

GE Healthcare



Signa® HDxt 1.5T See More, Do More...

The next generation in High-Definition MR.





Expect More

You've been heard. When you want more out of your MRI scanner, GE listens. And when you demand more accuracy, more productivity, and more support, GE delivers. Built on the high definition platform you know and trust, Signa® HDxt offers an MR System that allows you to see more, do more, and expect more than ever before.

**Introducing Signa HDxt 1.5T,
the next generation in High-Definition MR.**



**Designed for productivity
so you can do more.**

Do more with consistent high-quality imaging through can't-miss applications. Designed for optimal fat suppression, tissue characterization, and artifact reduction, every time.

**Engineered for high definition
so you can see more.**

See more with truly high-definition, anatomically optimized imaging. Engineered for enhanced image contrast, reduced blurring, smaller field-of-view prescriptions, and reduced artifacts.

Signa® HDxt 1.5T

**Clinically proven to give you more
on every exam, every day.**

GE was the first to introduce 1.5T MR technology. Today, we have the world's largest installed base of 1.5T scanners. And we're the only MR manufacturer celebrating its twenty-fifth year of upgradeability. In fact, HDxt is available as a new system—as well as an upgrade to our current installed base customers.

Signa HDxt 1.5T: The number one rated service. The peace of mind you're looking for.

At 1.5T, the only choice is GE.

**Built for longevity
so you can expect more.**

Expect more with 25 years of proven commitment to MR system longevity. Built for upgradeability, uptime, and investment protection—GE's Continuum™ commitment allows you to expect more from your scanner.

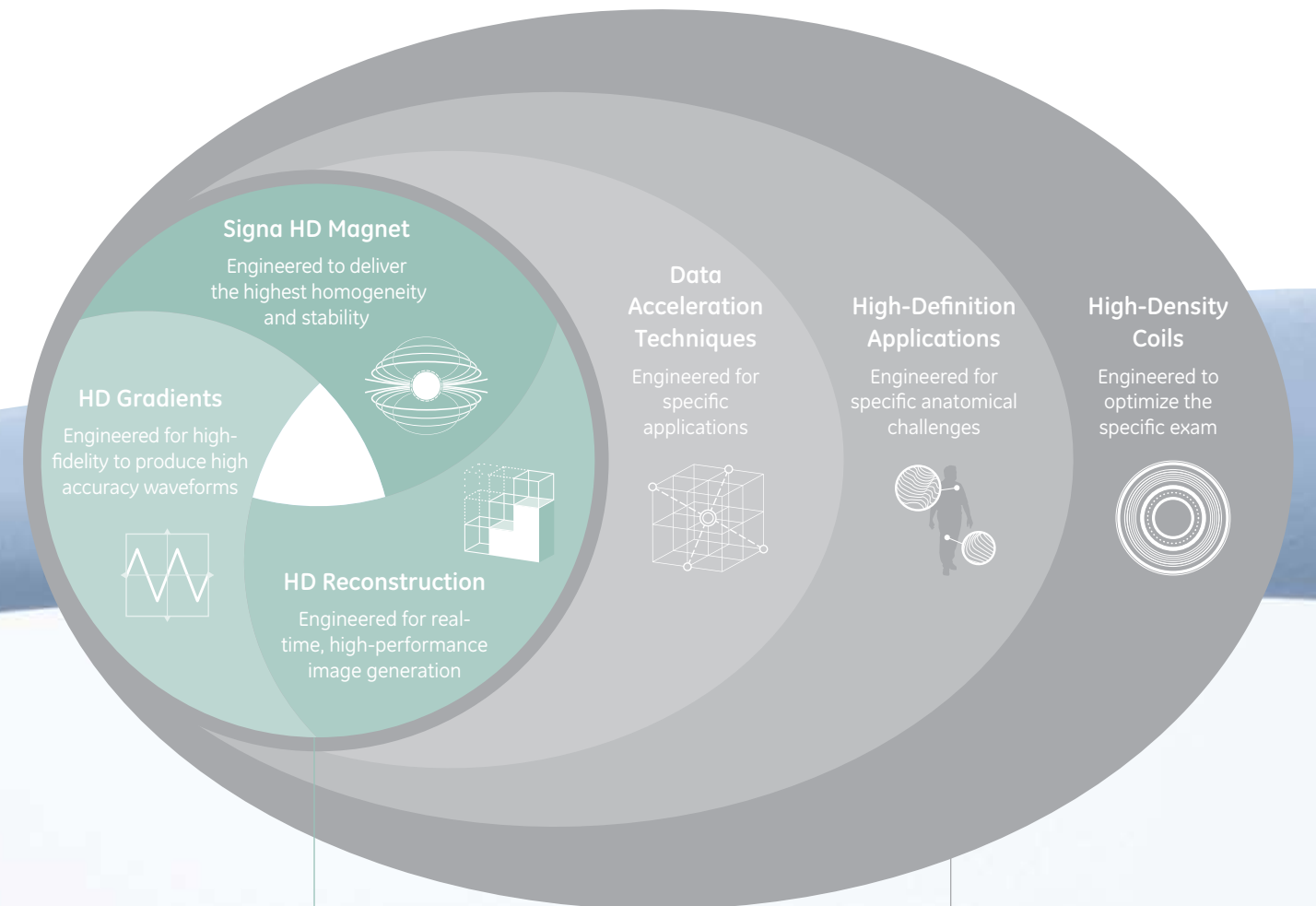
See More

Engineered for high-definition, anatomically optimized imaging

The Signa® HDxt 1.5T is engineered from end-to-end to allow you to see more. With GE's high-density coils, data acceleration technology, and high-definition applications optimized for each anatomical area, GE can deliver images with the enhanced contrast, clarity, and accuracy you need.



The Signa® HD MR Imaging Model



Premium Performance

Anatomical Imaging Optimization

See more in
Neuro Imaging

GE's advancements in neuro imaging continue with the delivery of high-definition 3D sequences for early detection and GE-exclusive motion correction. In short, Signa® HDxt 1.5T is a natural for neuro.

