LIPScan™ 3D Scan SDK

Datasheet v2.0.4

Overview

Features

- High-performance algorithm
- Low Scanning latency
- Intel® RealSense™ D400 series compatibility
- LIPSdege™ AE series compatibility
- LIPSdege™ L series compatibility
- Adjustable camera resolution
- Accurate surface detail reproduction
- High surface detail customizability
- Comprehensive file format support
- Support Mesh Model Differences Analysis

LIPScan™ 3D Scan is an advanced 3D scanning SDK developed for a seamless digitizing experience for professionals or hobbyists in the industrial setting. Paired with high-performance 3D camera, such as the Intel® RealSense™ D400, LIPSdege™ AE and LIPSdege™ L215 series, the SDK allows a designer to construct, edit and export digital 3D models of medium-sized objects, with the original surface detail of the scanned object intactly retained. Once scanned, the 3D digital replica can be cleaned up or smoothened within seconds with a high-performance algorithm. The 3D digital replica can then be exported to various formats, including .pyl, .obj or .stl files.

The SDK supports augmentation of its functions and user's interfaces for you to add your distinctive design. As a reference, LIPS Corp. provides an example application in the package.

System Requirements

Processor	Intel® Core™ i5 processor or above	
RAM	4 GB or above	
GPU Memory	1 GB or above	
System	64-bit system (x64)	
Graphic Cards	Internal	Intel® HD Graphics 630
	Dedicated	NVIDIA GeForce GTX 1050Ti

Hardware Compatibility

Series	Models
LIPSedge™	AE400
	AE430
	AE450
	AE470
	L210u
	L215u
Intel® RealSense™	Depth Camera D415
	Depth Camera D435
	Depth Camera D435i
	Depth Camera D455

Specifications

<table>
<tr><td>Model</td><td colspan="2">LIPScan™ 3D Scan SDK</td></tr>
<tr><td>Operating System</td><td colspan="2">Windows 10</td></tr>
<tr><td>Language</td><td colspan="2">C / C++</td></tr>
<tr><td>3D Sensor</td><td colspan="2">• LIPSedge™ AE400 / AE430/ AE450/ AE470
• LIPSedge™ L210u / L215u
• Intel® RealSense™ D415 / D435 / D435i / D455</td></tr>
<tr><td>Scanning Modes</td><td colspan="2">• Static scanning (Objects on a platform)
• Handheld scanning</td></tr>
<tr><td rowspan="3">Distance Modes</td><td>Scan Distance</td><td>Scannable Size (W * H)</td></tr>
<tr><td>Middle: 15 – 25 cm</td><td>21 * 21 – 40 * 40 cm</td></tr>
<tr><td>Far: 25 – 100 cm</td><td>18 * 18 – 80 * 80 cm</td></tr>
<tr><td>Working Distance</td><td colspan="2">15 – 120 cm</td></tr>
<tr><td rowspan="3">Point Distance</td><td>Scan Distance</td><td>Point Distance</td></tr>
<tr><td>Middle: 15 – 25 cm</td><td>< 0.18 cm</td></tr>
<tr><td>Far: > 25 cm</td><td>< 0.5 cm</td></tr>
<tr><td>Output format</td><td colspan="2">OBJ, STL, PLY</td></tr>
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* All specifications are subject to change without prior notice.