

Specificație Tehnică

Model: 11L-D, Producător: GE Helthcare/ GENERAL ELECTRIC

Specificarea tehnică deplină solicitată, Standarde de referință	Specificarea tehnică deplină propusă, Standarde de referință
Modelul: 11L-D Descrierea: Sonda tip Liniara Fregventa de lucru 4-10 MHz Latimea cimpului de scanare minimn 37 mm Numarul de elemente total 192 Aplicati: Parti moi, Vascular, Pediatric, Musculoskeletal, Soft de achizitie in regim 2D, CF, M-Mode obligatoriu sa fie inclus Prezentarea PN din catalog care este necesar sa coincida cu certificatul de conformitate sau manul de service a utilajului. Prezentarea dovezi compatibilitati cu Ecograful VOLUSON E8 BT12 Termeni de garantie 12 luni din momentul instalarii.	Modelul: 11L-D pagina 9-63/865 si 9-83/885 din Voluson E-Series Proprietary Service Manual Descrierea: Sonda tip Liniara DA Fregventa de lucru 4-10 MHz DA pagina 2 din Transducer Guide Voluson E- Series Extraordinary vision Latimea cimpului de scanare 37,4 mm DA pagina 2 din Transducer Guide Voluson E- Series Extraordinary vision pag 2 Numarul de elemente total 192 DA pagina 9-63/865 din Voluson E-Series Proprietary Service Manual Aplicati: Parti moi, Vascular, Pediatric, Musculoskeletal, DA pagina 9-63/865 din Voluson E-Series Proprietary Service Manual si pag. 2 Transducer Guide Voluson E-Series Extraordinary vision pag 2 Soft de achizitie in regim 2D, CF, M-Mode obligatoriu sa fie inclus DA Prezentarea PN H40432LN din catalog (Transducer Guide Voluson E- Series Extraordinary vision pag 2) care este necesar sa coincida cu certificatul de conformitate sau manul de service a utilajului- Voluson E-Series Proprietary Service Manual pag. 9-63/865 Prezentarea dovezi compatibilitati cu Ecograful VOLUSON E8 BT12 - DA pag. 9-83/885 din Voluson E-Series Proprietary Service Manua Termeni de garantie 12 luni din momentul instalarii. DA

Transducer Guide

Voluson E-Series Extraordinary vision

Extraordinary vision starts with advanced transducer technology. We collaborate with physicians and sonographers to evolve Voluson products to help meet your needs, and create innovations that put advanced technology for women's healthcare applications at your fingertips.

The Voluson® E-Series supports a wide range of probes that help provide quality imaging – especially in first trimester and complex gynecological exams.

Our innovative high-resolution 4D transvaginal probe helps bring your imaging to new heights and helps enhance diagnostic confidence. When combining our high resolution 4D probe with the wide field-of-view feature, you can visualize anatomical information you otherwise might not have seen.

You can rely on Voluson E-Series transducers to help deliver exceptional image quality.



	Description	Applications	FOV	Bandwidth	Availability
Small Parts – 2D					
 SP10-16-D H48651MT	2D Wide Band Linear Probe	Small Parts, Peripheral Vascular, Pediatrics, Musculoskeletal	33.7 mm	7 – 18 MHz	VE6, VE8, VE8 Expert
 11L-D H40432LN	2D Wide Band Linear Probe	Small Parts, Peripheral Vascular, Pediatrics, Musculoskeletal	37.4 mm	4 – 10 MHz	VE6, VE8, VE8 Expert
 9L-D H40442LM	2D Wide Band Linear Probe	Small Parts, Peripheral Vascular, Pediatrics, Obstetrics, Musculoskeletal	43.0 mm	3 – 8 MHz	VE6, VE8, VE8 Expert
 ML6-15-D H40452LG	Wide Band Linear Probe with Active Matrix Array Technology	Small Parts, Peripheral Vascular, Pediatrics, Musculoskeletal	49.6 mm	4 – 13 MHz	VE8, VE8 Expert
Abdominal – 2D					
 4C-D H4001BC	2D Wide Band Convex Probe	Abdomen, Urology, Peripheral Vascular, Obstetrics, Gynecology	58° Wide 81° <i>(only E8 Expert)</i>	2 – 5 MHz	VE6, VE8, VE8 Expert
 C1-5-D H40452LE	2D Wide Band Convex Probe, Curved Array Probe	Abdomen, Peripheral Vascular, Obstetrics, Gynecology	69° Wide 113° <i>(only E8 Expert)</i>	2 – 5 MHz	VE6, VE8, VE8 Expert
 AB2-7-D H48651MW	Wide Band Convex Probe	Abdomen, Obstetrics, Gynecology, Urology, Pediatrics	80° Wide 107° <i>(only E8 Expert)</i>	2 – 8 MHz	VE6, VE8, VE8 Expert
 M6C H40432LM	Wide Band Convex Probe with Active Matrix Array Technology	Abdomen, Obstetrics, Gynecology, Pediatrics	60° Wide 84° <i>(only E8 Expert)</i>	2 – 6 MHz	VE6, VE8, VE8 Expert
 C4-8-D H48681AS	2D Wide Band Convex Probe, Curved Array	Abdomen, Obstetrics, Gynecology, Urology, Pediatrics	70 ° Wide 95°	2 – 8 MHz	VE6, VE8, VE8 Expert

