



# LOGIQ V2

Ultrasound System



# LOGIQ V2 Ultrasound System

The LOGIQ™ V2 is a compact designed ultrasound imaging system designed for Abdominal, Obstetrical, Gynecological, Small Parts, Vascular/Peripheral Vascular, Urological, Transcranial and Cardiac applications.

## General specifications

### Dimensions and weight

Height: 120mm  
Length: 396mm  
Width: 368mm  
Weight: 6kg with battery

### Electrical power

Voltage: 100-240 VAC  
Frequency: 50/60 Hz  
Power consumption:  
Maximum of 200 VA with peripherals

### Console design

1 inbuilt active probe ports  
2<sup>nd</sup> probe port with optional adapter  
Integrated HDD (120GB)  
Integrated speakers

## User interface

### Operator keyboard

Ergonomic full size keyboard  
8 TGC Slider segments (pods)

### Monitor

15" (381mm) high-resolution LCD (1024X768 pixels)  
Brightness adjustment

## System overview

### Applications

Abdomen  
Obstetrics  
Gynecological  
Cardiac  
Vascular  
Transcranial  
Musculoskeletal  
Urological  
Small Parts  
Pediatric & Neonatal

### Scanning methods

Electronic Convex  
Electronic Linear  
Electronic Sector

### Transducer types

Convex Array  
Linear Array  
Sector Phased Array

## Operating modes

- B-Mode
- Coded Phase Inversion Harmonic Imaging
- M-Mode
- Color M Mode
- Color Flow Mode (CFM)
- Power Doppler Imaging (PDI)
- Directional PDI
- PW Doppler with High PRF
- Anatomical M-Mode (Option)
- CW Doppler Mode (Option)

## System standard features

AO (Automatic Optimization)  
CrossXBeam™  
SRI-HD (High Definition Speckle Reduction Imaging)  
B-Steer  
Coded Phase Inversion Harmonic Imaging  
Virtual Convex  
Patient information Database  
Image Archive on integrated HDD  
Raw Data Analysis (TruScan)  
Real-time automatic Doppler calculations  
OB Calculations  
Fetal Trending  
Multi-gestational Calculations  
Hip Dysplasia Calculations  
Gynecological Calculations  
Vascular Calculations  
Urological Calculations  
Renal Calculations  
Cardiac Calculations  
Remote capability: InSite ExC  
On-board reporting package  
MPEGVue  
Network Storage

## System Options

Auto-IMT  
CW Doppler  
DICOM® 3.0 Connectivity  
Anatomical M-Mode (AMM)  
LOGIQ View  
Easy 3D (Free Hand 3D)  
Scan Assistant  
Scan Coach  
SonoBiometry

## Peripheral Options Supported

Digital UP-D25MD Color thermal printer  
Digital UP-D897 BW thermal printer  
Digital UP-D898MD BW thermal printer  
HP office jet 100 Mobile Printer  
HP office jet Pro 8100 Printer (supported)  
1-Pedal type footswitch 'Whanam FSU-1000'  
Footswitch MKF 2-MED USB GP26  
SanDisk USB Stick 4G  
1TB mobile USB HDD  
DVD RW Kit, LITEON eUUA108  
Wireless USB adapter

## Display modes

Live and Stored Display Format: full size and Split screen – both with thumbnails for still and Cine

Review Image Format: 4x4 and “thumbnails” for still and Cine Simultaneous Capability

- B/PW
- B/CFM or PDI
- B/M
- B/CrossXBeam
- B + CFM/M
- Real Time Triplex Mode (B + CFM or PDI/PW or CW)
- Dual B (B/B)

## Selectable alternating Modes

- B/M
- B/PW
- B + CFM/M
- B + CFM (PDI)/PW (CW)
- 3D-Mode
- 3D-Mode Color
- B/CW (Option)
- B + CFM (PDI)/CW
- Multi-image split screen (quad screen)
- Live and/or frozen
- B + B/CFM or PDI
- PW/M
- Independent CINE playback
- Zoom: Write/Read/Pan

