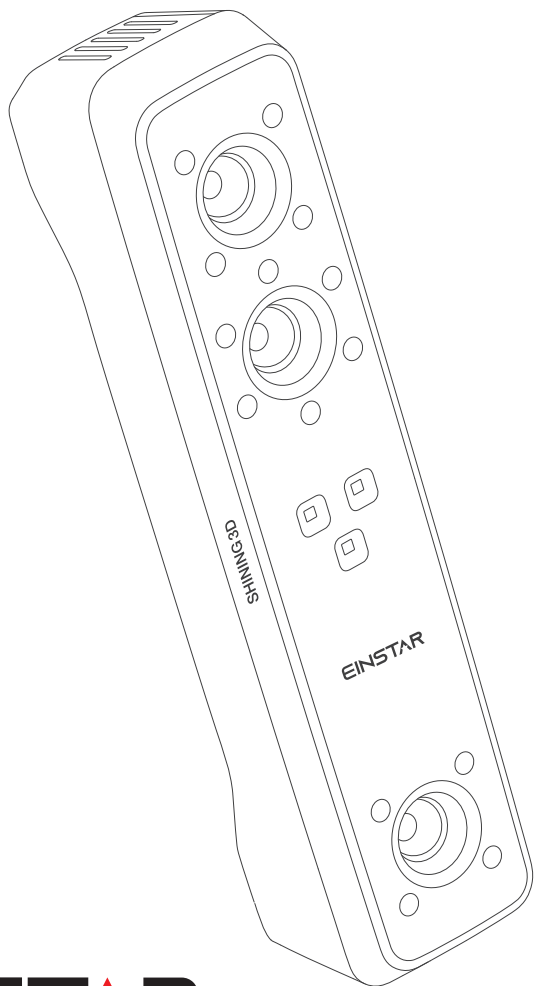




SHINING 3D

For More Shining Ideas



EINSTAR

Quick Start Guide

Compliance



LVD/EMC Directive

This product complies with the European Low Voltage Directive 2014/35/EU and EMC Directive 2014/30/EU.



WEEE Directive-2012/19/EU

The product this manual refers to is covered by the Waste Electrical&Electronic Equipment(WEEE) Directive and must be disposed of in a responsible manner.



This device complies with "IEC 60825-1:2014 Safety of laser products" 940nm



The UKCA marking is the product marking used for products being placed on the market in Great Britain (England, Scotland and Wales).



Federal Communications Commission Certified.



Restriction of Hazardous Substances Certified.



Korea Certification Certified.

Welcome!

Thank you for purchasing the Einstar 3D scanner. We hope you enjoy scanning with your new scanner.

You can login to our user platform passport.shining3d.com to get more information. For technical support, please visit our support center support.einstar.com.

Join our social media platform to get more information



Facebook

Facebook group

Instagram

Youtube video list

Tik Tok

WHAT'S IN THE BOX



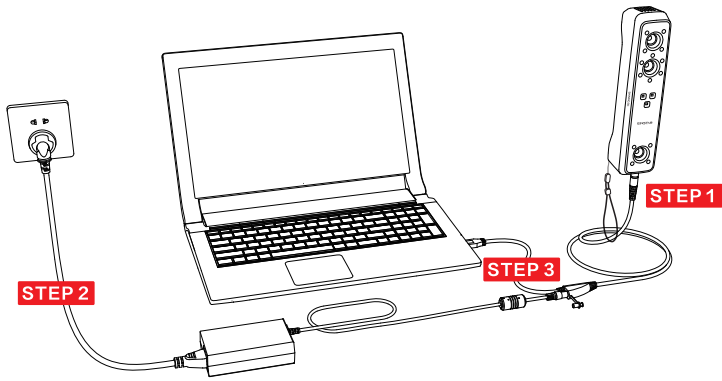
Note:

Serial number can be found on the back of the scanner after the silicon case is removed or on the back of the calibration board, which is like "EinStarXXX-XXXXX000X00".



