LOGIQ E10

Empowering You to Make the Difference
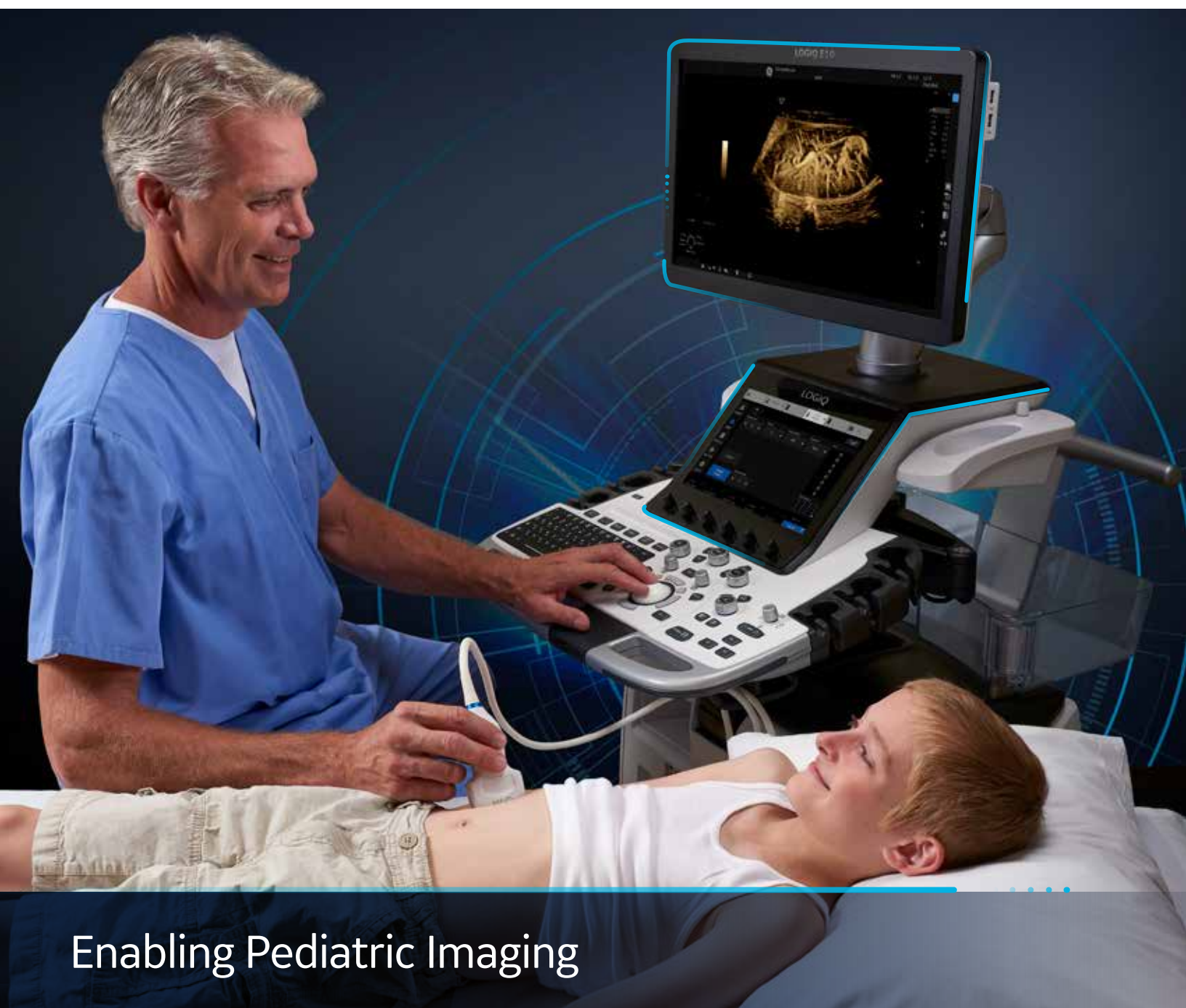
Enabling Pediatric Imaging

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PEDIATRIC

FAST, ACCURATE EXAMS, FROM NEONATES TO YOUNG ADULTS

Clinical challenge

In pediatric ultrasound, the diversity of the caseload can be challenging. Clinicians need a non-ionizing radiation technology that can image a wide range of patients, from newborns to young adults, and acquire detailed information accurately and efficiently.

GE solution

The LOGIQ™ E10 ultrasound system enables you to make a difference in the lives of your youngest patients. Central to the new system is the cSound™ Architecture that combines versatile XDclear™ probes and the new cSound Imageformer to deliver exceptional image quality, even with high-risk neonate cases.

**cSound**

Confident diagnosis

The extraordinary image quality of the LOGIQ E10 enables clinicians to diagnose a wide range of patients and conditions, from neonate cranial scans to abdominal or pelvic pain in children and teenagers.

Auto-optimized images: The cSound Imageformer automatically and continuously delivers images of high quality across a wide range of clinical scenarios. Extraordinary images are quickly obtained resulting in efficient studies, particularly important in challenging cases.

