solutions within reach

Resona 7

Ultrasound System

mindray

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Next generation ZONE Sonography® Technology advancing premium ultrasound to new levels

Powered by pioneering ZONE Sonography® Technology, the Resona 7 system delivers crystal clear B-mode imaging capabilities with unrivaled detail resolution and image uniformity across all general imaging, vascular, women's imaging, and shared service applications. Ultrasensitive Doppler modes and high-speed digital signal processing permit accurate display of hemodynamic states from skin line to depths up to 40 cm* without compromising frame rate. An intuitive, customizable gesture-powered touch screen enables logical and efficient workflow for an enhanced user experience.

Coupling premium imaging with advanced workflow features and user-directed ergonomic design, the Resona 7 system moves premium level ultrasound imaging into the next generation.

* Available on C4-1 transducer

Powered by ZST+

The Resona 7 system is the flagship imaging system in the Mindray portfolio of clinical solutions. It is powered by revolutionary, software-driven ZONE Sonography Technology (ZST), an approach to acoustic data acquisition and image formation that breaks the barriers of conventional ultrasound imaging.

Advanced Acoustic Acquisition™

Renders crystal clear imaging by using large ZONES to acquire up to 90% more acoustic data per frame and at speeds up to 10x faster than conventional technology.

Dynamic Pixel Focusing™

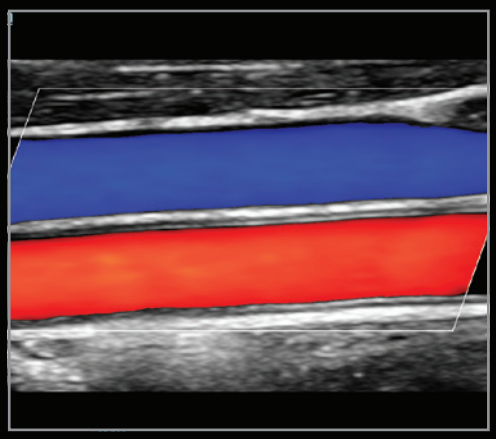
Creates a perfectly focused image every pixel, every frame, every time, in every patient and in every application, from skin line to deepest depths (up to 40 cm with the C4-1 transducer).

Sound Speed Compensation™

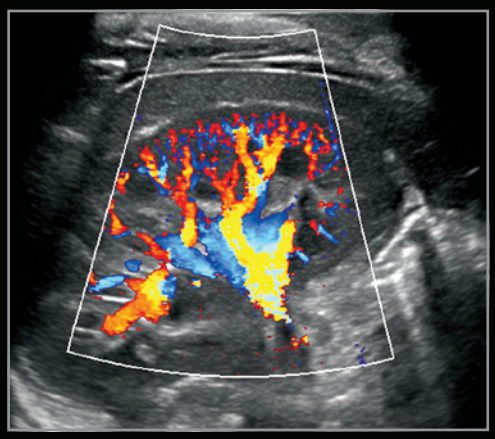
One button touch automatically calculates the true speed of sound in a specific soft tissue and recalibrates the imaging system to optimize spatial and contrast resolution.

Total Recall Imaging™

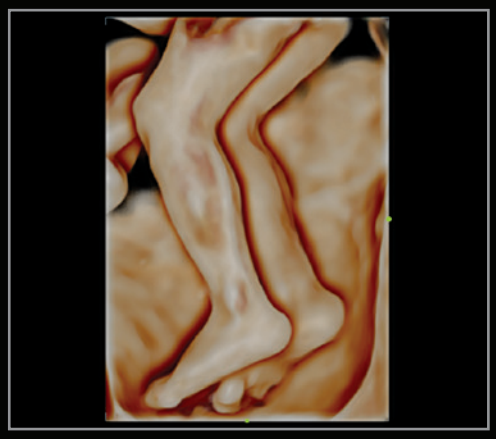
Powerful software allows manipulation of raw acoustic data from archived and cine images/clips permitting a broad range of post-processing functions, eliminating the need for repeat scanning and increasing patient throughput.



