




## New and Improved *SleepSign*™ for Animals

Improved scoring & reporting throughput, multi animal staging, FFT algorithm

**Just Released!** The newest version of [SleepSign for Animal software](#) by  KISSEI software features significantly easier automatic scoring for beginners and more flexibility for expert users.

Registered users, request your [free upgrade today!](#)

**What's new:** Easy and flexible automatic scoring      Comprehensive analysis parameter export

### Easy and flexible automatic scoring

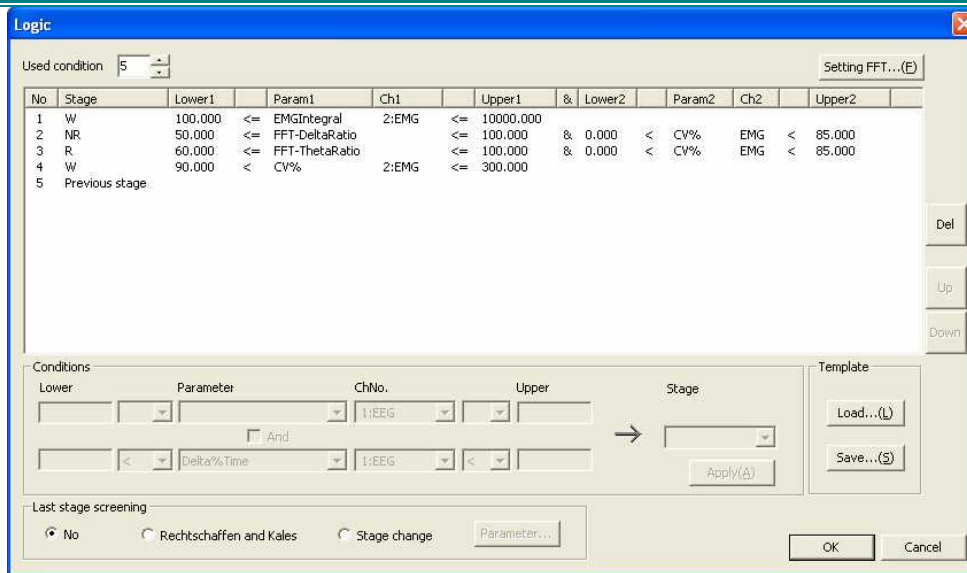
SleepSign's new automatic scoring offers the following new parameters:

- FFT band power (e.g. power of delta, theta)
- FFT band ratio (e.g. ratio of delta / delta + theta)
- CV (Coefficient of Variance)
- Activity (if a signal is available)
- Temperature
- And more!

These new automatic scoring parameters make setup as easy as 1, 2, 3:

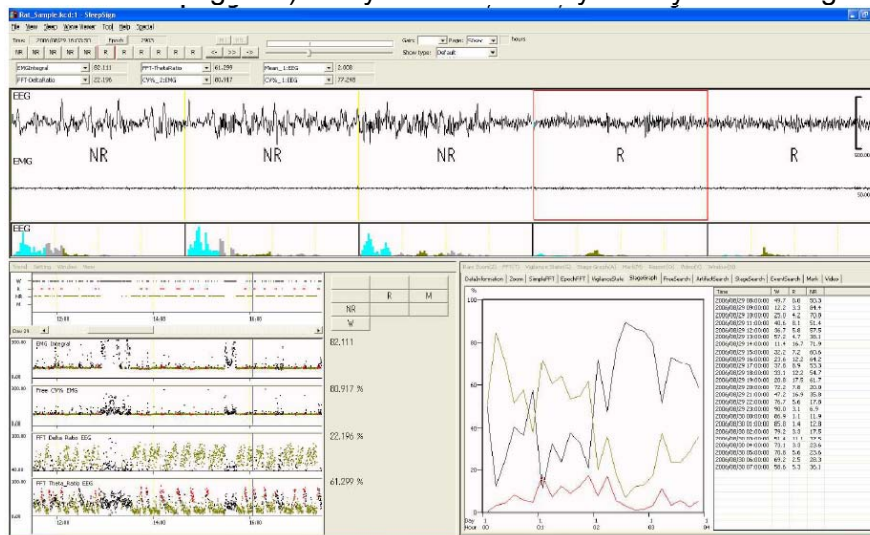
1. **Set up FFT**—Set up FFT parameters and define the frequency bands and the denominator band.
  - Select **Sleep > Screening**, click Logic button and then click Setting FFT in the Logic dialog.

2. **Set up the logic**—Set up the parameters and threshold criteria.
  - The following dialog shows the setup criteria of a simple rodent sleep scoring. Customize the criteria—including EMG integral—for your recording condition by adding more stage categories (light sleep, deep sleep, etc.), conditions, parameters (% delta and % theta based on the waveform recognition, activity, etc).



### 3. Score the data

- Click the Stage/Parameter button, and the software starts scoring. You can always modify the criteria using the **Setting FFT** menu (select **Sleep > Screening**, click the Logic button and then click Setting FFT) and you can manually modify the scoring.



### Comprehensive analysis parameter export

You can export all analysis parameters (stage graph, vigilance state parameters, average FFT, etc.) at the same time with a single click. This feature will accelerate your reporting process.

In the **Animal report** dialog (select **Report > Animal report**), specify time range and time bin, check parameters to export, and click **Output**. The parameters will be exported as CSV files in the specified folder.

**Animal report**

Start(<=) Day: 29 Time: 8:00:00 (<=)End Day: 30 Time: 7:59:50  
 Epoch: 0 Epoch: 8639

Select stage: W, R, NR, M  
 Artifact excludes for FFT

Select folder:  Output as one Excel book  
 C:\Documents and Settings\63887\My Documents\Rat\_Sample.csv

Output object: Set Episode length

StageGraph Duration: 60 min.  
 Graph unit: X-axis:  0 origin  Real time  
 Y-axis:  %  Time

Dose latency  
 1st dosing: 2006/08/29 13:00:00  
 2nd dosing: 2006/08/29 15:00:00  
 3rd dosing: 2006/08/29 23:00:00

Vigilance state[Episode transition]  
 Vigilance state[Episode count per duration]  
 Trimming:  Manual  Auto

AverageFFT[Per stages]  
 AverageFFT[Disregard Stages]  
 Select channel: 1:EEG

TrendGraph  ContinuousFFT  
 \*Output trend data to be shown on the trend area. [1:EEG]

Output Close

Enjoy better usability and throughput with the new [SleepSign](#)\*

Request your [free upgrade CD](#) today!

\* SleepSign for Animal R2.13.263.807



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