



SHINING 3D®

For More Shining Ideas

EinScan H

Hybrid LED & Infrared Light Source
Handheld Color 3D Scanner

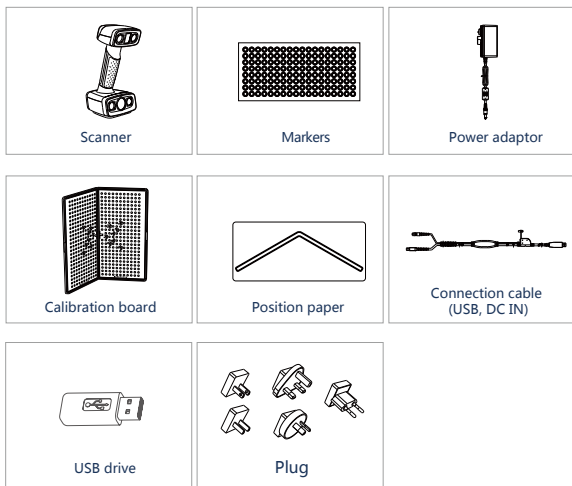


Quick Start Guide

Getting Started with EinScan H

Preparation

Device List



Preparation

Recommended

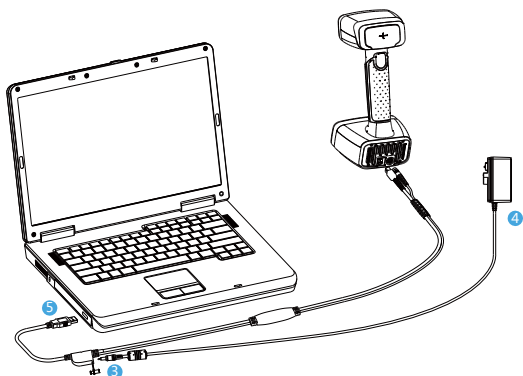
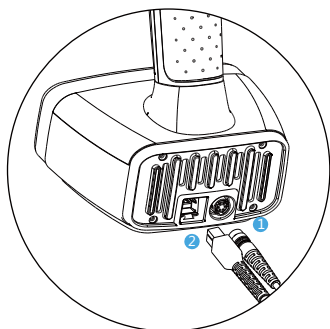
Graphics Card	NVIDIA GTX1080 and higher
Video Memory	≥4G
Processor	I7-8700
Memory	≥32G
Interface	high-speed USB 3.0

Required

Graphics Card	Quadro card P1000 and higher or NVIDIA GTX660 and higher
Processor	Intel (R) xeon E3-1230, Intel (R) I5-3470, Intel (R) I7-3770
Memory	8G
Interface	high-speed USB 3.0



Hardware Installation



- 1 Insert the pin plug into the scanner's circular connector port
- 2 Plug the other one to scanner's USB port
- 3 Plug the power adaptor into the connection cable DC in port
- 4 Plug the power cable another end into a power outlet
- 5 Connect the other end of the connection cable to a USB 3.0 port on your computer



Software Installation

Software Download

Download the software and user manual from www.einscan.com/support/download/

Run the installer **STEP 01**

Double click software installation icon to install the software.



License Activation **STEP 02**

After successful installation, when the device is correctly connected, double-click to open the software and activate the device. Online activation is recommended if your computer is connected to the internet.

Online Activation

Local Activation

If there is an issue with network connection, choose Local activation to save the .ple license file on your computer, under the activation menu. (.ple file can be found in the USB drive.)

Attention: If you install another device of different serial number, the software will automatically notify users to activate this device.

Online Activation

Local Activation

Calibration

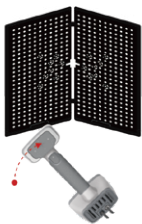
Standard Calibration

1. Put the calibration board vertically onto the paper position.
2. Follow the instructions from the software to finish 5 positions.
3. While holding the scanner, make sure it is upright to the center of the board. Bring the scanner closer or farther to the board till all the required distance captured.