	Description	Applications	FOV	Bandwidth	Availability
Phased Array – 2D					
 PA 6-8-D H48651MZ	2D Wide Band Phased Array Probe	Abdominal, Cardiology, Pediatrics	90°	4 – 10 MHz	VE6, VE8, VE8 Expert
 3S-D H48661LG	2D Wide Band Phased Array Probe	Abdominal, Cardiology, Pediatrics, Adult Cephalic	90°	1 – 3 MHz	VE6, VE8, VE8 Expert
 3Sp-D H48681AZ	2D Wide Band Phased Array Probe	Cardiology, Obstetrics, Abdomen, Neurology, Pediatrics	90°	1 – 5 MHz	VE6, VE8, VE8 Expert
Endocavity – 2D					
 IC 5-9-D H40442LK	2D Wide Band Convex Probe, 2D Endocavity Probe, Curved Array Probe	Obstetrics, Gynecology, Urology	146° Wide 179°	4 – 9 MHz	VE6, VE8, VE8 Expert
Micro Convex – Real-time 4D					
 RNA5-9-D H48651MY	Wide Band Convex Volume Probe	Abdomen, Small Parts, General Imaging, Cardiology, Obstetrics, Pediatrics	116°, V 116° x 90° Wide 144°, V 144° x 90° (only E8 Expert)	3 – 9 MHz	VE6, VE8, VE8 Expert
Abdominal – Real-time 4D					
 RAB2-5-D H48651MN	Wide Band Convex Volume Probe, Curved Array Volume Probe	Abdomen, General Imaging, Obstetrics, Gynecology	80°, V 80° x 85° Wide 98°, V 98° x 85° (only E8 Expert)	1 – 5 MHz	VE6, VE8, VE8 Expert
 RAB4-8-D H48651MP	Wide Band Convex Volume Probe, Curved Array Probe	Abdomen, Obstetrics, Gynecology, Pediatric, Urology	70°, V 70° x 85° Wide 90°, V 90° x 85° (only E8 Expert)	2 – 8 MHz	VE6, VE8, VE8 Expert
 RM6C H48671ZG	Wide Band Convex Volume Probe with Active Matrix Array Technology	Abdomen, Obstetrics, Gynecology, Pediatrics	60°, V 60° x 85° Wide 90°, V 90° x 85°	1 – 7 MHz	VE8 Expert

	Description	Applications	FOV	Bandwidth	Availability
Endocavity – Real-time 4D					
 RRE5-10-D H48671WS	Wide Band Convex Volume Probe, Endocavity Probe Transrectal	Gynecology, Urology	147°, V 147° x 135° Wide 206°, V 206° x 135°	4 – 9 MHz	VE6, VE8, VE8 Expert
 RIC5-9-D H48651MS	Wide Band Convex Volume Probe, Endocavity Probe	Obstetrics, Gynecology, Urology	146°, V 146° x 120° Wide 179°, V 179° x 120°	4 – 9 MHz	VE6, VE8, VE8 Expert
 RIC6-12-D H48651NA	Wide Band Convex Volume Probe, Endocavity Probe	Obstetrics, Gynecology, Urology	149°, V 149° x 120° Wide 195°, V 195° x 120°	5 – 13 MHz	VE8 Expert
Small Parts – Real-time 4D					
 RSP6-16-D H48651MR	Wide Band Linear Volume Probe	Small Parts, Peripheral Vascular, Pediatrics, Musculoskeletal	37.4 mm V 37.4 mm x 29°	6 – 18 MHz	VE6, VE8, VE8 Expert
 RM14L H48681AR	Wide Band Linear Volume Probe with Active Matrix Array Technology	Small Parts, Peripheral Vascular, Pediatrics, Musculoskeletal	37.4 mm V 37.4 mm x 30°	4 – 14 MHz	VE8 Expert

Note: 2MHz and 4MHz non-imaging CW probe also available.

