

GuardianTM G2

Wireless Audio System

- MR Conditional wireless audio system for use with high field MRI up to 3.0T
- Integrates audio entertainment for enhanced patient experience
- Dramatically attenuates gradient noise
- Compatible with most commercial audio players via connection with a standard 3.5mm audio jack.





Excessive gradient noise during an MRI examination can cause discomfort, stress, and over time, may lead to hearing damage. The noise reduction rating (NRR), a unit of measurement used to determine the effectiveness of hearing protection, is a critical consideration when selecting an MR audio system. The Guardian™ Wireless Audio System has an NRR of 29 decibels (dB), allowing its use without additional earplugs at noise levels up to 128dB. To facilitate its use in studies utilizing a head coil that cannot accommodate an over-the-ear headset, the Guardian™ Wireless Audio System includes a wireless earbud solution also rated at 29 dB NRR.

Prior to the introduction of the Guardian™ Wireless Audio System, most other MR audio systems have employed 1960s pneumatic tube technology. Wireless, tubeless technology is more comfortable than pneumatic tube systems and eliminates the possibility of the headphone displacement when the table advances. The speakers reside inside the headphones placing the audio source nearer to the ear and providing sound of the highest quality.



Specifications				
	Wireless Headphones	Wireless Earbuds	Transmitters and Console Interface	Battery Charging Dock
NRR ANSI S3.19-1974	29 dB	29 dB	N/A	N/A
LxWxH	19cm x 10cm x 20cm	12cm x 15cm x 6cm	18cm x 12cm x 4cm 17cm x 19cm x 4cm 18cm x 12cm x 4cm	21cm x 12cm x 6cm
Weight	453g	285g	310g, 250g, 1170g	386g
Device				9

- · Comfortable, MR Conditional, over-the-ear headphones
- · Individual right and left speakers with highest sound quality
- Rechargeable batteries



- Comfortable, MR Conditional earbuds
- · Rechargeable batteries
- Primary usage: head coil applications



- · Wireless transmitters for scan room and control room, delivering wireless audio signals, and generating artifact-free images
- · Technologist console interface integrating wireless hearing protection with existing MR scanner console and/or audio source
- · Audio source is a purchasable option (not shown)



- · 4-slot charging dock to charge batteries when not in use
- · Compact: may be placed on desktop or mounted to wall

Device Functions

Wireless Headphones

- Power button with LED indicator for both left and right side
- · Pairing button with LED indicator confirms wireless connection on both left and right side
- Removable / rechargeable battery for both left and right side

Wireless Earbuds

- Power button with LED indicator
- Pairing button with LED indicator confirms wireless connection
- Removable / rechargeable battery

Charging Dock

- · Power On / Off
- · Battery status indicator
- · Simultaneous charging up to four batteries
- Charging Time < 6 hours

Battery / **Battery Life**

- Removable
- Rechargeable Li-Po 3.7V
- 1000 mAh
- Up to 12 hours of continuous

Radio

- 2.4 GHz ISM band
- 5 GHz WiFi

Compatible Scanners

Contact NeoCoil to inquire about system compatibility.

