# Chart of Gain – dB Correlations

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Getting a Handle on dB values** | | | | |
| **Gain Increase Factor** | **dB Alteration** | **Gain Reduction Factor** | **dB Alteration** | **Reduction on 32767 scale** |
| **1.0** | **0.0**dB | **1.0** | **0.0**dB | 32767 |
| **1.5** | **3.5**dB | **0.7** | **-3.1**dB | 22936 |
| **2.0** | **6.0**dB | **0.5** | **-6.0**dB | 16383 |
| **2.5** | **8.0**dB | **0.4** | **-8.0**dB | 13106 |
| **3.0** | **9.5**dB | **0.35** | **-9.1**dB | 11468 |
| **3.5** | **10.9**dB | **0.3** | **-10.5**dB | 9830 |
| **4.0** | **12.0**dB | **0.25** | **-12.0**dB | 8191 |
| **8.0** | **18.1**dB | **0.125** | **-18.1**dB | 4096 |
| **16** | **24.1**dB | **0.0625** | **-24.1**dB | 2047 |
| **32** | **30.1**dB | **0.03125** | **-30.1**dB | 1024 |
| **64** | **36.1**dB | **0.015626** | **-36.1**dB | 512 |
| **128** | **42.1**dB | **0.0078125** | **-42.1**dB | 256 |
| **0.0** | **-96**dB (i.e., zero level) | | | 0 |

cdpcircs72.jpg  Last Updated: 2 January 2007  
   Layout revised: 30 July 2015