Recommended System Requirements

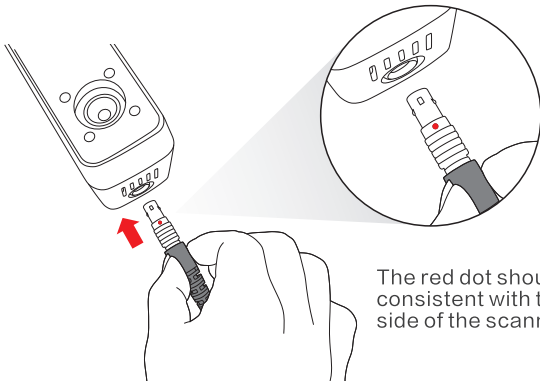
CPU	Intel Core i7-11800H or higher
Graphics card	NVIDIA GTX1050 or higher
Graphics memory	≥ 6GB
RAM	≥ 32GB
USB	2.0 or above
Operating system	Windows 10/Windows 11 (both 64-bit only)



Connect Your Scanner

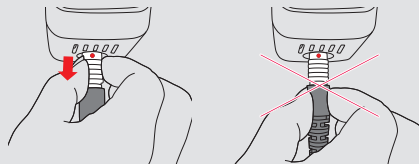
STEP 1

Align the plug of the cable into the bottom jack of the Einstar.



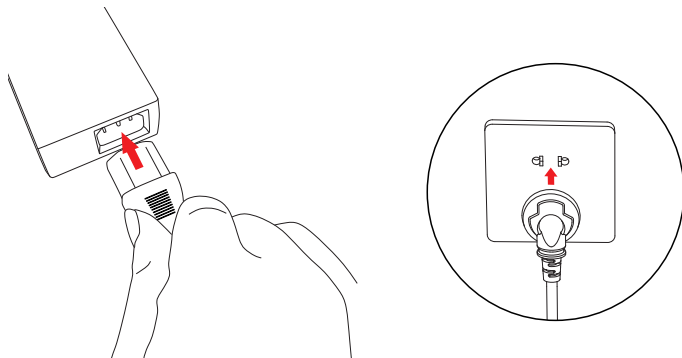
The red dot should be consistent with the front side of the scanner.

Note:
When unplugging, make sure to pinch the **METAL END** of the cable instead of the rubber part.



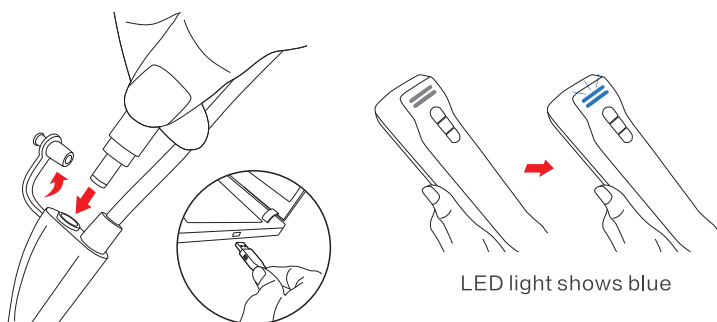
STEP 2

Connect adapter – Power on



STEP 3

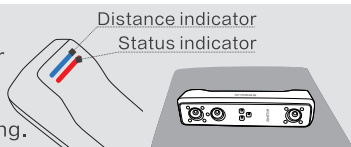
Remove secure plug – insert power – connect to PC USB port.



Note:

If the lower LED light is red, check whether the connections are correct.

Place the scanner properly before scanning.
(Please refer to **Safe Handling P13**)



