

LOG10 and dB Maths Functions

Two useful math functions:

The common logarithm function. The natural logarithm of x divided by the natural logarithm of 10.

[Logarithms huh?](#)

... and the dB function to calculate the logarithmic ratio between two powers (which requires the common log function).

Both return Floats as the result

Syntax:

```
=LOG10(expression)
```

```
=dB(Power1,Power2)
```

Examples:

```
x=LOG10(2.88)
```

```
=dB(1,0.001)
```

Code:

```
'Common Log - the natural log of x divided by the natural Log of 10
Function Log10(x As Float) As Float
    Log10=Log(x)/2.302585093
End Function
'calculate ratio between two powers as decibels, P1 & P2 are in Watts.
For dBm, specify P2=0.001
Function dB(P1 As Float,P2 As Float) As Float
    dB=10*Log10(P1/P2)
End Function
```

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