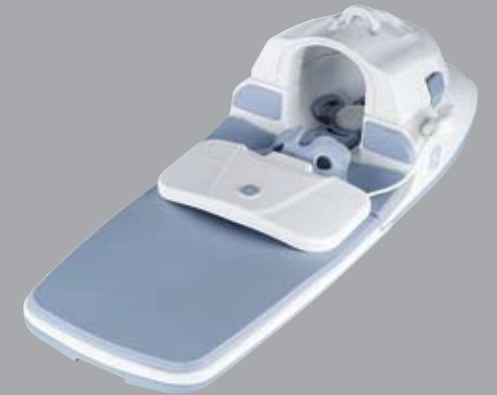
**PROPELLER
HD™**

Correct for motion artifacts and enhance tissue contrast without compromising image resolution or prolonging scan time—and reduce susceptibility artifacts to clearly visualize small or subtle lesions. Generate consistently excellent images with less retakes and less need for sedation, even on restless kids, patients with tremors, or metal implants.



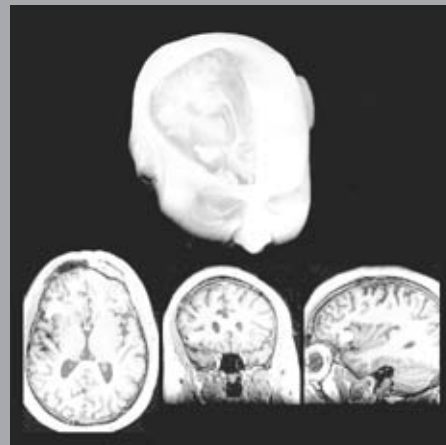
**High-Density
Head-Neck-Spine Array**

Image the head, neck, and spine without changing arrays or repositioning the patient. And, do it with high definition.



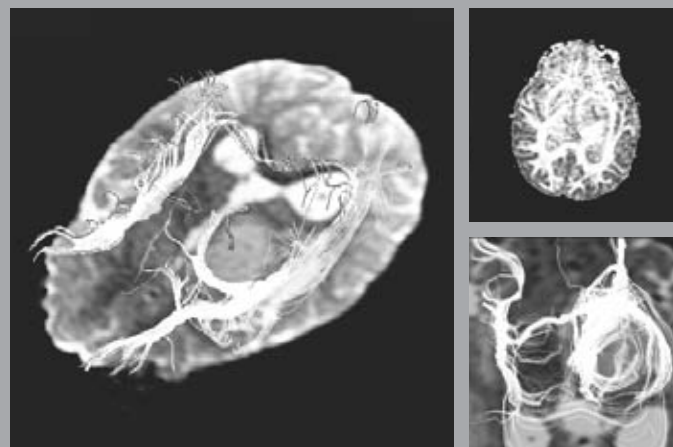
BrainWave

A suite of applications for neurofunctional brain mapping. Includes a robust acquisition sequence, easy-to-administer paradigms and complete post-processing and visualization tools. BrainWave Fusion integrates an eloquent cortex map and DTI white-matter trajectories with a high-resolution 3D anatomy data set.



DTI/FiberTrak

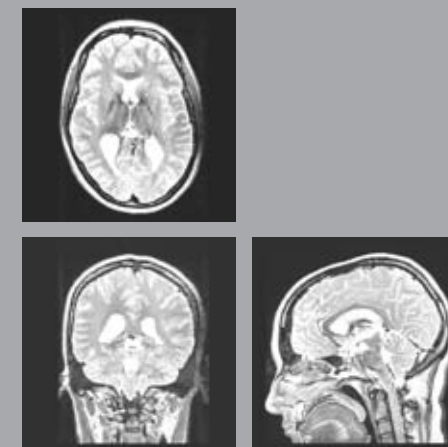
Visualizes white matter trajectories in the brain, generates color-coded directional fractional anisotropy maps, or 3D white matter fiber trajectories co-registered with the high-definition 2D or 3D anatomic data set.



Cube™ with ARC™

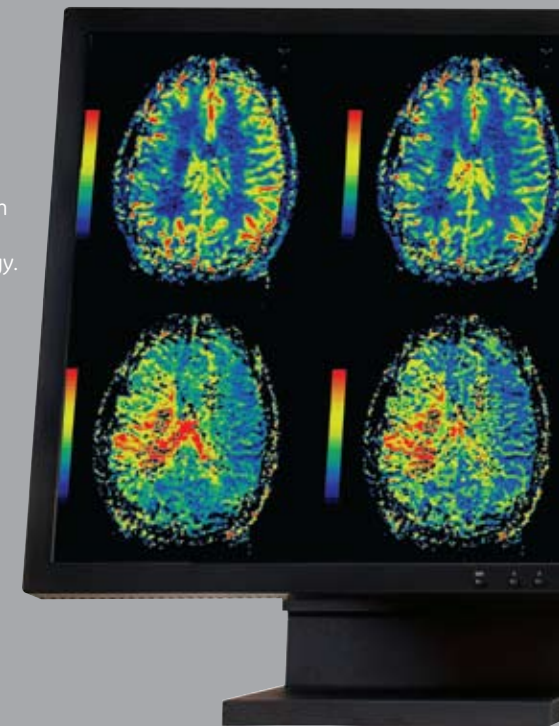
A GE-exclusive, Cube replaces several slice-by-slice, plane-after-plane 2D acquisitions with a single 3D volume scan—providing you with T2, T2 FLAIR, or PD contrast. Easily reformat sub-millimeter isotropic volume data from a single acquisition into any plane without gaps—and with the same resolution as the original plane.

ARC is an innovative, auto-calibrating, data-driven, parallel imaging method designed to reduce scan time and streamline reconstruction with high accuracy. In addition, it enables smaller fields of view during prescription, as compared to currently used parallel imaging techniques.



BrainSTAT

BrainSTAT is a post-processing tool for evaluating blood distribution patterns in the brain tissue. With BrainSTAT, clinicians can get a more objective assessment of pathology.



See more in
Body Imaging

Get the whole picture with GE's comprehensive MR body imaging solutions—an array of advanced tools designed to meet the needs of you and your patient.



