



<http://wiki.homerecz.com>



..... 1

..... 1

..... 1

..... 1

..... 5

..... 5

..... 5

..... 6

..... 8

..... 10

..... 10

..... 10

..... 10



1)

2)

- Behringer MA400
- Mackie HM-4
- Rupert Neve RNHP

- $Z = \frac{V}{I}$  ;
- $P = V \times I$  ; (Watt)

, Power V Z

- $I = \frac{V}{Z}$
- $P = \frac{V^2}{Z}$



Video

dBu(m) mW( ) 가 .

dBu 600Ω

EBU +4dBu

18dB 22dBu , 20dB 24dBu

600Ω 22dBm

158mW 600Ω

22dBu 158mW(@600Ω)

300Ω<sup>3)</sup> 79mW( 19dBm)

가 22dBu

22dBu가

가

OVU(+4dBu) 85dB SPL

가 OVU 85dB SPL

가

1mW dB SPL

가 97dB SPL/mW<sup>4)</sup> 1mW 97dB SPL

<sup>5)</sup>

80mW 2mW 100dB SPL,

4mW 103dB SPL....

64mW 115dB SPL , 128mW 118dB SPL 가

80mW 116dB SPL 가

116dB SPL Max, OVU

100dB SPL . Dolby Volume 85dB SPL RMS , 103dB SPL Peak(18dB

) .

가 <sup>6)</sup>가 .

, 103~105dBSPL Peak 가 , 85~86dBSPL/mW , 가 , 가 .

.

Apogee Groove ,

Max Output level: 225mW into 30Ω 40mW into 600Ω

가 .

300Ω 가 HD600 80mW 가 , 80mW 116dBSPL Peak 가 , 가 .

.



