Introducing a next-generation multimedia digital ultrasound system that will change the face of imaging in the 21st century.

Welcome to GAIA MT (SONOACE 8800). A next-generation multimedia digital CFM ultrasound system from SONOACE that combines genuine digital processing with three technological advances we call Millennium Technology - *OHI™*, *CAFE™*, and *FreeHand 3D™ Imaging* - to deliver unrivaled diagnostic power that will take your practice to a higher level.

The Digital Advantage

A genuine digital CFM, GAIA MT delivers the benefits of crystal-clear, lossless digital imaging throughout the entire clinical process - from post-scan digital beamforming which generates ultrahigh-resolution images, to digital image management which perfectly achieves them without degradation.

Millennium Technology

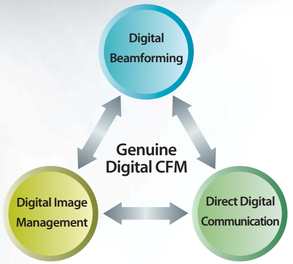
Behind GAIA MT's superior B/W, color imaging, and high-end diagnostic features is MEDISON's Millennium Technology, a trio of technological advances in harmonic imaging, color Doppler flash elimination, and 3D imaging.

Networking & Multimedia

The world's most advanced multimedia digital CFM to date, GAIA MT provides a full-featured networking and publishing environment using SonoView™ and PC-SonoView™ image management software with integrated LAN and DICOM protocol support. GAIA MT is also available with MEDISON's Cyber Service, a new optional service program that handles software upgrades, system diagnosis, and technical support requests over the Internet.

MILLENNIUM TECHNOLOGY

Genuine Digital CFM



Digital Beamforming

Free from image-degrading analog processing side effects like multiple signal reflection, non-linear attenuation, and time delay variations, GAIA MT's genuine digital beamforming based on custom ASIC * technology delivers phenomenal improvements in imaging resolution and performance.

* Application Specific Integrated Circuit

*Analog Beamforming process

*Digital Beamforming process

**Digital Image Management*

MEDISON GAIA MT's genuine digital processing extends all the way to image storage and management, eliminating image quality losses due to multiple analog-digital conversions. Using SonoView™ image management software, images can be saved for the patient's records, previewed, enlarged, searched, and archived without any loss of quality.

**Direct Digital Communication*

Supporting the DICOM 3.0 networking protocol, GAIA MT allows the direct exchange of images and patient information via the Internet, PACS, or even LAN networks with PCs running PC-SonoView™ image management software.

Millennium Technology Promises superior resolution and performance

**OHI™ (Bi-directional harmonic imaging)*

GAIA MT features Optimal Harmonic Imaging™, MEDISON's new harmonic imaging technology that enhances spatial resolution and contrast in the mid-field to enable detailed, precise diagnoses of even the most difficult-to-image patients. OHI™ is integrated with Optimized Tissue Imaging™ for preventing phase aberration of receiving harmonic signal based on tissue type, enabling scanning performance to be fine-tuned for a superior harmonic image in any given patient or tissue imaging situation. Eventually OHI™ eliminates phase aberration of both transmitting and receiving signals.

CAFE™ (Doppler flash elimination)

Existing techniques such as clutter filtering during color Doppler processing have proven less effective in eliminating flash artifacts. Based on various clutter signal probability models, GAIA MT's advanced new Compound Automatic Flash Elimination™ algorithm provides mode-specific non-linear filtering to eliminate the pixels that form flash artifacts to deliver crystal-clear Doppler images in each mode.


*Fundamental imaging


*Conventional harmonic imaging


*OHI™


*Conventional flash elimination


*CAFE™

Power Doppler Imaging

This imaging mode extracts a wealth of information from the color Doppler signal, enabling the examination of even minute vessels that are difficult to see in other modes.


*Power Doppler Image

**128-Channel Scan Reception*

128-channel scan reception allows a wider aperture in B-mode for enhanced image clarity.

**Trapezoidal Image Display*

With linear probe, the trapezoidal image mode displays a wider scan image for more efficient, convenient diagnoses.