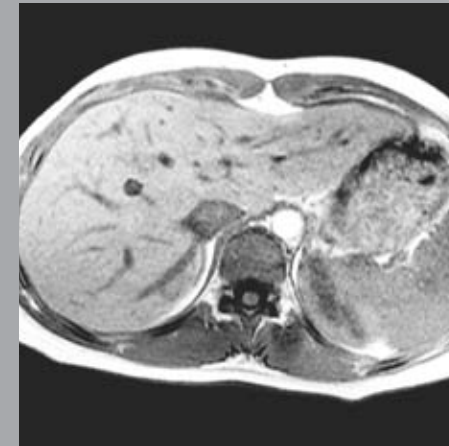
LAVA and LAVA-XV

LAVA acquires whole-organ coverage at high resolution in short breath-holds, while LAVA-XV provides whole abdominal coverage with the same superior fat suppression and resolution.

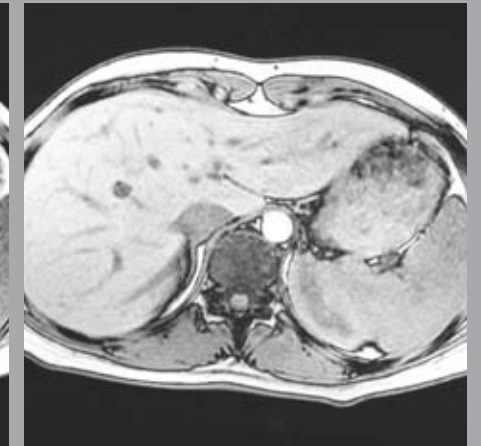


3D Dual Echo

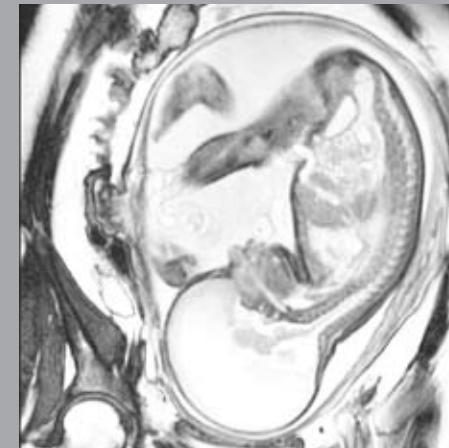
3D Dual Echo produces perfectly registered, in-phase and out-of-phase images in a single breath-hold—and eliminates inter-slice gaps that could compromise small lesion detection.



In-Phase

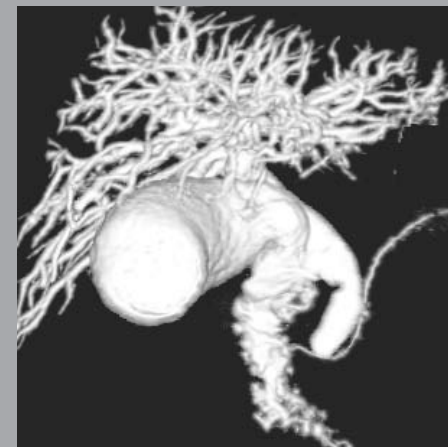


Out-of-Phase



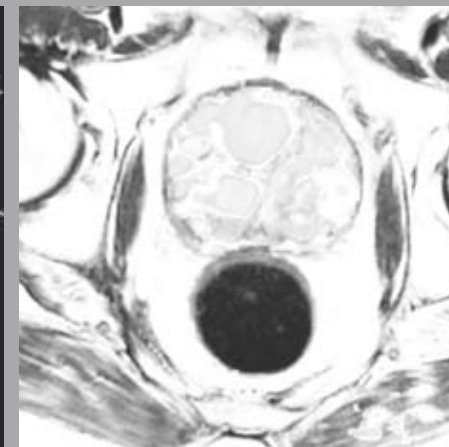
FIESTA

FIESTA provides images with very high signal-to-noise in scan times as short as 60ms. FIESTA is also equipped with an optional fat suppression pulse to mitigate bright signal from fat.



Enhanced MRCP

This 3D technique allows for multi-planar reformats, and the volumetric images can be manipulated to see behind overlapping structures.



DWI

DWI provides high sensitivity and easy interpretation of images with background suppression. Color or grayscale ADC maps are generated, with dark blue or black indicating restricted diffusion.



