GE Healthcare

Skyrocket

your MR performance.

SIGNA™ Voyager

Imagine what MR can be.


SIGNA
Voyager

Redefine

the limits of what's possible.

Enter a whole new realm of possibility in MR with the SIGNA™ Voyager.

Fueled by SIGNA™Works, our latest productivity platform, this system is designed to maximize productivity and workflow while delivering extraordinary clinical potential and exceptional patient comfort. And it has one of the smallest footprints and lowest power consumptions in the industry for a 1.5T wide bore system.

Get ready to experience MR excellence like never before.

SIGNA™ Voyager: Skyrocket your MR performance.


SIGNA
Voyager

Outclass

with exceptional image quality.

Total Digital Imaging... a total imaging win.

Experience the unique advantages of Total Digital Imaging (TDI) with SIGNA™ Voyager. TDI helps deliver consistently sharper images than conventional MR systems with higher SNR, superior homogeneity and uniformity. TDI consists of three components:

Digital Surround Technology (DST) combines the superior SNR and sensitivity of the high-density surface coils with the superior homogeneity and deeper signal penetration of the integrated RF body coil, to deliver richer, sharper, higher quality images.

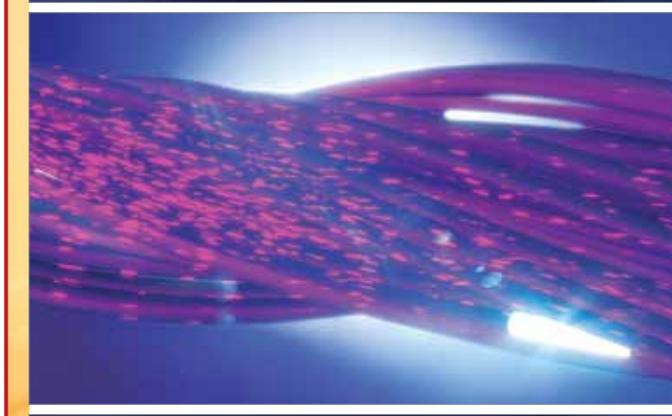
Direct Digital Interface (DDI) employs a separate analog-to-digital converter to capture and digitize every input from each of up to 65 RF channels, to vastly improve SNR.

Digital Micro Switching (DMS) technology replaces analog blocking circuits with intelligent Micro-Electro-Mechanical Switches (MEMS), to enable ultra-fast coil switching times for further expansion of zero TE imaging capabilities.

In addition to TDI, the SIGNA™ Voyager includes novel Ultra High Efficiency (UHE) Gradient technology, a leap forward in the gradient technology curve, generating shorter TR and TE values to deliver speed and exceptional image quality.

SIGNA™ Voyager: Skyrocket your clinical potential.

Digital Surround Technology: Simultaneously acquires body coil & surface coil signals for improved SNR and uniformity.



An independent digitizer for every channel delivers superior SNR.


SIGNA™ Works
fueling the future of MR

SIGNA™ Works

The new standard is extraordinary.

Our new SIGNA™Works productivity platform redefines productivity across the breadth of our core imaging techniques with solutions. The SIGNA™Works standard applications portfolio is an extensive set of high quality and efficient imaging capabilities that enables you to achieve desired outcomes across your entire practice area.

The SIGNA™ Voyager comes pre-loaded with the SIGNA™Works standard applications as a fully integrated solution. It's value-added technology that's upgradeable and can be customized further, giving you the flexibility to add applications to suit the needs of your growing practice.

SIGNA™Works takes full advantage of TDI (Total Digital Imaging), further advancing diagnostics and increasing throughput, while simultaneously improving patient outcomes and your ROI.

SIGNA™Works

Leap to a new high in MR capability.

Energize

Phenomenal exams to meet your clinical needs.

The SIGNA™Works standard applications portfolio contains NeuroWorks, BodyWorks, CVWorks, OrthoWorks, OncoWorks and PaedWorks. These imaging solutions cover a wide variety of contrasts, 2D and 3D volumetric data, including motion correction capabilities.

NeuroWorks

This one-stop solution of neuro techniques enables you to image brain, spine, vascular and peripheral nerve anatomy with exceptional tissue contrast. These motion-insensitive techniques feature single-click auto alignment, providing the complete neuro solution from scanning to post processing.

