GE Healthcare

Quick Card

LOGIQ® *e*

Control Panel

The Quick Card is a quick reference to operation. Please refer to Basic User Manual for detailed information.

1. Power
2. Time Gain Compensation (TGC)
3. Patient
4. Mode/Gain/Auto Optimize Keys:
   - M-Mode (M)
   - Pulsed Wave Doppler Mode (PW)
   - Color Flow Mode (CF)
   - B-Mode (B)
5. Steer/B-Steer+/Harmonics/PDI
6. Preset Key
7. End Exam
8. Imaging/Measurement Key:
   - Cursor
   - Clear
   - Body Mark
   - Measure
   - M/D Cursor
   - Scan Area
   - Set/Pause
9. Depth/Zoom/Ellipse
10. Start/Stop:
    - Split Screen Left/Right
    - Easy 3D Controls
    - LOGIQview
11. Freeze
12. Programmable Print Keys
13. Utility
14. Alphanumeric Keyboard:
    - Use the Keyboard to enter patient information and annotations
    - Function Keys
15. Soft Key Rotary Dial/Menu Select Keys

Scanning

Connecting the Probe

1. Handling the probe carefully, slide the connector straight into the port.
2. Lift the probe latch up into place.

Entering Patient Data

1. Press the **Patient** key [3].
2. Enter the patient ID and Name, **a patient ID must be entered in order to store your images**—the system can be programmed to automatically generate Patient ID *(utility>connectivity>select Automatic generation of patient ID>save)*.
3. Exit the patient page by selecting **Exit** or pressing the **B** [4] or **Freeze** [11] keys.

Selecting a Preset

1. Press the **Preset** key [6].
2. Use the pointer arrow to select the exam type that you will be performing.
3. Press the **Set** key [8]. The system will go to the scan screen after the preset is selected.

Measurements

1. Press the **Measurement** key [8]. A caliper will appear on the screen.
2. Place a caliper in the appropriate position and press the **Set** key.

3. A second caliper will appear.
4. Place the second caliper in the appropriate position and press **Set**.

   A measurement box appears with the generic measurement that you have just completed. If you want the measurement to be labeled with the name of the anatomy being scanned, begin the measurement process by pressing the measurement key, choosing the anatomy and location from the list provided on the left hand side or bottom of the image monitor.
5. A new caliper may appear for the next measurement. If measurements are complete, press the **Clear** key [8] or **Freeze** to exit the measurement function.

Annotating an Image

1. To add text to an image:

   a. Begin typing on the keyboard; if a word appears, press the **Tab** key on the keyboard to type the offered word (type and tab feature).

   b. Press the comment key (space bar) and type the desired word(s).

   c. Press the **Comment** key and choose a word from the Comments list with the pointer arrow and press the **Set** key.
2. To set the text on the screen, place the cursor in the desired location, type the desired word(s) and press **Set**. Set text is yellow.
3. To edit or move set text, reselect the text with the cursor. Editable text is green.

Color Flow

1. Press the **CF** key [4].
2. The color box appears over the B-Mode image.
3. Use the trackball to move the color box.
4. Press **Scan Area** key [8] once to size the color box and press once more to move the color box.

Power Doppler Imaging

5. Press the **PDI** key [5].
6. The color box appears over the B-Mode image.
7. Use the trackball to move the color box.
8. Press the **Scan Area** key once to size the color box and press once more to move the color box.

Pulsed Wave Doppler

1. Press the **PW** key [4].
2. The Doppler gate and B-Mode image appear above the Pulsed Wave Doppler spectral display.
3. Use the trackball to move the Doppler gate.
4. Press **Freeze** and **Measure** to complete calculations.

Split Screen

1. Press the **Start (L)** key [10] to display the left side of the image as active.
2. Press the **Stop (R)** key [10]. The left side of the screen will be frozen and the right side will be active.
3. Toggle between **(L)** and **(R)** to obtain the desired images and then press **Freeze**.
4. Press both **(L)** and **(R)** keys at the same time; the image will be live on both sides of the screen.