Choice of high-performance probes: E-Series and XDclear probes deliver powerful, high fidelity and wide bandwidth for impressive deep penetration and high resolution. Embedded Volume Navigation sensors in select probes simplify workflow and enhance productivity.

Specialty probes for pediatrics: Our portfolio of specially designed probes for pediatric imaging includes neonatal head, neonatal abdomen, and small pediatric scanning.

- **C3-10-D:** XDclear microconvex probe
- **C2-9-D/C2-9VN-D:** XDclear convex probe with embedded sensors
- **ML6-15-D:** Broad-spectrum linear matrix array probe
- **L2-9-D/L2-9VN-D:** New XDclear linear probe with embedded sensors
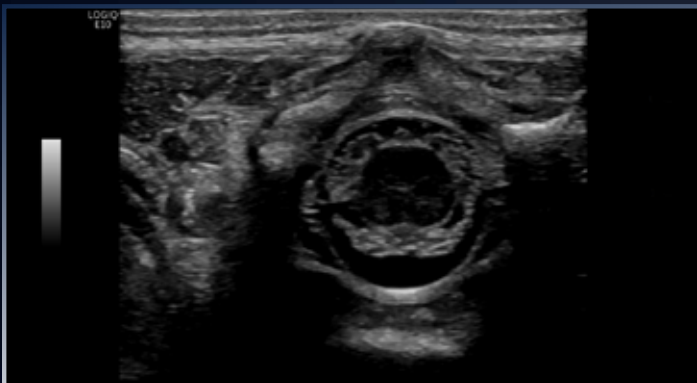
Neonatal Spine, L8-18i

B-Mode Neonatal Head, L2-9-D

Comprehensive tools

The LOGIQ E10 provides robust tools to facilitate accurate diagnostic and treatment decisions.

B-Flow™ imaging: This non-Doppler technique enables direct, real-time visualization of blood flow echoes with no vessel wall overlap to obscure details. Useful to evaluate perfusion and small vessel structures.

- *B-Flow Capture with Reconstruction:* Provides a three-dimensional view of blood vessels in which artifacts are automatically suppressed and weak vessel signals enhanced

B Steer +: Enhances needle visualization in real time to improve speed and confidence when doing needle procedures on pediatric patients.

Volume Navigation: The combination of 2D/3D GPS Tracking and Fusion Imaging can make a real difference in accuracy. When placed with 3D/GPS guidance, the probe may not need repositioning to achieve clean margins – potentially reducing procedure time and patient stress.

- *Fusion Imaging:* Merge real-time ultrasound with a volume DICOM® dataset (CT, MR, PET/CT, CBCT, SPECT and 3D CEUS) to help increase precision in image-guided interventional procedures

- *Needle Tip Tracking:* A live display of position and orientation helps users navigate interventional procedures. A virtual tracking tool is also available to see a projected view of the needle during procedures

- *2D/3D GPS Tracking:* Visually track position during a scan using GPS-like technology, and mark selected points of interest to save time and enhance confidence

Contrast Enhanced Imaging (CEUS): Optimizes the balance between penetration and resolution for improved contrast sensitivity, enhancing the ability to detect and characterize focal liver lesions. In addition, CEUS enhances sensitivity when evaluating for urinary reflux.

2D Shear Wave Elastography: Enables non-invasive 2D quantitative assessment of tissue stiffness and can be of particular value in evaluating liver diseases. Strain elastography is also available for qualitative tissue assessment.

Compare Assistant: Enables clinicians to easily view a prior study – ultrasound, CT or MR – and current images side-by-side in real time on the monitor. This can help improve the quality and efficiency of comparison studies, which constitute a high percentage of pediatric ultrasound exams.

› Concise workflow

The LOGIQ E10 can help you achieve new levels of workflow efficiency, so you have more time to focus on patients.

LOGIQ View: Constructs an extended image from individual frames, enabling a "virtual sweep" that can help reduce exam times when a panoramic view is needed, as in neonate spine studies. B-Mode measurement capability provides added diagnostic confidence.

Virtual Convex: Provides a wide field of view so users can visualize more anatomy in a single scan.

Raw Data: Expanded dual-screen capabilities enable users to apply a wide variety of image processing and quantification after the exam. This allows the operator to extract and reanalyze information without extending exam time.

Scan Assistant: Provides customizable automation to assist users at each step of an ultrasound exam, helping to reduce keystrokes and exam times.

Auto-Registration for Fusion Imaging: Sophisticated navigational tools help increase precision and accuracy of image-guided interventional procedures. The Active Tracker enables one-click auto-registration of CT and MR images to enhance accuracy and ease in managing patient motion, breathing and transmitter movements.

Exceptional mobility: The LOGIQ E10 system easily fits into the NICU. The Power Assistant battery means that no re-boot is required when the system is moved from location to location. On-board storage ensures supplies are at hand.

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