HD Body Array

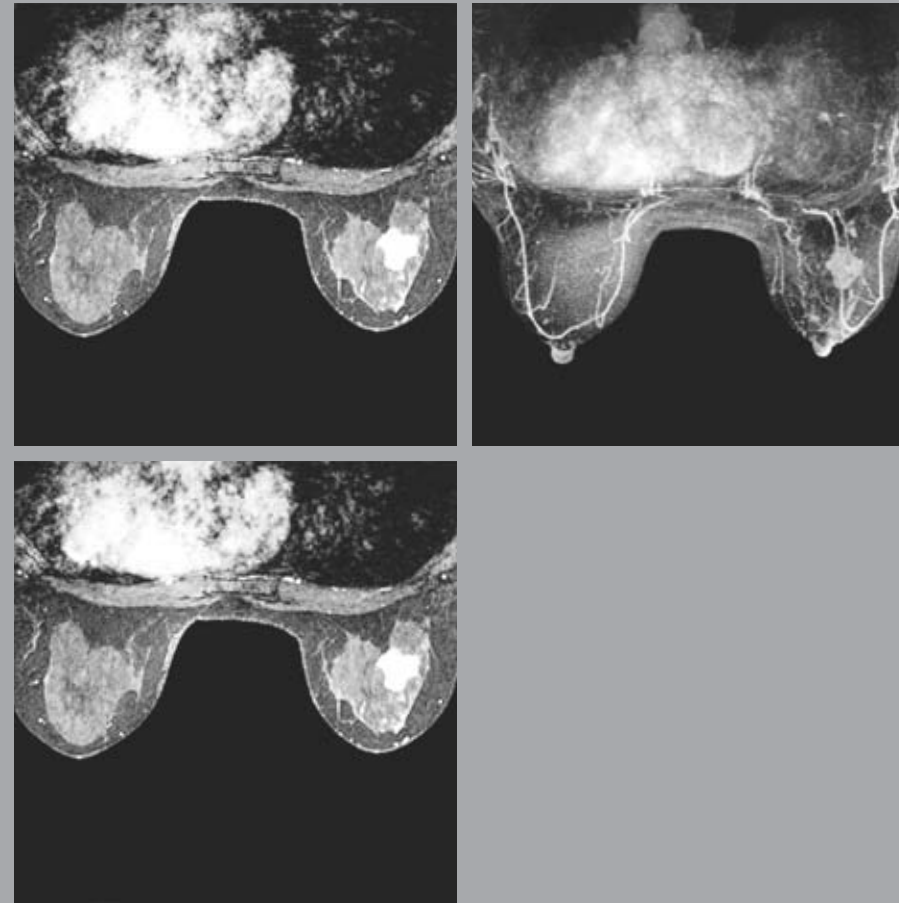
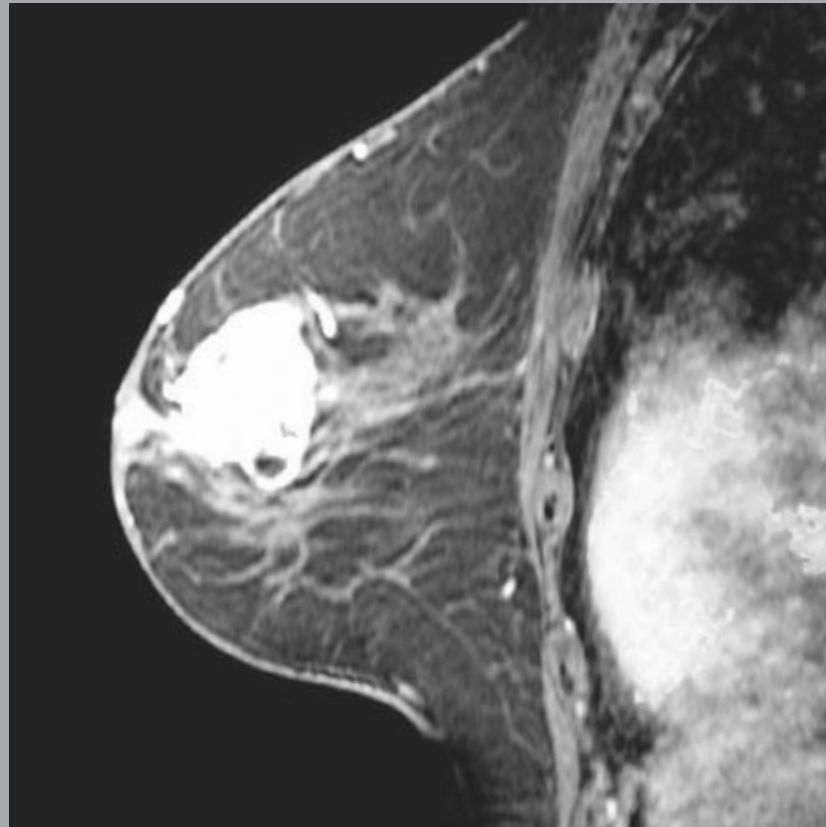
Available in 8-channel and 12-channel configurations, this high-density design is optimized for parallel imaging, superior image quality, and short scan times.

See more in
Breast Imaging

Not all breast MR needs are the same—and neither are all breast MR imaging solutions. With applications and tools designed specifically for breast MR, GE offers you the most complete portfolio.

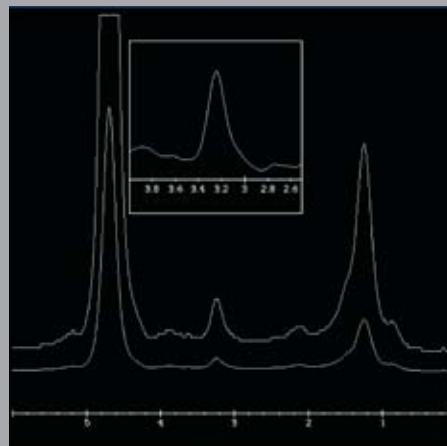
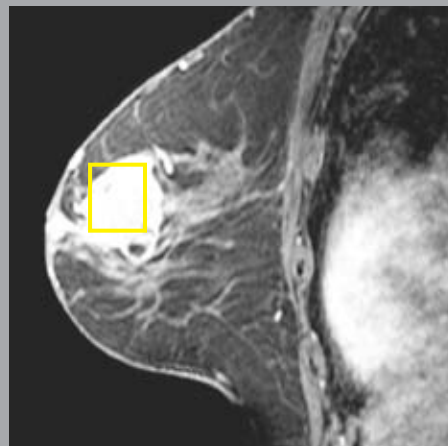
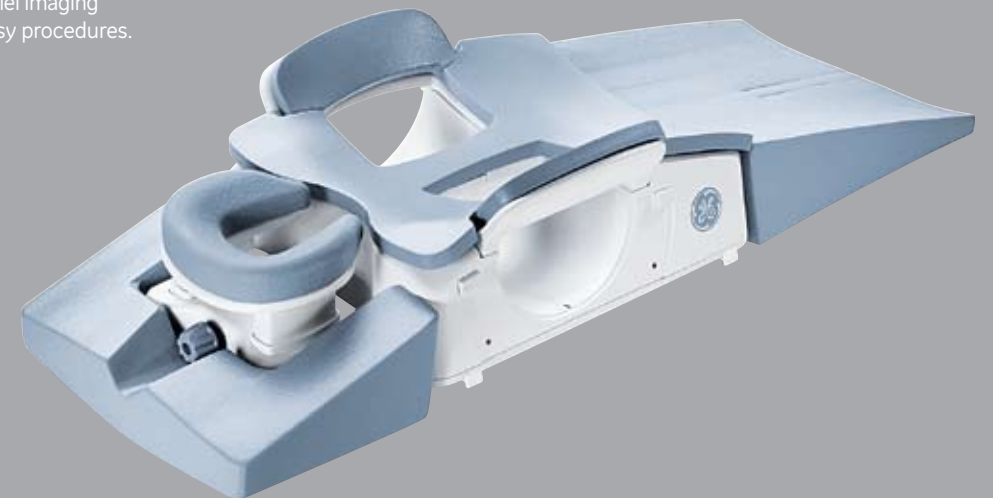
VIBRANT

VIBRANT lays the foundation with the highest combined spatial detail and scanning speed with bilateral shimming for excellent uniform fat saturation. No trade-offs between high spatial and high temporal resolution. Scan both breasts in one fast exam for increased patient comfort and convenience.



