



WITH  
**eXP**  
Technology

**scan brio**

The Key  
to Confidence

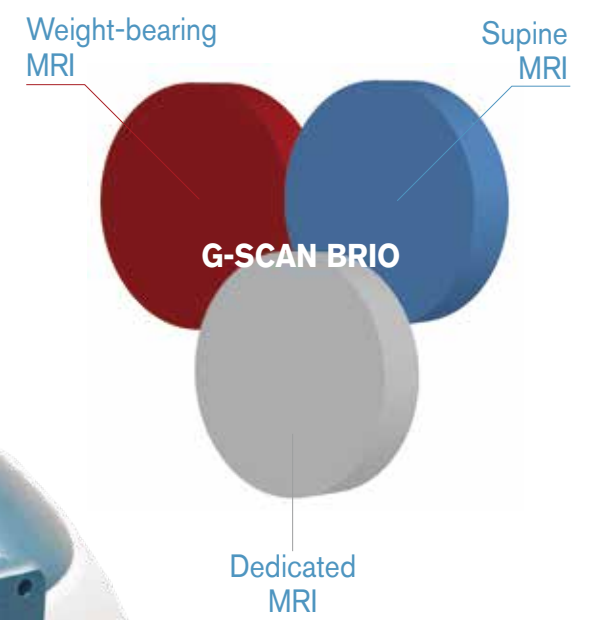
**esaote**

# More detail, better accuracy, greater confidence

The **G-scan Brio** is a revolutionary MRI approach for all musculoskeletal applications, which allows you to increase your diagnostic accuracy and confidence. The open and tilting design is the new and innovative way of doing MRI in which the position of the patient becomes an integral part of the outcome of the examination.









# G-scan Brio: adds weight to your diagnosis

Many symptoms and pathologies occur or are emphasized when the patient is in the weight-bearing position. Conventional MRI may not demonstrate the pathology related to particular symptoms whereas the **G-scan Brio** gives you a new point of view so you can accurately diagnose MSK pathologies which are affected by the weight-bearing position.

## G-scan Brio, the law of gravity

With the **G-scan Brio** you can gain a more complete understanding of the joint under examination. The forces of gravity generate bio-mechanical changes in the human anatomy, so MR imaging in the natural standing position allows you to obtain extra details which would not normally be seen.



Weight-bearing exam of the spine



Weight-bearing exam of the knee



# G-scan Brio: smooth and simple positioning

## Fast Positioning

The excellent ergonomics and unique features of **G-scan Brio** bring benefits for the operator as well as the patient:

- Easy patient positioning with optimized patient bed
- Easy bed extraction by operator
- Real time MR images
- Only one fixed position for placing coils
- High level of comfort during examination



# G-scan Brio: Real Time MRI

**G-scan Brio** is an MRI system specifically developed to perform musculoskeletal examinations. Unlike a multipurpose MRI, all aspects of the **G-scan Brio** system, from coils to user interface, have been developed and optimized to perform musculoskeletal MRI examinations in the most efficient and comfortable way. System handling and patient positioning therefore can be done by a single radiologist or technician.

**G-scan Brio** comes with the real-time MR feature. Using a fast acquisition sequence, the touch screen display on the gantry will show in real-time the MR image of the joint assuring fast and accurate positioning.







Simply select the joint under examination on the touch screen





# G-scan Brio: the right Coil for the best exam performance

**G-scan Brio** includes a complete set of receiving coils specially designed for the joints, which guarantees very high sensitivity and patient friendliness. The standard set includes: two 4 channel lumbar spine coils (large and small), a knee coil, a wrist/hand coil, an ankle/foot coil and a shoulder coil which are all Dual Phased Array, a multipurpose flexible coil as well as a linear shoulder and cervical spine coil. An optional DPA cervical spine coil is also available.



