# SIGNA™ ARTIST EVO 1.5T





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MR technology is always advancing, and if your current system isn't meeting your and your patients' growing needs, you might be thinking about a replacement. However, this has a major impact on your department, especially when you factor in unnecessary disruption and downtime.

Fortunately, you don't need to replace your 1.5T MR system to broaden its capabilities. GE technology is incredibly easy to transform – you can keep your magnet and reconfigure around it.



Introducing SIGNA<sup>™</sup> Artist *Evo*, a transformation that breathes new life into legacy 1.5T MR systems. Not only is this the world's first and only upgrade that opens up narrow-bore scanners from 60 cm to 70 cm for more comfortable scans, but it also opens up clinical capabilities and new possibilities for your patients.

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A SIGNA<sup>™</sup> Artist *Evo* transformation gives your legacy MR system a makeover, equipping it for the future. With a wider bore and a larger field of view, you can make the scan experience more comfortable for patients and diagnose them more effectively.

An improved gradient performance and more Total Digital Imaging (TDI) RF Channels increase the quality of images, and a higher maximum weight limit means you can scan broader body types, extending your service to a wider patient population.



# LEGACY MR SYSTEM\* 60 CM

# SIGNA™ ARTIST EVO<sup>†</sup> 70 CM

SIGNA Artist Evo

60 cm Narrow-Bore Magnet

48 x 48 x 48 cm Field of View 23–33 mT/m, 50–120 T/m/s Gradient 8–16 RF Channels

350 lbs / 159 kg Max Patient Weight

Detachable Table

#### Same Magnet, Wider Bore

**IROC** with Bilateral Control

Deep Learning in its DNA: **AIR™ Recon DL** standard, including future 3D & PROPELLER Enhancements<sup>‡</sup>

**AIR™ Coils:** Anterior Array 30 or 16 Channels, Multi-Purpose 21 or 20 Channels

Field of View **55 x 55 x 50 cm** 

Gradient 44 mT/m, 170 T/m/s

3 x 32 ch Coil Ports in Table

TDI RF Channels up to 128

Max Patient Weight **500** lbs / **227** kg

eXpress<sup>™</sup> Detachable Table with 40 Channel TDI Posterior Array

**Toe-to-Head** Whole-Body Imaging & **Feet-First Scanning** 

 \* Image is representative. Most of the GE 1.5T 60 cm systems are eligible for transformation. Contact your GE representative for additional details.
† SIGNA™ Artist Evo is 510(k) cleared in the USA. Not CE marked, not available for sale in all regions.
‡ AIR™ Recon DL 3D and AIR™ Recon DL PROPELLER are 510(k) pending at FDA. Not yet CE marked. Not available for sale in the United States or the EU. Not commercially available in all markets.

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\* Claustrophobia rate comparison head-first/feet-first.

Enders J, Zimmermann E, Rief M, et al. Reduction of claustrophobia during magnetic resonance imaging: methods and design of the "CLAUSTRO" randomized controlled trial. BMC Med Imaging. 2011 Feb 10:11:4. doi: 10.1186/1471-2342-11-4. PMID: 21310075; PMCID: PMC3045881.

### FOR PATIENTS

Patients will benefit from shorter scan times and the added comfort delivered from a wider 70 cm bore and AIR<sup>™</sup> Technology.

## FOR STAFF

Your staff will be able to help more patients with our most accessible system yet. Cut down on the need for rescans by reducing claustrophobia rejection rates by 90%\* and the need for sedation.<sup>1</sup>

## FOR RADIOLOGISTS

Radiologists will achieve pin-sharp image precision, undeniable speed, and consistent results.

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As well as extending the lifespan of your initial investment, SIGNA<sup>™</sup> Artist *Evo* is a sustainable option that reduces helium usage and eliminates magnet waste.

Your imaging department needs to accommodate different types of patients by improving comfort and accessibility. Fortunately, the SIGNA<sup>™</sup> Artist *Evo* transformation helps you remain receptive to their needs, without sacrificing the quality of results.



SIGNA<sup>™</sup> Artist Evo is the first and only 60 cm to 70 cm transformation that expands the bore of legacy 1.5T MR systems. This 36% larger cross-section and the addition of feet-first imaging will greatly enhance patient satisfaction and reduce claustrophobia rejection rates by up to 90%\* and the need for sedation.1 Our wider eXpress<sup>™</sup> Detachable Table lets you prepare patients outside the imaging room and accommodates a 1.4x greater maximum weight limit (500 lbs / 227 kg) than your legacy MR system, meaning you can expand your service to a wider patient population.