High-Density Breast Array

The high-density, 8-channel HD Breast Array provides high SNR, excellent parallel imaging acceleration, and access for biopsy procedures.



BREASE™ & CADstream

BREASE enhances diagnostic confidence by improving the ability to characterize lesions and monitor response to therapy. It is a breast-specific, single-voxel spectroscopy application designed for ease-of-use and visualization.

CADstream automatically generates the post-processed series and identifies the most suspicious washout curves. Sureloc, included with CADstream, enables point-of-procedure control for MR-guided biopsies from the HDxt console.

See more in
MSK Imaging

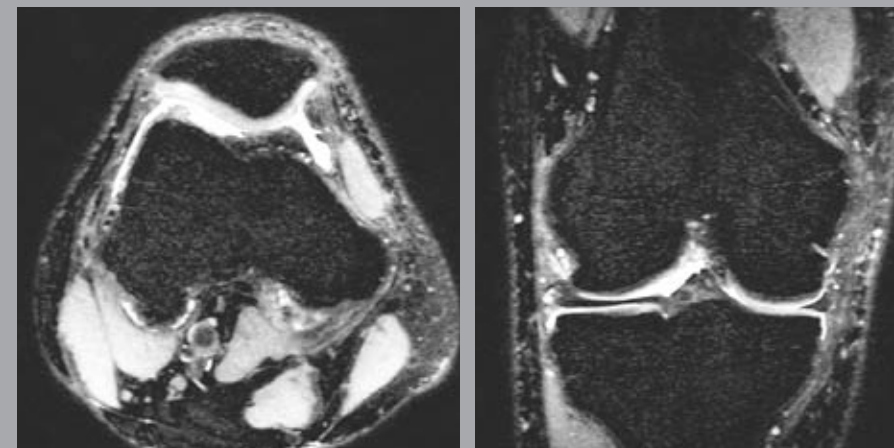
With a technique that allows you to scan once and get multiple contrasts—water only, fat only, in-phase, and out-of-phase—and delivers virtually infallible fat suppression, Signa® HDxt 1.5T makes no bones about capturing musculoskeletal anatomy like you've never seen it.

IDEAL

This unique fat/water separation technique provides multiple contrasts from one acquisition for consistent, uniform fat suppression virtually every time—patient to patient, technologist to technologist.

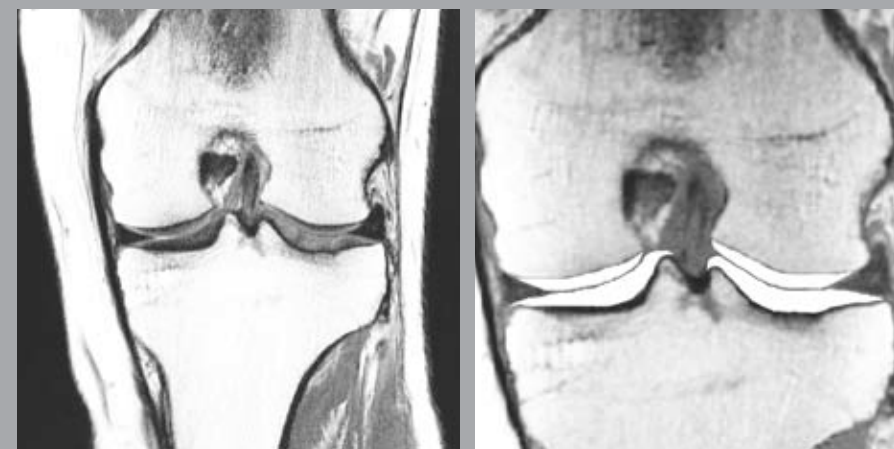


HD Shoulder
Array
Images



Cube™ with ARC™

A GE-exclusive MR imaging technique, Cube replaces several slice-by-slice, plane-after-plane 2D acquisitions with a single 3D volume scan utilizing state-of-the-art imaging acceleration technique, ARC. Easily reformat sub-millimeter isotropic volume data from a single Cube acquisition into any plane—without gaps, and with the same resolution as the original plane.



CartiGram™

CartiGram is a non-invasive imaging method to assess articular cartilage integrity, detect early cartilage degeneration, and non-invasively monitor patient progress. It allows better visualization of collagen fiber network loss or degradation that translates into focal T2 increase.

High-Density Coils

HD Wrist Array

The HD Wrist Array is an 8-channel phased array design that is optimized for parallel imaging.

HD Knee Array

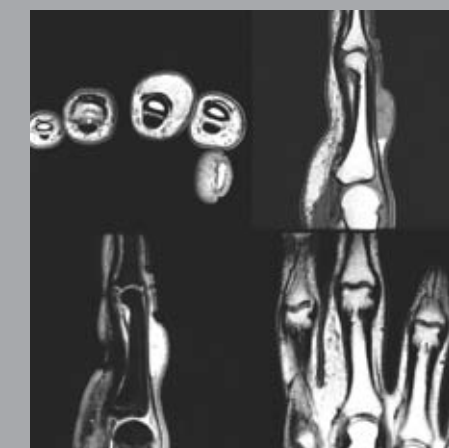
Tapered to the knee for superb SNR performance, the HD Knee Array's 8-channel, 9-element phased-array design virtually eliminates aliasing artifacts for superior, high resolution imaging.

HD Foot and Ankle Array

The HD Foot and Ankle Array is optimized for ASSET parallel imaging and produces exquisite images of the structures of the foot and ankle. The design also provides fast and easy set-up.

HD Shoulder Array with Concentric Technology

The HD Shoulder Array introduces the new innovative concentric coil design by GE that provides improved coverage, while also improving SNR penetration. It also is optimized for off-center imaging with robust fat saturation.



