Infinitely zoom and pan all graphs (2D and 3D included) for close-up analysis.
- Post analysis software with annotation.

OPTIONAL FEATURES INCLUDE:

- RF Waveform storage and replay, with changing gate and analysis settings.
- Weld analysis.
- TOFD (Time of Flight Diffraction).
- 3D C-Scan.
- Statistics analysis.
- Cluster analysis.
- Chain Scan.
- Multichannel C-Scan capability.
- Contour following.
- TCP (Transducer Characterization Program).
- Phased Array.
- Multi-Layer Gating.
- % of Bond analysis.

UTwin™ interfaces to ALL NDT Automation and most other tanks/scanners. Simply configure the motion and UT setups with easy to use pull-down menus.