Print Keys (Default Settings)

1. Press **P1** to store images to the hard drive.
2. Press **P2** to print images on the thermal paper printer.
3. Press **P3** to store images directly to a USB drive/memory stick or network.

End Exam

1. Press the **Patient** key [3].
2. Select **New Patient**.
3. Select **Store All** from the **Unsaved Exam Data** menu.
4. You are ready to begin the next exam.

B-Mode Optimization

Focus

Increases or decreases the number of focal zones or moves the focal zone(s) to the area of interest. Multiple focal zones can slow the frame rate. Ensure that focal zones are centered to the anatomy of interest.

Benefit: Optimizes the image by increasing resolution for specific area.

Range Focus

Provides a focal zone in the near field.

Benefit: Improves near field imaging, decreases vessel fill-in, increases contrast and detail resolution, and provides optimal imaging.

Auto Optimize

Optimizes the image based on a specific region of interest or anatomy within the B-Mode image.

Benefit: Automatically optimizes the image based on specific anatomy.

Gray Maps

Varies the appearance of the shades of gray from black to white. Gray Maps gradually change from the least amount of contrast or softest appearing image to the greatest amount of contrast (most black and white image). Clear Maps provide a more transparent appearance. If you change the gray map you may need to change dynamic range, gain, etc., to obtain the image appearance that you want.

Benefit: Optimizes the grayscale of the anatomy being visualized.

CrossXBeam

Combines three or more frames from different angles into a single frame.

Benefit: Improved border definition, continuous boundaries and interfaces, reduced speckle and "noise."

Speckle Reduction Imaging

An embedded, adapted algorithm to reduce the unwanted effects of speckle in the ultrasound image.

Benefit: Smoothes the image and reduces "noise."

Weekly Cleaning Maintenance

The system requires weekly cleaning maintenance to function safely and properly. Turn off system power before cleaning any part of the system. If possible, disconnect the power source.

Note: Failure to perform required maintenance may result in unnecessary service calls.

System Care and Maintenance

Moisten a soft, non-abrasive folded cloth and wipe down the system cabinet on all sides.

Note: Do not spray any liquid directly into the unit.

LCD Monitor

Use a soft, folded cloth to gently wipe the monitor face.

Do NOT use a glass cleaner that has a hydrocarbon base (such as Benzene, Methyl Alcohol or Methyl Ethyl Ketone) on monitors with the filter (anti-glare screen).

Hard rubbing will also damage the filter.

Note: When cleaning the screen, make sure not to scratch the LCD.

Operator Controls

- Moisten a soft, non-abrasive folded cloth with a mild, general purpose, non-abrasive soap and water solution and wipe down the operator control panel.
- Use a cotton swab to clean around the keys or controls.
  Use a toothpick to remove solids between keys and controls.

Note: When cleaning the operator control panel, make sure not to spill or spray any liquid on the controls, into the system cabinet, or in the probe connection receptacle.

Note: In case of SARS, use bleach, alcohol, or Cidex in a normal diluted form for cleaning/disinfecting the operator control panel.

Note: DO NOT use T-Spray or Sani-Wipes on the operator control panel.

Printer

- Wipe the external surfaces of the unit with a soft, clean, dry cloth.
- Remove stubborn stains with a cloth lightly dampened with a mild detergent solution.

Note: Never use strong solvents, such as a thinner or benzene, or abrasive cleaners because they will damage the cabinet. No further maintenance, such as lubrication, is needed.

To clean the surface of the print head:
Run the cleaning sheet (provided with the printer) through the printer.

Footswitch

- Moisten a soft, non-abrasive folded cloth with a mild, general purpose, non-abrasive soap and water solution.
- Wipe the external surfaces of the unit then dry with a soft, clean cloth.

