



With over 20 years of experience, Mindray hosts a wide range of ultrasound imaging solutions including cart-based and portable systems. Being exported to over 190 countries, Mindray ultrasound systems are today being used by medical professionals for general as well as highly dedicated clinical utility. With a global R&D base spanning over Asia, Europe and America, the ultrasound solutions by Mindray are a result of an integral cooperation with the medical community, allowing for the ultrasound systems to be extremely user centric in terms of performance and usability. Mindray is well positioned to become one of the leading ultrasound imaging solutions provider.

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**Resona 7**

Premium Ultrasound System

New Waves in Ultrasound Innovation





# New Waves in Ultrasound Innovation

Mindray is continuously exploring the way to improve diagnostic confidence since the company is founded. Powered by the most revolutionary ZONE Sonography® Technology, Resona 7's new ZST<sup>+</sup> platform brings the ultrasound image quality to a higher level by zone acquisition and channel data processing.

Besides the premium level image quality, Resona 7 also provides clinical research with the revolutionary V Flow for vascular hemodynamics evaluation, and the most intelligent plane acquisition from 3D dataset for fetal CNS diagnosis. Combining with the most intuitive gesture-based multi-touch operation and all clinical features together, Resona 7 is truly leading new waves in ultrasound innovation.

# It rises.

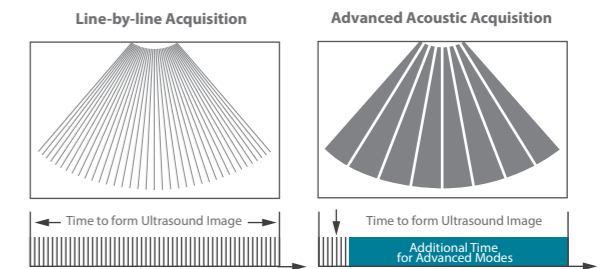
## With core platform advantages of ZST<sup>+</sup>

The channel data based ZST<sup>+</sup> is an extraordinary innovation, representing an ultrasound evolution. Transforming ultrasound metrics from conventional beamforming to channel data based processing, ZST<sup>+</sup> is able to deliver multiple imaging advances: Advanced Acoustic Acquisition, Dynamic Pixel Focusing, Sound Speed Compensation, Advanced Image Processing and Total Recall Imaging.



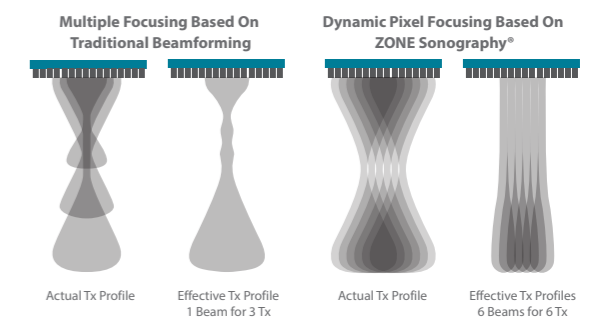
### Advanced Acoustic Acquisition

By transmitting and receiving a relatively smaller number of large zones, Advanced Acoustic Acquisition extracts more information from each acquisition, 10 times faster than a conventional line-by-line beamforming method.



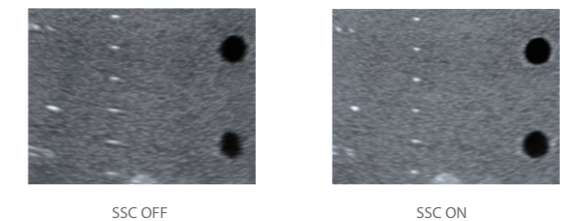
### Dynamic Pixel Focusing

Dynamic Pixel Focusing technology allows Resona 7 to achieve extreme uniformity in pixel level through the whole field of view. Therefore, there is no longer the need to frequently adjust the focal positions to achieve uniformity across patient exams.



### Sound Speed Compensation

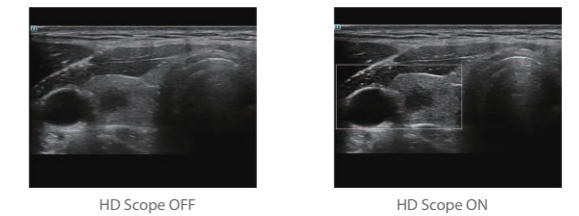
By retrospectively analyzing complete channel data stored in channel data memory, the Resona 7 is able to intelligently choose the optimal sound speed to improve image accuracy even with tissue variation, allowing for adaptive tissue-specific optimization.