Lightweight, blanket-like AIR<sup>™</sup> Coils are 50% lighter than conventional coil technology, providing added comfort and more accurate results. Patients no longer need to be readjusted during their scans as whole-body imaging workflows allow different organs to be scanned simultaneously, helping procedures to run seamlessly and smoothly. AIR<sup>™</sup> Recon DL also reduces scan time by up to 50%, which helps lower patients' stress levels.

"THE SCAN TIMES ... PROBABLY THE BIGGEST RFVOLUTION WE'VE SEEN IN IMAGING THF MR FIFI

Mr. Tom Schrack, Fairfax Radiological Consultants, USA Regarding AIR™ Recon DL

### LARGER BORE \_\_\_\_\_\_ gives patients 36% more room,

making scans more comfortable

# AIR™ COILS -

are 50% lighter than conventional coil technology

# AIR<sup>M</sup> RECON DL reduces scan time by up to 50%

 Enders J, Zimmermann E, Rief M, et al. Reduction of claustrophobia during magnetic resonance imaging: methods and design of the "CLAUSTRO" randomized controlled trial. BMC Med Imaging. 2011 Feb 10:11:4 doi: 10.1186/1471-2342-11-4 PMID: 21310075; PMC10; PMC30/5881



C A L E S L Ζ Ш A EXPANCCAP

To provide the best clinical service for your patients, it's important to have access to the latest technologies so you can enhance your performance and improve results. A SIGNA<sup>™</sup> Artist *Evo* transformation revolutionizes your legacy MR system, making it fit for your future research and advanced clinical endeavors.

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With access to the latest advanced AI technologies, users can scan all anatomies and achieve pin-sharp, consistent images faster, broadening your scanning capabilities and ensuring your patients get the most accurate results. Our pioneering Deep Learningbased reconstruction algorithm, AIR<sup>™</sup> Recon DL, has been proven to improve signal-to-noise ratio (SNR). This in turn accelerates scan time by up to 50%, meaning you can see more patients daily and work faster.

To further enhance image quality and scan uniformity, SIGNA<sup>™</sup> Artist *Evo* comes with a higher gradient performance of 44 mT/m (peak amplitude), 170 T/m/s (slew rate), and 128 Total Digital Imaging (TDI) RF Channels. You'll also notice the difference automated applications such as AIR Touch<sup>™</sup> and AIR x<sup>™</sup> make to both your workflow and your patient throughput.

# IMPROVE -

confidence from referring physicians with an MR system that enhances your clinical service

## ACCESS -

the latest advanced Al technologies to speed up scan time and improve accuracy

## ENHANCE —

image quality and uniformity with a higher gradient and more Total Digital Imaging (TDI) RF Channels than legacy MR systems EXTEND NVESTMENTS

Replacing your legacy MR system is a significant expense, especially when you factor in the cost of installation, unnecessary downtime, and disruption to your daily practice. SIGNA™ Artist *Evo* avoids all these challenges, making upgrading a more cost-effective and less disruptive investment.



Upgrading to SIGNA<sup>™</sup> Artist *Evo* means you can break even up to 40% faster than if you were to replace your legacy MR system.\* You can increase your yearly revenue by \$528,000<sup>+</sup> by gaining four or more additional time slots a day, which also means you can help even more patients. Additionally, the advanced imaging capabilities of SIGNA<sup>™</sup> Artist *Evo* reduces the need to rescan, potentially saving you \$115,000 annually.<sup>1</sup>

All this without replacing your best-in-class GE magnet, which has a life expectancy of up to 40 years, giving you greater value from your initial investment. UPGRADING -

around your existing magnet is more cost-effective than replacing your MR system

BREAK EVEN up to 40% faster than if you were to replace your legacy MR system\*

# PROFIT —

gain four or more additional time slots a day, increasing yearly revenue by \$528,000<sup>+</sup>

\* Based on historical ROI of full system upgrades vs. full replacement.

<sup>†</sup> Results may vary. Customers have reported scanning, on average, 4 more patients a day per MR with AIR™ Recon DL (Jb0349500). Calculation based on 4 patients x 22 days/month x \$500/scan x 12 months during clinical MR examinations.