See more in
Cardiac & Vascular Imaging

Advanced vascular techniques that provide high-definition results without temporal tradeoffs coupled with the ability to deliver comprehensive cardiac studies. Signa® HDxt 1.5T takes cardiac and vascular imaging to heart.

FGRE

Fast Gradient Recalled Echo reverses the polarity of the gradient magnetic field to regenerate the echo signal and uses ultra-short TR and TE pulses to speed acquisition.



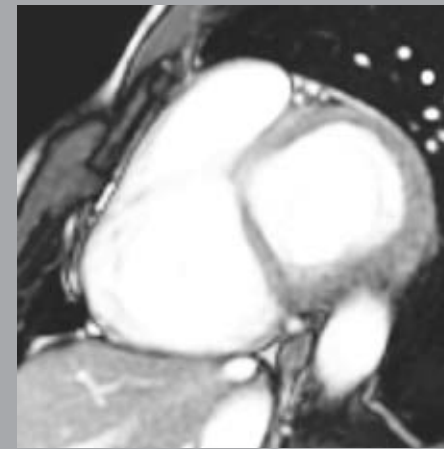
TRICKS-XV

TRICKS-XV enables high-resolution, time-resolved vascular imaging without the need to make a trade-off between detail and speed. Large 3D volumes can be acquired in under two seconds.



MR ECHO

With MR Echo, any plane can be imaged in real time and archived. Unique pathologies that may only be seen with true real time cardiac scanning, such as tamponade, are exquisitely visualized.



FIESTA

FIESTA 2D offers a white-blood imaging technique that is sensitive to signal loss in the presence of turbulent flow (2D). 3D FS FIESTA enables high-resolution imaging of the coronary artery in a short breath-hold.



HD Cardiac Array

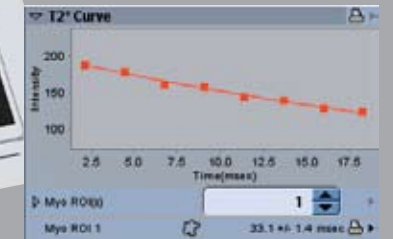
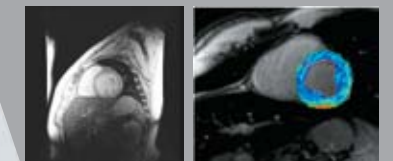
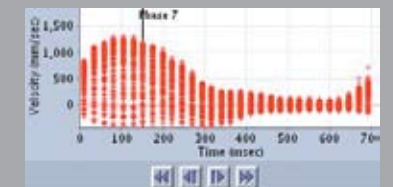
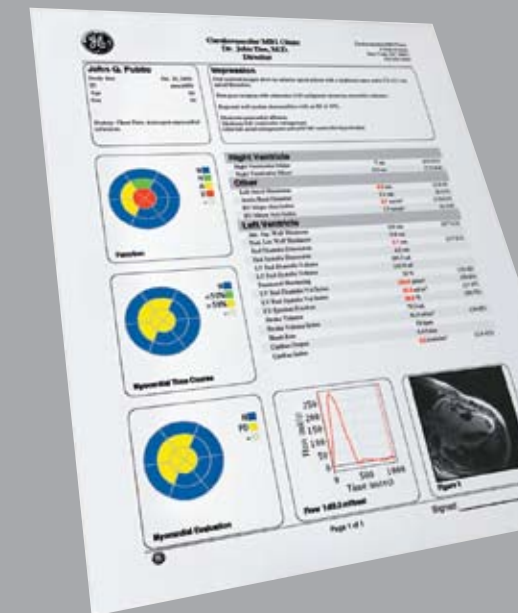
This 8-channel array from GE Healthcare enables parallel imaging, even in oblique planes for enhanced cardiac imaging.

ReportCard, Flow Analysis, StarMap

ReportCARD 4.0, a cardiac MR analysis tool, provides a comprehensive cardiac calculation and research package, and includes automatic LV segmentation, myocardial evaluation, time course analysis, and unique tools for PFO analysis. A complete CV report can be printed and archived. Database query tools are also included.

Flow Analysis provides an automated calculation of positive and negative flow volumes as well as a summary table of peak velocities across all cardiac phases.

StarMap is used to assess the presence of iron by producing grayscale and color maps that show the T2* or rate of signal decay (R2*) of the heart and liver.



Do more

Designed for consistency and simplicity to enhance your productivity

In the era of increasingly complex exams, simplicity and consistency are more important than ever before. Productivity starts with intelligent tools for “can’t-miss” imaging, time after time, no matter how difficult the exam or challenging the patient. Productivity continues to improve with the industry’s only MR system with a detachable table—the Liberty™ Docking System—that enables you to comfortably prepare your next patient while you’re still scanning the current one. And productivity expands even more with the industry’s best known and easiest-use user interface.

Consistent imaging for every exam, every patient, every time

Can’t-miss software applications designed for imaging consistency

Cube™

Designed to help you increase your productivity. Scan once. Get multiple planes.

IDEAL

Designed to help you reduce fat sat failures and metallic implant artifacts. Scan once. Solve multiple problems.

PROPELLER HD™

Designed to generate consistently excellent images with fewer retakes and less need for sedation. Scan once. Get motion resistant images and enhanced tissue contrast.

TRICKS

Designed for uncompromised time-resolved vascular imaging. Scan once. Get both high spatial and high temporal resolution.

Signa® User Interface designed for simplicity

The Signa HDxt wide console monitor is a high resolution display that displays multiple windows which are simultaneously accessible.

