



## Transducers

# ACUSON Redwood ultrasound system

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# Comprehensive suite of transducers

The ACUSON Redwood ultrasound system has a comprehensive suite of over 13 transducers supporting a diverse range of clinical applications.



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# Curved



## 9C3 transducer

Form factor	Curved
Design	1D, Hanafy, Piezoceramic
Gesture detection	No
Bandwidth	2.2–9.2 MHz
Maximum depth	300 mm
Field of view	78.6 deg
Physical footprint	69.56 x 20.47 mm
Total weight	780.4 gm



## 5C1 transducer

Form factor	Curved
Design	1D, Single Crystal
Gesture detection	No
Bandwidth	1.0–5.7 MHz
Maximum depth	300 mm
Field of view	72 deg
Physical footprint	63.3 x 18.2 mm
Total weight	743 gm

# Linear



## 18L6 transducer

Form factor	Linear
Design	1D, Hanafy, Piezoceramic
Gesture detection	No
Bandwidth	4.6–17.8 MHz
Maximum depth	80 mm
Field of view	57.5 mm
Physical footprint	69.22 x 16.48 mm
Total weight	761.8 gm



## 14L5 transducer

Form factor	Linear
Design	Multi-D, Piezoceramic
Gesture detection	No
Bandwidth	4.8–13.6 MHz
Maximum depth	80 mm
Field of view	38.2 mm
Physical footprint	49.58 x 12.89 mm
Total weight	726.9 gm



## 10L4 transducer

Form factor	Linear
Design	Multi-D, Piezoceramic
Gesture detection	No
Bandwidth	2.9–9.9 MHz
Maximum depth	140 mm
Field of view	38.2 mm
Physical footprint	49.25 x 18.85 mm
Total weight	723.2 gm

# Endocavity



## 9EC4 transducer

Form factor	Curved
Design	1D, Piezoceramic
Gesture detection	No
Bandwidth	2.9–8.1 MHz
Maximum depth	140 mm
Field of view	176 deg
Physical footprint	17.0 x 22.0 mm
Total weight	700 gm

# Vector



## 8V3 transducer

Form factor	Sector/Vector
Design	1D, Hanafy, Piezoceramic
Gesture detection	No
Bandwidth	2.1–8.3 MHz
Maximum depth	240 mm
Field of view	90 deg
Physical footprint	26.9 x 16.6 mm
Total weight	644 gm



## 5V1 transducer

Form factor	Sector/Vector
Design	1D, Single Crystal, Piezoceramic
Gesture detection	No
Bandwidth	1.1–4.9 MHz
Maximum depth	300 mm
Field of view	90 deg
Physical footprint	27.2 x 18.7 mm
Total weight	640 gm



### 4V1 transducer

Form factor	Vector
Design	1D, Hanafy, Piezoceramic
Gesture detection	No
Bandwidth	1.4–5.1 MHz
Maximum depth	300 mm
Field of view	90 deg
Physical footprint	35.5 x 20.2 mm
Total weight	639 gm



### 10V4 transducer

Form factor	Sector/Vector
Design	1D, Piezoceramic
Gesture detection	No
Bandwidth	4.1–9.9 MHz
Maximum depth	140 mm
Field of view	90 deg
Physical footprint	22.6 x 14.3
Total weight	376 gm

# Pencil



## CW2 transducer

Form factor	Pencil
Design	N/A
Gesture detection	N/A
Bandwidth	N/A
Maximum depth	N/A
Field of view	N/A
Physical footprint	17 mm
Total weight	N/A



## CW5 transducer

Form factor	Pencil
Design	N/A
Gesture detection	N/A
Bandwidth	N/A
Maximum depth	N/A
Field of view	N/A
Physical footprint	11 x 7 mm
Total weight	N/A



# Transesophageal echocardiography (TEE)



## V5Ms transducer

Form factor	Transesophageal echocardiography (TEE)
Design	1D, Piezoceramic
Gesture detection	No
Bandwidth	3.0–7.0 MHz
Maximum depth	180 mm
Field of view	90 deg
Physical footprint	14.8 x 11.6
Total weight	1800 gm

# Table 1: Selectable frequencies

Transducer	2D	THI	Color Doppler	PW Doppler	CW Doppler	Contrast
9C3	<ul style="list-style-type: none"> <li>• Pen</li> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	<ul style="list-style-type: none"> <li>• HPen</li> <li>• HLow</li> <li>• HMid</li> <li>• HHigh</li> </ul>	<ul style="list-style-type: none"> <li>• Pen</li> <li>• Mid</li> <li>• Res</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> </ul>	–	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>
5C1	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	<ul style="list-style-type: none"> <li>• HPen</li> <li>• HLow</li> <li>• HMid</li> <li>• HHigh</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> <li>• Res</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> <li>• Res</li> </ul>	–	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> </ul>
18L6	<p>on MSK exam only:</p> <ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> <li>• Res</li> </ul> <p>on the other exams:</p> <ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	<ul style="list-style-type: none"> <li>• HLow</li> <li>• HMid</li> <li>• HHigh</li> </ul>	<ul style="list-style-type: none"> <li>• Pen</li> <li>• Mid</li> <li>• Res</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	–	–
14L5	<p>on MSK exam only:</p> <ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> <li>• Res</li> </ul> <p>on the other exams:</p> <ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	<ul style="list-style-type: none"> <li>• HLow</li> <li>• HMid</li> <li>• HHigh</li> </ul>	<ul style="list-style-type: none"> <li>• Pen</li> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> </ul>	–	–
10L4	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	<ul style="list-style-type: none"> <li>• HLow</li> <li>• HMid</li> <li>• HHigh</li> </ul>	<ul style="list-style-type: none"> <li>• Pen</li> <li>• Mid</li> <li>• High</li> <li>• Res</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> </ul>	–	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> </ul>
9EC4	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	<ul style="list-style-type: none"> <li>• HLow</li> <li>• HMid</li> <li>• HHigh</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	–	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>