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Voluson E-Series

Proprietary Service Manual

English (English)

- Voluson E8 systems with Software version 6.x.x (BT06)
- Voluson E8 / Voluson E8 Expert systems with Software version 7.x.x (BT08)
- Voluson E6 / Voluson E8 / Voluson E8 Expert systems with Software version 9.x.x (BT09)
- Voluson E6 / Voluson E8 / Voluson E8 Expert systems with Software version 10.x.x (BT10)
- Voluson E6 / Voluson E8 / Voluson E8 Expert systems with Software version 12.x.x (BT12)
- Voluson E6 / Voluson E8 / Voluson E8 Expert systems with Software version EC200, 13.x.x (BT13)

ADVANCED SERVICE DOCUMENTATION

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Document Number: KTD102577

Revision 7

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Revision History

Revision	Date	Reason for change
1 - 4	November 2006 - May 2008	Proprietary Service Manual BT06 - BT08 (KT1106057)
1	March 2009	Initial Release
2	September 2009	new Software version, general update
3	April 2010	Breakthrough BT10 (SW 10.x.x), new parts
4	March 2011	new parts, general update, company name
5	September 2011	Breakthrough BT12 (SW 12.x.x)
6	August 2012	Breakthrough BT13 (SW 13.x.x), general update, new parts
7	February 2019	Implementation of BT06 (SW 6.x.x) and BT08 (SW 7.x.x) Breakthrough information, general update, new parts

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Chapter 1

Introduction

This chapter describes important issues related to safely servicing the Voluson E-Series (Voluson E6, Voluson E8, and/or Voluson E8 Expert) ultrasound system. The service provider must read and understand all the information presented in this manual before installing or servicing this system.

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Note

Under consideration of general maintenance requirements a minimum lifetime of 7 years for the equipment and 5 years for the probes may be expected. To maintain the safety and performance of the ultrasound system, a regular check (once per year) by authorized personnel is recommended.

9.12.2 2D-Probes - Linear Array Probes

Table 9-15 2D Linear Array Transducers

Item	Part Name	Part Number	Description	Qty	CRU	FRU
910	SP10-16-D	KTZ303999 H48651MT	broadband linear array transducer, 7.0 - 18.0 MHz, 192 Elements, electronically steerable <u>Applications:</u> Small Parts, Peripheral Vascular, Pediatrics, Orthopedics 	-	Y	Y
911	11L-D	5499499 H40432LN	broadband linear array transducer with a center image frequency of 7.3 MHz, 192 Elements, electronically steerable <u>Applications:</u> Small Parts (Breast), Peripheral Vascular, Pediatrics, Orthopedics (Musculoskeletal) 	-	Y	Y
912	9L-D	5499510 H40442LM	broadband linear array transducer with a center image frequency of 5.5 MHz, 192 Elements, electronically steerable <u>Applications:</u> Small Parts, Obstetrics, Peripheral Vascular, Pediatrics, Orthopedics (Musculoskeletal) 	-	Y	Y
913	ML6-15D*	5499600 H40452LG	1.25D Matrix linear array transducer with a center image frequency 9.0 MHz, 336 Elements / 3 rows (= 1008) <u>Applications:</u> Small-Part (Breast), Peripheral Vascular, Pediatrics, Orthopedics (Musculoskeletal), Neonatal 	-	Y	Y

Note Probes marked with an asterisk (*) are not applicable at Voluson E6 systems.

