

## AudioSpike - Version History

### Version 1.2.3.4, Date: 26.08.2020

- bugfixes for in-situ-calibration
- bugfixes for spectral calibration (could not be started any more)

### Version 1.2.2.4, Date: 21.07.2020

- Bugfix: RepetitionIndex in Spikes was stored with wrong value (exactly 1 too high)

### Version 1.2.2.3, Date: 20.07.2020

- Bugfix for highlighting current stimulus in stimulus list in random mode (randomization was correct, only highlighting was wrong)
- for predefined cluster windows you can specify now Xmin, Xmax, Ymin, Ymax for the axes

### Version 1.2.2.2, Date: 16.06.2020

- Bugfix for bubble plot, when using 'Response' for y-axis: plot was not updated when changing PSTH selection

### Version 1.2.2.1, Date: 08.06.2020

- Bugfix for spike selection
- Bugfix for randomly "vanishing" license

### Version 1.2.2.0, Date: 06.02.2020

- Bugfix for plotting many (!) spikes
- Bugfix for free search: thresholds loaded from ini on start

### Version 1.2.1.0, Date: 24.01.2020

- Bugfix for loading FFT filters
- setup now signed

#### **Version 1.2.0.2, Date: 12.11.2019**

- Bugfixes in settings and channel enumeration
- setup and executables now signed

#### **Version 1.2.0.1, Date: 25.10.2019**

- Minor bugfixes for In-Situ calibration

#### **Version 1.2.0.0, Date: 14.10.2019**

- New level calibration mode using acoustic calibrator and reference microphone (instead of level meter)
- New batch mode
- Option for saving recordings of insitu microphones
- Post-hoc individual adjustment of detection threshold per epoche
- Separate options for reloading epoches (pcm) with and without re-scanning of spikes
- Option for plotting only spikes of current epoche
- Option for starting in In-Situ-Mode as default
- New plots 'Period-Histogram' and 'Vector-Strength-Frequency-Plot' for measurements with frequency as parameter
- Option for loading different configurations (hardware, filters, calibration values)
- Bugfix in 'Append' mode: on reloading the repetition indices were not calculated correct Reload old measurements, reload the epoches (pcm) and save again to fix the bug.
- GUI options: optional free positioning of subwindows, different GUI styles
- Bugfix in audiospike\_loadresult.m for loading results from paths containing blanks

#### **Version 1.1.4.4, Date: 15.07.2019**

- Bugfix in AudioSpike2MAT.exe for converting XML results to MAT files
- Online licenses available
- minor internal bugfixes

#### **Version 1.1.4.3, Date: 22.11.2018**

- free search automatically clears all spikes every 10 seconds
- memory usage optimization

#### **Version 1.1.4.2, Date: 21.11.2018**

- new tool function for adjusting the spike length within result files
- file cache added for tone complexes used in free search

#### **Version 1.1.4.0, Date: 22.10.2018**

- PSTH plots show current binsize and let user set binsize
- Additional Stimulus-PSTH plot showing separate PSTH for each configured stimulus.
- Additional parameter plot: Response strength can be selected as Y-axis parameter

#### **Version 1.1.3.1, Date: 13.09.2018**

- changes in freesearch noise generation (done only if needed)
- bugfix in spectral calibration (painting microphone signal could crash calibration routine)
- linking changed (more runtime libraries used)

#### **Version 1.1.3.0, Date: 06.09.2018**

- bugfix in free search
- bugfix in in-situ startup procedure
- workaround for MERGING-HORUS soundcard

#### **Version 1.1.2.1, Date: 29.08.2018**

- bugfixes for 'add' mode for adding new levels to multichannel measurements

#### **Version 1.1.2.0, Date: 28.08.2018**

- minor bugfixes
- added 'Auto' option for the template path
- manual extended (description of adding new levels to an existing result with append mode)

#### **Version 1.1.1.0, Date: 28.06.2018**

- bugfix in highpass filters (very low frequencies came through)
- when editing highpass or bandpass filter current values are default in editor

#### **Version 1.1.0.0, Date: 14.06.2018**

- first version of in-situ calibration added
- minor bugfixes and enhancements
- compiler change

#### **Version 1.0.6.0, Date: 17.05.2018**

- spectral calibration: smoothing in log view done in fractions of octaves
- spectral calibration: smoothing and freehand-drawing of filters only enabled in expert mode
- white noise replaced by Schroeder phase tone complex in spectral calibration, level calibration and free search.
- option added to manual search to show only active bubble
- current mouse position in x-y-plot displayed in manual search
- optional highpass filter added to audio outputs
- optional bandpass filter added to electrode inputs
- clipping detector added to electrode inputs

#### **Version 1.0.5.3, Date: 05.04.2018**

- missing runtime libraries added to setup

#### **Version 1.0.5.2, Date: 19.03.2018**

- bugfix in free search

#### **Version 1.0.5.1, Date: 26.01.2018**

- bugfixes

#### **Version 1.0.5.0, Date: 24.01.2018**

- Tools for reading XML results to MATLAB/Octave rewritten
- New setting "Always save additional MAT file" to save results as MAT file as well

#### **Version 1.0.4.1, Date: 19.12.2017**

- New setting "Allow Multiple Audiospike Instances" to start multiple AudioSpike windows in settings dialog
- New "PSTH-per-bubble" plot when clicking a bubble

#### **Version 1.0.4.0, Date: 15.12.2017**

- Scrolling through epoches now with a scrollbar

- SpikeGroup (selection rectangle index) now saved with spikes

#### **Version 1.0.3.4, Date: 05.12.2017**

- Internal minor bugfixes and improvements

#### **Version 1.0.3.1, Date: 27.10.2017**

- Bugfix (new memory management) for measurements with many repetitions and/or stimuli
- Bugfix for channel selection in free search mode
- Smaller adjustments in settings dialog
- Update of manual and example

#### **Version 1.0.1.1, Date: 16.10.2017**

- Bubble plot (parameter plot) additionally shows number of spikes and spike rate per repetition

#### **Version 1.0.1.0, Date: 06.10.2017**

- (Default) downsampling factor now adjustable in settings dialog
- SpikeLength and PreThreshold now stored and loaded from Settings-node in measurement XML (struct)

#### **Version 1.0.0.5, Date: 18.09.2017**

- bugfix search mode

#### **Version 1.0.0.4, Date: 07.09.2017**

- bugfix in trigger test

#### **Version 1.0.0.2, Date: 07.08.2017**

- first release