

#### ULTRASOUND 2D/3D/4D

# **Rivent**<sup>™</sup> Series

# At the forefront of ultrasound imaging



Trusted in more than 400,000 systems worldwide

# At the forefront of ultrasound imaging

ContextVision gives manufacturers of ultrasound equipment **world-leading image quality** while providing clinicians with the greatest diagnostic confidence. Discover our portfolio for 2D/3D/4D ultrasound – based on the latest advances in image enhancement, and designed for both manufacturers and end users.

#### All of our ultrasound products provide

reliable, adaptive image enhancement in real time, thanks to highly intelligent algorithms that analyze every pixel/voxel in its context, frame by frame. These algorithms draw on the latest technology to distinguish and enhance true clinical information, while simultaneously suppressing noise and other artifacts. The results? Unrivaled image quality, powerful performance – and maximum diagnostic confidence.

#### Designed for seamless integration with

all types of ultrasound systems and applications – as well as easy customization to individual preferences – each product allows for superior flexibility and a tailored user experience.

**ContextVision offers you** a leading position in ultrasound, through continuous development and innovative technology – today and tomorrow.

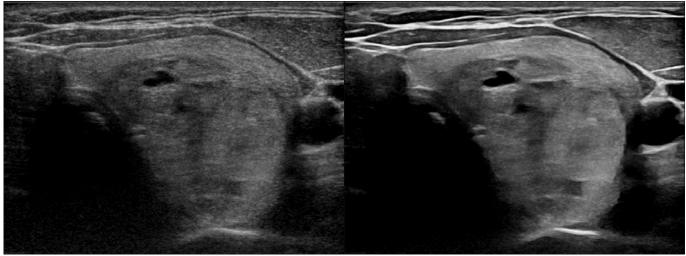
# **Rivent**<sup>™</sup> / **Rivent**<sup>™</sup> Plus

Image processing for 2D ultrasound

#### Unparalleled image quality, maximum flexibility

**Addressing increasing demands** for stronger processing with high detail preservation, Rivent provides maximum flexibility for customization to all preferences. Rivent Plus goes above and beyond what a great ultrasound image can be.

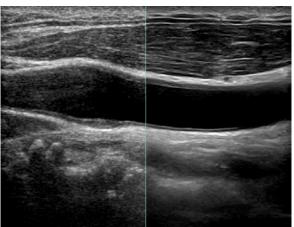
### Thyroid



### Designed for all systems and applications

**Rivent brings unparalleled image quality** to all types of ultrasound systems, and is designed to meet the needs of all clinical application areas.

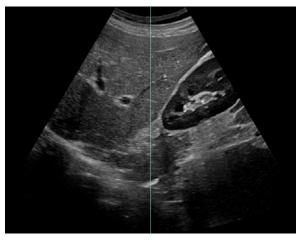




UNPROCESSED

PROCESSED

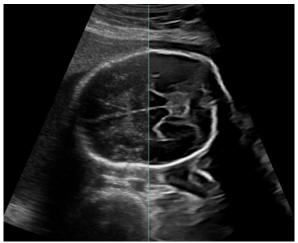




UNPROCESSED

PROCESSED

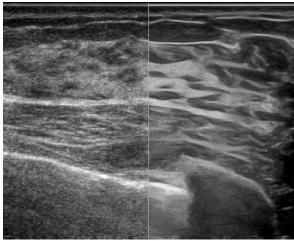




UNPROCESSED

PROCESSED





UNPROCESSED

PROCESSED

# **Rivent**<sup>™</sup> / **Rivent**<sup>™</sup> Plus

Image processing for 2D ultrasound

#### Maximum flexibility for all preferences

**Our products are highly customizable.** The processing can be adapted to different systems and individual customer requirements.

