Extreme Flexibility
without Compromise

MyLab™ 50 Vision

General Imaging

esaote
Extreme flexibility
Extreme flexibility
The Ideal Partner for:

> Radiology/Abdomen
> Small Parts/Musculoskeletal/Breast
> Cardiology/Vascular
> Obstetrics/Gynecology/Urology

The MyLab50 has been designed to be the reference system for every general imaging and shared-service ultrasound laboratory, whether a private practice, specialized clinic or bustling hospital department. High-level performance, advanced data management and application specific transducers and measurement packages satisfy even the most demanding needs.

Based on the revolutionary MyLab™ architecture, the MyLab50 XVision incorporates Esaote’s revolutionary XView technology which elaborates the pattern of every single frame at the pixel level, eliminating speckle and noise artifacts, dynamically enhancing tissue margins, improving tissue conspicuity and increasing diagnostic confidence. The MyLab50 XVision produces unmatched image quality both in terms of contrast and spatial resolution and increases user comfort while reducing eyestrain.

Another powerful technique, which has been implemented on the MyLab50Xvision, is called MView. This technique, which is available for all convex and linear probes, gives the possibility to obtain dramatically enhanced contrast and detailed resolution and provides an increased visualization of borders and interfaces, as well as strong reduction of false diagnosis due to non-perpendicular pulsing.

The MyLab50 improves efficiency, expands flexibility and optimizes workflow.
> Modular Architecture
> Application-Dedicated Transducers
> Ergonomic Design

> Unlimited Upgradeability
The MyLab50’s modular architecture offers the highest level of flexibility when it comes to choosing the system’s configuration. Any level of customization is possible by upgrading the system with application-dedicated packages and equipping it with the desired peripherals. This way, the present and future needs of any user are guaranteed. The MyLab50 is the perfect partner for any operator, whether he or she works in a private practice or in a hospital department using the most advanced technologies in modern medicine.

> A Versatile and Ergonomic Approach
The MyLab50 is based on an extremely simple and intuitive user interface designed specifically for multiple-application requirements with direct access to the most frequently used functions. A fully height-adjustable and rotating keyboard with back-illuminated soft-keys on the system’s alphanumeric keyboard ensures maximum comfort and versatility. The user can choose from a 19” LCD display or a 17” SVGA monitor, both designed to minimize user eyestrain. The ergonomic design and the compact dimensions make the MyLab50 a pleasure to use.
> Multi-Frequency Broadband Transducers
> TEI™ - Tissue Enhancement Imaging
> CnTI™ - Contrast Tuned Imaging

> Radiology/Abdomen

The MyLab50 is an ideal ultrasound system for multiple radiology applications. The **wide range of available broadband transducers** allows the operator to choose the best probe for every situation, providing exceptional artifact-free and high-resolution clinical images. The multifrequency transmission capability, in combination with the TEI (Tissue Enhancement Imaging) modality, ensures optimal results even with very difficult-to-scan patients.

Esaote’s proprietary CnTI (Contrast Tuned Imaging) technology uses a sophisticated signal-processing algorithm to obtain impressive response from contrast agents both in intermittent or real-time low-MI modalities. This can improve the ability to detect and characterize focal lesions, as well as raise the operators’ diagnostic confidence.

All the features described above, combined with the available biopsy and radiofrequency accessories, make the MyLab50 a **perfect partner for interventional procedures** and ensure an efficient and reliable approach to any clinical situation.
The premium-quality high-frequency linear transducers are one feature that make the MyLab50 an optimal choice for superficial examinations. High sensitivity and resolution Color Doppler (CFM), Power Doppler and Directional Power Doppler contribute to the MyLab50's ability to aide the operator in reaching precise and reliable fluximetric diagnoses.

Revolutionary technologies such as TEI (Tissue Enhancement Imaging) and CnTI (Contrast Tuned Imaging) have been implemented on all of Esaote's high-frequency probes. This provides the users with the opportunity to produce images with an extremely low noise and artifact level. Impressive results are also obtained in the higher part of the bandwidth, which can detect micro-vascularization very precisely. This opens new possibilities in several applications such as disease-level quantification and therapy action control. The panoramic images obtained with Esaote's VPan technology are displayed with an extended field of view, especially useful in the examination and diagnosis of muscles and soft tissues.

