

LIPSense™ 3D Body Pose SDK Release Note

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Overview

SDK V7.1 (For Windows / arm-based) 2025-11-05

New:

- Introduces Standard and Professional versions, with hand keypoint prediction available **ONLY** in the Professional version
- Support for Ubuntu 24.04
- Support for S315 camera
- New skeleton key points exclusively available, including:
 - Navel (NAVEL_SPINE)
 - Pelvis
 - Head
 - Chest (CHEST_SPINE)
 - Left / right clavicle (L_CLAVICAL / R_CLAVICAL)
 - Left / right hand (L_HAND, R_HAND)
 - Left / right foot (L_FOOT, R_FOOT)
 - left / right fingertips (L_HAND_TIP, R_HAND_TIP)
 - left / right thumb (L_THUMB_TIP, R_THUMB_TIP)
- New C# wrapper for .NET 6
- New camera configuration (camera horizontal) to reorient the camera in specific scenarios
- Enables multi-target hand keypoint prediction for enhanced tracking capabilities

Updates:

- Updated ONNXRuntime to 1.22.0.
- Updated OpenVINO to 2025.1.
- Updated supported TensorRT to 10.9.0.
- Updated supported CUDA to 12.9.1.
- Updated supported cuDNN to 9.9.0.

Improvements:

- Update for LIPSedge™ SDK
- Improved key point robustness to minimize detection bias
- Improved the performance of hand keypoints prediction.

Fix:

- Connection issue caused by conflicts with LIPSedge™ AE series camera
- Hand key point bias caused by incorrect value and configuration error

For detail information about the items on the release note, contact info@lips-hci.com

System Requirements

x86 based systems		
Minimum Requirements		
CPU	6 th Generation Intel® Core™ processor	
RAM	8 GB RAM or above	
GPU	NVIDIA RTX 4060	
Software	Intel® OpenVINO™ / NVIDIA® TensorRT™	
Recommended Requirements		
CPU	8 th generation Intel Core™ processor	
RAM	8 GB RAM or above	
GPU	NVIDIA RTX 4060	
Software	Standard	Cuda 12.x, cuDNN 9.9.0
	Professional	Intel® OpenVINO™

Compatible Sensor

Series	Models
LIPSedge™	AE400/ AE430
	AE450/ AE470
	DL
	S315

SDK V6.0 (For Windows / arm-based) 2025-03-07**New:**

- New precise finger tracking functionality (40 key points) for NVIDIA GPU systems (Finger Joint Model)

SDK V5.0.2 (For Windows / arm-based) 2024-09-25**Modified:**

- Applies a custom filtering algorithm to stabilize joint positions and prevent abrupt deviations during multi-person pose estimation (HIGH_ACCURACY_NVIDIA).

SDK V5.0 (For Windows / arm-based) 2024-08-01**New:**

- New advanced multi-person poses estimation framework (HIGH_ACCURACY_NVIDIA) for enhanced pose-detection performance

SDK V4.0 (arm-based) 2024-01-12**Updated:**

- Compatibility with NVIDIA[®] Jetson Xavier[™] & Orin[™]

SDK V3.5.1 (for Windows) 2023-06-01**Updated:**

- Updates for TensorRT 8.5.3

Fixed:

- Occasional floating issue of 3D key points caused by noisy depth image.
- Frames are not synced while using LIPSedge[™] AE series cameras on Windows

SDK V3.5 (for Linux) 2023-06-01

New:

- Support for Ubuntu 22.04 LTS System
- Support for LIPSedge™ DL

Updated:

- Updates for TensorRT 8.5.3

Fixed:

- Occasional floating issue of 3D key points caused by noisy depth image.

SDK V3.4 (for Windows) 2023-02-08

New:

- Support for configuring camera mirroring and rotation for Python
- Support for configuring camera mirroring and rotation for Unity
- Support for TensorRT for accelerating skeleton prediction on NVIDIA GPUs
- Support getting version string of the LIPSense™ 3D Body Pose SDK for Python

Updated:

- Updates for OpenVINO 2022.1
- Updates for OpenCV 4.5.5

Fixed:

- Hint the location of LIPSBODYPOSE_LICENSE_PATH while license file not found

SDK V3.4 (for Linux) 2023-02-08

New:

- Support for configuring camera mirroring and rotation for Python
- Support for TensorRT for accelerating skeleton prediction on NVIDIA GPUs
- Support getting version string of the LIPSense™ 3D Body Pose SDK for Python

Updated:

- Updates for OpenVINO 2022.1
- Updates for OpenCV 4.5.5

Fixed:

- Hint the location of LIPSBODYPOSE_LICENSE_PATH while license file not found

SDK V3.3 (for Windows) 2022-01-28

New:

- New installation assistant for Windows
- Capability to detect different camera connected in runtime
- Support for LIPSedge™ AE450
- Support for new 3D camera mounting positions (90° clockwise / 90° counterclockwise / 180°)

Updated:

- Updates for OpenVINO 2021.4
- Updates for Intel® RealSense™ SDK 2.44.0
- Updates for LIPSedge™ AE series SDK 2.43.0

Fixed:

- Inability for Unity project to replay properly
- Inconsistent LIPSedge™ AE series SDK version obtained when calling LIPSBodyPose ::getVersions ()
- Visibility issue of 3D skeleton frame color

SDK V3.3 (for Linux) 2022-01-28**New:**

- Capability to detect different camera connected in runtime
- Support for LIPSedge™ AE450
- Support for new 3D camera mounting positions (90° clockwise / 90° counterclockwise / 180°)

Updated:

- Updates for OpenVINO 2021.4
- Updates for Intel® RealSense™ SDK 2.44.0
- Updates for LIPSedge™ AE series SDK 2.43.0

Fixed:

- Inconsistent LIPSedge™ AE series SDK version obtained when calling LIPSBodyPose ::getVersions ()
- Visibility issue of 3D skeleton frame color

SDK V3.2.0 (for Windows) 2021-10-13**New:**

- Support for Python 3.6
- Support for Unity
- Support for using CPU as an alternative when an Intel® GPU is unavailable
- New facial key points (eyes / nose) added for 3D skeleton frames

Improved:

- Efficiency of filter parameter adjustment

SDK V3.2.0 (for Linux) 2021-10-13

New:

- Support for Ubuntu 20.04 LTS system
- Support for using CPU as an alternative when an Intel[®] GPU is unavailable
- New package-based installation method
- New facial key points (eyes / nose) added for 3D skeleton frames

Improved:

- Efficiency of filter parameter adjustment

Removed:

- Installation by tar.gz file

SDK V3.1.0 (for Windows / Linux) 2021-07-14

Fixed:

- Time limit error in Trial Mode

SDK V3.0.0 (for Windows / Linux) 2021-05-14

New:

- Support for LIPSedge™ AE400
- Support for Intel[®] RealSense™ D435 / D455
- Support for Intel[®] RealSense™ SDK 2.43

Updated:

- New licensing mechanism
- 20 Minute time-limit for unlicensed use

SDK V2.0.9 (for Windows / Linux)

New:

- Intel® RealSense™ SDK 2.33 compatibility upgrade for Linux kernel 5.3 support

SDK V2.0.8 (for Windows / Linux)

New:

- Support for Ubuntu 18.04 LTS system
- Support for Intel® RealSense™ SDK 2.31
- Support for Python wrapper

Removed:

- Support for Ubuntu 16.04 LTS system

SDK V2.0.6 (for Windows / Linux)

New:

- Enhances head position accuracy by improving nose prediction performances

SDK V2.0.5 (for Windows / Linux) 2019-07-30

New:

- Enables “Trial Mode” configuration when the license is absent
- Video streaming terminates 30 minutes after starting up

SDK V2.0.4 (for Windows / Linux)

New:

- Version Query interface restored for querying LIPS library and 3rd party software

Fixed:

- OpenVino upgrade for preventing framerate dropping on the trained model

SDK V2.0.3 (for Windows / Linux)

Fixed:

- Range extension for Intel HD Graphics device ID in OpenVINO 2018R5

SDK V2.0.2 (for Windows / Linux)

New:

- Support ID acquisition for body tracking
- Support log management

Fixed:

- Support for device IDs of 8th Generation Intel CPU previously unsupported by OpenVINO2018R5
- Certain exceptions fixed

SDK V2.0.1 (for Windows / Linux)

New:

- Support for Intel[®] RealSense[™] Depth Camera D415
- Support a new model for speeding up
- Support Intel OpenVINO

SDK V1.1.6 (for Windows / Linux)

Improved:

- Temporal jittering issues
- Limitation of pose estimation within 3 m

SDK V1.1 (for Windows / Linux)

Improved:

- Background noise issues
- Update for the network model

SDK V1.0 (for Windows / Linux)

New:

- Support for new models for improving 3D skeletal prediction

Fixed:

- Flickering issue of depth image