Making tough exams simpler

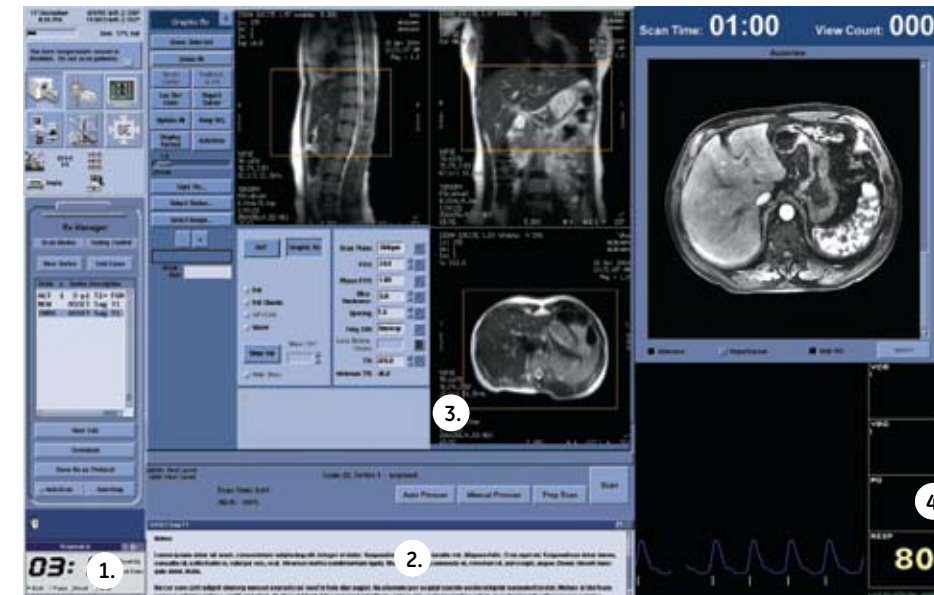
Greater Confidence
Half of MR Technologists surveyed felt best equipped to generate high quality images using GE MR systems over any other scanner*

More Familiar
Over half of MR Technologists surveyed know how to operate a GE MR system*

Easier to Use
MR Technologists selected GE MR 2-to-1 as easiest to use*

*Source: 200 US Technologists Randomly Surveyed by IMV, Sponsored by GE Healthcare, October 2007

User Interface Console & Wizard Guides



1. Easy access to timing screen.

2. Protocol notes allow you to permanently load physician preferences and protocol information to ensure imaging consistency.

3. Auto TR eliminates time spent finding the lowest TR depending on prescribed slices.

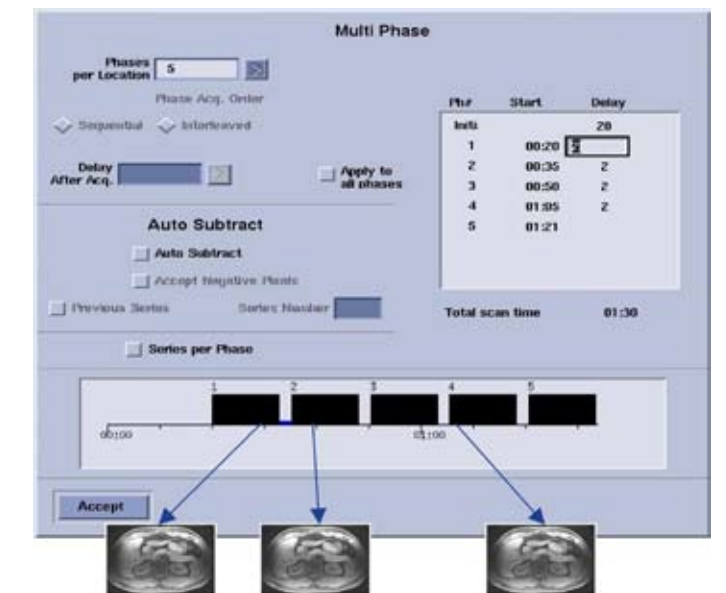
4. Gating and triggering screen is easily visualized, eliminating the need to change screens when evaluating waveforms.

ProtoCopy



- Copy a protocol after the scan has been completed
- Share between multiple-facilities or centers with a mouse click

DynaPlan



- Optimize your breast or abdomen delay times
- Subtraction, mask-phase and unique time delays are optimized for even the most unique protocols
- Preferences are permanently stored, simplifying future use

Liberty™ Docking System: more than a table

Designed for Productivity

Prepare the patient outside the scan room and improve workflow by utilizing a second table

Designed for Safety

One technologist can remove a patient in less than 30 seconds

Designed for Service Expansion

Grow clinical services with additional tables
MRgFUS dedicated uterine fibroid ablation table or the Signa OR-compatible table for MR Surgical Suite

Liberty Docking System is the industry's only detachable table system

Expect more

Built for upgradeability, uptime and investment protection—it's all about system longevity

With ever increasing operational costs and the need to stay technologically current, you need a strategic vendor who continuously provides for you.

The GE MR mission: flexible systems with a future. The upgradeability benefits from GE are unmatched. It starts with a proven 25-year continuum that's driven by a magnet designed for longevity and seamless upgradeability. It continues with the easy-to-incorporate breakthrough applications and system enhancements that keep customers current in today's ever changing and increasingly competitive market. Rest assured, your investment is always protected.

Wherever you are from wherever we are, your Signa® HDxt 1.5T is supported by the world's most advanced portfolio of MR service and asset management tools, so you reap all the benefits of GE MR ownership. Maximized uptime. Optimized accuracy and consistency. Higher productivity. Better patient care. And true peace of mind.

Built for investment protection

GE introduced the industry's first short-bore 1.5T magnet. Manufactured in Florence, South Carolina, it's built for years of service and upgradeability—instead of replacement—to protect you from obsolescence.

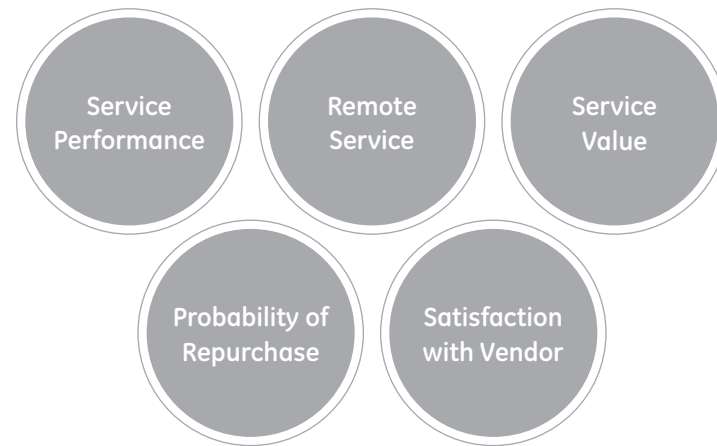
A magnet built to last.

