General System Parameters *(cont.)*

Image Storage *(cont.)*

- Compare old images with current exam
- Reload of archived data sets

Connectivity & DICOM

- Ethernet network connection
- DICOM 3.0 (option)
- Wireless LAN (option)
- Verify
- Print
- Store
- Modality worklist
- Storage commitment
- Modality Performed Procedure Step (MPPS)
- Media exchange
- Off network/mobile storage queue
- Query/retrieve
- Public SR template
  - Structured reporting – compatible with vascular and OB standard
  - Direct export DICOM SR and XML
- Remote capability InSite™ ExC
- DICOM directory import
- LOGIQ P apps

Physiological Input Panel (Option)

- Physiological input
- ECG, 2 lead
- Dual R-Trigger
- Pre-settable ECG R delay time
- Pre-settable ECG position
- Adjustable ECG gain control
- Automatic heart rate display

Report Writer (Option)

- On-board reporting package automates report writing
- Formats various exam results into a report suitable for printing or reviewing on a standard PC

Report Writer (Option) *(cont.)*

- Exam result reports can include patient info, exam info, measurements, calculations, images, comments and physician diagnosis
- Standard templates provided
- Customizable templates
- Thyroid reporting template

Scanning Parameters

- 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)
- Continuous dynamic receive focus/continuous dynamic
- Receive aperture
- Adjustable dynamic range
- Adjustable Field of View (FOV)
- Image reverse: right/left
- Image rotation of 0°, 90°, 180°, 270°

Digital B-Mode

Adjustable

- Acoustic power
- Dynamic range
- Gray scale map
- Line density
- B colorization
- Reject
- Suppression
- SRI-HD
- Edge enhance
- Gain
- Frame averaging
- Frequency
- Scanning size (FOV or angle – depending on the probe, see probe specifications)

Digital M-Mode

Adjustable

- Acoustic power
- Dynamic range
- Frequency
- M colorization
- Rejection
- Gain
- Gray scale map
- Sweep speed
- M display format

Anatomical M-Mode

- 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
- Curved Anatomical M-Mode

General System Parameters *(cont.)*

Digital Spectral Doppler Mode

Adjustable	• Acoustic power • Dynamic range • Transmit frequency • PW colorization • Sweep speed • Sample volume length • Spectrum inversion • Baseline shift • Time resolution • Compression • Trace sensitivity	• Gain • Gray scale map • Wall filter • Velocity scale range • Angle correction • Steered linear • Trace method • Doppler auto trace • Trace direction

Digital Color Flow Mode

Adjustable	• Acoustic power • Gain • Velocity scale range • Wall filter • Packet size • Spatial filter • Baseline shift • Threshold • Sample volume control • Flash suppression	• Color maps, including velocity-variance maps • Line density • Steering angle • Frame average • Accumulation mode • Quantification (option)

Digital Power Doppler Imaging

Adjustable	• Acoustic power • Gain • Velocity scale range • Wall filter • Packet size • Spatial filter • Frame average • Accumulation mode • Flash suppression	• Color maps including velocity-variance maps • Line density • Steering angle • Threshold • Sample volume control

Continuous Wave Doppler (Option)

Adjustable	• Acoustic power • Dynamic range • Transmit frequency • CW colorization • Sweep speed • Angle correction • Trace method • Baseline shift • Compression • Trace direction	• Gain • Gray scale map • Wall filter • Velocity scale range • Spectrum inversion • Doppler auto trace • Trace sensitivity

Available on the following probes: 3Sc-RS, 6S-RS, 12S-RS, 6Tc-RS, P2D, P6D and P8D

Automatic Optimization

Optimize B-Mode image to improve contrast resolution

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

Auto TGC

Auto-spectral optimize adjusts	• Baseline • PRF (on live image)	• Invert • Angle correction

Coded Harmonic Imaging

Available on all 2D and 4D probes

B-Flow/B-Flow Color (Option)

Available on C1-5-RS, 8C-RS, L6-12-RS, 12L-RS, 9L-RS, ML6-15-RS, L8-18i-RS, L4-12t-RS, L10-22-RS, L3-9i-RS, L12n-RS, E8CS-RS, BE9CS-RS, L3-12-RS and IC59-RS probes

Background: on/off

Sensitivity/PRI

Line density

Edge enhance

Frame average

Gray scale map

Tint map

Dynamic range

Rejection

Gain

Hybrid B-Flow	• Supported on C1-5-RS, 12L-RS, 9L-RS, ML6-15-RS, L4-12t-RS, L3-12-RS and L12n-RS • B & B-Flow simultaneous dual display • B & B-Flow overlay display

B-Flow Color (BFC)

B-Flow High Definition Color (HD Color)	Supported on C1-5-RS, 12L-RS, ML6-15-RS, L4-12t-RS, L3-12-RS and L12n-RS

Accumulation

Coded Contrast Imaging (Option)

Available on C1-5-RS, 9L-RS, 3Sc-RS, IC9-RS and BE9CS-RS probes

2 contrast timers

Timed updates: 0.05 – 10 seconds

Accumulation mode, six levels

Maximum Enhance Mode

General System Parameters *(cont.)*

Coded Contrast Imaging (Option) *(cont.)*

Flash

Time Intensity Curve (TIC) Analysis

Auto MI control

The LOGIQ P9 is designed for compatibility with commercially available ultrasound contrast agents. Because the availability of these agents is subject to government regulation and approval, product features intended for use with these agents may not be commercially marketed nor made available before the contrast agent is cleared for use. Contrast related product features are enabled only on systems for delivery to an authorized country or region of use.