#### Pancreas



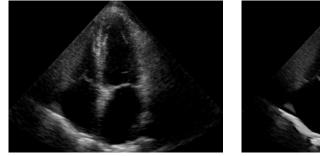
UNPROCESSED



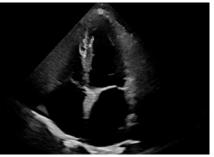


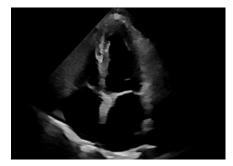
EXAMPLES OF PROCESSING

### Heart



UNPROCESSED





EXAMPLES OF PROCESSING

Features & benefits	<ul> <li>Highly efficient noise reduction enabling smooth, homogenous tissue with enhanced contrast and detail resolution</li> <li>Clear tissue differentiation</li> <li>Great depth perception</li> </ul>	<ul> <li>Reliable black areas</li> <li>"MRI look"</li> <li>Compensation for vertical information loss</li> <li>Advanced line and edge enhancement</li> </ul>
API functions	<ul> <li>Automatic adaption to varying res e.g. line density or acoustic zoom</li> <li>Optimized image quality in near ar simultaneously</li> </ul>	
Platforms	<ul> <li>Available on CPU and GPU</li> <li>Supported platforms: Windows ar</li> </ul>	nd Linux

R	iv	e	n	E
		$\overline{}$		-

$\rightarrow$	Powerful processing while maintaining tissue information
$\rightarrow$	Unparalleled noise supression
$\rightarrow$	Customizable for all systems, applications and image preferences

														R	26	V	76	9	n	h	<b>ב</b>	M	Ρ	lı	u		5											
tio	or	۱								•			-		> ``								en															
io	n								•	•					<i>&gt;</i>								isp es					S	w	it	h	hi	gl	h				
ns, fe		ər	nc	es	5				•	•			-		>								mc din									er	va	ıti	io	n	1	
									•	•			-		>			S	ig	n	at	u	re '	'n	IR	l	lo	oł	<b>د</b> "									
• •		•	•	•	•	•	•	•	•	٠	•	•	•	•	٠	٠	٠	•	•	•				•														
				٠	•	•	• •	•	•	٠	•	٠	٠	•	٠	٠	٠	•	•				•															
		•	•	•	•		•				•	•	•	•	•	•	•	•	•	1																		
		•	•	•	•	•	• •	•	•	•	•	•	•	•	•	•	•	•	•	•	-	-																
		•	•	•	•	•	• •	, , , , , , , , , , , , , , , , , , ,	•	•	•	•	•	•	•	•	•	•	•	* * *	-																	
		•	•	•	•	•	• •		•	•	•	•	•	•	•	•	•	•	•	- - - -		•																
		•	•	•	•	•			•	•	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • •	•	•	•	• • • • • •	• • • • •	•	•	* * * * *		•																
		•	•	•	•	•			•	•	•	• • • • • • • • • • • • • • • • • • • •	•	•	• • • • • • • • • • • • • • • • • • • •	•	•	•	• • • •	• • • •		•																
		• • • • • •	• • • • •	• • • • •	•	•			•	•	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•	• • • • • • • • • • • • • • • • • • • •	•	•	•	•	• • • •	• • • •																		
		• • • • • •	• • • • • •	• • • • •	•	•			•••••••••••••••••••••••••••••••••••••••	•••••••••••••••••••••••••••••••••••••••	•	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•	•	•	•	•	• • • •		•																

## **Rivent**<sup>m</sup> Mobile

Image processing for handheld ultrasound

#### A tailored handheld experience

Rivent Mobile builds on our broad experience in enhancing ultrasound image quality and deeply investigating the mobile diagnostics market. Our solution has features tailored to the handheld units and their users' needs, resulting in excellent image quality.



