VIVE 3DSP Unity Plugin Release notes

VIVE 3DSP Unity Plugin v1.0.0

Release date: 2019.03.08

Based on native code version: 1.0.0

- New feature
 - Add geometric occlusion mode feature.
 - o Add bypass small signal feature.
 - o Add mute far distance source feature.
- Bug fixes
 - o Fixed geometric occlusion corner case.
 - Fine-tuned ambisonic decoder.
 - Fixed raycast occlusion issue where it keeps calculating even when the component is disabled.
 - o Early reflection calculation results are now correct.
 - o Fixed speed up mode binaural reverb gain issue.
 - o Fixed reverb clipping issue when function is on or off.
 - Fixed sample rate error where it was not set correctly when setting the reverb parameter.
 - o Fixed reverb preset effect.
- Change Logs
 - o Improved FFT calculation performance.
 - Fine-tuned sphere-type geometric occlusion performance.
 - Changed parameter creation method to improve performance.
 - Changed object creation method to improve performance.
 - o Fine-tuned overall process when the signal is small.

VIVE 3DSP Unity Plugin v0.10.0

Release date: 2018.12.07

Based on native code version: 0.10.0

- New feature
 - Parametric equalizer (UI included)
 - Export audio file
 - o Record audio file

Bug fixes

- o Fixed CPU burst problem when the set sample rate is not 48Hz.
- o Fixed quaternion value error when Y rotation is 180 degrees.
- Fixed issue where changes/edits are not applied to all selected objects.
- Fixed issue where changes/edits are not applied to the background audio and volume.

VIVE 3DSP Unity Plugin v0.9.2.12

Release date: 2018.08.24

Based on native code version: 0.9.2.12

- New feature
 - Customizable linear decay feature for sound decay mode.
- Bug fixes
 - VIVE 3DSP no longer crashes when room size is huge.
 - Fixed sound clipping issue.
 - Prevent CPU burst when one audio source is released and other sources are still being processed.
- Change logs
 - Renamed Quadratic Decay to Point Source Decay.
 - o Renamed Linear Decay to Line Source Decay.

VIVE 3DSP Unity Plugin v0.9.1.8

Release date: 2018.07.20

Based on native code version: 0.9.1.8

- Bug fixes
 - Fixed noise issue when phi is set to 90 or -90 on the ambisonic decoder.
 - Fixed geometric occlusion issue when the listener, occlusion object, and source are lined up in a straight line.

VIVE 3DSP Unity Plugin v0.9.1.6

Release date: 2018.07.06

Based on native code version: 0.9.1.6

New feature

- o Graphic Equalizer
- Ambisonic channel (Unity version 2017.1 or later)
- Binaural reverb

Bug fixes

- o Fixed geometric occlusion corner case.
- o Minimum decay now works when distance is over 500 meters.
- o Raycast occlusion now works in x64 platform.
- o Fixed Quasi Doppler free crash issue.
- o Changed ambisonic initial distance.

Change logs

- Fixed missing audio when the application comes back to the foreground.
- o Fine tune Ambisonic performance.
- Real world decay rate.
- Support 32-bit and 64-bit libraries.
- o Changed 3DSP component path.

VIVE 3DSP Unity Plugin v0.9.0.2

Release date: 2018.04.20

Based on native code version: 0.9.0.1

- Bug fixes
 - Background audio volume slider bar not work.
 - Minimum decay volume not work.
 - Minimum decay volume sound smooth issue.
- Change logs
 - Changed default raycast number from 1 to 12.
 - Changed example scene music files.

VIVE 3DSP Unity Plugin v0.9.0.0

Release date: 2018.04.10

Based on native code version: 0.9.0.0

Bug fixes

Fixed sound distortions with reverb effect at the beginning.
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Release version: 1.0.0

- o Fixed Memory leak in Ambisonic.
- o Fixed null reference when audio listener is not attached.

Change logs

- When object is covered by multiple rooms, set the smallest room as default.
- Split occlusion effect into Geometric Occlusion and Raycast Occlusion.
- o Moved most of occlusion calculations into the native library.

VIVE 3DSP Unity Plugin v0.8.6.0

Release date: 2018.02.27

Based on native code version: 0.8.6.0

- New feature
 - o Basic 3D sound effect without effector.
 - o Raycast quality settings.
 - o Room preset.
- Bug fixes
 - o Fixed reverb effect smooth issue.
 - o Fixed Raycast occlusion ratio smooth issue.
- Change logs
 - Occlusion engine settings move to occlusion script.
 - o Removed basic occlusion size settings.
 - o Gizmo display only when occlusion engine set to basic occlusion.

VIVE 3DSP Unity Plugin v0.8.5.0

Release date: 2018.02.09

Based on native code version: 0.8.5.0

- New feature
 - o Add 2 Occlusion Engines: Advanced and Raycast.

VIVE 3DSP Unity Plugin v0.8.4.2

Release date: 2018.02.01

Based on native code version: 0.8.4.2

- New feature
 - o Add audio source spatializer 3D switch.
 - Add audio source room switch.
 - o Add audio source occlusion switch.
 - o Add audio room component.
 - Add room background audio effect.
 - o Add headset model option for optimization.
- Bug fixes
 - Fixed sound distortion.
 - Fixed sound source sometimes get cut.
- Change logs
 - o Changed to Audio source effect mode.
 - o Computing performance enhancement.
 - Occlusion ratio UI string changed to Occlusion Intensity (Range: 1~2).
 - o Occlusion calculation method enhancement.

VIVE 3DSP Unity Plugin v0.8.1.0

Release date: 2017.12.22

Based on native code version: 0.8.1.0

- New feature
 - Version information.
- Bug fixes

- Fixed crash issue when using an audio source without attaching the VIVE 3DSP script.
- Fixed CPU loading issue when using audio source without attaching the VIVE 3DSP script.
- Fixed crash issue when audio source is frequently opened and closed.
- Fixed create audio source CPU burst issue.
- o Audio source smooth mode update.

VIVE 3DSP Unity Plugin v0.8.0.2

Release date: 2017.12.08

- New feature
 - o Add Listener reflection gain.
 - o Add Listener reverb gain.
 - o Add Occlusion material preset.
 - o Add Reverb material preset.
 - Add Spatial blend setting.
 - o Add Audio mixer.
- Bug fixes
 - o Fixed null exception issue.
 - Fixed CPU computing issue.
 - o Fixed occlusion issue when using multiple sources.
 - o Fixed update function issue.
 - o Fixed sound distortion issue.

VIVE 3DSP Unity Plugin v0.2.0.0

Release date: 2017.11.24

- New feature
 - Add source distance mode.
 - o Add custom settings for occlusion material.
 - Add custom settings for listener material.
- Change logs
 - Updated occlusion description.

VIVE 3DSP Unity Plugin v0.1.0.0

Release date: 2017.11.08First version release.