## Colorized Image

- Colorized B
- Colorized M
- Colorized PW
- Colorized CW

## Time line display

- Independent Dual B/PW or CW Display
- Display Formats
  - Top/Bottom selectable format (Size: 1/2:1/2; 1/3:2/3; 2/3:1/3)
  - Side/Side selectable format (Size: 1/2:1/2; 1/4:3/4; TL only)

## Switchable after Freeze

- Timeline only
- Virtual Convex
- CrossXBeam

## Display annotation

Patient Name: First, Last (Max 28 characters displayed per each, Up to 64 total characters per each)

Patient ID (Max 54 characters)

Other ID (Max 54 characters)

Age, Sex and Date of Birth

Hospital Name (Max 23 characters displayed)

Date format: 3 Types selectable

- MM/DD/YY
- DD/MM/YY
- YY/MM/DD

## Time format: 2 types selectable

- 24 hours
- 12 hours

## Gestational Age from

- LMP
- GA
- EDD
- BBT

## Displayed Acoustic Output

- TIS: Thermal Index Soft Tissue
- TIC: Thermal Index Cranial (Bone)
- TIB: Thermal Index Bone
- MI: Mechanical Index

% of Maximum Power output

Probe Name

Map Names

Probe Orientation

Depth Scale Marker

Lateral Scale Marker

Focal Zone Markers

Image Depth

Zoom Depth

## B-Mode

- Gain
- Dynamic Range
- Imaging Frequency
- Edge Enhance
- Frame Average
- Frame Rate
- Gray Map
- ATO On/Off
- SRI-HD
- CrossXBeam

## M-Mode

- Gain
- Time Scale

## Doppler Mode

- Gain
- Angle
- Sample Volume Depth and Width
- Wall Filter
- Velocity and/or Frequency Scale
- Spectrum Inversion
- Time Scale
- PRF
- Doppler Frequency

## Color Flow Mode

- Line Density
- Frame Average
- Packet Size
- Color Scale: 2 types
  - Power
  - Directional PDI
- Color Velocity Range and Baseline
- Color Threshold Marker
- Color Gain
- PDI
- Inversion
- Doppler Frequency

## TGC Curve

Cine Gauge, Image Number/Frame Number

Body Pattern: Multiple human

Application Name

Measurement Results

Operator Message

Biopsy Guide Line and Zone

Heart Rate

## General System Parameters

### System Setup

- 8 Pre-programmable Categories
- User Programmable Preset Capability
- 248 presets (8 (application groups) x 4 (user defined) + 30(applications) ) x 4 (probes)
- Factory Default Preset Data
- 120 presets (30(applications) x 4 (probes))
- Languages: English, Latin American Spanish, French, German, Italian, Brazilian Portuguese, Chinese (Simplified), Swedish, Russian, Norwegian, Danish, Dutch, Finnish, Japanese
- OB Report Formats including Tokyo Univ., Osaka Univ., USA, Europe, and ASUM
- User Defined Annotations
- Body Patterns
- Customized Comment Home Position
- System Boot-up Time: 120 seconds
- System Shut-down Time: 40 seconds
- BTU (Heat dissipation): Typical Input power during scanning with full configuration: 511 BTU (th) / hr. (1BTU=0.293071W)

## CINE Memory/Image Memory

System RAM: 2GB

Processor: Intel Celeron 1047 (1.4G x2 core)

128 MB of Cine Memory

Max number of Cine loops: 2269 frames

Selectable Cine Sequence for Cine Review

Prospective Cine Mark

Measurements/Calculations and Annotations on Cine Playback

Scrolling timeline memory

Dual Image Cine Display

Quad Image Cine Display

Cine Gauge and Cine Image Number Display

Cine Review Loop

Cine Review Speed: 11 steps (11, 13, 14, 17, 22, 25, 31, 48, 100,

200, 400%)

## Image Storage

On-board database of patient information

Storage Formats:

- DICOM – compressed/uncompressed, single/multi-frame, with/without Raw Data
- Display Format: Full Size, 4x4 and “thumbnails”
- Storage Devices:
  - Internal Hard Drive Partition of 55 GB for Image Storage. At 22KB/image, it can store 2,621,440 still images.
  - External SD card, USB HDD and USB Memory Stick Support for Import, Export, DICOM Read, SaveAs, and MPEGVue
  - CD-RW storage: 700 MB
  - DVD storage: -R (4.7 GB)

Conversion to Formats: JPEG, AVI, WMV

Live Image and stored image side-by-side Display

Compare stored images with current exam

Storematrix: 800 x 600 x 24 Bit (Image Only)

1024 x 768 x 2 4 Bit (Normal Display)

Reload of archived data sets

Network Storage support for Import, Export, DICOM Read, SaveAs, MPEGVue

## Connectivity & DICOM

### Ethernet network connection

- DICOM 3.0 (Optional)
- Verify
- Print
- Store
- Modality Worklist
- Storage Commitment
- Modality Performed Procedure Step (MPPS)
- Query/Retrieve
- Structured Reporting Template – which can be compared to vascular and OB standard
- Remote capability InSite ExC

## Scanning Parameters

Digital Agile Beamformer Architecture  
193,536 System Processing Channels  
Max. Frame Rate: 1100 F/s  
Displayed Imaging Depth: 0 – 33 cm  
Minimum Depth of Field: 0 – 2 cm (Zoom) (probe dependent)  
Maximum Depth of Field: 0 – 33 cm (probe dependent)  
Transmission Focus: 1 – 8 Focal Points selectable (probe and application dependent)  
Quad Beamforming  
Continuous Dynamic Receive Focus/Aperture  
Multi-Frequency/Wideband Technology  
Frequency Range: 1.7 to 13 MHz  
Max Frequency Bandwidth: 13MHz  
256 Shades of Gray  
224dB Composite Dynamic Range  
Adjustable Dynamic Range (36 – 96dB)  
Adjustable Field of View (FOV): up to 128 degree (depending on probe)  
Image Reverse: Right/Left  
Image Rotation of 0, ° 180°

## B-Mode

Acoustic Power Output: 0 – 100%, 2, 5, and 10 steps  
Gain: from 0 – 90 dB, 1 dB steps  
Adjustable Dynamic Range: 36 – 96 dB, 3 or 6 dB steps  
Frame Average: 8 steps, probe depend  
Gray Scale Map: 7 types, probe depend  
Colorize Map / Tint Map: 9 types  
Frequency: Up to 11 selectable (depending on probe)  
Line Density: 5 steps  
Line Density Zoom: 5 steps  
Thermal Index: TIC, TIS, TIB  
Image Reverse: On/Off  
Maximum Focus Number: 8 steps on any probe/application  
Focus Width: 3 types  
Suppression: 6 steps  
Edge Enhance: 7 steps  
Rejection: 6 steps  
Steered Linear:  $\pm 15^\circ$   
Scanning Size (FOV or Angle – depending on the probe)  
SRI-HD: Up to 6 Levels selectable  
CrossXBeam: Up to 7 Angles selectable  
Depth: 2 – 33 cm, 0.5 or 1 cm step, Probe dependent

## M-Mode

Gain: -20 -20 dB, 1 dB step  
Gray Scale Map: 7 types  
B Colorization: 9 types  
Scanning Size (FOV or Angle – depending on probe, see probe specifications)  
Rejection: 6 steps  
M/PW Display Format: V-1/3B, V-1/2B, V-2/3B, H-1/2B, H-1/4B, Timeline only

## Anatomical M-Mode (Option)

M-Mode cursor adjustable at any plane  
Can be activated from a Cine loop from a live or stored image  
M and A capability  
Available with Color Flow Mode