9.14.7 Probe - Compatibility

Table 9-29 Probe - Compatibility

Part Name	current (RoHS conform) Part Number	(obsolete) Part Number	H-Cat #	Array Type	BT06	BT08		BT09		BT10		BT12		BT13 (EC200)				
					VE8	VE8	VE8Exp	VE6	VE8	VE8Exp	VE6	VE8	VE8Exp	VE6	VE8	VE8Exp	VE6	VE8
2D Curved Array Probes																		
4C-D	5488478	KTZ157036	H4001BC	Curved	X	X	X	X	X	X	X	X	X	X	X	X	X	X
M6C-D	5499598	KTZ157049	H40432LM	Curved Matrix	X	X	X	X	X	X	X	X	X	X	X	X	X	X
AB2-7-D	KTZ303978	KTZ157022	H48651MW	Curved	2	X	X	X	X	X	X	X	X	X	X	X	X	X
C1-5-D	5499513	KTZ280094	H40452LE	Curved	-	-	-	X	X	X	X	X	X	X	X	X	X	X
C4-8-D	5488428	KTZ280169	H48681AS	Curved	-	-	-	-	-	-	X	X	X	X	X	X	X	X
IC5-9-D	5499592	KTZ280047	H40442LK	Transvaginal	-	X	X	X	X	X	X	X	X	X	X	X	X	X
2D Linear Array Probes																		
SP10-16-D	KTZ303999	KTZ157047	H48651MT	Linear	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11L-D	5499499	KTZ157048	H40432LN	Linear	2	X	X	X	X	X	X	X	X	X	X	X	X	X
9L-D	5499510	KTZ280048	H40442LM	Linear	-	X	X	X	X	X	X	X	X	X	X	X	X	X
ML6-15-D	5499600	KTZ280093	H40452LG	Linear Matrix	-	-	-	-	X	X	-	X	X	-	X	X	-	X
2D Phased Array Probes																		
PA6-8-D	KTZ157001	KTZ157042	H48651MZ	Phased	-	X	X	X	X	X	X	X	X	X	X	X	X	X
3S-D	KTZ304013	KTZ280049	H48661LG	Phased	-	X	X	X	X	X	X	X	X	X	X	X	X	X
3SP-D	KTZ280293	KTZ280168	H48681AZ	Phased	-	-	-	-	-	-	X	X	X	X	X	X	X	X
S4-10-D	5394804	-	H45302LA	Phased	-	-	-	-	-	-	-	-	-	-	-	X	X	X
CW Doppler (non-imaging) Pencil Probes																		
P2D	-	KTZ280051	H4830JE	Pencil	-	X	X	X	X	X	X	X	X	X	X	X	X	X
P6D	-	KTZ280050	H4830JG	Pencil	-	X	X	X	X	X	X	X	X	X	X	X	X	X
Real-Time 4D Volume Probes																		
RAB2-5-D	KTZ303980	KTZ157037	H48651MN	Curved	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RAB4-8-D	KTZ303983	KTZ157038	H48651MP	Curved	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RAB6-D	KTZ303986	KTZ302502	H48681MG	Curved	-	-	-	-	-	-	-	-	X	X	X	X	X	X
RIC5-9-D	KTZ303987	KTZ157043	H48651MS	Transvaginal	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RIC6-12-D	KTZ303991	KTZ157045	H48651NA	Transvaginal	X	-	X	-	-	X	-	-	X	-	-	X	-	X
RSP6-16-D	KTZ303997	KTZ157046	H48651MR	Linear	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RAM3-8	KTZ196215	KTZ157039	H48651NB	Curved Matrix	1	-	X	-	-	X	-	-	X	-	-	X	-	X
RM6C-D	KTZ303993	KTZ280117	H48671ZG	Curved Matrix	-	-	-	-	-	X	-	-	X	-	-	X	-	X
RSM5-14	KTZ157034	KTZ157044	H48651NC	Linear Matrix	-	-	X	-	-	X	-	-	X	-	-	X	-	X
RM14L-D	KTZ303992	KTZ280162	H48681AR	Linear Matrix	-	-	-	-	-	-	-	-	X	-	-	X	-	X
RRE5-10-D	KTZ303996	KTZ280096	H48671WS	Transrectal	-	-	-	-	-	-	X	X	X	X	X	X	X	X
RRE6-10-D	KTZ156993	KTZ156992	H48651N	Transrectal	-	X	X	X	X	X	X	X	X	X	X	X	X	X
RNA5-9-D	KTZ303994	KTZ156994	H48651MY	Microconvex	-	X	X	X	X	X	X	X	X	X	X	X	X	X