> Small Parts/Musculoskeletal/Breast

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The MyLab50’s TEI mode allows the operator to make clear and detailed diagnoses, even in difficult-to-image patients. The innovative Compass M-Mode tool allows multiple measurements to be made on one image without moving the patient, an ideal approach to increasing patient throughput while maintaining diagnostic precision. The kinetic activity of the heart can be easily evaluated by using the real-time TVM (Tissue Velocity Mapping) feature, which, by assigning a different color to the tissue based on its instantaneous velocity, provides a complete wall motion analysis for both systolic and diastolic myocardial function evaluation. This PW Doppler-associated technology obtains high quality Doppler signals, measures velocity, mean and instantaneous local acceleration and generates rapid quantification. Furthermore, in TVM mode the user can trace and quantify the real-time data to provide more detailed information for precise and reliable diagnoses while Automatic Doppler Tracing can help to improve efficiency and increase workflow. The Stress-Echo package with programmable protocols and multi-format reviewing is ideal for monitoring all cardiovascular pathologies. A complete selection of dedicated multi-frequency transducers allows the MyLab50 to produce optimal images in all facets of vascular imaging.
> Obstetrics & Gynecology

The MyLab50 is an ideal system for the modern OB/GYN practice or department. Esaote’s unique 200° field-of-view endocavity transducer, automatic pulsatility and resistive index (PI, RI) calculation and Doppler tracing functions are just a few of the features that help practitioners make easy and reliable diagnoses. The latest real-time 3/4D technology on this system makes volumetric ultrasound scanning more effective and provides a good 4-D baby-face construction.

It is more than just real-time images; it creates real-time emotion. Diagnosing is more immediate and safe due to Tomographic Mode Imaging (TMI), which simultaneously displays parallel planes on the screen. Thick Slice Imaging (TSI) allows increasing the perception of anatomical details and tissue separation.

> Urology

The exceptional performance of Esaote’s unique endocavity transducer, which ensures high spatial and contrast resolution with a 200° field of view, is a true advantage to any urology department or clinic. Use of the endocavity probe together with the available biopsy kit can assist healthcare providers in making a reliable diagnosis and designing treatment for prostate diseases.

The TEI and CnTI features are also available for Esaote’s endocavity probe, adding an extra diagnostic capability to both gynecology and urology examinations.
> Extreme Connectivity

The MyLab50 has been designed to be limitless in terms of connectivity. During real-time scanning, images and video clips are temporarily stored and can be displayed as thumbnails by pressing just one button. When selecting the final storage destination, the operator can easily choose from the integrated hard disk, DVD/CD burner, personal USB memory drive and/or network storage. Additionally, several types of printers can be attached to the system and controlled by dedicated buttons, including cost-effective inkjet and USB printers.

The MyLab50 is IHE (Integrating the Healthcare Enterprise) compliant. IHE is an initiative of the Radiology Society of North America and the Healthcare Information and Management Systems Society and brings together medical equipment and information products from different manufacturers for defining, testing and demonstrating an efficient workflow in the hospital-wide connectivity.

> Post-processing Workstation, Quantification Tools

Esaote designs its ultrasound systems to be an integral part of a digital ultrasound department, both in Windows® and DICOM environments, and not only a stand-alone piece of equipment, allowing the user to choose the level of integration and offering the highest upgrade capability.

The latest image management solution from Esaote, MyLab Desk, is an ideal solution for private offices, increasing their workflow and productivity. MyLab Desk installs the MyLab systems’ user interface on a standard PC, allowing comfortable reviewing and processing with all the features of the PC. Additionally, the BioPACS package is a complete digital archive system for reviewing, exporting, reporting and printing clinical data. In a more sophisticated PACS environment, Organizer is the best cost-effective solution to improve daily clinical workflow. Moreover, additional advanced tools are available to provide quantitative assessment of contrast-enhanced examinations, including perfusion graphs and other important parameters.
> Limitless Connectivity
> IHE Compliance
> Windows® and DICOM compatibility
> MyLab Desk, BioPACS™ and Org@nizer™ image management