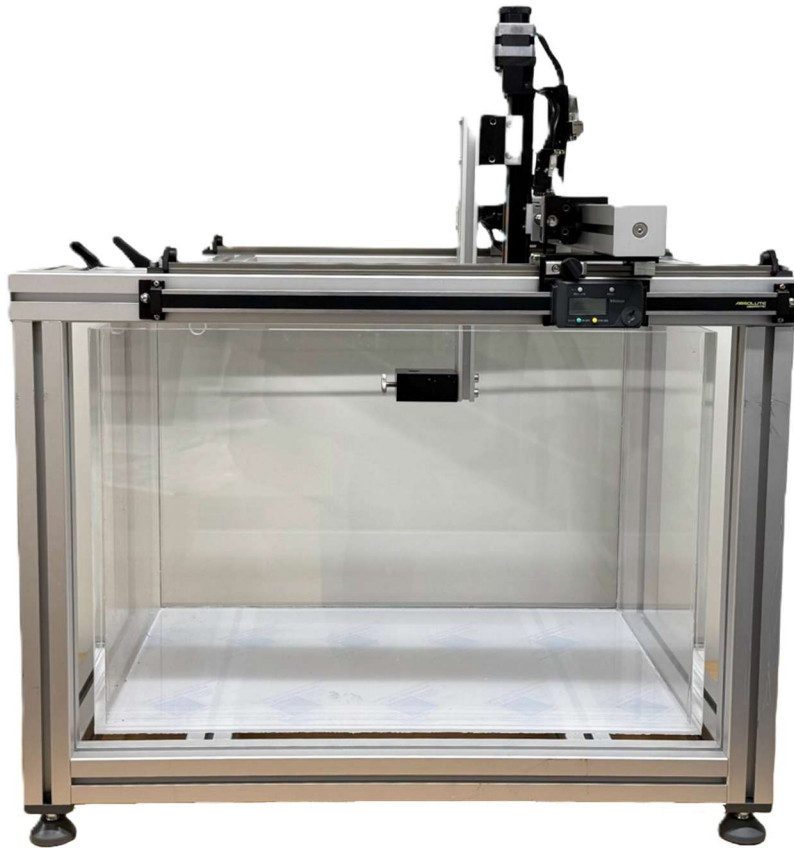


UMS Research tank v2



UMS Research tank v2 is an entry-level scanning system that offers a way to automate many of the repetitive tasks of acquisition, display, storage and processing of data associated with the measurement and mapping of acoustic fields in a cost-effective way.

Building on the accuracy required for ultrasound measurements, UMSR2 features an enhanced framework for improved stability during scanning. It also incorporates:

- Computer controlled movement of two linear axes and data acquisition
- Improved manual positioning of the third linear axis, now equipped with either a ruler or digimatic scale for visual positioning feedback
- Beam profiling, planar scanning and trans-axial scanning with real-time display in the two motorised axes

TYPICAL SYSTEM SPECIFICATION

Water tank dimensions	0.6 m (L) x 0.5 m (W) x 0.4 m (H)
Framework dimensions	0.72m (L) x 0.58m (W) x 0.92m (H)
Linear motion range	0.15m x 0.15 m
Ideal frequency range	0.5 MHz – 20 MHz
Number of axes	2 motorised linear axes (can be user-reconfigured to any choice of XY, YZ or XZ,). 1 manual axis with visual feedback (offered by either a rule or a digimatic scale)
Position encoding	None
Linear resolution*	2.5 µm
Working speed	10 mm/s
Working load	Up to 1 kg
Data acquisition	Via modern digital oscilloscope (can be supplied if needed)
System software	USB Key Supplied with UMS3 Software Installer. UMS3 handles hardware synchronisation required for scanning, acquisition of data and post processing.

*Calculated from manufacturer specification of linear axes leadscrew pitch in combination with smallest motor step size.