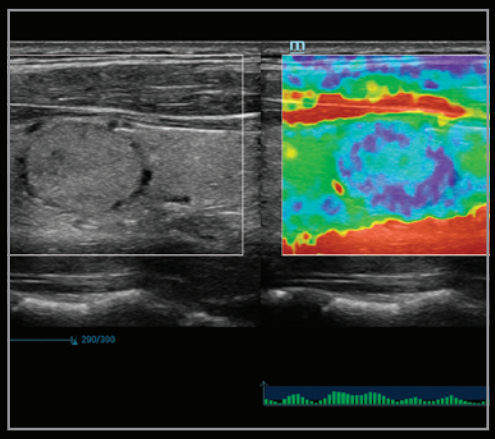
Carotid artery and jugular vein



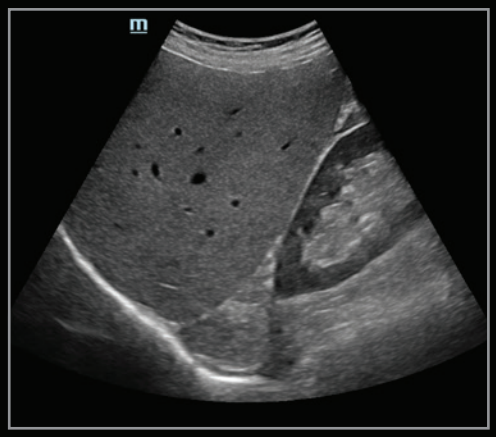
Renal CDI



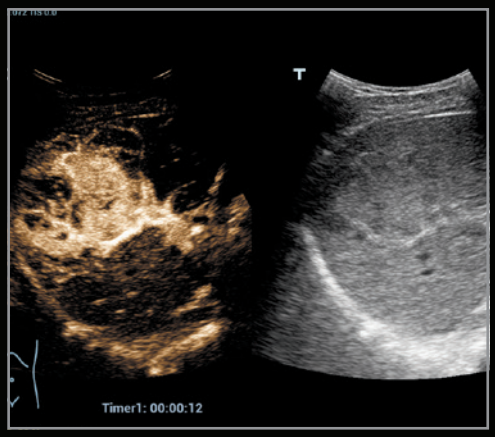
4D imaging of limbs



Thyroid nodule with
Natural Touch Elastography



Liver/kidney B-mode



Contrast imaging of liver mass

Key Features

- iWorks™: powerful protocol and customizable software
- iNeedle™: enhanced needle visualization software
- Seamless wireless access
- Voice command capabilities
- 3D – 4D supports color Doppler imaging
- HR Flow: better visualization of tiny vessels and complex flow patterns
- Retrospective post-processing capabilities
- Smart Doppler: allows rapid and accurate adjustment of color and PW Doppler modes
- Smart FLC: automatic detection and volume calculation of ovarian follicles using a 3D volumetric data set
- Smart OB: automatic measurement of major fetal biometric parameters – BPD, HC, OFD, FL, AC

ZONE Sonography Technology (ZST+)

By incorporating robust signal processing and advanced image formation in its ZST architecture, the Resona 7 system offers several unique features which can assist with bringing clinical certainty within reach

Robust
hardware

- Designed by users for users
- Fully-featured platforms with premium image quality
- Advanced technologies and special focus on ergonomic design
  - Improve patient management
  - Increase ease-of-use
  - Enhance users' overall experience

+

Next generation
software

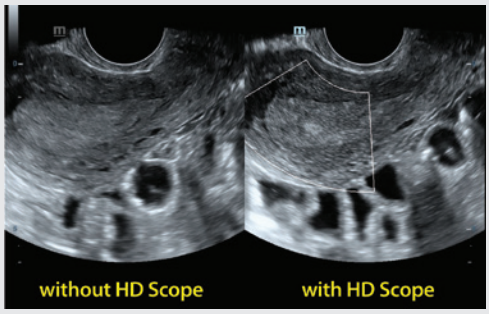
- Software-based; easily upgradeable
- Acoustic data acquired in ZONES
- Permits rapid acoustic acquisition at speeds up to 10x faster
- Full field-of-view focus
  - Every pixel
  - Every frame
  - Every time

ZST+ Advanced Features

HD Scope

High Definition Scope

HD Scope is an image processing technique that focuses imaging resources within a specified region of interest (ROI), analyzes the received channel data in unique ways, and applies various filtering and processing algorithms. This results in more optimal spatial and contrast resolution for various tissue types.