 Andre JB, Bresnahan BW, Mossa-Basha M, et al. Toward quantifying the prevalence, severity and cost associated with patient motion during clinical MR examinations. J Am Coll Radiol. 2015 Jul;12(7):689–95

22 doi: 10.1016/j.jacr.2015.03.00

For added assurance, we're providing legacy MR systems with new covers, electronics, and software updates to improve clinical capabilities, as well as extending the life of the system.

# "IT WAS REALLY EASY TO PERSUADE EVERYONE THAT THIS WAS AN UPGRADE WORTH THE COST"

Dr. Andres Von Heijne, Danderyds Hospital, Sweden Regarding AIR™ Recon DL ALL-ROUND BETTER IMAGNNG

For pin-sharp precision, you need a SIGNA<sup>™</sup> Artist *Evo* transformation. With AIR<sup>™</sup> Recon DL, radiologists can achieve sharper, more consistent images like these making diagnoses simpler and more accurate.



# NEUROWORKS

#### AIR<sup>™</sup> Recon DL – Fast brain imaging done in 5 minutes 13 seconds



Axial T2 FLAIR with Fat Sat 0.8 x 1.5 x 5 mm | 1:17 min



Axial T2 FSE 0.9 x 1.1 x 5 mm | 0:30 min



Sagittal T1 FLAIR 1 x 1.3 x 5 mm | 0:45 min



Axial DWI b1000 2 x 2 x 5 mm | 0:23 min



Coronal T2 STIR 0.8 x 0.9 x 3 mm | 1:24 min



Axial T2 GRE 0.9 x 1.5 x 5 mm | 0:54 min



3D Axial TOF SPGR with HyperSense 0.6 x 0.6 x 1 mm | 4:50 min



Axial T2 HyperCube IACs 0.7 x 0.7 x 0.8 mm | 3:42 min



Sagittal T1 Pituitary with AIR™ Recon DL 0.5 x 0.6 x 2.5 mm | 2:06 min



Cube T2 FLAIR and 3D TOF with Volume Illumination Processing and fusion available on MR console Cube T2 FLAIR – 1.1 x 1.3 x 1.4 mm | 3:55 min 3D TOF – 0.6 x 0.9 x 1.2 mm | 3:25 min



Sagittal T2 (2-station) 0.7 x 1.4 x 3 mm | 2:04 min / station



# BODYWORKS

#### Liver imaging with SIGNA<sup>™</sup> Works AIR<sup>™</sup> IQ and 30 ch AIR<sup>™</sup> Coil



Axial T2 Fat Sat Navigator with AIR<sup>™</sup> Recon DL 1.2 x 1.7 x 6 mm | 2:51 min



3D Axial LAVA Flex with HyperSense 1.3 x 1.9 x 4.4 mm | 0:12 min

#### **Breast** imaging



Axial T2 FSE ASPIR with AIR™ Recon DL 1 x 1 x 2.5 mm | 2:51 min



Axial DWI 3:1 with AIR<sup>™</sup> Recon DL 4.8 x 4 x 6 mm | 1:25 min



3D Axial DISCO Star free breathing 1.3 x 1.3 x 4.4 mm | 1:41 min



Axial 3D DISCO 0.8 x 0.8 x 1.2 mm | 1:43 min

#### AIR<sup>™</sup> Recon DL and 30 ch AIR<sup>™</sup> Coil. Achieving PI-RADS guidelines at 1.5T in short scan times



Axial T2 with AIR<sup>™</sup> Recon DL 0.4 x 0.7 x 3 mm | 2:16 min

#### Whole-Body Imaging with AIR<sup>™</sup> Recon DL



Whole-Body Diffusion Imaging b900 Coronal 5 stations, 2:38 min / station, 5 mm slices with AIR<sup>™</sup> Recon DL MIP reconstructions | 2 x 30 ch AIR<sup>™</sup> AA Coils



