

### Nuewa R9

Premium Ultrasound System

## New Waves in Women's Healthcare

Zone Intelligence 2.0 Full Stack of Intelligent Solution for Women's Health







P/N:ENG-Nuewa R9-210285X16P-20200313

©2020 Shenzhen Mindray Bio-Medical Electronics Co., Ltd. All rights reserved.



# New Waves in Women's Healthcare

## Further Enhanced by Zone Intelligence 2.0

Since the company was founded, Mindray is continuously exploring new ways to improve diagnostic confidence. Powered by the most revolutionary ZONE Sonography® Technology, the ZST\* platform brings ultrasound image quality to a higher level by zone acquisition and channel data processing.

Thanks to the innovative, software-driven ZST+ platform, the Nuewa R9 is evolving with the leading-edge technologies to meet the most challenging diagnostic demands in women's health practice. More importantly, it is designed with the understanding that the wisdom of experts is always precious, and you need more intelligent partner for enhanced speed and confidence. Finally, the Nuewa R9 with Zone Intelligence 2.0 provides a total solution to help you with diagnostic confidence, efficiency, and standardization across different diagnostic challenges in today's demanding and overburden hospital environment.

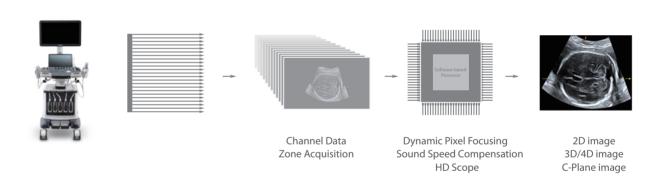


## It rises.

### 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 more powerful and flexible to integrate the latest innovative OB/GYN imaging technologies, and to deliver a higher level of imaging performance in 2D, 3D/4D, and even the coronal plane image.





#### As a result, you can have extraordinary confidence in your practice to:

- Assess fetal condition from early stages
- Provide more accurate diagnosis on fetal CNS
- Deliver a higher level of image quality on the most difficult pregnant women
- Address a wide range of tough challenges in women's health

## It progresses.

## Innovative clinical tools for confident diagnosis

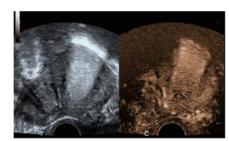
#### **Sound Touch Elastography**

Integrated with Mindray's exclusive Ultra-wide Beam Tracking technology, STE provides real time 2D shear wave elastography with professional measurement tools for comprehensive quantitative elastic analysis. Meanwhile, the operator independent STE ensures good reproducibility and brings highly consistent quantitative elastic results.



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

UWN+ (Ultra-Wideband Non-linear Plus) CEUS enables the Nuewa R9 to detect and utilize both 2nd harmonic and non-linear fundamental signals, generating significantly enhanced images, resulting in greater sensitivity and longer agent duration for better understanding of the GYN diseases.

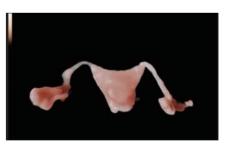






## 3D/4D Hycosy (HysterosalpingoContrast Sonography )

A simple and well-tolerated ultrasound procedure used to assess the patency of the fallopian tubes, as well as detect abnormalities of the uterus and endometrium.



#### **New iLive with Hyaline**

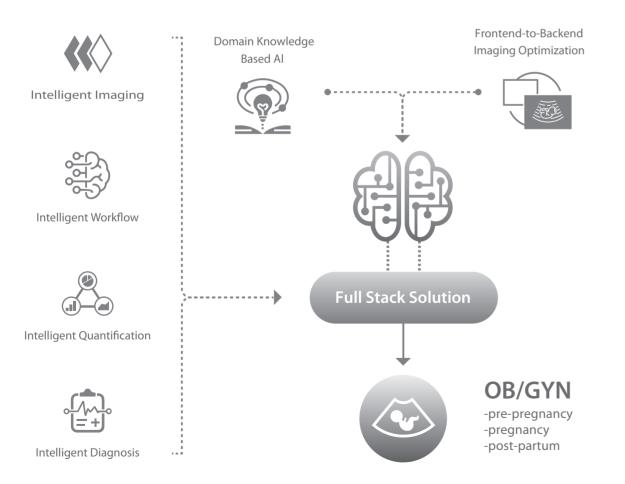
By mimicking multiple light sources of variable intensity, iLive Pro helps to significantly improve the detailed resolution as well as anatomical realism for both surface and internal structures.



## It leads.

## Forwarding smart to clinical intelligence

Powered by the channel data based ZST<sup>+</sup> platform, the Nuewa R9 with Zone Intelligence 2.0 builds up a truly smart mechanism to deliver a new level of intelligence. The core of Zone Intelligence is deep learning that is based on big data base and Ultrasound expertise. Now, Zone Intelligence 2.0 has further expanded the intelligent solution throughout the whole exam procedure to provide a higher level of assistance for users. As a result, it is able to provide the right intelligent tool at the right time during an exam, leading to efficient and effective diagnosis to meet more clinical challenges with increased patient volume.

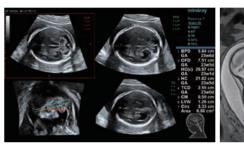


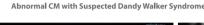
#### **Smart Planes CNS**

Mindray's exclusive pioneering technology 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.

