



EEGer Tech Note-Freqset

This tech note explains how the EEGer review ratio frequency bands/titles are specified and changeable in a text editor (like notepad). A future enhancement will be a “nice” user interface to the change logic.

The key user file for this is **C:\EEGer\Preferences\Settings\freqset.ini**.

This file is first located and parsed by EEGer to see if there are user-specified changes to be made to the default settings. **If there are errors in the file, the default values are set.**

The default frequency band values are:

<i>Low freq</i>	<i>High freq</i>	<i>Name</i>	<i>Code</i>
4	7.5	Theta	T
7.5	12	Alpha	A
12	18	Beta	B
22	36	HiBeta	HiB

And the default ratios to display/print are:

<i>Numerator</i>	<i>Denominator</i>
T	A
T	B
A	B
B	HiB

The file contents are shown here:

```
# this defines the frequency bands filtered and ratios printed for the review option
# please note that this format is NOT very flexible nor is the software decoder very forgiving
# all issues resulting are YOURS!
# uncomment lines below

#[freqset]
#1=4,7.5,Theta,T
#2=7.5,12,Alpha,A
#3=12,18,Beta,B
#4=22,36,HiBeta,HiB

#[ratioset]
#1=T,A
#2=T,B
#3=A,B
#4=B,HiB
```

The # character in the first line is a comment marker. There are two groups of settings. The first group (**freqset**) specifies the frequency bands, the band titles, and the “code” used to annotate the data. The reason the code is used is to minimize the width of the generated text line (which otherwise wraps around and is confusing to read). The second group (**ratioset**) specifies the ratios to display.

The data in these two groups controls the output of the Review Ratio screen:

Frequency bands										
T = 4.0 - 7.5 A = 7.5 - 12.0 B = 12.0 - 18.0 HiB = 22.0 - 36.0										
Period 1	1	site= C3-A1	eyes	unk	30.0	seconds				
T=15.0		A=15.2	B=15.9	HiB=16.4	T/A=0.99		T/B=0.95	A/B=0.96	B/HiB=0.97	
Period 2	2	site= C3-A1	eyes	unk	30.0	seconds				
T=13.0		A=15.1	B=14.3	HiB=12.4	T/A=0.86		T/B=0.91	A/B=1.06	B/HiB=1.15	
Period 3	3	site= C3-A1	eyes	unk	30.0	seconds				
T=13.3		A=12.6	B=10.7	HiB=10.0	T/A=1.06		T/B=1.24	A/B=1.17	B/HiB=1.07	
Period 4	4	site= C4-A2	eyes	unk	30.0	seconds				
T=10.8		A=11.2	B=10.1	HiB=9.8	T/A=0.97		T/B=1.07	A/B=1.11	B/HiB=1.04	
Period 5	5	site= C4-A2	eyes	unk	30.0	seconds				
T=14.6		A=14.5	B=13.2	HiB=12.3	T/A=1.00		T/B=1.11	A/B=1.10	B/HiB=1.07	

Show Threshold Evts
 Show Scale Evts
 Show Freq Evts

The entire **ratioset** and/or **freqset** group needs to be UNcommented if changes are to be made. Here is an example of a modified freqset.ini file where the frequency bands and ratios have been changed:

```
# this defines the frequency bands filtered and ratios printed for the review option
# please note that this format is NOT very flexible nor is the software decoder very forgiving
# all issues resulting are YOURS!
# uncomment lines below

[freqset]
1=4,7,Theta,T
2=8,11,Alpha,A
3=12,18,Beta,B
4=22,38,HiBeta,HB

[ratioset]
1=T,A
2=T,B
3=A,B
4=B,HB
5=T/HB
```

Please note that EEGer bandpass filters are specified at the corners (of the flat pass region) and not at the half-power points like some other programs. The actual bandpass graphs are shown during a Plan Session as the frequency limits are changed.