### Advanced Image Processing

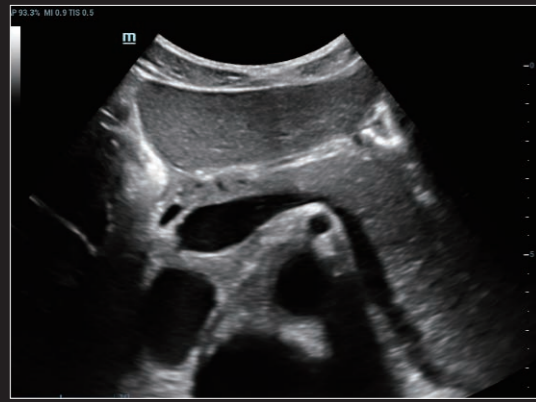
Channel data based ZST<sup>+</sup> provides Advanced Image Processing for greatly improved imaging clarity. By multiple and retrospective channel data processing, it makes the best use of acoustic information for image improvement.

- **HD Scope:** higher definition image within ROI.
- **Coherent Spatial Synthesis:** further improved image quality.

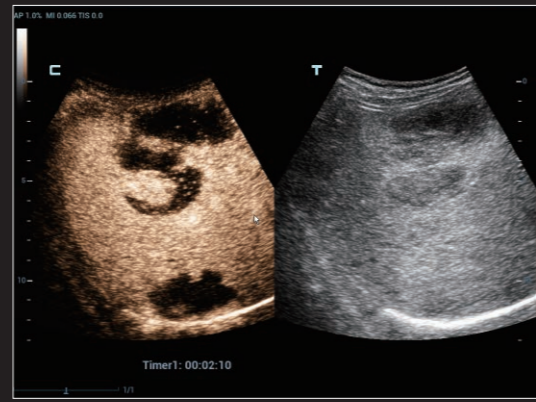


### Total Recall Imaging

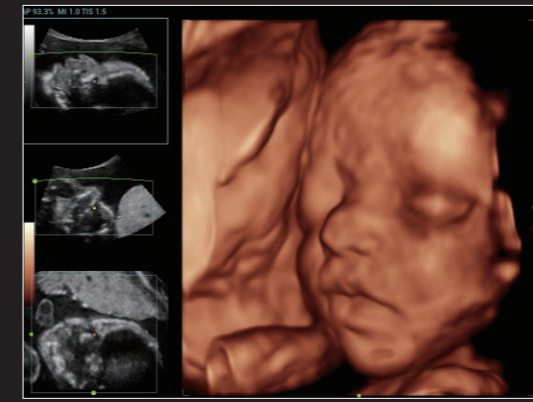
As ZST<sup>+</sup> captures and stores the complete acoustic raw data set, Total Recall Imaging allows the user to retrospectively modify numerous imaging parameters and optimize clinical information.