## Pulse Wave Doppler Mode

- Acoustic Power: 0 – 100%, 2, 5, and 10 steps
- Gain: 0 -85 dB, 1 dB step
- Gray Scale Map: Up to 8 types
- PRF: 0.3 – 27.9 KHz
- Transmit Frequency: 1.7~6.3MHz,probe depend
- Wall Filter: 5.5 – 5000Hz, 27 steps, dependent on probe
- PW Colorization: Up to 6 types
- Velocity Scale Range: 0.4 ~ 4084 cm/s
- Sweep Speed: 0~7, 8 steps
- Sample Volume Depth: 0.2~30 cm, probe depend
- SV Gate: 1, 2, 3, 4, 5, 6, 7, 8, 10, 12, 14, 16 mm
- Angle Correction: -90 to +90degree, 1 degree steps
- M/PW Display Format: V-1/3B, V-1/2B, V-2/3B, H-1/2B, H-1/4B, Timeline only
- Spectrum Inversion
- Duplex: Simultaneous: On/Off (PW only)
- PW Angle Steer: 0,  $\pm 10$ , 15, 20°
- Sample Volume Depth: 75 steps default pre-settable, probe dependent
- Trace Method: Off, Max, Mean
- Baseline Shift: 11 steps
- Doppler Auto Trace
- Compression: 0.5~2.4 9steps (0.5,0.7,0.9,1,1.1,1.4,1.6,2,2.4)
- Trace Direction: Above, Below, Both
- Trace Sensitivity: 0~40, 2 steps

## Color Flow Mode

Baseline Shift: 0-100%/11 steps  
Invert: On/Off  
CF/PDI Focus Depth: default pre-settable for 10 – 100% of ROI in depth, 10% or 16% step  
CF/PDI Flash Suppression: 5 steps  
CF/PDI Angle Steer: 0,  $\pm 10^\circ$ ,  $\pm 15^\circ$ ,  $\pm 20^\circ$   
Packet Size: 8 – 24, dependent on probe and Application  
Line Density: 5 steps  
Line Density Zoom: 5 steps  
Frame Average: 7 steps  
PRF: 0.1 – 18.5 KHz/19 steps  
Min PRF: 0.1 KHz; Max PRF: 18.5KHz  
Velocity Range: 2 - 300 cm/s  
Spatial Filter: 6 steps  
Gain: 0 – 40 dB, 0.5 dB per step (totally 81 steps)  
Wall Filter: 0-3 / 4 steps, dependent on probe and Application  
Scanning Size (FOV or Angle): Probe dependent  
CF/PDI Vertical Size (mm) of ROI: default pre-settable  
CF/PDI Center Depth (mm) of ROI: default pre-settable  
CF/PDI Frequency: Up to 4, depending on probe  
Color Maps, including velocity-variance maps: 14 types depending on Application  
Transparent: 5 steps  
Echo/Color Priority: 0 - 100%/11 steps (Color Threshold)  
Accumulation: 8 steps  
Max. Frame Rate: 324 fps (3Sc probe)  
Max FR in Triplex: 307 fps

## Power Doppler Imaging

PDI Map: 14 types  
CF/PDI Focus Depth: default pre-settable for 10 – 100% of ROI in Depth, 10% or 15% step  
CF/PDI Acoustic Output: 0 – 100%, 2%, 5% or 10% step  
CF/PDI Angle Steer: 0,  $\pm 10^\circ$ ,  $\pm 15^\circ$ ,  $\pm 20^\circ$   
Packet Size: 8 – 24, dependent on probe and application  
Spatial Filter: 6 steps  
Frame Average: 7 steps  
PRF: 0.1 – 18.5 KHz/19 steps  
Power Threshold: 0 – 100%, 10% steps  
Gain: 0 – 40 dB, 0.5 dB steps  
Wall Filter: 4 steps depending on probe and application  
CF/PDI Frequency: Up to 4 steps, depending on probe  
Transparent: 5 steps  
Invert: On/Off  
Accumulation: 8 steps  
Flash Suppression

## Continuous Wave Doppler (Option)

Gray Scale Map: 8 types  
Baseline: 11 steps  
Angle Correct:  $\pm 90^\circ$ ,  $1^\circ$  step  
Spectral Color: 6 types  
Invert: On/Off  
Gain: 0 – 85 dB, 1 dB steps  
Wall Filter: 5.5 – 5000Hz, 27 steps, dependent on probe and application  
CW-Mode includes:

- Transmit Frequency
- CW Colorization
- Velocity Scale Range: 6 ~ 6004cm/s
- Spectrum Inversion
- Trace Method
- Doppler Auto Trace
- Trace Direction
- Trace Sensitivity

## Spectral Doppler Mode

PRFs: 0.3 – 27.9 KHz

**Velocity Range (PW) :** Min: 1 cm/s

Max: 4711 cm/s with 80 Angle Correction

Max: 1636 cm/s with 60 Angle Correction

Max: 818 cm/s with 0 Angle Correction

**Velocity Range (CW):** Min: 6cm/s

Max: 6004cm/s with 80 Angle Correction

Max: 2120cm/s with 60 Angle Correction

Max: 1060cm/s with 0 Angle Correction

## Auto Optimization

Optimize B-Mode image to improve contrast resolution

Selectable amount of contrast resolution improvement (low, medium, high)

Auto-Spectral Optimize adjusts

- Baseline
- Invert
- PRF (on live image)
- Angle correction

## Coded Harmonic Imaging

Coded Phase Inversion Harmonic Imaging  
Available on all Probes  
Line Density: 5 steps  
Line Density Zoom: 5 steps  
Suppression: 6 steps  
Edge Enhance: 7 steps  
Gray Scale Map: 7 types  
Tint Map: 9 types  
Gain: 0 – 90 dB, 1 dB step  
Dynamic Range: 36 to 96dB, 36~48/78~96 6dB step;  
Rejection: 6 step  
Frequency: Up to 4 steps, probe depended

## LOGIQView (Option)

Extended Field of View Imaging  
For use in B-Mode  
CrossXBeam is available on linear probes  
Auto detection of scan direction  
Post-process zoom  
Rotation  
Auto fit on monitor  
Measurements in B-Mode  
Up to 60cm scan length

## Easy 3D (Option)

Allows unlimited rotation and planar translations  
3D reconstruction from Cine sweep

## Scan Assistant (Option)

Factory Programs  
User defined programs  
Steps include image annotations, mode transitions, basic imaging controls and measurement initiation

## Scan Coach (Option)

Modules showing basic scanning techniques with graphic of beam formation, indicative probe position, schematic of anatomy and example clinical reference image. Covers Obstetrics, Gynecology & Abdomen applications.

## SonoBiometry (Option)

SonoBiometry is a workflow tool available on the LOGIQ Vision series that automatically places calipers for fetal biometry measurements, thus helping the user to perform these fetal measurements quickly. This tool can help enhance clinical workflow by reducing keystrokes to perform biometry measurements. Additionally, the user has the option to either accept or edit the measurement suggested by this tool.

Algorithms: Auto measurement of Bi-Parietal Diameter, Head Circumference, Abdominal Circumference & Femur Length

### **Virtual Convex**

Provides a convex field of view

Compatible with CrossXBeam

Available on linear and Sector transducers

### **SRI-HD**

High Definition Speckle Reduction Imaging Provides multiple levels of speckle reduction

Compatible with Side by Side DualView Display

Compatible with all linear, convex and sector transducers

Compatible with B-Mode, 3D/4D imaging

### **CrossXBeam**

Provides 3, 5, 7 of spatial compounding

Live Side by Side DualView Display Compatible with:

- Color Mode
- PW
- SRI-HD
- Coded Harmonic Imaging
- Virtual Convex

Available on 4C-RS, L6-12-RS, E8C-RS 12L-RS, 8C-RS and LK760-RS.

### **Controls Available While "Live"**

Write Zoom

B/M/CrossXBeam-Mode

Gain

TGC

Dynamic Range

Acoustic Output

Transmission Focus Position

Transmission Focus Number

Line Density Control

Sweep Speed for M-Mode

Number of Angles for CrossXBeam

PW-Mode

Gain

Dynamic Range

Acoustic Output

Transmission Frequency

PRF

Wall Filter

Spectral Averaging

Sample Volume Gate

- Length

- Depth

Velocity Scale

Color Flow Mode

CFM Gain

CFM Velocity Range

Acoustic Output

Wall Echo Filter

Packet Size

Frame Rate Control

CFM Spatial Filter

CFM Frame Average

Frequency/Velocity Base Line Shift

### **Controls Available on "Freeze" or Recall**

Automatic Optimization

SRI-HD

CrossXBeam – Display non-compounded and compounded image simultaneously in split screen