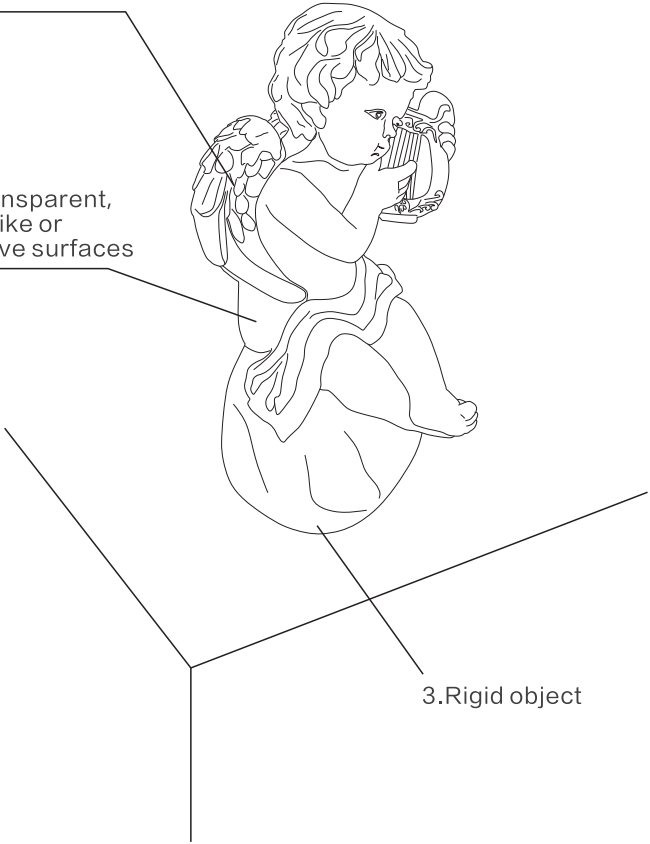
Before scanning

Check if the objects meet the requirements below:

1. Rich geometry features or textures.

2. Non transparent,
mirror like or
reflective surfaces

3. Rigid object

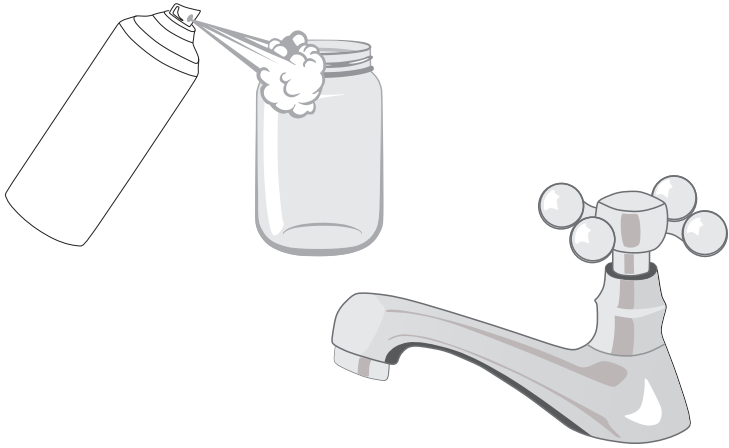


If the objects don't meet ALL requirements, some preparations need to be done before scanning. Please refer to the **P5 PREPARATIONS** page.

How to deal with it?

Surface type: Transparent/Mirror like/Reflective surfaces

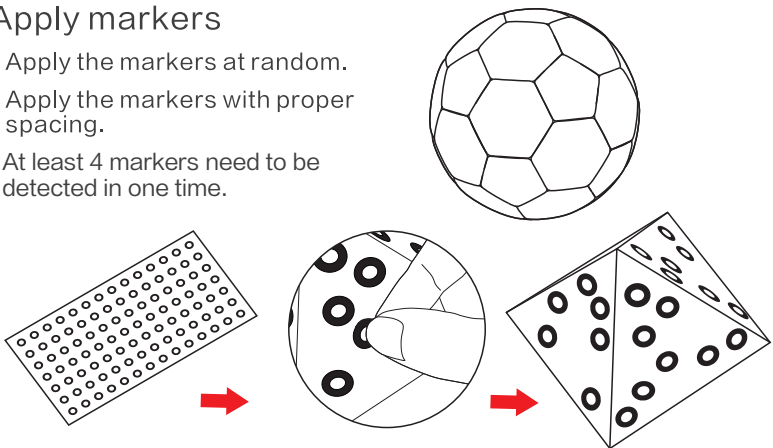
Dust with anti-glare spray



Surface type: Thin/Flat/Repetitive features

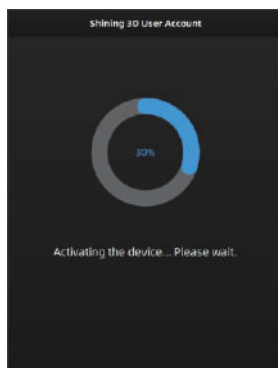
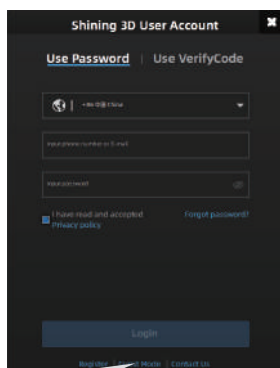
Apply markers

- Apply the markers at random.
- Apply the markers with proper spacing.
- At least 4 markers need to be detected in one time.



Scanner Activation

1. Download software from: www.einstar.com--Support--Software download
2. Click and follow the installation wizard of EXStar.
3. Launch the software, then register a Shining 3D user account.
4. Login with your new account, and the device will be activated automatically.