LOGIQ*e* Transducer Care

			4C-RS	8C-RS	E8C-RS	8L-RS	9L-RS 12L-RS	16L-RS	i12L-RS	3S-RS	6S-RS	i739-RS t739-RS	⏳
	***Aquasonics 100***	Parker Laboratory Inc.	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	–
	Scan	Parker Laboratory Inc.	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	–
	Sonogel	Sonogel Vertriebs GmbH	OK	OK	OK	OK	OK	⊘	OK	OK	OK	OK	–
	Clear Image	Sonotech Inc.	OK	⊘	⊘	OK	⊘	⊘	OK	OK	OK	⊘	–
	Kendall	Tyco/Healthcare	OK	⊘	⊘	OK	⊘	⊘	⊘	OK	OK	⊘	–
	Wavelength	National Therapy Products Inc.	OK	⊘	⊘	OK	⊘	⊘	⊘	OK	OK	⊘	–
	Haiyin	Wuxi Huali Industrial Company	⊘	⊘	⊘	⊘	⊘	⊘	⊘	OK	⊘	⊘	–
	***T-Spray***	Pharmaceutical Innovations	OK	OK	OK	OK	OK	⊘	⊘	OK	⊘	OK	< 20 minutes
	T-Spray II	Pharmaceutical Innovations	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	< 20 minutes
	Transeptic Spray	Parker Laboratory Inc.	⊘	⊘	OK	⊘	⊘	⊘	⊘	⊘	⊘	⊘	< 15 minutes
	Protex	Parker Laboratory Inc.	OK	⊘	⊘	OK	⊘	⊘	⊘	OK	⊘	⊘	< 20 minutes
	***Asepti-wipes II***	Ecolab Inc.	OK	OK	OK	OK	OK	⊘	OK	OK	OK	OK	< 30 minutes
	CaviWipes	Metrex	OK	⊘	⊘	OK	⊘	⊘	OK	OK	OK	⊘	< 30 minutes
	Cleanisept wipes	Dr.Schumacher GmbH	OK	OK	OK	OK	OK	⊘	OK	OK	OK	OK	< 30 minutes
	Septiwipes	Dr.Schumacher GmbH	OK	OK	OK	OK	OK	⊘	OK	OK	OK	OK	< 30 minutes
	Sani-Cloth HB	PDI	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	< 30 minutes
	***PeraSafe***	Antec International	⊘	OK	OK	⊘	OK	⊘	⊘	⊘	⊘	OK	< 15 minutes
	***Cidex***	Johnson & Johnson	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	< 50 minutes
	Cidex OPA	Johnson & Johnson	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	< 15 minutes
	Cidex Plus	Johnson & Johnson	OK	OK	OK	OK	OK	⊘	OK	OK	OK	OK	< 25 minutes
	Gigasept AF	Schülke & Mayr	⊘	OK	OK	⊘	OK	⊘	⊘	⊘	⊘	OK	< 30 minutes
	Gigasept FF	Schülke & Mayr	⊘	OK	OK	⊘	OK	⊘	⊘	⊘	⊘	OK	< 30 minutes
	Gigasept FF neu	Schülke & Mayr	OK	⊘	⊘	OK	⊘	⊘	⊘	OK	⊘	⊘	< 20 minutes
	Hibitane	Regent Medical	⊘	⊘	OK	⊘	⊘	⊘	⊘	⊘	⊘	OK	< 30 minutes
	Metricide 14	Metrex	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	< 50 minutes
	Metricide OPA Plus	Metrex	OK	⊘	⊘	OK	⊘	⊘	⊘	OK	⊘	⊘	< 10 minutes
	MetriZyme	Metrex	OK	⊘	⊘	OK	⊘	⊘	⊘	OK	⊘	⊘	< 15 minutes
	Ster Bac Blu	Ecolab Inc.	⊘	OK	OK	⊘	OK	OK	⊘	⊘	OK	OK	< 50 minutes
	Wavicide-01	MCC	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	< 50 minutes

http://www.gehealthcare.com/rad/us/probe_care.html

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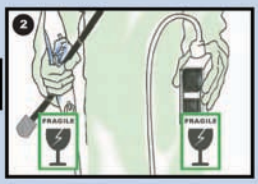
TEE Probe Care Card (6T/6T-RS/6Tc/6Tc-RS/6Tv/9T/9T-RS)

We strongly recommend not to apply anaesthetic sprays directly on the endosope.
It is important to use a bite guard during the probe intubation, the examination and the extubation.
Make sure to keep it in place until the probe is completely extubated.