BodyWorks

With BodyWorks, we address one of the fastest growing areas in MR. This all-inclusive library allows you to image abdominal and pelvic anatomy with user flexibility to adapt to different patient types.

CVWorks

With our intuitive cardiac techniques, you can access morphology, function, and flow, plus gain crucial insights into vascular structure. Plus, you have the flexibility to adapt to different patient types with exams that vastly simplify workflow.

OrthoWorks

This extensive library of musculoskeletal imaging techniques enables you to image bone, joint and soft tissue with remarkable tissue contrast.

OncoWorks

This broad library of techniques captures anatomic and morphologic data to uniquely enable oncological assessment of anatomy. OncoWorks includes robust tissue contrast, motion-insensitive, high temporal and spatial resolution imaging.

PaedWorks

Delivers exclusive and distinctive imaging techniques that provide ease of use for the user and clinical excellence for your smallest, most fragile patients.

Expand

Broaden your areas of expertise.

Take your expertise to the next level when you move beyond the standard with SIGNA™Works innovative applications such as ImageWorks, SilentWorks and FreedomWorks. Improved image quality, higher efficiency and a more streamlined workflow help you perform better than ever before.

ImageWorks

ImageWorks boosts your overall MR performance through automation and advanced post-processing capabilities. READYView visualization and MAGiC one-and-done scanning help ensure consistent and clear results.

SilentWorks

SilentWorks is GE's most advanced noise-reducing technology and strengthens our promise to transform the patient experience. Traditional exams can be as loud as a rock concert, but our innovative SilentWorks technology reduces sound levels to roughly the same as ambient noise.

FreedomWorks

Offer your patients freedom from breath-holds, needles and the need to lie statue still during an MR exam with our Breathe-free, Needle-free and Motion-free suite applications.

SIGNA™ Voyager

with MAGiC.

One and Done imaging.

The secret of MAGiC (MAGnetic resonance image Compilation) lies in its unique ability to generate multiple image contrasts in a single MR scan. We call this One and Done imaging and it delivers MR imaging that goes faster, further and deeper than conventionally possible.

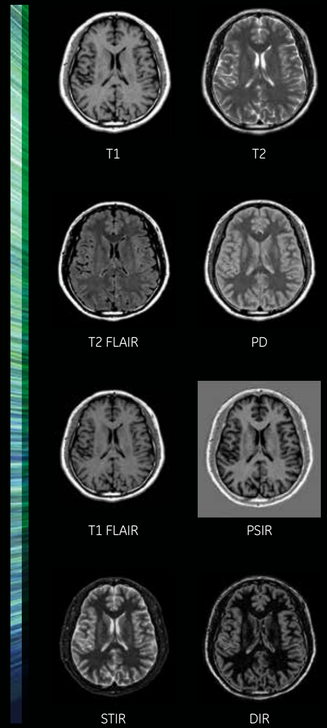
Faster
With MAGiC you can acquire multiple image contrasts including T1, T2, STIR, T1 FLAIR, T2 FLAIR, DIR, PSIR and PD weighted images of the brain with a single acquisition, in as low as 5 minutes.

Further
With MAGiC dramatically cutting down the time required for a basic scan, you now have the freedom to add on advanced imaging such as DTI & 3D ASL, without increasing the total examination time.

MAGiC also allows you to change image contrasts after acquisition, with simple adjustments so you never have to worry about acquiring the wrong contrast.

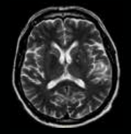
You can go further, to generate image contrasts that were previously not possible or practical with conventional imaging such as very long TR for superior CSF visualization or ultra-high T1 weighting.

Deeper
With every MAGiC scan, you have access to rich parametric T1, T2 and PD maps which could be used for a deeper analysis of tissue characteristics during diagnosis.

