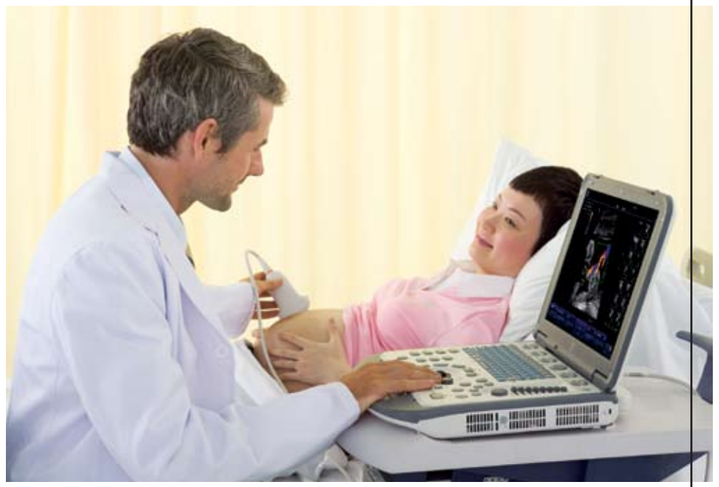
Vision Clear
With Mindray's iClear™ Technology

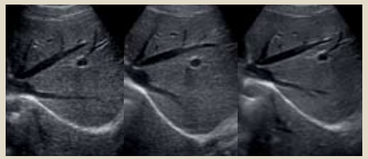
Thanks to its continuing effort in innovations, Mindray is proud to introduce a new breakthrough in speckle reduction called iClear™ adaptive image processing.

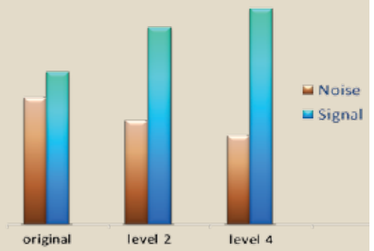
Speckle, an inherent imaging artifact, has been a major obstacle to further differentiate desired anatomy with ultrasound systems.

The implementation of **iClear™** realizes aggressive suppression of speckle patterns, bringing you a clear vision of ultrasound images with benefits in the following aspects:



- **Noise:** significantly reduced speckle noise for better tissue differentiation
- **Edge:** enhanced margin definition for increased diagnostic accuracy
- **Contrast:** improved contrast resolution without compromising spatial resolution





Various levels of speckle reduction can be selected with the iClear™ algorithm:

- **Level 1 to level 4 from low to high speckle reduction settings**
- **Satisfying visual preference of different users**

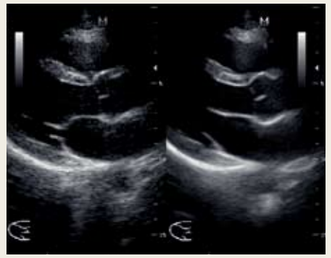
Different levels of **iClear™** on the same image are shown on the left figure, and the SNR was calculated for each level. It is clearly indicated that with the increase of the speckle reduction level:

- The speckle pattern is evidently suppressed, especially with level 4
- The SNR is significantly increased

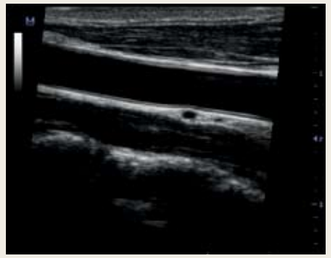
Benefiting from its adaptive nature, **iClear™** will help to visualize more tissue subtleties to improve diagnostic confidence; meanwhile, the operator dependence will be reduced and this will ultimately lead to more efficient patient throughput.

MINDRAY™

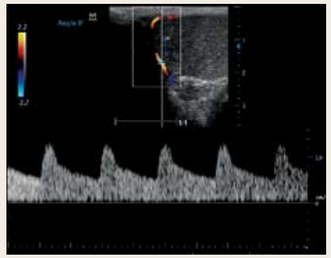
Gallbladder: the boundaries of the cavity are better delineated and more details are visualized especially in the mid-to-far field.



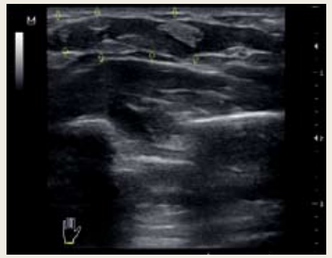
Long axis view of LV: less clutter in near field, and the speckle noise is significantly reduced through the whole field of view.



Carotid artery: improved continuity of intima.

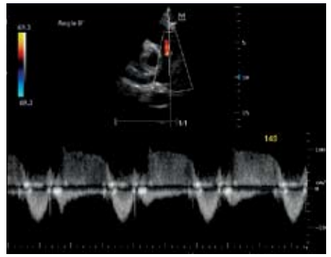


Testicle: improved sensitivity for better visualization of pulsed Doppler waveform of tiny vessels.

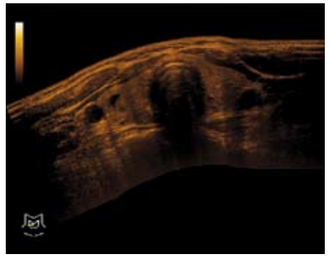


Carpal canal: improved contrast resolution and better delineation of the tendon

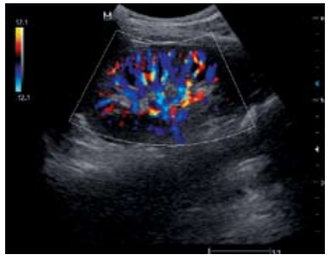
Nerve: better visualization of brachial plexus between ASM and MSM



Pulmonary artery: improved sensitivity in visualization of little regurgitation.



Thyroid (panoramic imaging): improved SNR to visualize more details in the whole thyroid structure.



Kidney: improved color sensitivity for better visualization of renal flow.

MINDRAY™

MINDRAY ™

Headquarters: Mindray Building, Keji 12th Road South, High-tech Industrial Park, Nanshan, Shenzhen 518057, P. R. China
Tel: +86 755 26582492, 26582888 Fax: +86 755 26582500, 26582501
E-mail: intl-market@mindray.com Website: www.mindray.com

CE 0123

DISTRIBUTOR:

MINDRAY is a trade mark of Shenzhen Mindray Bio-Medical Electronics Co., Ltd. Specifications subject to change without notice.
P/N: ENG-iClear-210285-20081112

© 2006 Shenzhen Mindray Bio-Medical Electronics Co., Ltd. All rights reserved.