4 Channel Lumbar Spine Coil



Optional Cervical Spine Coil DPA



Cervical Spine Coil



Knee Coil DPA



Ankle/Foot Coil DPA



Shoulder Coil DPA



Wrist/Hand Coil DPA



Shoulder Coil



Flexible Coil

# G-scan Brio reveals what supine MRI misses

Images courtesy:

Department of Radiology, University of L'Aquila, Italy

Villa Donatello clinic, Florence, Italy

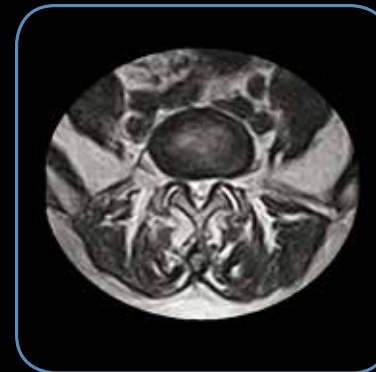
Parker Instituttet, Frederiksberg Hospital, Denmark



**G-scan Brio  
supine**



**G-scan Brio  
weight-bearing**

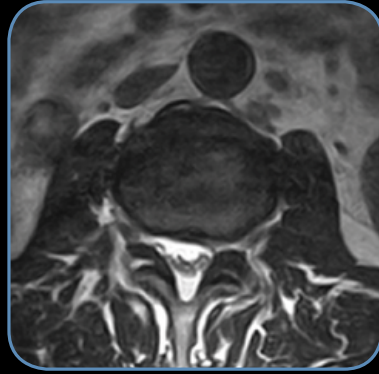


**Spine** (FSE T2, 4mm)  
C-spine in weight-bearing flexion, evident ligament instability at level of C4-C5

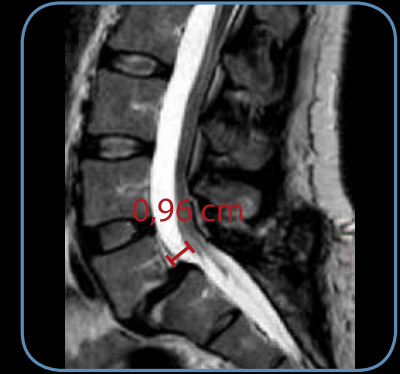
**Lumbar Spine** (Transverse FSE T2) Articular facet instability highlighted in weight-bearing, while supine exam only shows arthrosis

**Knee** (Coronal SE T1)  
In weight-bearing the actual damage to the cartilage of the medial compartment is clear and the origin of the bone edema is well identified. The lesion to the medial collateral ligament is visible only in weight-bearing





3 Tesla  
supine



G-scan Brio  
weight-bearing



**Lumbar Spine** (Sagittal FSE T2)  
Spondylolisthesis at L4-L5 level,  
highlighted in the weight-bearing  
position

**Lumbar Spine** (Axial 3D Hyce)  
Increased foraminal stenosis  
evident from weight-bearing exam

**Lumbar Spine** (Sagittal FSE T2)  
Impact of biomechanics: Disk  
extrusion under weight-bearing

**Lumbar Spine** (Sagittal FSE T2)  
Spondylolisthesis, anterior  
shift of the vertebra more evident  
in the weight-bearing exam



