Headphone Measurements: Beyerdynamic DT48

**Headphone Measurements:**

**Volts RMS required to reach 90dB SPL:** 0.075 Vrms

**Impedance @ 1kHz:** 35 Ohms

**Power Needed for 90dB SPL:** 0.16 mW

**Broadband Isolation in dB (100Hz to 10kHz):** -18 dB

---

**Graphs:**

1. **Frequency Response**
   - Top: Compensated and Averaged
   - Bottom: Raw Data for Five Headphone Positions

2. **Isolation**
   - Attenuation of External Sound vs. Frequency

3. **Electrical Impedance and Phase**
   - Measured with 600 Ohm output impedance.

4. **%THD+noise @ 90dB and 100dB**

5. **30 Hz Square Wave**

6. **300 Hz Square Wave**

7. **Impulse Response**

---

Copyright © SOURCE INTERLINK MEDIA All rights reserved.
Headphone Measurements:  
Beyerdynamic DT 48 E 120 Ohm

Volts RMS required to reach 90dB SPL:  0.389 Vrms
Impedance @ 1kHz:  150 Ohms
Power Needed for 90d BSPL:  1.01 mW
Broadband Isolation in dB (100Hz to 10kHz):  -19 dB

---

**Frequency Response**
Top - Compensated and Averaged
Bottom - Raw Data for Five Headphone Positions

**Isolation**
Attenuation of External Sound vs. Frequency

**Electrical Impedance and Phase**
Measured with 600 Ohm output impedance.

**%THD+noise @ 90dB and 100dB**

**30 Hz Square Wave**

**300 Hz Square Wave**

**Impulse Response**
Headphone Measurements:

Beyerdynamic DT 48 E pad holes

- **Volts RMS required to reach 90dB SPL:** 0.043 Vrms
- **Impedance @ 1kHz:** 34 Ohms
- **Power Needed for 90d BSPL:** 0.05 mW
- **Broadband Isolation in dB (100Hz to 10kHz):** -20 dB

---

**Frequency Response**
- Top - Compensated and Averaged
- Bottom - Raw Data for Five Headphone Positions

**Isolation**
- Attenuation of External Sound vs. Frequency

**Electrical Impedance and Phase**
- Measured with 600 Ohm output impedance.

**%THD+noise @ 90dB and 100dB**

**30 Hz Square Wave**

**300 Hz Square Wave**

**Impulse Response**

---

Copyright © SOURCE INTERLINK MEDIA All rights reserved.
**Headphone Measurements:**

**Beyerdynamic DT 48 Loose**

- **Volts RMS required to reach 90dB SPL:** 0.081 Vrms
- **Impedance @ 1kHz:** 35 Ohms
- **Power Needed for 90d BSPL:** 0.19 mW
- **Broadband Isolation in dB (100Hz to 10kHz):** -17 dB

---

**Frequency Response**

Top - Compensated and Averaged
Bottom - Raw Data for Five Headphone Positions

**Isolation**

Attenuation of External Sound vs. Frequency

**Electrical Impedance and Phase**

Measured with 600 Ohm output impedance.

**%THD+noise @ 90dB and 100dB**

**30 Hz Square Wave**

**300 Hz Square Wave**

**Impulse Response**

---

Copyright © SOURCE INTERLINK MEDIA All rights reserved.