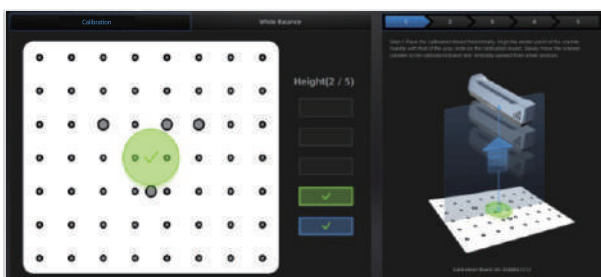


Note:

1. If the computer is not connected to the Internet, you can choose "Offline Activation".
2. If you fail to download software or can't do registration, please visit support.einstar.com and submit a ticket.
3. After activation, you can also use the account to login to passport.shining3d.com for accessing Einstar learning material and the latest software.

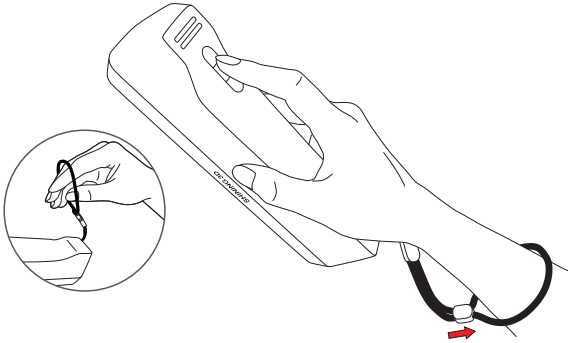
The software enters the Scan interface after activation. We suggest to recalibrate in calibration interface before the first scanning.

(Please refer to **P7 How to hold the scanner and Calibrate**)



How to hold the scanner

Put on and tighten the wrist strap. Hold the scanner securely as shown in the picture.

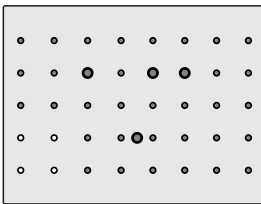


How to calibrate

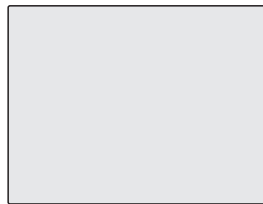
Follow the steps of the calibration wizard in the software.

Note:

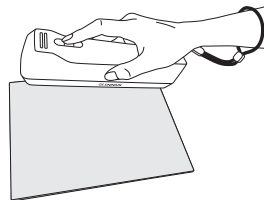
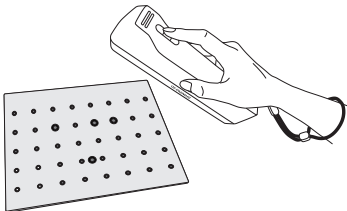
We recommend calibrating no later than 14 days after the latest date to guarantee accuracy.



1. Calibration



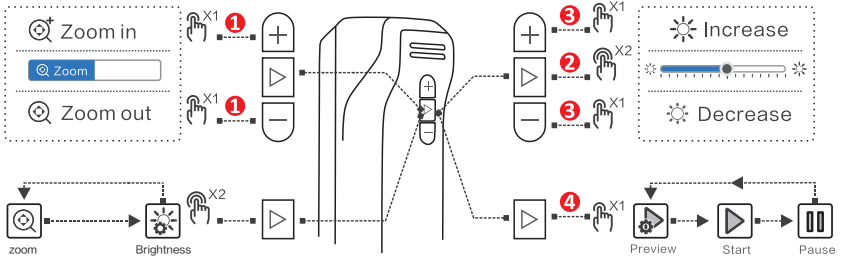
2. White Balance



Note:

After calibration, please place the calibration board in the black flannel bag to protect it from damage and stains.

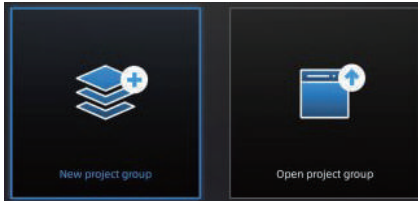
Scanner button controls



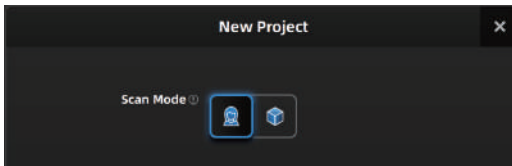
- 1 Click to zoom in or zoom out.
- 2 Double click to switch between Zoom and Brightness adjustment.
- 3 Click to Increase or Decrease.
- 4 Click to switch scanning status.