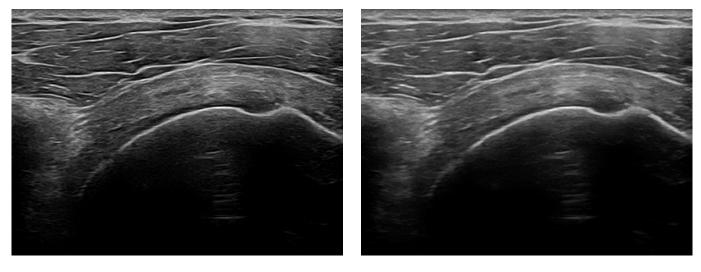
# Features & benefits

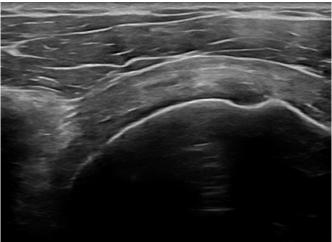
- ✓ State-of-the-art image enhancement for handheld ultrasound
- ✓ Powerful noise suppression
- $\checkmark$  Enhanced contrast and detail resolution
- ✓ Optimized image quality in near and far field simultaneously
- Advanced line and edge enhancement

### **Platforms**

✓ Supported on iOS/Android/Windows platforms

#### MSK





EXAMPLES OF PROCESSING WITH RIVENT



For ultimate flexibility



### **Tuning interface**

With Rivent Tuning interface we want to give our customers freedom to fine tune their images themselves. This tool ensures maximal customizability and can be used in combination with Rivent, Rivent Plus and Rivent Mobile.

# **Rivent**<sup>™</sup> 3D

Clarity close to reality

#### Maximum flexibility for all preferences

Rivent 3D combines the benefits of volumetric processing with unique capabilities to process images powerfully while maintaining a natural appearance. By analyzing data in all dimensions, Rivent 3D takes image quality to a level beyond conventional 2D enhancement technology.

#### ✓ Full 3D contextual analysis of Features & benefits

- each voxel in real time Optimized image quality result-
- ing from a holistic approach on 3D image formation
- ✓ Intelligent noise reduction reveals "hidden" information by using data from all dimensions
- Excellent edge and contrast enhancement

- ✓ Advanced homogeneity filtering
- ✓ Dedicated near and far field filtering
- Highly customizable for different rendering and visualization techniques
- ✓ High visibility in deep tissue
- Structures in all dimensions are clearly visible in arbitrary planes

**Platforms** 

Available on GPU

Supported platforms: Windows and Linux

### Rivent<sup>™</sup> 3D

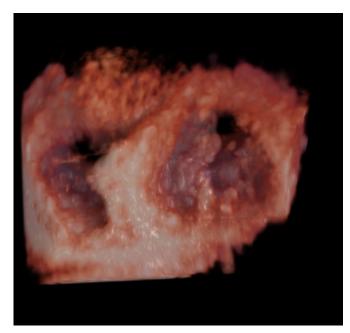
High flexibility for optimization of rendered views and MPR Powerful noise suppression with preserved detail Robust processing consistency between images in the 3D volume

.

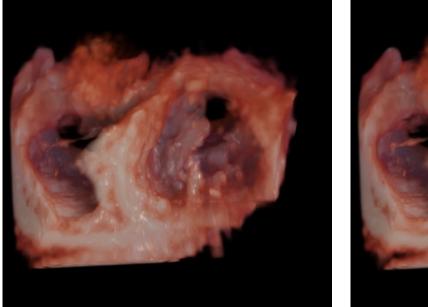
•

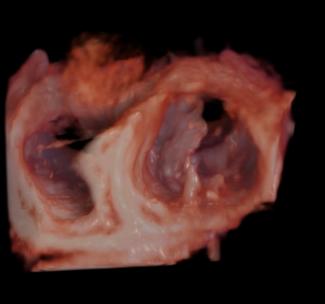
. • • . . • . • .

### Heart



UNPROCESSED



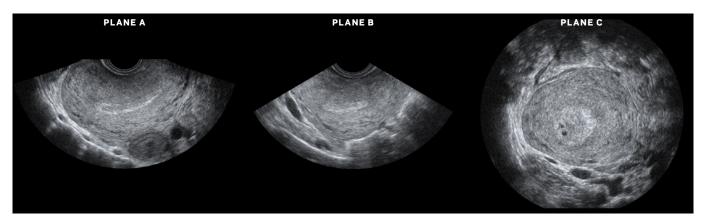


EXAMPLES OF RIVENT 3D PROCESSING

### Superior visualization in **every dimension**

Intelligent noise reduction reveals "hidden" information by using data from all dimensions.

