SoundMexPro - Version History

Version 2.7.9.6, Date: 12.02.2021
- support for Octave 6.1 added

Version 2.7.8.6, Date: 28.08.2020
- new parameter 'recfileclose' for command 'recpause'

Version 2.7.7.6, Date: 24.08.2020
- bugfix for timing problems on ('pause', 'value', 0) on some computers

Version 2.7.6.6, Date: 22.05.2020
- bugfix for init parameter 'reccompensatelatency'

Version 2.7.5.6, Date: 17.02.2020
- missing runtime library added to setup
- more bugfixes for Octave

Version 2.7.5.5, Date: 10.02.2020
- Support for Octave 5.2.0.0 added
- more bugfixes for Octave
- Cursor display in trackview rewritten

Version 2.7.4.3, Date: 28.01.2020
- bugfix for Octave (crashed on some machines)

Version 2.7.3.3, Date: 05.12.2019
- bugfix: all commands work again with DEMO license
- setup and executables now signed

**Version 2.7.2.3, Date: 10.10.2019**
- bugfix in GUI when using NO output tracks at all (input only)

**Version 2.7.1.3, Date: 09.07.2019**
- Support for Octave 5.1.0.0 added
- Internal buffersize for 'loadfile' lowered. Can be adjusted now with new 'init' parameter 'filereadbufsize'

**Version 2.7.0.3, Date: 30.04.2019**
- support for online licenses as an alternative to dongle licenses added
- fixed a bug with overflowing integer in position returned by command 'recgetdata'

**Version 2.6.4.2, Date: 29.11.2018**
- new option 'reccompensatelaytency' for command 'init'. If set to 1 then the latency of the ASIO driver is compensated in recorded files. NOTE: this option uses the latency retrieved from the driver itself. Depending in a particular driver this might lead to perfectly 'aligned' record files that contain exactly the played samples - or not!
- command 'getproperties' now additionally returns input latency and output latency as retrieved from driver.
- process priority of SoundMexPro set to "HIGH" on startup (processing thread still has realtime priority)
- Support for Octave 4.4.1 added

**Version 2.6.2.2, Date: 21.08.2018**
- bugfix for commands 'version': now returns all four parts of version number again

**Version 2.6.1.2, Date: 14.08.2018**
- bugfix for commands 'recgetdata' and 'plugingetdata' for recent MATLAB versions (MATLAB did crash)

**Version 2.6.1.1, Date: 14.06.2018**
- new option 'recprocesseddata' to allow harddisk recording of data processed by plugins
- VST plugins compiling bugfix
- bugfixes

**Version 2.6.0.0, Date: 30.05.2018**

- compiler change
- support for Octave 4.4 added
- command 'license' changed
- VST plugin HtVSTEqualizer replaced by HtVSTEq
- many internal bugfixes

**Version 2.5.0.2, Date: 20.03.2018**

- bugfix for horizontal zoom in track view
- track view partially rewritten for better performance
- minor internal bugfixes

**Version 2.4.4.2, Date: 02.10.2017**

- additional VST plugin type 'final' added: 'final' plugins are applied on output channels AFTER applying the MATLAB script plugins, while 'master' plugins are applied BEFORE the MATLAB script plugins
- 'reclength' now can be changed while device is running (but recording to file must not be active)

**Version 2.4.4.1, Date: 09.08.2017**

- extended command 'showerror': when setting it's value to 2, then each failing command calls 'error' in MATLAB