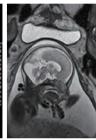
Smart Planes CNS provides a user-friendly tool that greatly improves scanning efficiency through increased accuracy coupled with automated operation. With a simple button click on a 3D fetal brain volume image, the standard CNS scanning planes (MSP, TCP, TTP and TVP) and a range of related anatomical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

Dandy Walker & ACC









#### **Smart Face**

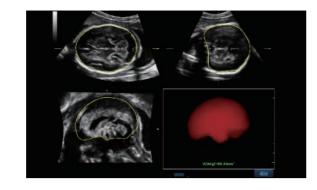
Acquiring an optimal view of the fetal face in 3DUS is cumbersome and time-consuming. In some cases, it is impossible to get rid of the occlusions such as cord, placenta, uterus, and extremities. The new Resona series with Zone Intelligence provides a fast and intelligent optimization for fetal face with simple one-touch operation. It can immediately remove occlusions in the volume data and eliminate unwanted noise information, and generate an optimal view of the fetal face with minimized effort.





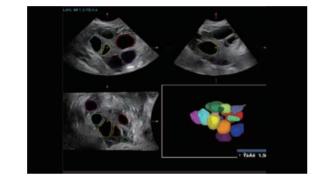
#### **Smart ICV**

Using deep learning mechanism for fetal brain segmentation, Smart ICV realizes fully automatic measurement for fetal intra-cranial volume study. With minimum user manipulation, Smart ICV offers the most intelligent and efficient ICV measurement with guaranteed accuracy.



#### **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, essential for IVF exams.



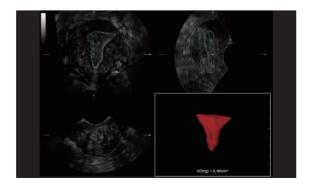
#### **Smart OB/NT**

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.



#### **Smart V Trace**

With more intelligent algorithm, Smart V-trace is able to effectively detect anatomical structures with even weak boundaries, such as endometrium. In addition, comprehensive assessment of vascular footprint and blood flow intensity in the target area is provided to ensure more diagnostic information.



#### **Smart Pelvic**

Realizing the increasing importance of ultrasound diagnosis on pelvic floor disorders, the new Resona Series with Zone Intelligence provides a new solution to greatly simplify the operation procedures, and to minimize the exam time for a standardized evaluation on pelvic floor. With extremely simple user-interaction, it generates a standard coordinate system and automatically provides all related measurements within a few seconds.





#### SmartScene 3D

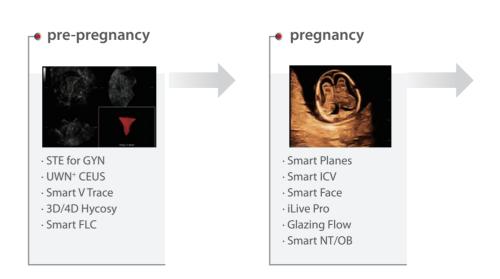
SmartScene 3D realizes industry's first scenario-based automatic workflow of 3DUS scan. By accurately identifying the specific structure under scanning, it greatly reduces manual operation and adjustment for maximized productivity on 3D imaging.

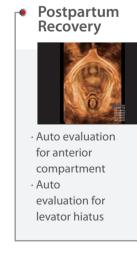


As a result, the Nuewa R9 with Zone Intelligence 2.0 provides an intelligent total solution to deliver truly exceptional women's healthcare from pre-pregnancy evaluation, to postpartum Recovery. Eventually, the Zone Intelligence will make ultrasound system as an intelligent partner to guarantee extraordinary confidence and enhanced efficiency in your daily diagnosis.

### Full Stack of Intelligent Solution for Women's Healthcare

Powered by Zone Intelligence









Cleft lip and palate on a 26-week fetus



High definition 3D image of 15-week fetus with proboscis



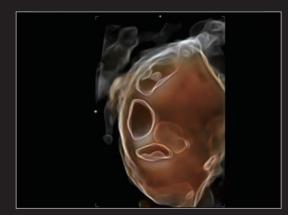
Smart NT measurement



iLive with Hyaline—more vivid display on leg muscles



A vivid fetal face with iLive



Hyaline exposing the fifth embryo



Butterfly sign with excellent definition



Excellent detailed and contrast resolution on fetal heart



Uterine Diverticulum with Hyaline



3D reconstruction of levator hiatus



Excellent color profile with HR Flow on fetal aortic arch



Ovarian chocolate cyst with iLive



Excellent uniformity on ovary

## It releases

## A new standard of image clarity

Better vision, deeper understanding. Based on the cutting-edge ZST<sup>+</sup> platform, the Nuewa R9 redefines a new standard of image performance to meet the needs of the most challenging clinical practices.

## It senses.

## Ensuring a better user experience

The Nuewa R9 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. Gel warmer's three level temperature and swiveling angle adjustment delivers great user comfort to ensure a pleasant exam experience. Inspired innovations drive a better user experience.



High resolution LED monitor with wide angle of view



Three level temperature adjustable gel warmer



Tilting multi-gesture touch screen



Pinless transducer with light indicator

#### **Dedicated Transducers for Women's Health:**

- New generation convex volume transducer with light weight and compact design, providing a higher standard of image qualityeven on the most complex cases in women's health practice
- Professional endocavity volume transducer with a wide angle of view, providing more comprehensive diagnostic information especially for pelvic floor evaluation.







## 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 20years' experience in ultrasound development, Mindray constantly endeavors to integrate the most advanced, reliable ultrasound technology to produce of amazing quality, for increasingly enhanced clinical confidence and patient care. Moreover, with the understanding of today's demanding and overburden hospital environment, the Resona Series delivers a leading edge premium ZST<sup>+</sup> platform, transforming expertise to clinical intelligence for enhanced diagnostic efficiency and effectiveness. Medical minds think alike. By making ultrasound technology better, we are making lives better.