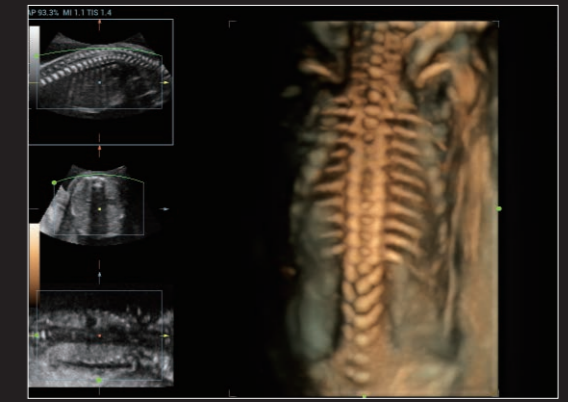
Pancreas



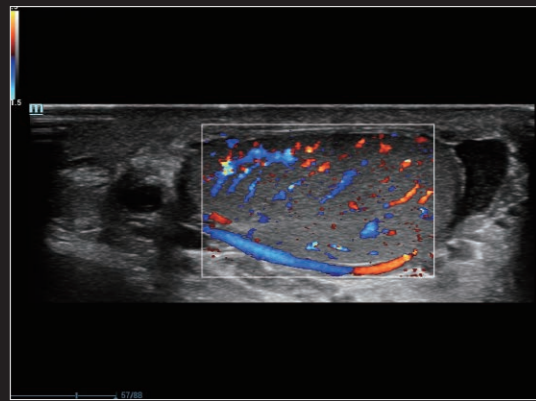
CEUS of Liver Lymphoma



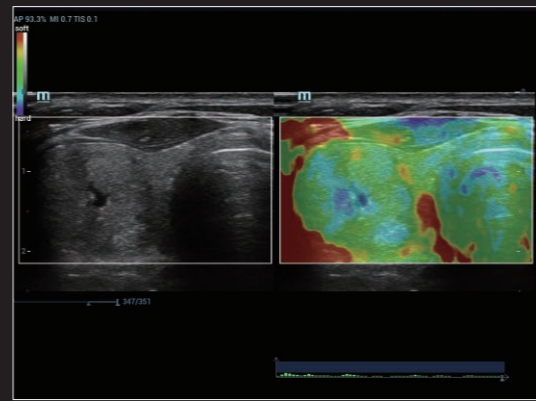
3D Fetal Face



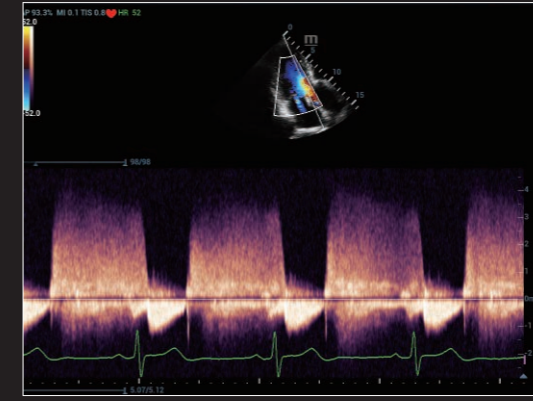
3D Fetal Spine



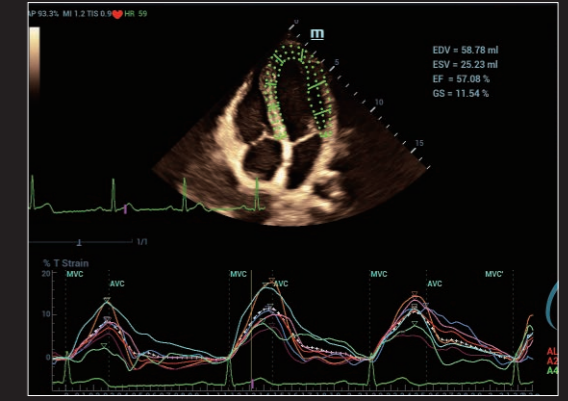
Testicle Perfusion



Elastography of Thyroid Mass



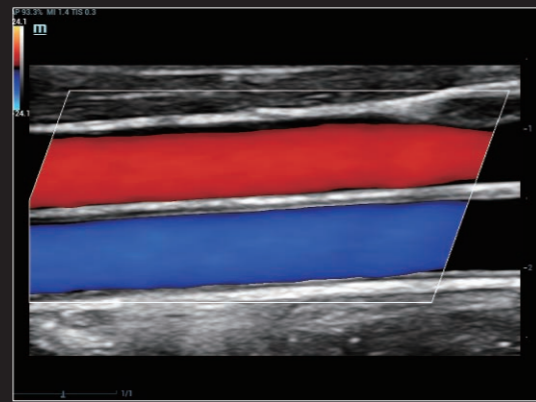
Aortic Regurgitation



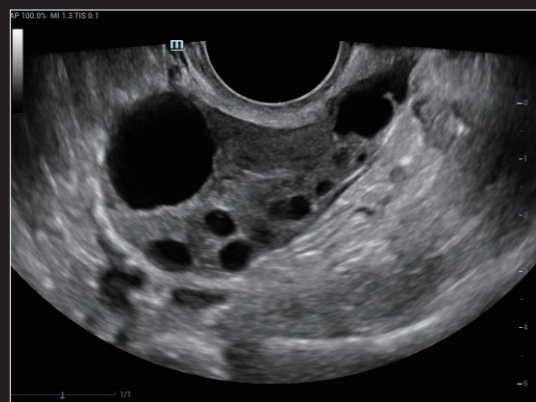
TT QA



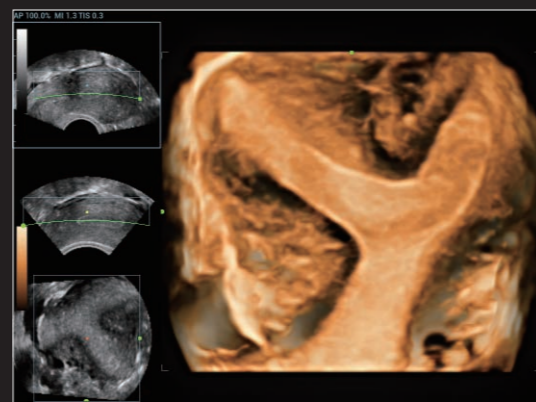
Ankle Trauma



CCA and Jugular Vein



Follicles



3D Uterus Septus

# It releases.

## A new standard of image clarity

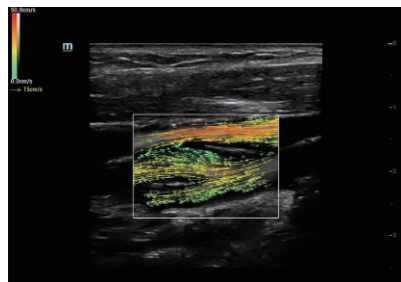
Better vision, deeper understanding. Based on the cutting-edge ZST<sup>+</sup> platform, Resona 7 redefines a new standard of image performance to meet the needs of the most challenging clinical practices.

# It progresses.

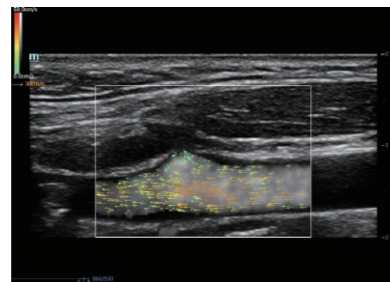
## Innovative clinical tools for confident diagnosis

### V Flow

V Flow (Vivid Vector Flow) is a novel approach for vascular hemodynamic analysis. V Flow uses color coded vector arrows to follow up blood cell's moving velocity magnitude and direction. With up to 400fps, it