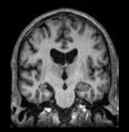


320 x 256, 4mm slice, 24 FOV, 5:24 min

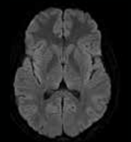
Image Gallery



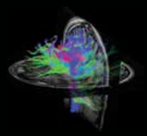
Brain
T2 PROPELLER Axial
512 x 512 3mm



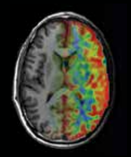
Brain
3D Bravo Coronal
1 mm Isotropic



Brain
Axial DWI B1000
128 x 256 FOV22 5mm



Brain
Diffusion Tensor Axial
128 x 128 3mm



Brain
3D ASL Fused to BRAVO
Quantitative Blood Perfusion

Brain IAC Volume Rendering
3D Cube Axial
FOV20 0.6mm

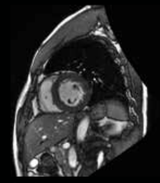
Brain

C-Spine
T2 Cube Axial
248 x 248 1mm

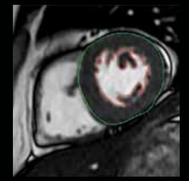
L-Spine
T2 frFSE Sagittal
320 x 320 3.5mm

Whole Spine
T2 frFSE Sagittal
332 x 256 3mm

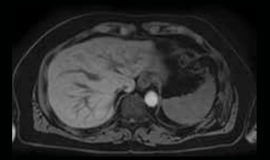
Spine



Cardiac
ShortAxis FIESTA
192 x 192 7mm



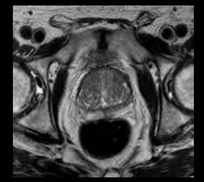
Cardiac
ShortAxis Segmentation



Abdomen
Disco Axial
4 phases in 20 sec 2mm

Renal MRA – Non Contrast
Inhance IFIR

Prostate
FOCUS Axial
B-500 24 x 11cm FOV 4mm



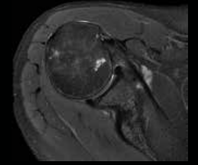
Prostate
PROPELLER T2 Axial
256 x 256 4mm FOV 18cm

Female Pelvis
T2 frFSE Sagittal
288 x 256 4mm

Kidneys
FOCUS DWI Coronal
B-800 Free Breathing 4mm

Knee
PD Coronal
896 x 384 3mm

Knee
3D Cosmic Sagittal
288 x 320 0.2mm

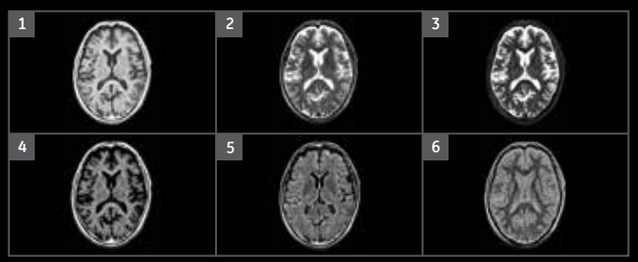


Shoulder
PD FatSat PROPELLER Axial
256 x 256 3.5mm

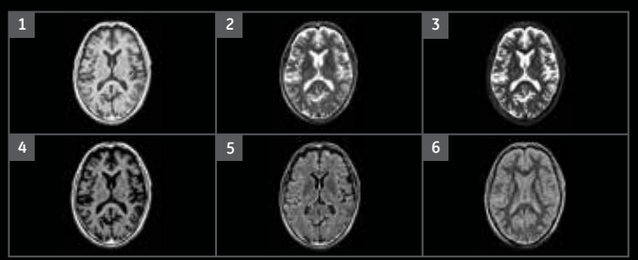
Ankle
T1 FSE Coronal
352 x 288 3mm

Body and MSK

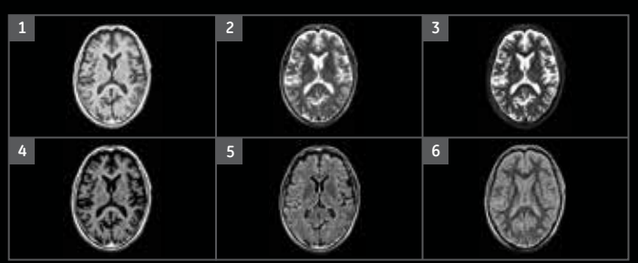
Conventional MR



6 scans are needed to deliver 6 contrasts.

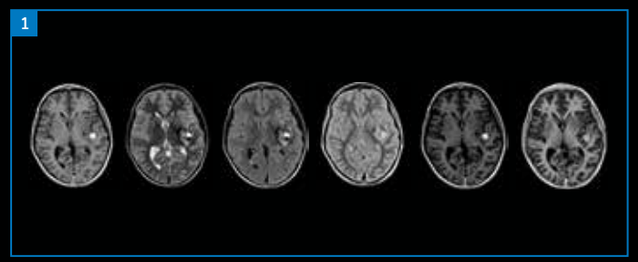


Exam time increases with the addition of advanced sequences.