**Version 2.4.3.0, Date: 16.05.2017**

- Mixer now shows current peak level in dB fullscale
- Bugfix in command parser

**Version 2.4.2.0, Date: 20.04.2017**

- bugfix for command 'startthreshold': output stayed muted after threshold exceeded
<table>
<thead>
<tr>
<th>Version 2.4.1.0, Date: 25.01.2017</th>
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<tbody>
<tr>
<td>• bugfix for command 'recthreshold': 'mode' 0 did not work</td>
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<tr>
<td>• bugfix for command 'loadfile': if a length was specified &gt; (filesize - startoffset) with loopcount 1, then the file was NOT looped internal as stated in help.</td>
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<thead>
<tr>
<th>Version 2.4.0.0, Date: 22.12.2016</th>
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<tbody>
<tr>
<td>• Support for Octave 64bit</td>
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<tr>
<td>• new parameter for 'recdownsamplefactor' for command 'init': simple downsampling of recording data supported for data written to disk or retrieved via 'recgetdata'</td>
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<td>• new parameter for 'recfiledisable' for command 'init': disables recording to file completely. No recording files will be created at all.</td>
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<td>• new advanced example &quot;Threshold Driven Playback&quot;</td>
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<tr>
<td>• internal bugfixes</td>
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<tr>
<td>• runtime libraries added. SoundMإخPro now needs the following runtime libraries (shipped in BIN directory): borindmn.dll, cc32100mt.dll, rtl140.bpl, rtl140.de, vcl140.bpl, vcl140.de, vclx140.bpl, vclx140.de Be sure they are in BIN path or Windows search path!</td>
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<tr>
<th>Version 2.3.3.8, Date: 10.10.2016</th>
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<tr>
<td>• bugfix for usage on Windows versions before Windows Vista</td>
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<td>• bugfix for using ramps with loopcount = 0 (endless loop)</td>
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<tr>
<th>Version 2.3.2.7, Date: 17.08.2016</th>
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<tr>
<td>• bugfix for return values. Don't use 2.3.2.6!</td>
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<tr>
<th>Version 2.3.2.6, Date: 15.08.2016</th>
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<tr>
<td>• bugfix for Octave 4.01 and higher: first return value was not set correctly</td>
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<th>Version 2.3.2.5, Date: 02.06.2016</th>
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<tr>
<td>• new parameter 'forcelic' for command 'init' to force taking over a license locked by another computer</td>
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<tr>
<td>• bugfix for 'loadmem' with loopcount 0 (endless loop) and startoffset &gt; 0</td>
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<th>Version 2.3.1.5, Date: 05.04.2016</th>
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<tr>
<td>• new command 'license' returning license information for dongle(s)</td>
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</table>
- new parameter 'pluginuserdatasize' for command 'init' for user defined size of user data in script plugins
- Adjusted many tutorials and examples for newer MATLAB versions
- bugfix for 'init': license type is returned correctly again

**Version 2.3.0.5, Date: 14.03.2016**
- rudimental low level MIDI commands added for sending MIDI messages to a MIDI device
- example added for controlling RME TotalMix via MIDI commands
- bugfix: sparse matrices as audio data could crash SoundMexPro: now a sparse matrices are detected and a corresponding error message is generated

**Version 2.2.2.4, Date: 21.01.2016**
- minor bugfixes

**Version 2.2.1.4, Date: 28.10.2015**
- performance enhancements in WDM mode
- minor bugfixes

**Version 2.2.0.3, Date: 06.10.2015**
- driver model 'wdm' rewritten for more stability and forced 24/32-bit output. The WDM mode now uses new Windows API and is thus only available for Windows Vista and above.
- more bugfixes for plotting wave data in track view

**Version 2.1.3.3, Date: 10.09.2015**
- bugfix for plotting vector wave data in track view
- bugfix for hang on init on some machines

**Version 2.1.2.3, Date: 06.08.2015**
- minor internal changes

**Version 2.1.1.3, Date: 28.07.2015**
• Bugfix for command 'setbutton' for newer MATLAB versions

Version 2.1.0.2, Date: 22.07.2015
• Bugfix for showing wavedata (showtracks)
• new parameter 'pluginforcejvm' for command 'init'. This will be needed if GUI commands are used in MATLAB script plugins.
• enhanced performance for MATLAB script plugins.
• commands 'cleartrack' and 'cleardata' now allowed while playing, but only if 'start' was called with 'length' set to 0.'