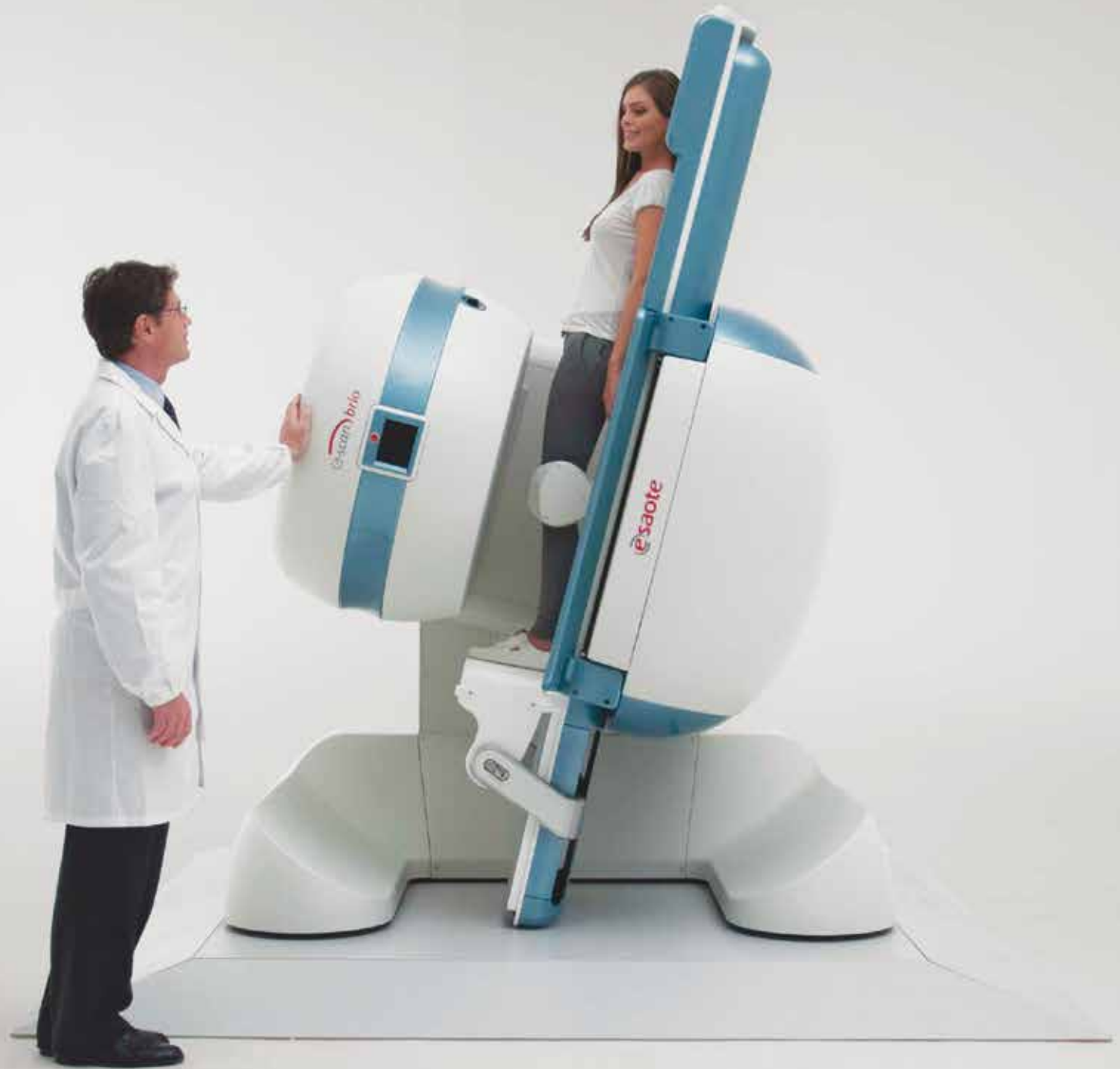


# G-scan Brio: intuitive user interface

The user interface is very simple and user friendly, routine exams can be performed by just a few mouse clicks. Even the most expert user will be fully satisfied as all scanning parameters can be personalized and the custom sequences can be stored and integrated in the normal menu structure for subsequent use. Thanks to its unique tilting design, the magnet unit can be rotated to move the patient into a true weight-bearing position.

Normally the patient will be imaged first in the upright weight-bearing position and then in the traditional supine position, also to make differential diagnosis possible. There are several ways of performing weight-bearing MRI but there is only one simple and cost effective way: **G-scan Brio**, the in-office weight-bearing MR.





# G-scan Brio: connected to MSK needs

## Windows® Interface

The **G-scan Brio** is easy to learn as it uses Windows® functionalities. The interface and protocols are custom designed for extremity and Spine MRI purposes which speeds up and simplifies the examination procedure considerably.

## Connectivity

**G-scan Brio** comes with all network, archiving and documentation features to work either stand alone or as part of an integrated environment. It has an integrated DVD archive and retrieve software package, printer facility and a patient CD package. **G-scan Brio** is also DICOM compliant and offers smart solutions for connectivity and teleradiology:

- DICOM image transfer to any PACS or Workstation
- DICOM worklist capabilities allowing the system to be connected to a centralized registration system
- E-MRI Viewer: an Esaote software only PC program which transforms a normal PC into a DICOM viewer.

