As an industry first in 2010, the ACUSON SC2000™ ultrasound system released IN Focus coherent technology. This revolutionary imaging technology was developed to better visualize all aspects of the echocardiogram such as Left Ventricular (LV) function, valve detail, and blood flow.

IN Focus technology brings similar benefits to echocardiography that made cardiac magnetic resonance imaging (CMR) a diagnostic cornerstone: superior spatial resolution, precise border definition, and blood flow visualization. IN Focus did that without any compromise to frame rate. (Compare figure 1 and 3).

IN Focus technology works by utilizing up to 64 parallel beams to synthesize focus at every pixel and every depth throughout the image with our latest proprietary coherent imageformer. (Compare figure 2 and 3).

**Figure 1:** CMR image:
Uniform spatial resolution, border definition, & blood flow.

**Figure 2:** IN Focus OFF:
Poor focus outside the focal zone; no distinct blood flow visualization.

**Figure 3:** IN Focus ON:
Complete focus, distinct endocardial borders, & blood flow.
Increase clarity, confidence and quality with IN Focus Coherent Technology

With IN Focus you have the clarity to find disease with the whole image in focus. The confidence to diagnose with more uniformly defined endocardial borders. And the increased quality with unsurpassed diagnostic detail: follow blood flow throughout the heart.

Clarity to Find Disease

- Save time by eliminating the need to capture and review multiple images at different focal zones.
- Increase patient satisfaction by reducing the positional discomfort and time it sometimes takes to achieve high quality images.

Confidence to Diagnose

- Confidently characterize LV function with clear visualization of wall motion.
- Achieve more reproducible images with IN Focus’ high spatial resolution throughout the field of view in every image.

Quality Exams

- Increase the efficiency of your echo department by reducing non-diagnostic transthoracic echo (TTE) exams with fully focused images, even with technically difficult patients.
- Achieve higher quality echo exams by reducing misdiagnosis due to poor image quality.
- Improve quality and patient satisfaction by reducing the need for additional testing.

<table>
<thead>
<tr>
<th>Test</th>
<th>Higher cost compared to TTE</th>
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<tbody>
<tr>
<td>Contrast TTE</td>
<td>1.5X^1</td>
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<tr>
<td>TEE</td>
<td>1.3X^2</td>
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<tr>
<td>CMR</td>
<td>1.9X^3</td>
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<tr>
<td>SPECT</td>
<td>2.3X^4</td>
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IN Focus plus the superior architecture of the ACUSON SC2000 also provides real-time full volume imaging with color at clinically relevant sizes and rates for every beat and every patient (See Figure 4 and 5).

![Figure 4: Real-time 90° x 90° full volume B-mode](image1)

![Figure 5: Real-time 90° x 90° full volume B-mode with volume Color Doppler](image2)