<https://www.youtube.com/watch?v=xLShpyzwjJs>

| JULIAN KRAUSE                   |                    |                  |              |              |              |              |              |              |                      |                      |                |                |                 |                 |  |
|---------------------------------|--------------------|------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------------|----------------------|----------------|----------------|-----------------|-----------------|--|
| Headphone Output Comparison     | Frequency Response | Output Impedance | Output Power | Output Power | Output Power | Output Power | Output Power | Output Power | THD+N 20 Hz - 20 kHz | THD+N 20 Hz - 20 kHz | Noise Floor    | Noise          | Channel Balance | Crosstalk       |  |
|                                 | 20 Hz - 20 kHz     | @ 300 mV 32 Ohm  | @ 1 kHz      | into 16 Ohm  | into 32 Ohm  | into 150 Ohm | into 300 Ohm | into 600 Ohm | 20 Hz - 20 kHz       | 20 Hz - 20 kHz       | @ minimum gain | @ 0 dBFS = 1 V | @ 10 mV         | @ 10 kHz 300 mV |  |
|                                 | ± dB               | Ohm              | mW           | mW           | mW           | mW           | mW           | mW           | dB                   | dB                   | dBV(A)         | dBV(A)         | ± dB            | dB              |  |
| ASRock P67 Pro3 front           | 2.00               | 80.00            | 2.70         | 4.00         | 4.40         | 3.20         | 2.00         | 2.00         | -77.50               | -78.40               | -92.80         | -92.80         | 0.05            | -44.10          |  |
| ASRock P67 Pro3 rear            | 0.60               | 198.00           | 0.21         | 0.40         | 1.20         | 1.50         | 1.50         | 1.50         | -62.50               | -75.10               | -87.50         | -87.50         | 0.03            | -82.90          |  |
| ASRock Z370 Taichi front        | 0.10               | 170.00           | 3.60         | 6.20         | 11.60        | 10.80        | 8.10         | 8.10         | -87.90               | -90.10               | -90.70         | -90.70         | 0.06            | -58.20          |  |
| ASRock Z370 Taichi rear         | 0.00               | 76.00            | 5.63         | 8.30         | 10.40        | 7.50         | 5.50         | 5.50         | -92.50               | -94.50               | -100.50        | -100.50        | 0.06            | -73.10          |  |
| MSI PRO Z690-A front            | 2.00               | 82.00            | 2.14         | 3.20         | 3.60         | 2.70         | 1.70         | 1.70         | -66.80               | -75.20               | -100.60        | -100.60        | 0.00            | -49.80          |  |
| MSI PRO Z690-A rear             | 2.10               | 81.00            | 2.14         | 3.20         | 3.60         | 2.60         | 1.60         | 1.60         | -66.90               | -75.10               | -100.80        | -100.80        | 0.03            | -75.90          |  |
| Antelope Zen Go Synergy Core    | 0.10               | 27.30            | 36.20        | 60.90        | 63.70        | 46.60        | 25.70        | 25.70        | -88.90               | -98.80               | -111.40        | -111.40        | 0.00            | -50.10          |  |
| Audient EVO 4                   | 0.10               | 22.14            | 14.40        | 21.00        | 24.10        | 16.90        | 10.90        | 10.90        | -81.83               | -95.38               | -103.30        | -103.30        | 0.02            | -78.00          |  |
| Audient iD4 MKII                | 0.10               | 22.30            | 76.31        | 107.20       | 123.30       | 80.00        | 53.80        | 53.80        | -96.50               | -102.60              | -108.30        | -108.30        | 0.00            | -79.90          |  |
| Audient iD14                    | 2.20               | 22.90            | 17.29        | 34.50        | 32.30        | 29.00        | 19.70        | 19.70        | -82.60               | -94.50               | -100.60        | -100.60        | 0.05            | -74.60          |  |
| Audient iD14 MKII               | 0.20               | 22.10            | 70.89        | 112.80       | 83.50        | 75.50        | 40.50        | 40.50        | -96.50               | -100.90              | -113.10        | -113.10        | 0.00            | -78.80          |  |
| Arturia MiniFuse 1 and 2        | 0.10               | 11.20            | 176.40       | 145.80       | 49.30        | 26.50        | 13.70        | 13.70        | -72.80               | -89.60               | -102.60        | -101.60        | 1.50            | -68.10          |  |
| Behringer UM2                   | 0.70               | 10.17            | 13.46        | 17.30        | 11.60        | 7.00         | 3.90         | 3.90         | -79.16               | -85.47               | -110.70        | -92.70         | 2.00            | -66.20          |  |
| Behringer UMC22                 | 0.70               | 10.32            | 13.00        | 16.90        | 11.30        | 6.90         | 3.80         | 3.80         | -79.03               | -86.08               | -109.90        | -92.70         | 1.10            | -63.70          |  |
| Behringer UMC202HD              | 0.80               | 10.30            | 13.92        | 18.00        | 11.60        | 7.00         | 3.90         | 3.90         | -69.09               | -83.97               | -100.60        | -100.50        | 0.80            | -67.20          |  |
| Behringer UMC404HD              | 0.60               | 22.00            | 16.58        | 17.10        | 8.10         | 4.40         | 2.40         | 2.40         | -75.90               | -76.30               | -103.20        | -100.10        | 1.80            | -80.00          |  |
| Black Lion Audio Revolution 2x2 | 0.20               | 2.10             | 26.41        | 101.30       | 75.30        | 39.70        | 20.70        | 20.70        | -84.60               | -93.70               | -97.70         | -97.90         | 6.70            | -57.40          |  |