### Uterus

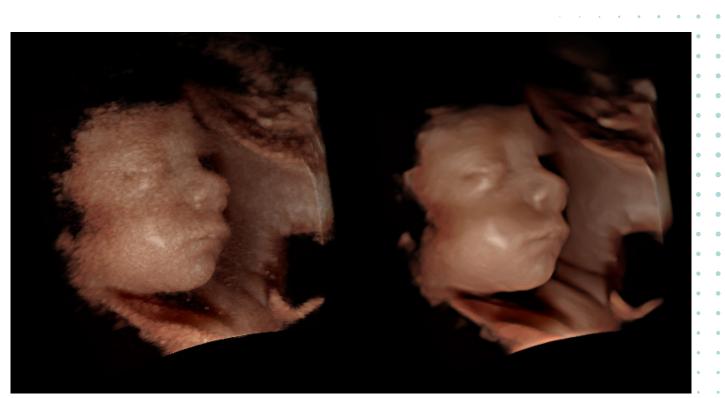


UNPROCESSED



PROCESSED WITH RIVENT 3D

												•	-											
							•	•	•	•	•	•	•	•	•	•	•							
					•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•					
			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	•			
			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	•	•	٠	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		Optimized image
•	•	•	•	٠	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•		quality resulting from
		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	a holistic approach on
	•	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	٠	•	•	•	•	3D image formation
•	•	•	•	•	•	•	•	•	•					•	•	•	•	•	•	•	٠	•	•	ob image formation
	•	•	•	•	•	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•	• • •
•	•	•	•	•	•	•	•	•	•						•	•	•	•	•	•	•	•	•	• • •
	•	•	•	•	•	•	•	•	•	•					•	•	•	•	•	•	•	•	•	• • •
•	•	•	•	•	•	•	•	•	•						•	•	•	•	•	•	•	•	•	



UNPROCESSED

PROCESSED WITH RIVENT 3D

**RIVENT SERIES** 



For extended customizability



### **Tuning interface 3D**

Tuning Interface 3D gives even more control over Rivent 3D to our customers. This tool can be used to adapt existing parameter files or create a completely new appearance.

# Building **strong** partnerships

**We offer you more than** 40 years of experience in medical imaging through state-of-the-art image enhancement software and professional support.

**With a versatile and configurable** design, Context-Vision's products can be customized to all needs regarding clinical applications and customer preferences.

**All ContextVision products** are designed for seamless integration. The products are delivered as an SDK containing a .dll file together with parameter files (XML files). The parameter files control the settings of the image features of the algorithms.

**With our continuous development** and innovative technology, a partnership with ContextVision offers you a leading position in radiography – today and tomorrow.

**Contact ContextVision for more information** about the best solution for your needs and visit our website at www.contextvision.com.



Recent developments have brought many exciting features to ultrasound, but image quality is still in first place. Clear images facilitate routine exams and allow me to feel confident that I'm providing my patients with the best possible care.

> **Srecko Rijetkovic** Assistant professor, Karolinska Institutet Stockholm, Sweden

## Let's improve image quality – together



ContextVision is a medical technology software company specialized in image analysis and artificial intelligence. As the global market leader within image enhancement, we are a trusted partner to leading manufacturers of ultrasound, X-ray and MRI equipment around the world.

Our expertise is to develop powerful software products, based on proprietary technology and artificial intelligence for image-based applications. Our cutting-edge technology helps clinicians accurately interpret medical images, a crucial foundation for better diagnosis and treatment.

The company, established in 1983, is based in Sweden with local representation in the U.S., Japan, <u>China and Korea</u>. ContextVision is listed on the Oslo Stock Exchange under the ticker CONTX.

For more information, please visit www.contextvision.com -

