



NeoCoil

Innovations to **sharpen** your image

Guardian™

Wireless Audio System

Models S1 and S2

- MR Conditional wireless audio system for use with high field MRI up to 3T
- Integrates audio entertainment, the technologist's voice, and automatic voice commands
- 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 an important 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 128 dB. 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, all 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.



The Guardian™ Wireless Audio System connects directly to the patient table for a clean installation and allows both audio entertainment and technologist communication.

When the technologist uses the intercom or when the automatic voice instructions are used, the audio entertainment volume is lowered for clear communication.

Specifications

| | Wireless Headphones | Wireless Earbuds | Audio Interface Module | Battery Charging Dock |
|-------------------------------|--|---|---|---|
| NRR ANSI S3.19-1974 | 29 dB | 29 dB | N/A | N/A |
| L x W x H | 19 cm x 10 cm x 20 cm | 12 cm x 15 cm x 6 cm | 6 cm x 6 cm x 3.5 cm | 21 cm x 12 cm x 6 cm |
| Weight | 453 g | 285 g | 80 g | 386 g |
| Device |  <ul style="list-style-type: none"> • Comfortable, MR Conditional, over-the-ear headphones • Individual right and left speakers with highest sound quality • Rechargeable batteries |  <ul style="list-style-type: none"> • Comfortable, MR Conditional earbuds • Rechargeable battery • Primary usage: head coil and C-spine applications |  <ul style="list-style-type: none"> • Table mounted transceiver delivering wireless audio signals • Rechargeable battery • Audio Entertainment System (AES) is a purchasable option (not shown) |  <ul style="list-style-type: none"> • 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 | Wireless Earbuds | Charging Dock | Battery / Battery Life | Radio |
|---|---|--|--|--|
| <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • Power button with LED indicator • Pairing button with LED indicator confirms wireless connection • Removable / rechargeable battery | <ul style="list-style-type: none"> • Power On / Off indicator • Battery status indicator • Simultaneous charging up to four batteries • Charging Time < 6 hours | <ul style="list-style-type: none"> • Removable • Rechargeable Li-Po 3.7V • 1000 mAh • Up to 12 hours of continuous use | <ul style="list-style-type: none"> • 2.4 GHz ISM band |

Compatible Scanners

Contact NeoCoil to inquire about system compatibility