Version 2.0.3.2, Date: 02.07.2015
• Bugfix for compiled DSP plugins

Version 2.0.2.2, Date: 10.06.2015
• Support for GNU Octave 3.8 added
• Bugfix for recording VST host

Version 2.0.1.1, Date: 04.06.2015
• Support for GNU Octave added
• stft.m and stftinit.m renamed to smp_stft.m and smp_stftinit.m for GNU Octave compatibility
• tutorials and examples adjusted for GNU Octave

Version 2.0.0.0, Date: 04.05.2015
• New commands:
  • channelname, trackname, recname: symbolic names can be set for tracks, output and input channels and these names can be used in all commands for the parameters 'track', 'output' and 'input respectively besides their indices
  • recvolume: sets recording gain
  • tracklen: returns total length of loaded data in tracks
  • cleartrack: clears data in particular tracks
• New features for loading sound data (file or vector):
  • object gains: each loaded object can get it's own gain
  • crossfading between loaded sound objects
  • object ramps: each loaded object can have own volume ramps
  • loop ramps: each loaded object can have own volume ramps for each loop
  • loop-crossfade: each loaded object can do a crossfade when looping
• Other new features:
  • VST plugins for recording channels now supported
- Support for compiled MATLAB script DSP plugins
- Most commands now allowed while sound output is already running
- **New GUI features:**
  - Update of wavedata in trackview while running allowed
  - Ctrl + left mouse button sets playback position in trackview
  - Mixer now has a variable width
- **Changes in default behaviour:**
  - Default value for parameter ‘autocleanup’ in command ‘init’ is now 0
  - Default value for parameter ‘wavedata in commands ‘showtracks’ and ‘updatetracks’ is now 1
  - Default GUI (command ‘show’) was removed. Command ‘show’ now is identical to ‘showmixer’

**Version 1.5.8.16, Date: 06.01.2015**
- bugfixes in volume and trackvolume
- bugfix mixer GUI for many tracks/channels

**Version 1.5.7.16, Date: 04.11.2014**
- bugfix in sfft skripts for spectral script driven plugins

**Version 1.5.6.16, Date: 31.07.2014**
- bugfix for mixer GUI
- bugfix for problems with Asio4All

**Version 1.5.5.16, Date: 05.02.2014**
- bugfixes for quiet option of command ‘init’

**Version 1.5.5.15, Date: 04.02.2014**
- new parameter ‘quiet’ for command ‘init’ to supress printing of version information to workspace
- soundmexpro.dll for MATLAB versions older than 7.1 now renamed to soundmexpro.old.dll to avoid ‘shadowing’ messages in workspace by default. Users of old MATLAB versions will have to rename this DLL.
- bugfixes for command ‘setbutton’

**Version 1.5.4.13, Date: 12.08.2013**
- bugfix in command ‘iostatus’: now duplicates for input are allowed to map one input to multiple tracks
- default value of parameter ‘length’ changed to 0 (endless recording) if no output channels used at all

**Version 1.5.3.13, Date: 19.02.2013**

- change for command ‘volume’: now volume is applied directly before buffer is passed to soundcard. Thus the latency of the new volume to be audible does not depend on number of buffers (see command ‘init’). NOTE: this does NOT apply for ‘trackvolume’. trackvolume has to be applied within buffers because plugins may do costly calculations AFTER the trackvolume and thus trackvolume has to be applied in buffered audio data!
- new parameters ‘tracks’, ‘output’ and ‘inputs’ for command ‘showmixer’ to hide groups of mixer sliders
- bugfix for command ‘getdriverstatus’

**Version 1.5.2.13, Date: 02.01.2013**

- bugfixes for WDM mode in ‘start’ (samples missing) and ‘wait’ (returned too early)

**Version 1.5.1.13, Date: 01.12.2012**

- bugfixes in HtVstEqualizer
- bugfix VST host for parameter names containing blanks

