
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.

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- **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**

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Different levels 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 tissues subtleties to improve diagnostic confidence; meanwhile, the operator dependence will be reduced and this will ultimately lead to more efficient patient throughput.

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