0.4 x 0.7 x 3 mm | 2:49 min

Sagittal T2 with

AIR<sup>™</sup> Recon DL



Coronal T2 with AIR<sup>™</sup> Recon DL 0.4 x 0.7 x 3 mm | 2:48 min





Axial Focus DWI with AIR<sup>™</sup> Recon DL 2.6 x 1.3 x 4 mm | 2:33 min

# ORTHOWORKS

#### Knee imaging with AIR™ Recon DL and 21 ch Multi-Purpose AIR™ Coil





Coronal PD FSE Fat Sat 0.4 x 0.6 x 3 mm | 2:18 min

Axial PD FSE Fat Sat 0.4 x 0.6 x 3 mm | 1:55 min



Sagittal T1 FSE 0.3 x 0.6 x 3 mm | 2:37 min

#### Shoulder imaging with AIR<sup>™</sup> Recon DL and 16 ch Shoulder Coil



Axial PD FSE Fat Sat 0.4 x 0.5 x 3 mm | 2:07 min



0.4 x 0.5 x 3 mm | 2:05 min



Coronal T1 FSE 0.4 x 0.5 x 3 mm | 2:43 min

#### Long bone imaging with AIR™ Recon DL and 30 ch AIR™ Anterior Array Coil (30 cm FOV)

#### Wrist imaging with 16 ch T/R Wrist Coil



Axial T1 with AIR™ Recon DL 0.2 x 0.3 x 2.5 mm | 2:44 min



Coronal T1 with AIR™ Recon DL 0.2 × 0.3 × 2.5 mm | 2:32 min



Sagittal PD FSE Fat Sat 0.4 x 0.6 x 3.5 mm | 1:59 min

Elbow imaging with AIR™ Recon DL and 20 ch Multi-Purpose AIR™ Coil





Coronal T1 FSE 0.3 x 0.4 x 3 mm | 1:58 min

Axial PD FSE FS 0.4 x 0.4 x 3 mm | 2:20 min



Elbow imaging wit

# CVWORKS

#### Cardiac imaging with Multi-Purpose 21 ch AIR™ Coil



Short Axis T1 Black Blood with AIR™ Recon DL 1.3 x 1.3 x 8 mm | 0:30 min



Short Axis T2 Black Blood Fat Sat with AIR™ Recon DL 1.6 × 1.6 × 8 mm | 0:36 min

#### 3D Heart with Navigator 1.4 x 1.4 x 2.9 mm | 3:09 min



Right coronary artery - oblique view



Right coronary artery – curved view

#### Non-contrast aorta imaging with Multi-Purpose 21 ch AIR™ Coil



3D Aorta Breath Hold 1.9 x 2.3 x 3.6 mm | 0:21 min

Non-contrast renal arteries imaging with 30ch AIR™ Anterior Array Coil



3D Axial Inhance IFIR 1.8 x 1.1 x 2 mm | 3:16 min

Non-contrast lower legs run-off imaging with two 30ch AIR™ Anterior Array Coils



Inhance 3D DeltaFlow 3 stations 2 x 30 ch AIR™ AA Coils



SIGNA<sup>™</sup> Artist *Evo* widens the scope for more sustainability by allowing you to transform, rather than replace, your legacy MR magnet.

As there is no need to build or transport a new magnet, keeping your current magnet reduces unnecessary fossil fuel emissions. You can also save up to 2,000 L of helium by transforming your legacy MR system instead of replacing it, lowering your carbon footprint. AIR™ Recon DL also reduces power consumption per patient scan by up to 50%, which is more affordable for you and kinder for the environment.

# "AIR™ RECON DL IS REALLY A GAME-CHANGER"

Dr. Melany Atkins, Fairfax Radiological Consultants, USA

# ENHANCE PATIENT COMFORT

A 70 cm bore and lightweight, blanket-like AIR<sup>™</sup> Coils help improve patient comfort and accessibility

# EXPAND CLINICAL CAPABILITIES

Achieve pin-sharp image quality, undeniable speed, and consistency with our pioneering Deep Learning-based reconstruction algorithm, AIR<sup>™</sup> Recon DL

# EXTEND INVESTMENTS

Gain a 40% faster ROI vs. a replacement with a SIGNA<sup>™</sup> Artist *Evo* transformation\* and reduce your carbon footprint by keeping your current advanced GE MR magnet



# Open up with a SIGNA<sup>™</sup> Artist Evo transformation

If you're interested in learning more, please contact a representative for a product demonstration.

#### About GE Healthcare.

GE Healthcare is the \$18 billion healthcare business of GE.

(NYSE: GE). As a leading global medical technology and digital solutions innovator, GE Healthcare enables clinicians to make faster, more informed decisions through intelligent devices, data analytics, applications, and services, supported by its Edison intelligence platform. With over 100 years of healthcare industry experience and around 50,000 employees globally, the company operates at the center of an ecosystem working toward precision health, digitizing healthcare, helping drive productivity, and improving outcomes... for patients, providers, health systems, and researchers around the world.

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