**Version 1.5.0.13, Date: 01.07.2012**

- new commands ‘setdrivermodel’ and ‘getdrivermodel’ for ‘wdm’ mode

**Version 1.4.5.13, Date: 13.01.2012**

- bugfix in VST host of SoundMexPro
- bugfix in error handling

**Version 1.4.3.12, Date: 14.11.2011**

- new command ‘startthreshold’ and corresponding tutorial added
- fix for buggy sound card drivers (e.g. M-Audio Delta, error ‘C++-Exception’ on ‘init’)
Version 1.4.1.12, Date: 07.09.2011

- bugfix for MATLAB-script-plugin interface (error 'mpluginmex' not found)

Version 1.4.0.12, Date: 06.09.2011

- recursive wiring for VST plugins
- thread handling for VST plugins enhanced
- new parameter 'vstthreadpriority' for command 'init'
- performance of VST convolver plugin enhanced
- bugfix (EAccessViolation in 'init' on some 64bit systems)
- bugfix (command 'about' caused access violation)

Version 1.3.5.12, Date: 18.4.2011

- 'numbufs' supports 1 as value.
- new chapter 'Buffer configuration' in manual.

Version 1.3.4.12, Date: 16.02.11

- new feature 'file2file'-operation with new parameters 'file2file' and 'f2fbufsize' for command 'init' and new command 'f2ffilename'
- new tutorial t_11a_file2file.m showing usage of 'file2file'-operation
- new command 'debugfilename' for setting filenames of audio debug output
- bugfix in command 'recpause' (did return wrong recpause status)
- help for recpause extended (file closing)
- manual: description of VST plugin usage extended and tutorial added

Version 1.3.3.12, Date: 25.10.10

- VST host now multi-threading capable to make use of multi-core processors
- examples and tutorials adjusted to use global settings (see set_driver_channels.m)
- minor bugfixes

Version 1.3.2.12, Date: 21.06.10

- minor bugfixes
- extended error handling on startup

Version 1.3.1.11, Date: 07.06.10
### Version 1.3.0.10, Date: 12.03.10

- New communication between MATLAB and SoundMexPro using interprocess communication to support 64-bit MATLAB
- Bug fixes for MATLAB deadlock on start, if device is in use
- Bug fix for situations where more recording than playback channels are used
- New example: Bekesy-Tracking
- New parameter 'plugintimeout' for command 'init'

### Version 1.2.0.8, Date: 05.02.10

- Maintenance update with many minor bug fixes
- Command parser rewritten

### Version 1.1.3.7, Date: 20.11.09

- Bug fix for MATLAB plugins for Windows Vista and Windows 7
- Bug fix for initialization without software buffering ("numbufs", 0" in 'init' command)
- Bug fix in command 'reclength': return value was not correct, now correct value(s) are returned.
- New command 'cliptreshold'.
- New argument 'pause' for command 'start' for pausing device automatically after playback has finished (rather than stopping it)
- New argument 'mode' for command 'wait' (waiting for data output or device stop respectively)
- Trackview extended: optional visualization of loaded wave data, new parameter 'wavedata' for commands 'showtracks' and 'updatetracks'. NOTE: this feature is in BETA-state: use with care!!

### Version 1.1.2.6, Date: 03.09.09

- New argument 'logfile' for command init for debugging
- New value 'all' for command 'init' parameters 'input' and 'output' to use all available channels.
- Command 'playposition' now also sets current playback position in pause mode.
- New arguments 'startoffset' and 'length' for command 'loadfile'. Important note: the meaning of argument 'fileoffset' has changed slightly!
- New argument 'startoffset' for command 'loadmem'
- Bug fix in command 'iostatus': Important note: check your scripts that use 'iostatus'. The mapping was not as described here. If the syntax was used with same number of inputs and tracks n, then always the first n inputs were used, not the specified ones.
- Bug fixes in trackview
- Bug fix in command 'loadfile'
new tool scripts in BIN-directory (soundmexpro_showdevs.m, soundmexpro_showcfg.m soundmexpro_trackmap.m) for hardware/configuration checking and setup. Very useful!
new tutorial t_02b_config_tools.m added for the new tool scripts
tutorial adjusted for new commands/arguments, examples moved within tutorials
manual restructured and extended
more internal minor bugfixes
removed path message boxes from SoundDllProLoader