LOGIQ View (Option)

Extended Field of View imaging

Available on the following probes: C1-5-RS, 8C-RS, L6-12-RS, 12L-RS, 9L-RS, ML6-15-RS, L8-18i-RS, L4-12t-RS, L10-22-RS, L3-9i-RS, L12n-RS, E8C-RS, E8CS-RS, IC9-RS, BE9CS-RS, RIC5-9A, 6Tc-RS, RAB2-6-RS, 3SC-RS,6S-RS,12S-RS

For use in B-Mode

CrossXBeam is available on linear probes

Auto detection of scan direction

Pre or post-process zoom

Rotation

Auto fit on monitor

Measurements in B-Mode

3D

Allows unlimited rotation and planar translations

3D reconstruction from Cine sweep

Advanced 3D (Option)

Acquisition of color data

Automatic rendering

3D landscape technology

3D movie

Real-time 4D (Option)

Acquisition modes	• Real-time 4D • Static 3D

Real-time 4D (Option) *(cont.)*

Visualization modes	• 3D rendering (diverse surface and intensity projection modes) • Sectional planes (three section planes perpendicular to each other) • Volume contrast imaging-static (option) • Tomographic ultrasound imaging (option)
Render mode	Surface texture, surface smooth, max-, min- and X-ray (average intensity projection), mix mode of two render modes

Curved 3 point render start

3D movie

Scalpel: 3D cut tool

Display format	• Quad: A-/B-/C-Plane/3D • Dual: A-Plane/3D • Single: 3D or A- or B- or C-Plane

Automated Volume Calculation – VOCAL II (option)

Betaview

Auto sweep

STIC (option)

HD*live* (option)

Omniview (option)	VCI OmniView

Scan Assistant (Option)

Factory programs

User defined programs

Steps include image annotations, mode transitions, basic imaging controls and measurement initiation

Shear Wave Elastography (Option)

Available on the following probes: C1-5-RS, L3-12-RS

User programmable measurement display in kPa and meters per sec.

Single and dual view display

B Steer+ (Option)

Available on the following probes: C1-5-RS, 8C-RS, L6-12-RS, 12L-RS, 9L-RS, ML6-15-RS, L4-12t-RS, L3-12-RS, L12n-RS, RAB2-6-RS

General System Parameters *(cont.)*

Strain Elastography (Option)

Available on C1-5-RS, L6-12-RS, 12L-RS, 9L-RS, ML6-15-RS, L4-12t-RS, L12n-RS, E8CS-RS, BE9CS-RS, L3-12-RS and IC9-RS probes

Semi-Quantification[2]

TVI (Option)

Myocardial doppler imaging with color overlay on tissue image

Available on the sector probes

Tissue color overlay can be removed to show just the 2D image, still retaining the tissue velocity information

Curved anatomical M-Mode: free (curved) drawing of M-Mode generated from the cursor independent from the axial plane

Q-Analysis: multiple time motion trace display from selected points in the myocardium

Stress Echo (Option)

Advanced and flexible Stress Echo examination capabilities

Provides exercise and pharmacological protocol templates

8 default templates

Template editor for user configuration of existing templates or creation of new templates

Reference scan display during acquisition for stress level comparison (dual screen)

Baseline level/previous level selectable

Raw data continuous capture

Over 100 sec. available

Wall motion scoring (bulls-eye and segmental)

Smart stress: automatically set up various scanning parameters (for instance, geometry, frequency, gain, etc.) according to same projection on previous level

Scan Assistant (Option)

Factory programs

User-defined programs

Steps include image annotations, mode transitions, basicim-aging controls and measurement initiation

Compare Assistant (Option)

Allows side-by-side comparison of previous ultrasound and other modality exams during live scanning

Power Assistant (Option)

Allows moving the system without a complete system shutdown and boot-up power cycle

Extended battery for off line scanning (option) provides battery powered live scanning

Breast Productivity Package (Option)

Worksheet summary includes measurements and locations for nodule, parathyroid and lymph node

Feature assessment

BI-RADS® assessment

User editable

Thyroid Productivity Package (Option)

Worksheet summary includes measurements and locations for nodule, parathyroid and lymph node

Feature assessment

User editable

Auto EF (Option)

Allows semi-automatic measurement of the global EF (Ejection fraction)

User editable

Cardiac Strain (Cardiac AFI) (Option)

Allows assessing the left ventricle with all segments at a glance by combining three longitudinal views into one comprehensive bulls-eye view

2D strain based data moves into clinical practice

Virtual Convex

Provides a convex Field of View

Compatible with CrossXBeam

Available on all linear and sector transducers

SRI-HD

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, color, contrast agent and 3D imaging

General System Parameters *(cont.)*

CrossXBeam

Provides 3, 5, 7 or 9 angles of spatial compounding

Live side-by-side DualView display

Compatible with
- Color Mode
- SRI-HD
- Virtual convex
- PW
- Coded harmonic imaging

Available on C1-5-RS, 8C-RS, L6-12-RS, 12L-RS, 9L-RS, ML6-15-RS, L8-18i-RS, L4-12t-RS, L10-22-RS, L3-9i-RS, L12n-RS, E8C-RS, E8CS-RS, BE9CS-RS, RIC5-9A-RS, IC9-RS, L3-12-RS and RAB2-6-RS probes

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

Controls Available While "Live" *(cont.)*

Wall echo filter

Packet size

Frame rate control

CFM spatial filter

CFM frame averaging

CFM line resolution

Frequency/velocity baseline 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

Max read zoom to 8x: baseline shift

Sweep speed

PW Mode

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