can provide extremely vivid, accurate and angle-independent visualization of complex vascular hemodynamics profile. With comprehensive data information, V Flow will be the most valuable tool for vascular clinical research



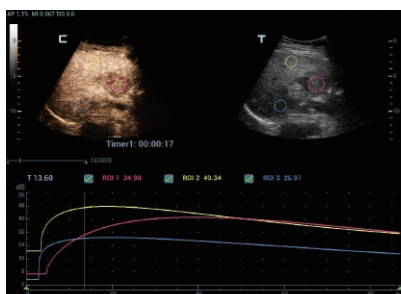
V Flow of Carotid Bulb and JV



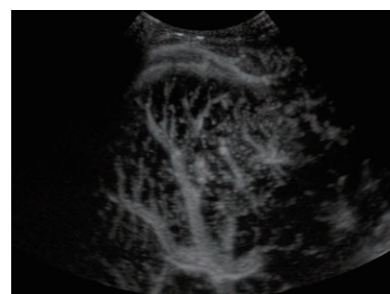
V Flow of CCA and ICA

### UWN<sup>+</sup> Contrast Imaging

UWN<sup>+</sup> (Ultra-Wideband Non-linear Plus) contrast imaging enables the Resona 7 to detect and utilize both 2<sup>nd</sup> harmonic and non-linear fundamental signals, generating significantly enhanced images, resulting in greater sensitivity of minor signal and longer agent duration with lower MI.



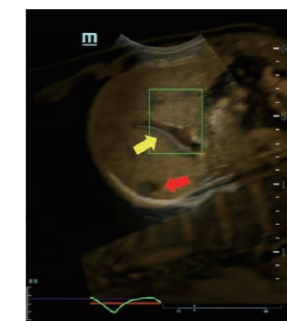
Contrast TIC Analysis



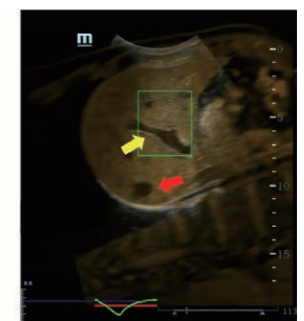
Micro Flow Enhancement

### iFusion with Respiration Compensation

Bringing the precision of fusion imaging to a new level, Mindray's pioneering, innovative and exclusive respiration compensation technology - supported by a sensitive magnetic motion sensor with millimeter accuracy - can help eliminate distortion and fusion inaccuracy caused by patient respiration.