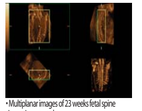
■ 128-channel scan reception and trapezoidal image display are available with the SonoAce's L5-12 linear probe

***FreeHand 3D™ Imaging*

FreeHand 3D™ imaging technology offers realistic, freely-rotatable surface-rendered fetal images, transparent rendering to view internal vessels and structures, CT-like coronal plane visibility, and the MagiCut™ electronic scalpel.


*Surface-rendered fetal hand at 27 weeks


*Surface-rendered fetal face at 30 weeks


*Multiplanar images of 23 weeks fetal spine in maximum mode

Tissue Specific Imaging

Upon selection of a probe, specific imaging automatically optimizes the system for each exam, shortening set-up time, reducing operator variability and enhancing productivity.

High-Sensitivity Probes

MEDISON probes provide high grayscale resolution and color Doppler sensitivity available. Designed to deliver superb signal penetration at greater depths, they're exceptionally effective with difficult-to-image patients.

Flicker-Free Display

GAIA MT's high-resolution 15-inch monitor and high refresh rate ensures an ultrastable image and reduced eye fatigue.

Multimedia & Unprecedented Networking

**SonoView™*

With the ability to keep track of minimum 8,000 images, SonoView™ is one of the most powerful ultrasound image management programs available. A standard GAIA MT feature, SonoView™ effortlessly handles all storage, filing, viewing, and network transfer tasks through an integrated, easy-to-use interface.

**PC-SonoView™*

PC-SonoView™ brings the power of SonoView™ image management software to any network-ready PC. A single crossover cable connection between the GAIA MT and PC gives complete access to the SonoView™ patient database, allowing information and images to be used in virtually any PC application.

**Cyber Service Option*

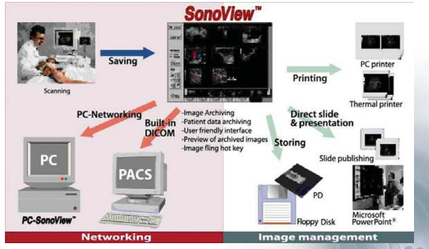
The Cyber Service option allows software upgrades, system diagnosis, and technical support requests to be conveniently handled via the Internet using GAIA MT's internal modem.

Voice Recording

GAIA MT enables you to record and transmit the oral messages with the diagnostic images.

**MUSE™*

GAIA MT includes MUSE™, the MEDISON Ultrasound Simulator for Education. Designed specifically to meet the ultrasound training needs of doctors, MUSE™ helps medical professionals learn scanning skills and improve their diagnostic abilities in a controlled, vertual-clinical multimedia training environment.



*Optional Feature

Digital GAIA MT

Technology for the New Millennium

Digital Beamforming

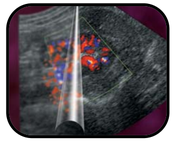
The digital foundation of Millennium Technology

The basic task of any ultrasound system is to acquire clinical images as faithfully as possible. MEDISON's digital beamforming with pixel-based focusing delivers near-perfect images that will enhance the accuracy of every diagnosis you make.

Optimal Harmonic Imaging™

Bi-directional harmonic imaging

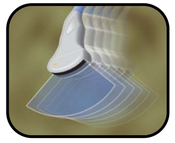
MEDISON's OHI™ with Optimized Tissue Imaging™ dramatically simplifies the examination and diagnosis of overweight, elderly, and other difficult-to-image patients.



Compound Automatic Flash Elimination™

A new algorithm for clearer, more precise blood-flow imaging

MEDISON's advanced new CAFE™ algorithm intelligently suppresses pixels in Doppler images likely to create flash artifacts for maximum image clarity in each mode.



FreeHand 3D™ Imaging

Tomorrow's ultrasound technology has a third dimension

MEDISON's new FreeHand 3D™ imaging technology brings the superior visualization power of 3D rendering to your practice.

Multifrequency Probes

■ **Linear Array**

PL5-9

L5-9/50mm

L5-12

■ **Convex Array**

C3-7

C4-7/50R

C4-9/10R

EC4-9

FC4

CW4.0M
CW2.0M

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Digital GAIA MT

What is Millennium Technology?

The 'MT' in Digital GAIA MT's name stands for Millennium Technology, MEDISON's latest technological advances in ultrasound imaging for physicians who are dedicated to exploring and expanding the frontiers of diagnostic imaging in their specialties.

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