3D reconstruction from a stored Cine loop

B/M/CrossXBeam Mode

Gray Map Optimization

TGC

Colorized B and M

Frame Average (loops only)

Dynamic Range: Anatomical M-Mode

Sweep Speed

Gray Map

Post Gain

Baseline shift

Sweep Speed

Invert Spectral wave form

Compression

Rejection

Colorized Spectrum

Display Format

Doppler Audio

Angle Correct

Quick Angle Correct

Auto Angle Correct

Overall Gain (loops and stills)

Color Map

Transparency Map

Frame Average (loops only)

Flash Suppression

CFM Display Threshold

Spectral Invert for Color/Doppler

Anatomical M-Mode on Cine loop

## **Measurements/Calculations**

### **General B-Mode**

Depth and Distance

Circumference (Ellipse/Trace)

Area (Ellipse/Trace)

Volume (Ellipsoid)

% Stenosis (Area or Diameter)

Angle between two lines

### **General M-Mode**

M-Depth

Distance

Time

Slope

Heart Rate

## General Doppler Measurements/Calculations

Velocity

Time

A/B Ratio (Velocities/Frequency Ratio)

PS (Peak Systole)

ED (End Diastole)

PS/ED (PS/ED Ratio)

ED/PS (ED/PS Ratio)

AT (Acceleration Time)

ACCEL (Acceleration)

TAMAX (Time Averaged Maximum Velocity)

Volume Flow (TAMEAN and Vessel Area)

Heart Rate

PI (Pulsatility Index)

RI (Resistivity Index)

## Real-time Doppler Auto Measurements/Calculations

PS (Peak Systole)

ED (End Diastole)

MD (Minimum Diastole)

PI (Pulsatility Index)

RI (Resistivity Index)

AT (Acceleration Time)

ACC (Acceleration)

PS/ED (PS/ED Ratio)

ED/PS (ED/PS Ratio)

HR (Heart Rate)

TAMAX (Time Averaged Maximum Velocity)

PVAL (Peak Velocity Value)

Volume Flow (TAMEAN and Vessel Area)

## OB Measurements/Calculations

### Gestational Age by:

- GS (Gestational Sac)
- CRL (Crown Rump Length)
- FL (Femur Length)
- BPD (Biparietal Diameter)
- AC (Abdominal Circumference)
- HC (Head Circumference)
- APTD x TTD (Anterior/Posterior Trunk Diameter by Transverse Trunk Diameter)
- FTA (Fetal Trunk Cross-sectional Area)
- HL (Humerus Length)
- BD (Binocular Distance)
- FT (Foot Length)
- OFD (Occipital Frontal Diameter)
- TAD (Transverse Abdominal Diameter)
- TCD (Transverse Cerebellum Diameter)
- THD (Thorax Transverse Diameter)
- TIB (Tibia Length)
- ULNA (Ulna Length)
- Estimated Fetal Weight (EFW) by:
  - AC, BPD
  - AC, BPD, FL, HC
  - AC, FL, HC
  - BPD, APTD, TTD, FL

## Calculations and Ratios

- FL/BPD
- FL/HC
- CI (Cephalic Index)
- CTAR(Cardio-Thoracic Area Ratio)

Measurements/Calculations by: ASUM, ASUM 2001, Berkowitz, Bertagnoli, Brenner, Campbell, CFEF, Chitty, Eik-Nes, Ericksen, Goldstein, Hadlock, Hansmann, Hellman, Hill, Hohler, Jeanty, JSUM, Kurtz, Mayden, Mercer, Merz, Moore, Nelson, Osaka University, Paris, Rempen, Robinson, Shepard, Shepard/Warsoff, Tokyo University, Tokyo/Shinozuka, Yarkoni

Fetal Graphical Trending

Growth Percentiles

Multi-Gestational Calculations (4)