iFusion without Respiration Compensation



iFusion with Respiration Compensation





# It leads.

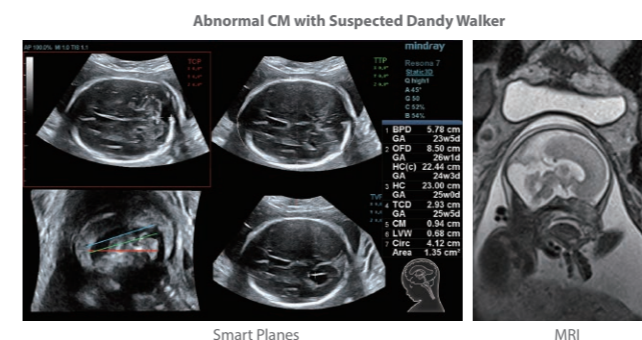
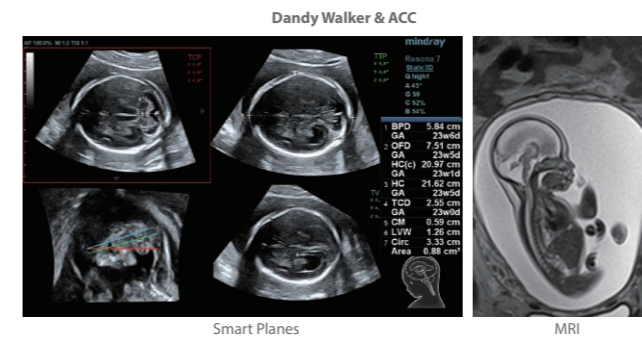
## Forwarding smart to clinical intelligence

The Resona 7 elevates clinical intelligence to a new level with a complete solution that enables clinicians to manage routine and advanced studies more efficiently, consistently, and accurately, from acquisition and to calculation. As an example, Smart Planes shows exceptional intelligence in accurate diagnosis and analysis of fetal central nervous system (CNS).

### Smart Planes

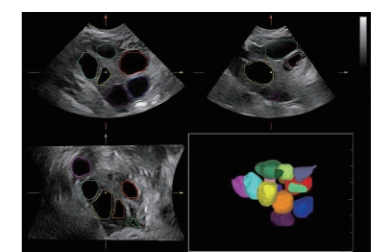
Mindray's exclusive pioneering technology positions the Resona 7 as the industry's first ultrasound system to allow fully automatic and accurate detection of the most significant planes and frequently used measurements of fetal CNS, leading to intelligent diagnosis, improved throughput, and reduced user dependency.

Smart Planes provides a user-friendly tool that greatly improves scanning efficiency through increased accuracy coupled with automated operation. With a simple button-click on a 3D fetal brain volume image, the standard CNS scanning planes (MSP, TCP, TTP and TVP) and a range of related anatomical measurements (BPD, HC, OFD, TCD, CM and LVW) are obtained immediately.



### Smart FLC

Smart FLC automatically detects the number of follicles and calculates each volume from a 3D ovarian volume image, assuring accurate assessment of follicles, especially with IVF exams.



### Smart OB/NT

Automatic measurements of the most frequently examined parameters, including BPD, HC, FL, AC, OFD and even NT as early as 11 weeks, are available with a single click for higher productivity and reproducibility.



# It senses.

## Ensuring a better user experience

The Resona 7 is designed around you. Gesture-based operation opens up a new trend in cart-based ultrasound with an agile, smart, and intuitive user experience beyond your expectations. A six-way floating control panel with electronic height adjustment provides scanning comfort in any position. Inspired innovations drive a better user experience.



- 21.5" high resolution LED monitor
- 12.1" tilting multi-gesture touch screen
- 6-way floating control panel
- Gel warmer with temperature control
- Pinless transducer with light indicator
- Central and swivel lock

# It resonates.

With innovation,  
better diagnosis and  
healthier life

Healthcare is, and remains, one of the most pressing challenges facing humanity across the globe. Technology, the core driver in many diverse industries, is transforming healthcare to a new level of resonance with unprecedented clinical precision, diagnostic confidence, patient safety and satisfaction. The same is true for ultrasound.

With more than 20 years experience in ultrasound development, Mindray constantly endeavors to integrate the most advanced, reliable ultrasound technology to products of amazing quality, for increasingly enhanced clinical confidence and patient care. Medical minds think alike. By making ultrasound technology better, we are making lives better.

