The system is composed of:

1. **Analog to Digital Converter-ADC** with input from the PC and output to the
2. **Amplifier** that is connected via ~2m BNC cables to a
3. **Transformer/Filter** that is connected via ~4m BNC cables to the
4. **BNC connectors on the RF panel in control room** that are connected on the other side to
5. **BNC filters on RF panel** that are connected via BNC adapter (splitter) to the
6. **Headphone**

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**MR CONFON Audio System Setup**

- Scanner Room: 32-ch, 20-ch
- Control Room: The 20-ch headset operates only near the magnet
- Close to RF-Shield: 2m BNC cables
- From PC-front panel audio out: 10m BNC cables

**Notes:**
- The BNC filters and connectors are NOT MR-safe
- Earplugs are optional with the 20ch headphone, but are a MUST with the 32-ch headphone.
We have two headphones, both are electrical:

1. electro-dynamic headphone (HP SC03)

2. piezo headphone (HP PI US02)

<table>
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<tr>
<th>Headphone</th>
<th>Pictures</th>
<th>Coil</th>
<th>Passive dampening (at ~700 Hz, epi)</th>
<th>Passive dampening with earplugs</th>
<th>Earplugs</th>
<th>Comment</th>
</tr>
</thead>
</table>
| HP SC03   | ![HP SC03](image1.png) | 20-ch | up to 35 dB                         | > 55 dB                         | Optional | 1. active in the presence of a magnetic field  
2. Dedicated foam cushion |
| HP PI US02 | ![HP PI US02](image2.png) | 32-ch | 15-18 dB with ear defender          | ~35 dB                          | Must     |

The electro-dynamic headphone (HP SC03) and the piezo headphone (HP PI US02) can be connected in parallel via a BNC adapter mounted on the RF panel inside the magnet room.

Verify that only the chosen headphones are connected, and remember that the BNC filters and connectors are NOT MR-SAFE !!! So keep them away from the magnet.

If you’re working with MR CONFON headphones - **Turn off** the sensimetrics amplifier.

**Setting Up:**

- Connect the audio cable to the **front** audio socket of the stimuli computer.
- A window of the sound driver will open, mark the **Speaker** checkbox (not Headphone).
- Check that the headphone of your choice is connected to the BNC filters inside the magnet room.
- Test the earphones.

**Turning ON/OFF the system:**

There is no ON/OFF switch bottom. Since the amplifier is getting warmed, **unplug the system during the weekend**.

Good Luck !

Adi