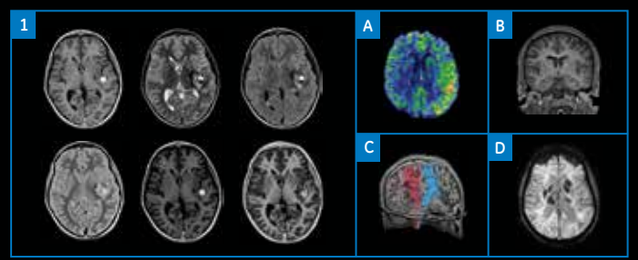
Additional sequences required to acquire parametric data, further increasing exam time.

MAGiC MR



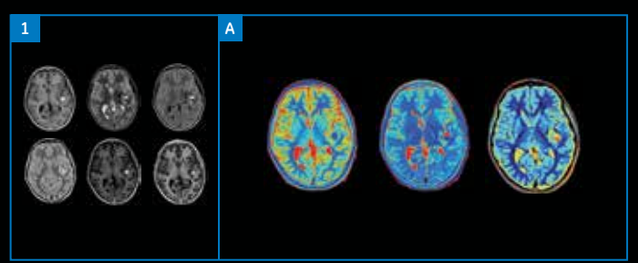
One scan delivers 6 contrasts.

Faster.



Exam time not increased. Time saved with MAGiC allows for addition of advanced sequences such as DTI, ASL, SWAN, spectroscopy and morphology without increasing exam time.

Further.



Parametric T1, T2 and PD maps available by default with every MAGiC scan. No increase in exam time.

Deeper.

Multiply
your MR productivity.

Speed and simplicity

Besides revolutionary MAGiC technology that delivers multiple contrasts in one scan, SIGNA™ Voyager has a host of features to speed up and simplify imaging.

Turbo LAVA/LAVA Flex features enable faster body imaging and up to 47% shorter breath-holds, with multiple phases in a single breath-hold so that each scan is done right the first time.

DISCO (Differential Sub-sampling with Cartesian Ordering) technology makes advanced body imaging with MR as simple as CT, enabling simultaneous high spatial and temporal resolution imaging of the entire liver, breast and prostate, and delivering an entire 3D volume in as little as 3 seconds.

AutoFlow efficiency

SIGNA™ Voyager's AutoFlow suite of features makes workflow easier and more efficient than ever:

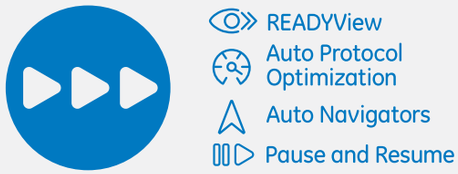
READYView: image review and analysis platform that reduces number of clicks through automation and enables advanced visualization of multi-parametric data with ease.

Auto Protocol Optimization: simplifies and automates breath-hold imaging, making it easier for operators, while enhancing reliability of image quality and exam duration, regardless of patient profile.

Auto Navigators: delivers real-time robust free breathing respiratory motion compensation to streamline routine and advanced body imaging. They are compatible with DISCO, Turbo LAVA, Turbo LAVA Flex and GE's entire body imaging suite.

Pause and Resume: eliminates the need to redo scans or retrace your steps, giving you greater flexibility to respond to patient needs mid-scan.

AutoFlow



IntelliTouch touch-and-go landmarking, Auto Guidance and GE's famously simple setup with dual touch screens further enhance workflow efficiency and imaging reliability.

SIGNA™ Voyager: Skyrocket your MR productivity.

Multiply your ROI

SIGNA™ Voyager is designed to multiply your ROI to remarkable levels. With one of the smallest mechanical footprints of any wide bore 1.5T MR system in the industry, the SIGNA™ Voyager substantially lowers setup cost. And with one of the lowest power consumption levels in the industry, it ensures you keep operating costs surprisingly low.

Transform

the patient experience with advanced applications.

Experience a new standard of patient comfort with SIGNA™ Voyager.

SilentWorks

GE's proprietary SilentScan technology dramatically reduces scanning noise from an ear-splitting, motor-cycle level of 91dB to within 3dB of scan room ambient noise. It includes a Silent Neuro Package with Diffusion Weighted Imaging (DWI), enabling a complete silent neuro exam, and an expanded Silent feature that also covers spine and musculoskeletal imaging.