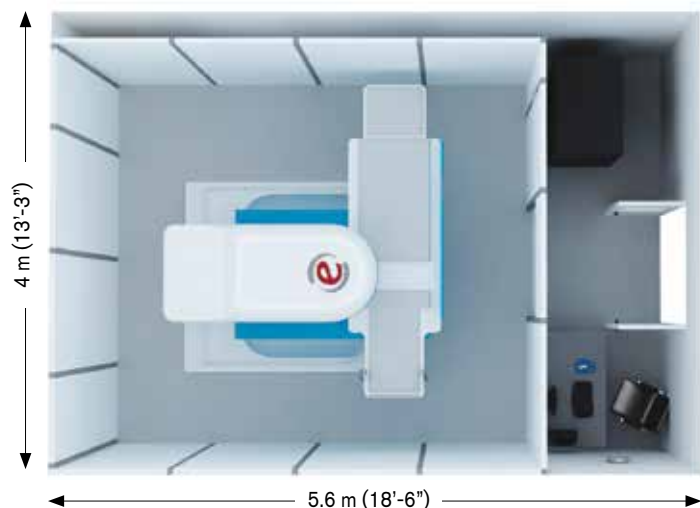
## Remote

All Esaote systems come with remote service capability. Many system parameters and system components can be checked via the remote service program specially developed for Esaote MRI systems. Using the remote connection, it is possible for Esaote application specialists to verify image quality and help the local operator set exam parameters. Moreover, it shortens reactions times and improves the time to repair as service visits can be made more efficient with the service technician.

# G-scan Brio: Hassle-Free MRI

Like all Esaote MRI systems, also **G-scan Brio** is a “one room” MRI system which means that the complete system, magnet, electronics and console can be installed in a single room of only 23 m<sup>2</sup> (245 ft<sup>2</sup>).

- **G-scan Brio** is based on an optimized permanent magnet so no cryogenes and no complicated cooling systems are required.
- Dedicated shielding available. The Esaote dedicated shielding is a pavilion style independent shielding that can be installed without any construction works.
- Fast and high quality service. Thanks to the built-in remote service capability, technical assistance is fast and efficient.







### G-scan Brio, a turning point in MR imaging

- Open permanent magnet
- Rotating gantry
- Shimming: passive
- Very compact, installation space of 23 m<sup>2</sup> (245 ft<sup>2</sup>) required
- Low Power Consumption: Only 2.8 kW during acquisition
- Power supply voltage: 200-210/220-240 V 50/60 Hz
- Complete set of dedicated coils

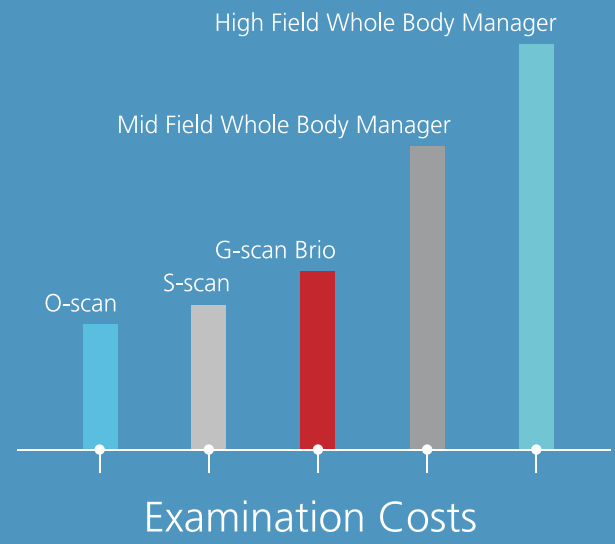
## e@volution

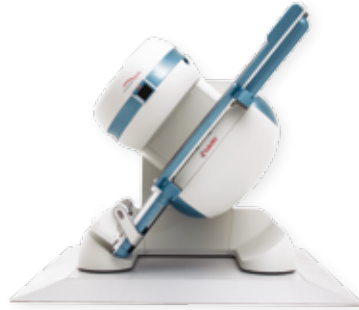
Esaote's long-term strategy is to maintain its leadership position in dedicated MRI with products that reflect market needs. Evolution is Esaote's continuous improvement program which ensures product and service enhancement as well as increased customer satisfaction.

- Continuous improvement of performance, features and services
- State-of-art technologies upgrading possibilities
- Investment protection and maximised return on the investment

### G-scan Brio economics

Easy installation, ease of use, low maintenance technology, low energy consumption, no cryogen, remote service possibility all = smart investment.





scan brio



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