The industry's choice for reliability—not replacement.

Built upon an entire network to help you get the most out of your investment—from day one

The industry's number one ranked service team paired with GE training and consulting services can help you get the most out of your investment today and tomorrow.

More performance from the service team ranked number one* in the industry for:



More from your network

The Physician-Instructed MR Masters Series

The first of its kind in the industry—offering clinicians the widest selection of training and educating programs on MR technology and techniques.

The GE Healthcare Institute

Receive comprehensive hands-on training on your system at our dedicated educational facility.

TiP Virtual Assist

Combining expertise and convenience, live interactive applications training with remote trainers helps you get the most from your Signa HDxt 1.5T.

Onsite Training

Detailed, on-site training and consulting to help you grow clinical performance, referral power, and your bottom line.

*Source: ServiceTrack™ Imaging Report 2007, MR Systems, IMV, Ltd. Greenbelt, MD. Survey exclusive to United States.



Your support network is here for you today and in the future, when and where you need it.

Built for a Continuum

GE has a proven 1.5T Continuum of upgradeability that for 25 years has enabled customers to expand the capability of their system with new surface coils, new software applications, or even new system platforms without replacing the magnet.

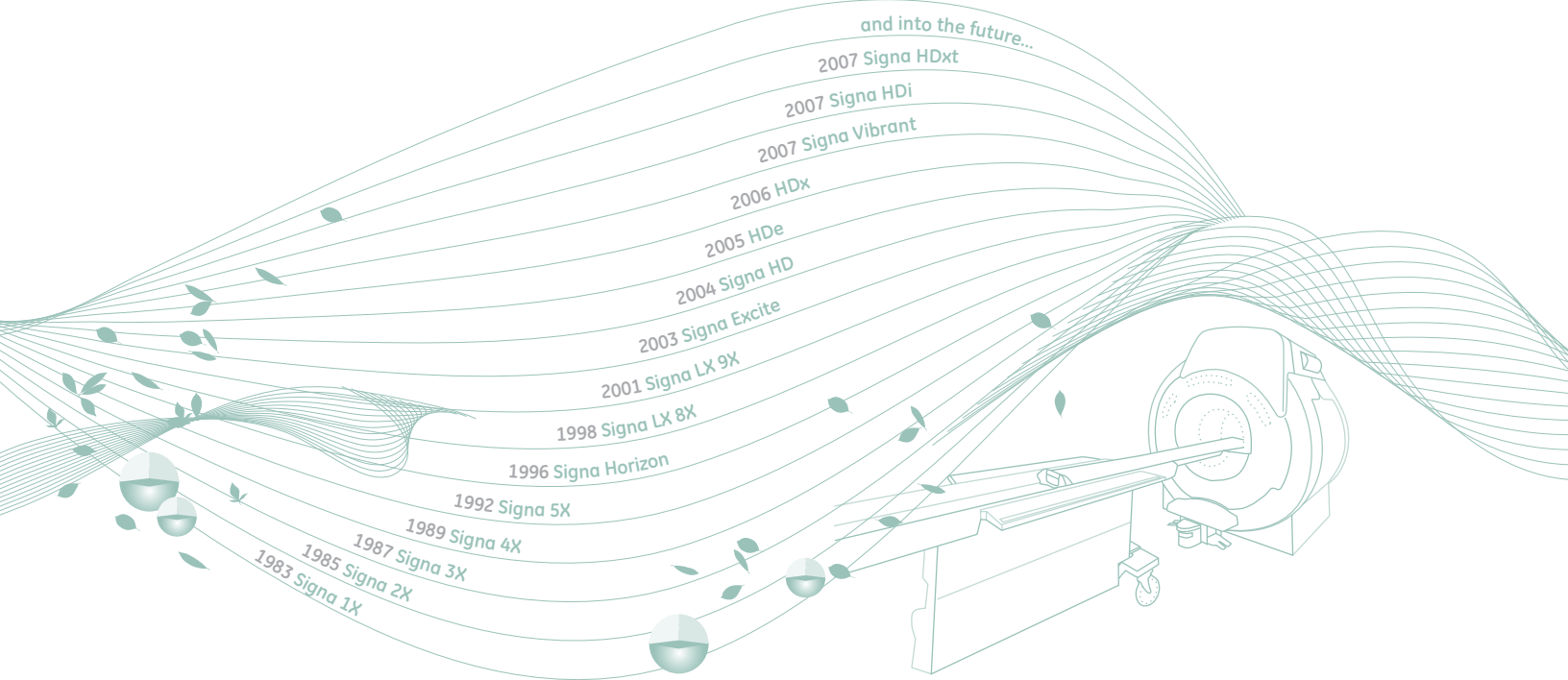
With platform upgradeability starting from any point, scalability is on your side.

Built for incorporation of the ContinuumPak, which are no-charge regular software releases with system improvements, and new software applications.

Easy-to-add breakthrough applications and new coil technology keep users technologically current in today's ever-changing and increasingly competitive market.



The Signa® Continuum



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France
Paris
Fax: +33 (0) 1 30 70 98 55

Japan
Tokyo
Fax: +81 3 3223 8524

Singapore
Fax: +65 291 7006

USA
Milwaukee
Fax: +1 262 521 6123

Healthcare Re-imagined™

GE is dedicated to helping you transform healthcare delivery
by driving critical breakthroughs in biology and technology.
Our expertise in medical imaging and information technologies,
medical diagnostics, patient monitoring systems, drug discovery
and biopharmaceutical manufacturing technologies is enabling
healthcare professionals around the world to discover new ways
to predict, diagnose and treat disease earlier. We call this model
of care "Early Health." The goal: to help clinicians detect disease
earlier, access more information and intervene earlier with more
targeted treatments, so they can help their patients live their lives
to the fullest. Re-think, Re-discover, Re-invent, Re-imagine.

GE Healthcare
3000 North Grandview
Waukesha, WI 53188
USA

Chalfont St. Giles,
Buckinghamshire
UK

www.gehealthcare.com