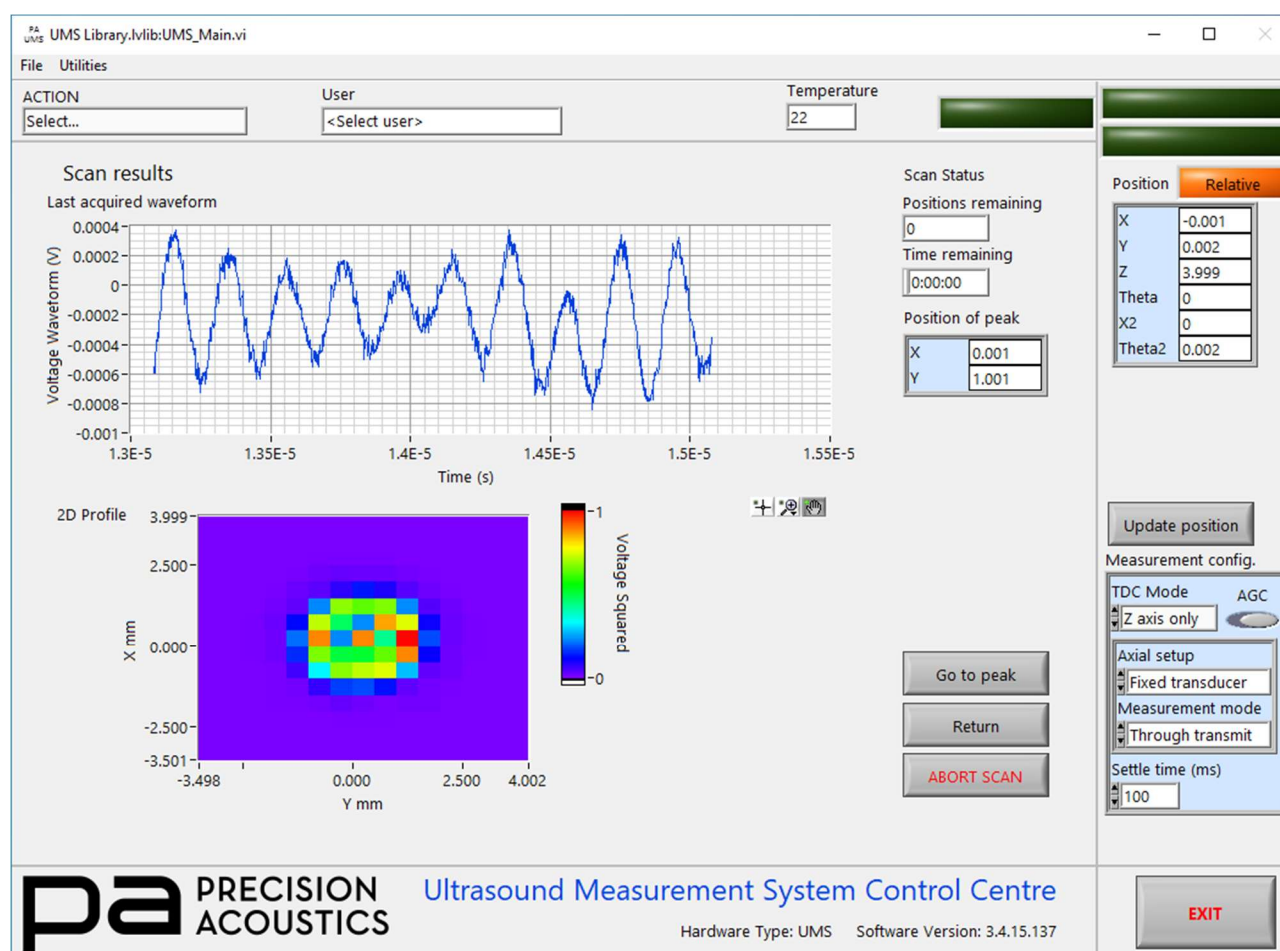


Figure 1 – UMS3 acquisition interface.

All information is based on results gained from experience and tests and is believed to be accurate but is given without acceptance of liability for loss or damage attributable to reliance thereon as conditions of use lie outside the control of Precision Acoustics Ltd.