Fetal Qualitative Description (Anatomical survey)

Fetal Environmental Description (Biophysical profile)

Programmable OB Tables

Over 20 selectable OB Calculations

Expanded Worksheets

## GYN Measurements/Calculations

Right Ovary Length, Width, Height

Left Ovary Length, Width, Height

Uterus Length, Width, Height

Cervix Length, Trace

Ovarian Volume

ENDO (Endometrial thickness)

Ovarian RI

Uterine RI

Follicular measurements

Summary Reports

## Vascular Measurements/Calculations

SYS DCCA (Systolic Distal Common Carotid Artery)

DIAS DCCA (Diastolic Distal Common Carotid Artery)

SYS MCCA (Systolic Mid Common Carotid Artery)

DIAS MCCA (Diastolic Mid Common Carotid Artery)

SYS PCCA (Systolic Proximal Common Carotid Artery)

DIAS PCCA (Diastolic Proximal Common Carotid Artery)

SYS DICA (Systolic Distal Internal Carotid Artery)

DIAS DICA (Systolic Distal Internal Carotid Artery)

SYS MICA (Systolic Mid Internal Carotid Artery)

DIAS MICA (Diastolic Mid Internal Carotid Artery)

SYS PICA (Systolic Proximal Internal Carotid Artery)

DIAS PICA (Diastolic Proximal Internal Carotid Artery)

SYS DECA (Systolic Distal External Carotid Artery)

DIAS DECA (Diastolic Distal External Carotid Artery)

SYS PECA (Systolic Proximal External Carotid Artery)

DIAS PECA (Diastolic Proximal External Carotid Artery)

VERT (Systolic Vertebral Velocity)

SUBCLAV (Systolic Subclavian Velocity)

Automatic IMT

Summary Reports

## Urological Calculations

Bladder Volume

Prostate Volume

Lt/Rt Renal Volume

Generic Volume

Post-Void Bladder Volume



## Cardiac Measurements/Calculations

Cardiac calculation package including extensive measurements and display of multiple repeated measurements Parameter annotation follow ASE standard

## Probes

### 4C-RS

#### Convex Probe

- Frequency Range: 2.0-5.0MHz
- Applications: Abdomen, OB/Gyn, Vascular, Urology
- Number of Element: 128
- Convex Radius: 60 mmR
- FOV: 55°
- Footprint: 18.3 x 66.2 mm
- B-Mode Imaging Frequency: 2.0, 3.0, 4.0, 5.0 MHz
- Harmonic Imaging Frequency: 3.0, 4.0, 5.0 MHz
- CFM/PDI/PWD Frequency: 2.0, 2.8, 3.6 MHz
- Biopsy Guide: Multi Angle, Reusable Bracket

### L6-12-RS

#### Linear Probe

- Frequency Range: 4.0 – 13.0 MHz
- Applications Vascular, Small Parts, Pediatrics
- Number of Element: 128
- Footprint: 38.4 x 6.0 mm
- B-Mode Imaging Frequency: 6.0, 8.0, 10.0, 11.0 MHz
- Harmonic Imaging Frequency: 8.0, 10.0, 12.0, 13.0 MHz
- Highest Linear Harmonics: 13MHz
- CFM/PDI/PWD Frequency: 4.0, 5.0, 6.0 MHz
- Steered Angle : +/-20°°
- Steering steps: 23 steps, in Fine Angle Steer (from -20 to +20, 1 or 2 degree steps)
- Max Steering Angle: +- 20 degrees in Fine Angle Steer
- Biopsy Guide: Multi Angle, Reusable Bracket

### E8C-RS

#### Endo Micro Convex Probe

- Frequency Range: 4.2 – 10.0MHz
- Applications: OB/Gyn, Urology, Transvaginal,
- Transrectal
- Number of Element: 128
- Convex Radius: 10.73 mmR
- FOV: 128°
- Footprint: 16.9 x 21.2 mm
- B-Mode Imaging Frequency: 6.0, 8.0, 10.0 MHz
- Harmonic Imaging Frequency: 7.0, 8.0, 10.0 MHz
- CFM/PDI/PWD Frequency: 4.2, 5.0, 6.3 MHz
- Biopsy Guide: Fixed Angle,
- Disposable, or Reusable Bracket

