

# Diagnose and treat a wide range of musculoskeletal conditions with confidence

#### **Clinical challenge**

Ultrasound imaging is a critical diagnostic test for many musculoskeletal conditions. Clinicians need excellent contrast and detail resolution to get an in-depth understanding of tissue, pathology, blood flow, and inflammation levels.

#### **GE** solution

The LOGIQ™ E10 Series helps you make a difference in the lives of your patients. It provides extraordinary images across the range of musculoskeletal conditions, thanks to the cSound™ Architecture with XDclear™ probes. Al-based workflow tools increase exam efficiency, and advanced specialty tools like 2D Shear Wave Elastography expand your imaging flexibility.



## **Confident diagnosis**

The LOGIQ E10 Series empowers clinicians to scan, diagnose, and treat a broad range of conditions. Clinicians can count on high quality images, deep penetration in larger structures, like the shoulder, and finely-detailed visualization in smaller parts, like fingers and wrists.

**Auto-optimized images:** The cSound Imageformer—now with new Advanced Speckle Reduction Imaging (SRI)—continuously delivers images of incredible uniformity from near to far field. There's no need to adjust the focus – the information you need is there, instantly.

**Radiant***flow*\*: Provides a near-3D look to support visualization of tiny vessels, especially when combined with Micro Vascular Imaging (MVI).

**MVI:** High-definition flow mode helps clinicians clearly see even small vessels in the joints with ease. Further enhanced when used with Radiant flow.

Choice of high-performance probes: E-Series and XDclear probes – including the new L6-24-D and ML4-20-D high frequency probes – deliver powerful, high fidelity and wide bandwidth for deep penetration and high resolution. Embedded Volume Navigation sensors in select probes simplify workflow and enhance productivity. Available with Verza™ Needle Guidance, which has five angles for needle visualization.

#### **Comprehensive tools**

The LOGIQ E10 Series provides robust tools that give clinicians a new level of confidence in their diagnostic and treatment decisions.

**B-Steer+:** Enhances needle visualization in real time to improve speed and confidence in needle guidance procedures.

**B-Flow imaging:** This non-Doppler technique enables direct, real-time visualization of blood flow echoes with no vessel wall overlap to obscure details. B-Flow Capture with Reconstruction provides a 3D view of blood vessels, suppressing artifacts and enhancing weak vessel signals.

**Volume Navigation:** The combination of fusion imaging, GPS, and needle tracking help make a real difference in accuracy.

- Fusion Imaging: Merge real-time ultrasound with a volume DICOM® dataset (MR or other imaging modality) to help increase precision in image-guided interventional procedures
- Needle Tip Tracking: Helps users navigate interventional procedures in plane or out of plane. Available Virtual Tracking tool displays a projected view of the needle during procedures

**Compare Assistant:** Enables clinicians to easily view a prior study – ultrasound, CT or MR – and current images together in real time via a split screen on the monitor, helping to improve confidence and exam efficiency.

**Multi-Modality Query Retrieve:** Enables import of any DICOM data set of previous study for comparison and follow-up.

**2D Shear Wave Elastography:** Enables qualitative and quantitative assessment of tissue elasticity. Now available with a Shear Wave Elastography Quality Map to support accurate measurements.

Photo Assistant app: Acquire and send photos of relevant anatomy from the Android™ tablet or phone to provide valuable context for documentation and comparison after a study. Photo Assistant with Compare Assistant allows you to track and document changes between the photo and the sonogram.

**Remote Control app:** Operate a LOGIQ E10 system from an Android tablet or phone that has the LOGIQ Smart App loaded onto it.

### **Concise workflow**

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

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

**LOGIQ View:** Constructs an extended image from individual frames, enabling a "virtual sweep" that can help improve visualization of the entire tendon or muscle.

Raw Data: Expanded 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.

Flow Quantification: 2D CFM/PDI quantitative assessment of vascular feeding in a selected ROI. Can help in the assessment of inflammatory disease and vascular feeding of suspicious anatomical areas.

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

**Exceptional mobility:** Systems easily fit into crowded suites. Power Assistant battery eliminates the need for re-boot, and you can even scan on battery power. On-board storage ensures supplies are at hand.



MVI with Radiant flow - elbow, L6-24-D

Shoulder - B-Mode, ML4-20-D





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