FreedomWorks

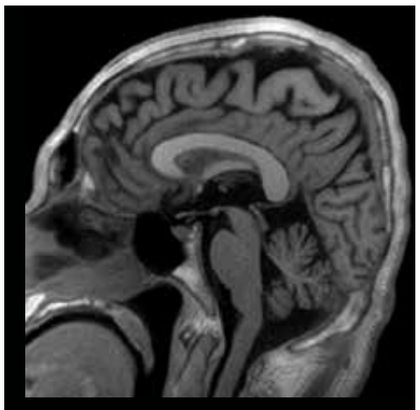
SIGNA™ Voyager makes scanning a worry-free experience for patients. Our wide Comfort Plus table with low height and open 70cm design allows patients to rest freely while offering easy access and a comfortable scanning experience.

Breathe-free: Patients can breathe freely because our Auto Navigator technology is compatible with Turbo LAVA, Turbo LAVA Flex and DISCO to enable complete body exams without a single breath-hold.

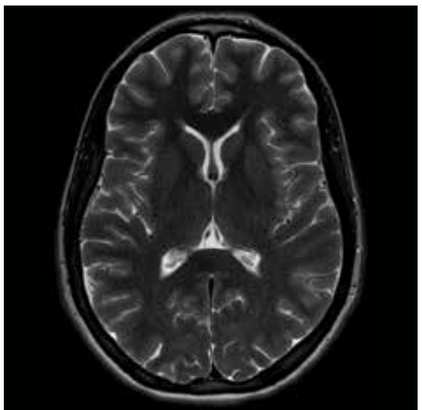
Motion-free: With advanced 3D motion correction technology such as 3D PROMO for neuro imaging and GE's signature PROPELLER for head-to-toe 2D motion correction, we help eliminate the need for patients to lie motionless throughout the scan, making scanning less stressful for the patients.

Needle-free: For non-contrast MR exams, we offer needle-free imaging capabilities which eliminate the pain of needles and the cost of contrast. Whether it is a routine MR angiography study with our Inhance 2.0 Suite or advanced imaging such as liver fat-fraction mapping with IDEAL IQ or brain perfusion imaging with 3D ASL, SIGNA™ Voyager enables complete non-contrast MR exams.

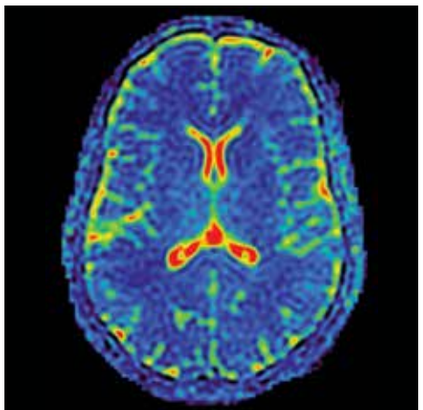
SIGNA™ Voyager: Skyrocket patient comfort.



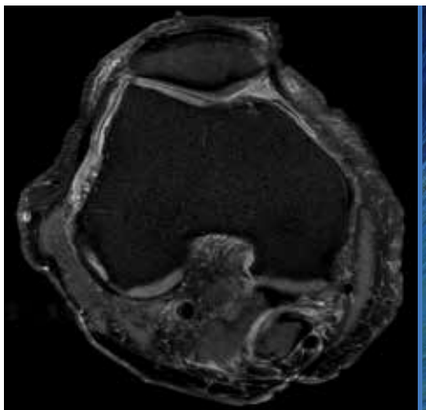
Brain
T1 3D Silent
256 x 256 1mm



Brain
Silent Axial T2 PROPELLER
512 x 512 4mm



Brain
Silent Axial DWI B1000
112 x 112 5mm



Knee
Silent Axial PD FS
356 x 356 3.5mm

www.gehealthcare.com

GE Healthcare provides transformational medical technologies and services that are shaping a new age of patient care. Our broad expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery, biopharmaceutical manufacturing technologies, performance improvement and performance solutions services help our customers to deliver better care to more people around the world at a lower cost. In addition, we partner with healthcare leaders, striving to leverage the global policy change necessary to implement a successful shift to sustainable healthcare systems.

Imagination at work

MR-0502-10.16-EN-US
JB43920US