Transducer	2D	THI	Color Doppler	PW Doppler	CW Doppler	Contrast
8V3	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> <li>• Res</li> </ul>	<ul style="list-style-type: none"> <li>• HLow</li> <li>• HMid</li> <li>• HHigh</li> </ul>	on Cardiac exam only: <ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> </ul> on the other exams: <ul style="list-style-type: none"> <li>• Pen</li> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	on Cardiac exam only: <ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> </ul> on the other exams: <ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	on Cardiac exam only: <ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> </ul>	–
5V1	<ul style="list-style-type: none"> <li>• Pen</li> <li>• Low</li> </ul>	on Cardiac exam only: <ul style="list-style-type: none"> <li>• HLow</li> <li>• HMid</li> <li>• HHigh</li> </ul> on the other exams: <ul style="list-style-type: none"> <li>• HPen</li> <li>• HLow</li> <li>• HMid</li> <li>• HHigh</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	<ul style="list-style-type: none"> <li>• Pen</li> <li>• Low</li> <li>• Mid</li> <li>• High</li> <li>• Res</li> </ul>	Cardiac exam only: <ul style="list-style-type: none"> <li>• Mid on</li> </ul>	<ul style="list-style-type: none"> <li>• Pen</li> <li>• Low</li> <li>• Mid</li> <li>• High</li> <li>• Res</li> </ul>
4V1	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	<ul style="list-style-type: none"> <li>• HPen</li> <li>• HLow</li> <li>• HMid</li> <li>• HHigh</li> </ul>	<ul style="list-style-type: none"> <li>• Pen</li> <li>• Mid</li> <li>• Res</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	–	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> </ul>
10V4	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> <li>• Res</li> </ul>	<ul style="list-style-type: none"> <li>• HLow</li> <li>• HMid</li> <li>• HHigh</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	on Cardiac exam only: <ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> </ul>	–
CW2	–	–	–	–	• Mid	–
CW5	–	–	–	–	• Mid	–
V5Ms	<ul style="list-style-type: none"> <li>• Pen</li> <li>• Low</li> <li>• Mid</li> <li>• High</li> </ul>	<ul style="list-style-type: none"> <li>• HLow</li> <li>• HMid</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> </ul>	<ul style="list-style-type: none"> <li>• Low</li> <li>• Mid</li> </ul>	–

## Table 2: Cable length

Transducer	Cable length
9C3	2.1 m
5C1	2.1 m
18L6	2.1 m
14L5	2.1 m
10L4	2.1 m
9EC4	2.2 m
8V3	2.2 m
5V1	2.1 m
4V1	1.9 m
10V4	2.2 m
V5Ms	1.9 m

## Table 3: Connector type

Transducer	Connector type
9C3	Compact Pinless Connector
5C1	Compact Pinless Connector
18L6	Compact Pinless Connector
14L5	Compact Pinless Connector
10L4	Compact Pinless Connector
9EC4	Compact Pinless Connector
8V3	Compact Pinless Connector
5V1	Compact Pinless Connector
4V1	Compact Pinless Connector
10V4	Compact Pinless Connector
CW2	Hirose
CW5	Hirose
V5Ms	Micro Pinless Connector

## Table 4: Biopsy guides

Transducer	Product description	Guidance angle selection – depth
9C3	Ultra-Pro II Bracket Starter Kit	A – 5 cm
		B – 10 cm
5C1	Verza Tracking Bracket Starter Kit	1 – 2.2 cm
		2 – 3.8 cm
		3 – 6.1 cm
		4 – 9.9 cm
		5 – 15.0 cm
18L6	Ultra-Pro II Bracket Starter Kit	A – 2.1 cm
		B – 5.4 cm
14L5	Verza Bracket Starter Kit	1 – 1.8 cm
		2 – 3.0 cm
		3 – 4.3 cm
		4 – 6.4 cm
		5 – 8.9 cm
10L4	Verza Tracking Bracket Starter Kit	1 – 2.2 cm
		2 – 3.6 cm
		3 – 5.6 cm
		4 – 8.6 cm
		5 – 13 cm
9EC4	Disposable Endocavity Guide Kit – 24 pack	1° Needle Path angle
9EC4	Reusable Endocavity Guide	1° Needle Path angle
4V1	Ultra-Pro II Tracking Bracket Starter Kit	A – 5 cm
		B – 10 cm

## Table 5: Advanced applications

<b>Transducer</b>	<b>Strain Elastography</b>	<b>Point Shear Wave Elastography</b>	<b>2D Shear Wave Elastography</b>	<b>Contrast Imaging</b>	<b>Fusion Imaging</b>
9C3	N/A	N/A	N/A	Yes	N/A
5C1	N/A	Yes	N/A	Yes	N/A
18L6	Yes	N/A	N/A	N/A	N/A
14L5	Yes	N/A	N/A	N/A	N/A
10L4	Yes	Yes	Yes	Yes	N/A
9EC4	Yes	N/A	N/A	Yes	N/A
8V3	N/A	N/A	N/A	N/A	N/A
5V1	N/A	N/A	N/A	Yes	N/A
4V1	N/A	Yes	N/A	Yes	N/A
10V4	N/A	N/A	N/A	N/A	N/A
CW2	N/A	N/A	N/A	N/A	N/A
CW5	N/A	N/A	N/A	N/A	N/A
V5Ms	N/A	N/A	N/A	N/A	N/A

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