| Elgato WAVE XLR                 | 0.50               | 1.50             | 72.90        | 39.90        | 9.00         | 4.60         | 2.30         | 2.30         | -74.50               | -80.50               | -98.10         | -98.10         | 0.00            | -55.90          |  |
| Focusrite Clarett 2Pre USB      | 0.50               | 5.30             | 87.03        | 172.60       | 144.80       | 74.90        | 38.10        | 38.10        | -50.30               | -91.40               | -106.20        | -105.50        | 1.30            | -39.50          |  |
| Focusrite Clarett+ 2Pre         | 0.20               | 5.20             | 87.03        | 162.50       | 146.00       | 75.50        | 38.60        | 38.60        | -88.80               | -100.90              | -106.90        | -106.60        | 5.00            | -58.00          |  |
| Focusrite Scarlett 2i2 Gen 2    | 0.20               | 10.23            | 12.38        | 20.00        | 28.00        | 21.70        | 11.40        | 11.40        | -75.30               | -95.40               | -102.70        | -101.70        | 1.20            | -60.60          |  |
| Focusrite Scarlett 2i2 Gen 3    | 0.50               | 0.31             | 28.48        | 31.90        | 15.20        | 8.00         | 4.70         | 4.70         | -48.40               | -84.55               | -103.30        | -102.70        | 0.50            | -38.10          |  |
| Focusrite Scarlett Solo Gen 3   | 0.40               | 0.35             | 30.02        | 31.90        | 14.80        | 8.40         | 4.50         | 4.50         | -48.42               | -86.15               | -103.30        | -102.60        | 0.90            | -39.00          |  |
| M-AUDIO air 192   4             | 0.20               | 10.15            | 48.73        | 41.30        | 14.20        | 7.50         | 4.00         | 4.00         | -81.32               | -81.56               | -101.20        | -101.50        | 2.70            | -79.40          |  |
| M-AUDIO M-Track Solo and Duo    | 1.00               | 10.10            | 25.60        | 22.60        | 7.30         | 3.90         | 2.00         | 2.00         | -69.88               | -81.75               | -103.40        | -95.20         | 0.50            | -79.20          |  |
| MOTU M2                         | 0.20               | 0.06             | 13.57        | 21.60        | 29.10        | 23.10        | 14.60        | 14.60        | -93.17               | -101.76              | -109.20        | -109.20        | 0.01            | -72.90          |  |
| MOTU UltraLite-mk5              | 0.10               | 0.17             | 24.96        | 50.20        | 85.90        | 54.10        | 27.10        | 27.10        | -93.50               | -103.90              | -109.10        | -104.90        | 0.00            | -55.70          |  |
| NI Komplete Audio 1 and 2       | 0.20               | 10.21            | 65.66        | 50.70        | 16.50        | 8.90         | 4.50         | 4.50         | -72.59               | -88.40               | -104.70        | -103.50        | 0.50            | -71.50          |  |
| PreSonus AudioBox GO            | 0.10               | 22.20            | 28.90        | 36.50        | 17.70        | 10.20        | 5.50         | 5.50         | -82.50               | -83.50               | -101.90        | -100.10        | 0.70            | -79.90          |  |
| PreSonus Audiobox USB 96        | 4.40               | 0.56             | 77.01        | 45.80        | 11.00        | 5.60         | 2.90         | 2.90         | -62.30               | -79.40               | -98.20         | -98.90         | 1.30            | -69.00          |  |
| PreSonus Studio 24c             | 0.20               | 22.20            | 50.63        | 51.20        | 23.60        | 13.50        | 7.20         | 7.20         | -92.70               | -96.90               | -108.30        | -105.70        | 1.00            | -75.60          |  |
| Rode AI-1                       | 0.80               | 4.25             | 198.03       | 243.30       | 113.70       | 61.30        | 31.70        | 31.70        | -81.00               | -85.50               | -94.90         | -96.20         | 2.50            | -83.50          |  |
| Solid State Logic SSL 2         | 0.20               | 10.87            | 51.76        | 90.30        | 35.30        | 19.00        | 9.80         | 9.80         | -54.87               | -94.95               | -111.90        | -108.20        | 0.70            | -54.80          |  |
| Steinberg UR22C                 | 0.40               | 90.68            | 8.46         | 13.00        | 15.80        | 12.00        | 7.70         | 7.70         | -92.50               | -95.82               | -110.90        | -105.50        | 1.20            | -79.00          |  |
| Steinberg UR22 MKII             | 0.40               | 91.00            | 3.78         | 5.80         | 7.00         | 5.30         | 3.40         | 3.40         | -86.86               | -87.24               | -112.20        | -104.70        | 0.30            | -81.40          |  |
| Tascam US-2x2HR                 | 0.80               | 66.60            | 9.75         | 16.20        | 27.20        | 24.00        | 17.20        | 17.20        | -63.20               | -96.40               | -115.20        | -109.30        | 1.90            | -61.30          |  |
| Universal Audio Volt 2 and 276  | 0.20               | 10.90            | 93.03        | 107.00       | 54.20        | 31.00        | 16.50        | 16.50        | -95.70               | -99.20               | -107.40        | -105.50        | 1.10            | -76.60          |  |
| RME Babyface Pro FS             | 0.10               | 10.13            | 33.76        | 61.30        | 67.40        | 35.90        | 18.70        | 18.70        | -93.90               | -100.60              | -112.30        | -112.30        | 0.00            | -77.40          |  |
| RME Babyface Pro FS 3.5 mm      | 0.10               | 0.25             | 150.16       | 88.20        | 19.00        | 9.50         | 4.80         | 4.80         | -96.70               | -105.60              | -115.50        | -115.50        | 0.00            | -75.60          |  |

1)

2)

가 가

3.5mm TRS      1/4 " TRS

3)

HD600

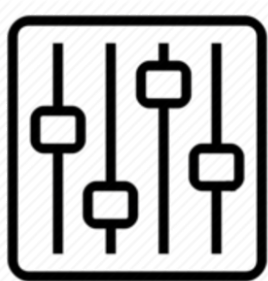
4)

HD600, DT150

5)

6)

10dB



<http://wiki.homerecz.com>

From:  
<https://wiki.homerecz.com/> -

Last update: **2024/03/28**

: (admin@homerecz.com)