Version 1.1.1.5, Date: 29.06.09
- new commands 'trackmute', 'channelmute', 'recmute'
- new commands 'tracksolo', 'channelsolo', 'recsolo'
- new command 'resetclipcount',
- additional return value for command 'clipcount' (now track clipping is returned as well)
- new commands 'showmixer' and 'hidemixer'
- new arguments for command 'showtracks' and 'show'
- track visualization improved
- new example sine_generator.m: online sine generator with variable frequency

Version 1.1.0.5, Date: 17.04.09
- additional bugfix for loading required DLL ("Cannot load required library SOUNDDLLPRO.DLL")

Version 1.1.0.4, Date: 16.04.09
- bugfix for loading required DLL ("Cannot load required library SOUNDDLLPRO.DLL")

Version 1.1.0.3, Date: 16.04.09
- new commands 'showtracks', 'hidetracks' and 'updatetracks' for showing file/ vector load and playback in all tracks
- new application SoundDllProLoader.exe for using SoundMexPro without MATLAB
- support for reading different audio file formats added (24bit Wav, OGG/Vorbis, IFF, AIFF, VOC, FLAC ...)
- minor VST-Host bugfixes
- manual extended

Version 1.0.12.3, Date: 24.03.09
- new command 'cleardata'
- new return value for command 'getproperties' returning supported samplerates
- new parameter 'name' in command 'loadmem' (needed for next release)
• ‘recgetdata’ return argument ‘position’ rewritten: now position is identical to sample positions within recorded files
• bugfix for alignment with endless looped files/vectors
• performance of file reading improved
• minor bugfixes

Version 1.0.11.2, Date: 13.02.09

• new command ‘controlpanel’
• bugfix for ‘loadmem’ with data pointers > 2 GB
• bugfix for playing files (“unexpected wave file read error”)
• detection of external change of sample rate (output stopped and message of asynchronous error is set correspondingly)
• detection of external change of buffer size (output stopped and message of asynchronous error is set correspondingly)
• manual on command help extended

Version 1.0.10.2, Date: 19.12.08

• Manual extended
• Minor internal bugfixes

Version 1.0.9.2, Date: 26.11.08

• bugfix in command ‘recfilename’: did not work with blanks in filename/pathname when working with cell array
• bugfix in commands ‘playing’ and ‘wait’
• bugfix for playing small files with ‘loadfile’
• Performance increased when playing files (loadfile)
• Number of channels in hetero-dyning plugin decreased to two to increase performance (multiple instances can be used to use more channels)

Version 1.0.8.1, Date: 01.11.08

• “ASIO Direct Monitoring“ (ADM) support added (command ‘adm’)
• command ‘xrun’ extended

Version 1.0.7.1, Date: 17.09.08

• bugfix in VST plugin HtVstEqualizer for log filters
Version 1.0.6.1, Date: 11.09.08

- new command 'helpa' ('alphasort') showing command list in alphabetical order
- new argument 'topmost' for command 'show'
- minor bugfixes
- command interface completely case insensitive now
- new argument 'stoptimeout' for command 'init'
- 'stop' extended to detect stopping failures

Version 1.0.5.0, Date: 26.08.08

- new argument 'starttimeout' for command 'init'
- bugfix for large ASIO buffer sizes
- manual extended

Version 1.0.3.0, Date: 13.05.08

- minor bugfixes
- 'iostatus' syntax extended
- fast convolution plugin HtVSTConv.dll added

Version 1.0.0.0, Date: 21.04.08

- first release