### 3Sc-RS

#### Phased Array Sector Probe

- Frequency Range: 1.7 – 4.0 MHz
- Applications: Cardiac, Transcranial
- Number of Element: 64
- FOV: 120°
- Footprint: 27.6 x 19.3 mm
- B-Mode Imaging Frequency: 2.0, 3.0, 4.0 MHz
- Harmonic Imaging Frequency: 3.0, 3.2, 3.5, 4.0 MHz
- CFM/PDI/PWD Frequency: 1.7, 2.0, 2.5, 3.3 MHz
- CWD Frequency: 1.9 MHz
- Biopsy Guide: Multi Angle, Reusable Bracket

### 8C-RS

#### Convex Probe

- Frequency Range: 4.2 – 10.0 MHz
- Applications: Pediatric ,cardiac, Small Parts
- Number of Element: 128
- Convex Radius: 10.73 mmR
- FOV: 128°
- Footprint: 12.0 x 22.0 mm
- B-Mode Imaging Frequency: 6.0 8.0 10.0 MHz
- Harmonic Imaging Frequency: 7.0 8.0 10.0 MHz
- CFM/PDI/PWD Frequency: 4.2 5.0 6.3 MHz

### 12L-RS

#### Linear Probe

- Frequency Range:4.2- 13.0 MHz
- Applications: Vascular, Small Parts, Pediatrics
- Number of Element: 192
- Footprint: 12.7 x 47.1mm
- B-Mode Imaging Frequency: 6.0, 8.0, 10.0, 12.0 MHz
- Harmonic Imaging Frequency: 8.0, 10.0, 12.0, 13.0 MHz
- Highest Linear Harmonics: 13MHz
- CFM/PDI/PWD Frequency:4.2 6.3 7.7 MHz
- Steered Angle : +/-20°°
- Steering steps: 23 steps, in Fine Angle Steer (from -20 to +20, 1 or 2 degree steps)
- Max Steering Angle: +- 20 degrees in Fine Angle Steer
- Biopsy Guide: Multi Angle, Reusable Bracket

### LK760-RS

#### Linear Probe

- Frequency Range: 5.0-10.0 MHz
- Applications:Small Parts
- Number of Element: 128
- Footprint: 38.4 x 6.0 mm
- B-Mode Imaging Frequency: 5.0 7.0 9.0 MHz
- Harmonic Imaging Frequency: 6.0 8.0 10.0 MHz
- Highest Linear Harmonics: 10.0 MHz

## Inputs and Outputs

HDMI output

VGA output with optional adapter

TV output (S-video and composite video)

100BASE-TX Ethernet (RJ45)

2 USB ports

## Safety Conformance

### The LOGIQ V2 is:

CE Marked to Council Directive 93/42/EEC on Medical Devices

Conforms to the following standards for safety:

- IEC 60601-1 Medical electrical equipment—Part 1: General requirements for safety
- IEC 60601-1-2 Medical electrical equipment—Part 1-2 General requirements for safety—Collateral Standard: Electromagnetic compatibility—requirements and tests EMC Emissions Grp-1
- Class A device requirements as per CISPR 11
- IEC 60601-2-37 Medical electrical equipment—Part 2-37: Particular requirements for the safety of ultrasonic medical diagnostic and monitoring equipment
- ISO 10993-1 Biological evaluation of medical devices—Part 1 Evaluation and testing
- EN 62366 Medical devices —Application of usability engineering to medical devices





### About GE Healthcare

GE Healthcare provides transformational medical technologies and services to meet the demand for increased access, enhanced quality and more affordable healthcare around the world. GE (NYSE: GE) works on things that matter - great people and technologies taking on tough challenges. From medical imaging, software & IT, patient monitoring and diagnostics to drug discovery, biopharmaceutical manufacturing technologies and performance improvement solutions, GE Healthcare helps medical professionals deliver great healthcare to their patients.

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## Imagination at work

Data subject to change

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