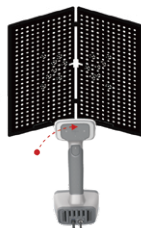
STEP 01



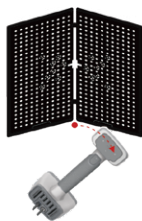
STEP 02



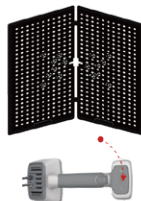
STEP 03



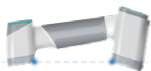
STEP 04



STEP 05



Calibration



White Balance Calibration

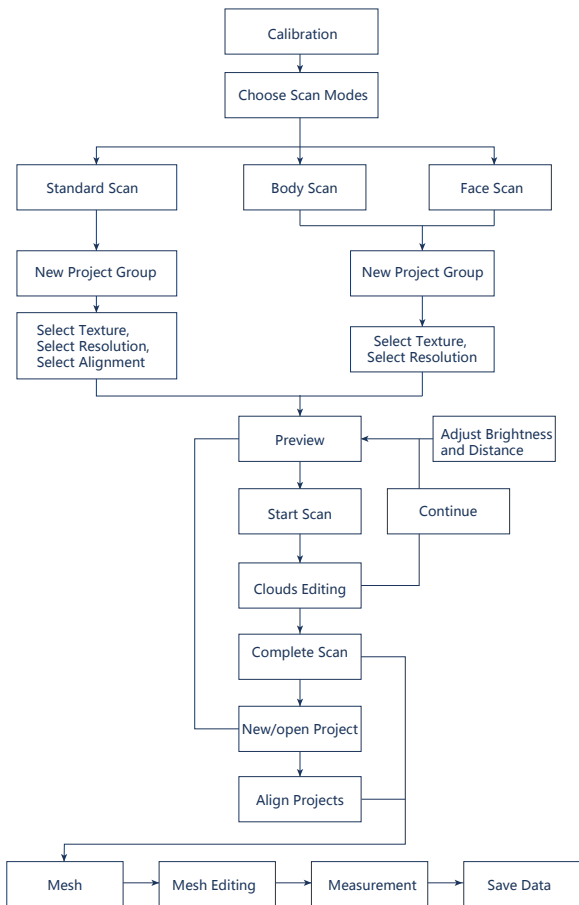
Hold the scanner vertically to the back side of calibration board (white). Move the scanner up and down till a photo taken at a right distance.

The first time installing the software , standard calibration is required by default.

Note:

1. Customer calibration is recommended to do twice a week for daily use.
2. Move the scanner at a steady and slow speed.
3. Make sure to protect the calibration board and keep it clean, no scratches or stains on the black surface with white circles.
4. The Calibration board is matched to the Device with same Serial Number. Doing the calibration with an incorrect calibration board will fail to generate good scan data or optimum accuracy.
5. Clean with clear water only, do not use alcohol or chemical liquid to clean the calibration board.

Software Scan Work Flow



Scanning Tips

Scan Mode Selection

Use Standard Scan mode when:

A fast scanning experience is needed;
Objects with good geometry for feature alignment;

Use Body Scan mode when:

Body scan mode is recommended to scan human body. The alignment algorithm under this mode was defaulted set to process non-rigid objects those shapes may change a little bit due to breathing or slight deviation.

Use Face Scan mode when:

Face Scan mode is utilizing infrared light source for 3d capturing, which is good to scan human face without any visible light, very comfortable to eyes. It can help capture hair data. Straight, silky hair is more easy to be scanned.

Summary

	Standard Scan	Body Scan	Face Scan
What to scan?	300mm - 4m objects	Human body	Face or body incl. hair
Light source	LED	LED	Invisible infrared
Accuracy	Up to 0.05mm	Up to 0.05mm	Up to 0.6mm
Resolution	0.25~3mm	0.5~3mm	0.5~3mm
Alignment	Markers/features/ hybrid/texture	Feature	Feature
Scanning speed	1,200,000points/s, 20FPS		720,000points/s, 20FPS
Texture Scan	Yes	Yes	Yes



Difficult to Scan

- Transparent objects like glasses
- Shining or highly reflective objects like mirrors



Solution

- Spray with white powder



Not Recommended

- Moving objects or vibrating objects
- Lattice structure with many small deep holes
- Soft material objects



SHINING 3D®

Technical Support

Register at support.shining3d.com for support
Or contact through:

Email: einscan_support@shining3d.com

Skype: [einscan_support](https://www.skype.com/people/einscan_support)

APAC Headquarters

SHINING 3D Tech. Co., Ltd.

Hangzhou, China

P: +86-571-82999050

Email: sales@shining3d.com

No. 1398, Xiangbin Road, Wenyan,
Xiaoshan, Hangzhou, Zhejiang, China,
311258

EMEA Region

SHINING 3D Technology GmbH.

Stuttgart, Germany

P: +49-711-28444089

Email: sales@shining3d.com

Breitwiesenstraße 28, 70565,
Stuttgart, Germany

Americas Region

SHINING 3D Technology Inc.

San Francisco, United States

P: +1415-259-4787

Email: sales@shining3d.com

1740 César Chávez St. Unit D.
San Francisco, CA 94124

www.shining3d.com

www.einscan.com