Handle the probe with care.
Do not drop the connector or scanhead.
Use a disposable scanhead protection cover whenever carrying the probe.

Process the TEE probe immediately after extraction from the patient. Specifically do not allow body fluids to dry on the probe.
If a sheath is used, go to Step 7.

If immediate rinsing is not possible, then dry off the endoscope with a wipe or cloth moistened with water.

Rinse the endoscope thoroughly with a large amount of lukewarm running water. The rinse should typically be 1 minute. Do not reuse the water.

Clean the probe in enzymatic cleaner (Table 3). Follow the chemical manufacturer's instructions. Observe specifically soak times and dilution rates. **CAUTION!** Overexposure to the enzymatic cleaner can damage the probe.

Table 3: Enzymatic cleaners

Solutions	Manufacturer	Active ingredients
Cidezyme/Enzol	Johnson&Johnson	Subtilisins
Klenzyme	Steris	Triethanolamine
Hexanios G+R	Laboratoires Anios	Quaternary Ammoniums
Aniosyme DD1	Laboratoires Anios	Biguanide derivatives
Salvanios pH7	Laboratoires Anios	

Rinse the endoscope thoroughly with a large amount of lukewarm running water to remove residual detergent or gel. The rinse should typically be 1 minute. Do not reuse the water.

Wipe dry the surfaces of the endoscope with a soft towel.

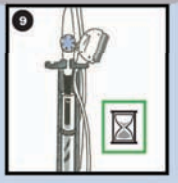
Table 1: High level disinfectants

Solutions	Manufacturer	Active ingredients
Perasafe	Antec International	Peracetic acid
Sekusept Aktiv	Ecolab	Peracetic acid
TD-100 & TD-5*	PCI Medical	Glutaraldehyde
Tristel Generator Solution	Tristel	Chlorine Dioxide

* TD-100 and TD-5 are available only in the USA and Canada.

Table 2: High level disinfectants (cont.)

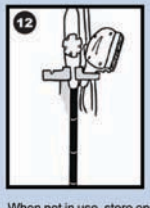
Solutions	Manufacturer	Active ingredients
Anioxyde 1000	Laboratoires Anios	Peracetic acid
Cidex	Johnson&Johnson	Glutaraldehyde
Cidex OPA	Johnson&Johnson	Ortho-phtalaldehyde
Cidex Plus	Johnson&Johnson	Glutaraldehyde
DisOPA	Johnson&Johnson	Ortho-phtalaldehyde
Korsolex extra	Bode	Glutaraldehyde
Nu-Cidex	Johnson&Johnson	Peracetic acid
Metricide	Metrex Research Corp.	Glutaraldehyde
Wavicide-01	Medical chemical Corp.	Glutaraldehyde



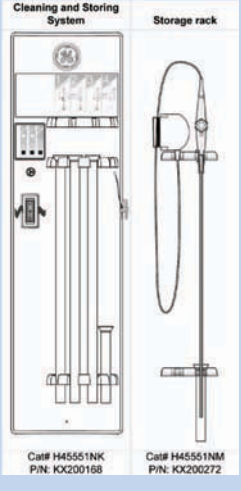
Immerse the endoscope shaft into the disinfection fluid (Table 1 & 2). Follow the chemical manufacturer's instructions. Observe specifically soak times and dilution rates.
CAUTION! Overexposure to the disinfection fluid can damage the probe.

Rinse the endoscope shaft three times with large amounts of potable or sterile running water. Do not reuse any of the water. Each rinse should typically be 1 minute. For further details, refer to the instructions supplied by the manufacturer of the disinfectant.

Dry the probe with a soft towel before storage.



When not in use, store endoscopes freely hanging vertically to aid drying.
Do not store in closed containers or where condensation might occur. The probe shipping case is not recommended for storage between exams. Keep away from dirty endoscopes to prevent cross contamination. Please refer to the User Manual for further information.



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imagination at work

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