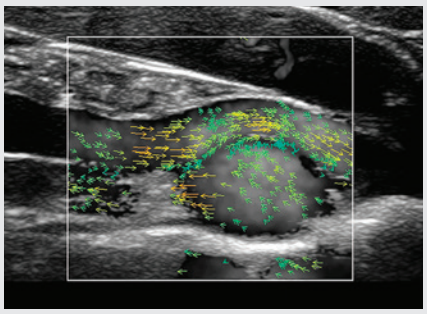


Endometrial polyp with enhanced contrast resolution

V Flow

Vector Flow

Vector flow imaging creates a quantitative map of hemodynamic states by tracking the acoustic speckle produced by red blood cells as they flow through several non-temporally coherent plane waves. The resulting information is plotted as arrows of varying lengths and colors expressing direction and velocity of blood within the interrogated area.

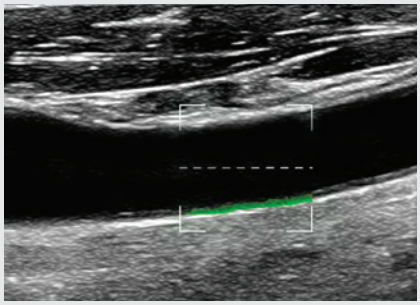


Popliteal venous varix with flow reversal

RIMT

Radiofrequency Intimal-Medial Thickness

Utilizing RF data stored in channel domain memory as opposed to a single B-mode image, RIMT automatically calculates and displays intimal-medial thickness in real-time across six cardiac cycles. This can result in significantly increased accuracy of IMT measurements and reduce operator dependence and variability.

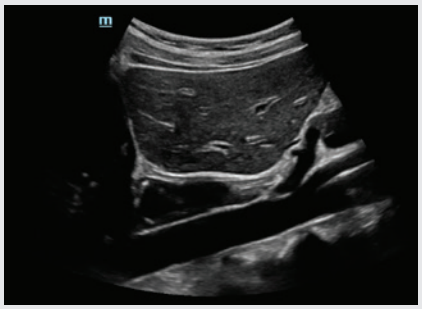


Measurement reliability indicated in carotid artery with green overlay

CSS

Coherent Spatial Synthesis

Mindray's proprietary CSS applies advanced software algorithms to the channel domain data received from a single transmit-receive cycle to synthetically produce a spatially compounded image without impacting frame rate. Traditional ultrasound systems enhance B-mode image resolution by employing spatial compounding methods which require multiple transmit-receive cycles that increase image acquisition time and decrease frame rate.



Enhanced spatial resolution in abdominal imaging

Industry's Best Investment Protection and Cost of Ownership

Living Technology

Living Technology is a constantly evolving software-based approach to providing our customers with easily upgradeable enhancements made possible by both of our core imaging technologies: ZONE Sonography and mQuadro. These upgrades secure product investment protection by ensuring that Mindray ultrasound systems remain at the cutting-edge of imaging performance excellence throughout their entire life cycle.

The Resona 7's standard five (5) year warranty* includes:

- Replacement parts and standard transducers (normal wear and failure)
- Onsite labor for cart related repairs
- Ongoing state-of-the-art ultrasound performance with software updates**

5 Year Warranty

* Standard five (5) year warranty is available for systems purchased directly from Mindray North America. Warranties for systems purchased from Mindray authorized agents can vary.

** Upgrades, such as new application packages and hardware, are optional purchases.

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