Portrait mode scanning

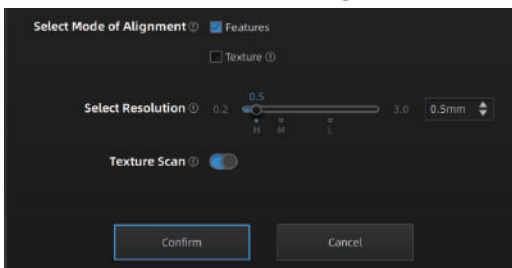
1. Create a New project group.



2. Select Scan mode Portrait.



3. Select Mode of Alignment



Feature: For objects with obvious geometric information.

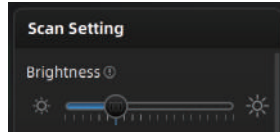
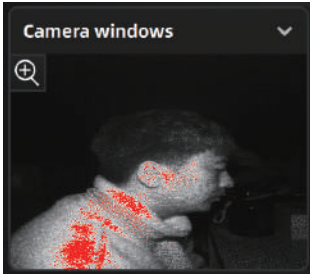
Texture: For objects with rich texture or color information.

Select Resolution: Choose the proper resolution.

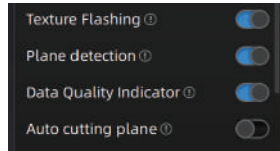
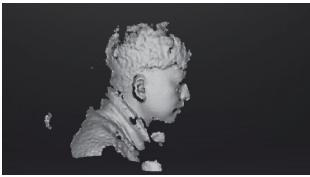
(We usually recommend using a 1mm resolution to scan the whole body, and a 0.5mm resolution to scan specific body parts.)

Texture Scan: Turn on texture scan if you need color data.

4. Place the scanner in a proper working distance from the object (Distance indicator shows green), adjust the brightness until the object is slightly reddish in camera preview.



Adjust the brightness by clicking or dragging the slider to set the value. Brightness adjustment can also be achieved by scanner buttons. (Please refer to **P8 Scanner button controls**)

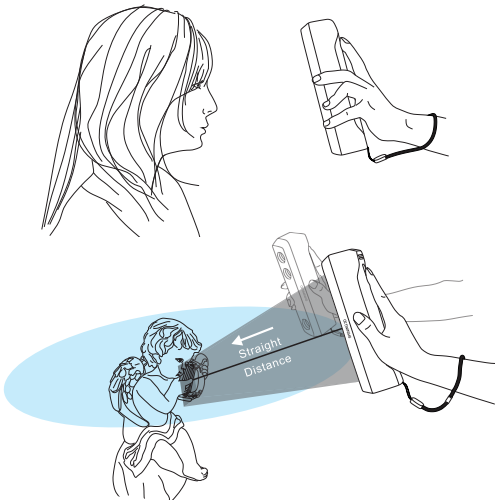


Turn on the selection as you need.

5. Scan

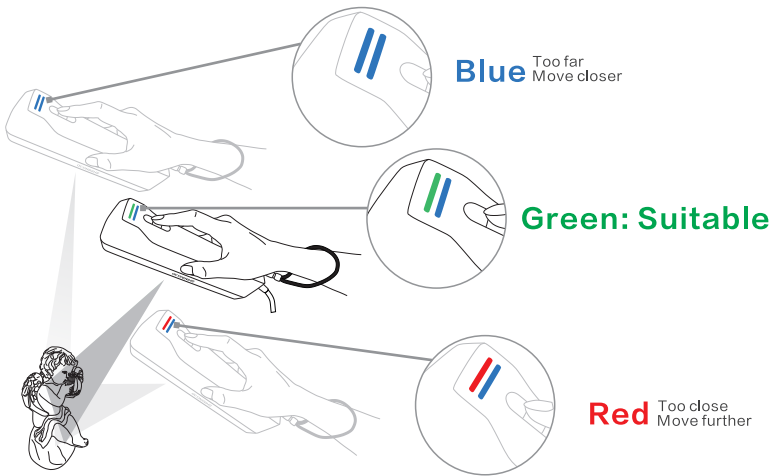
5.1 Position

During scanning, face the scanner straight to the object.



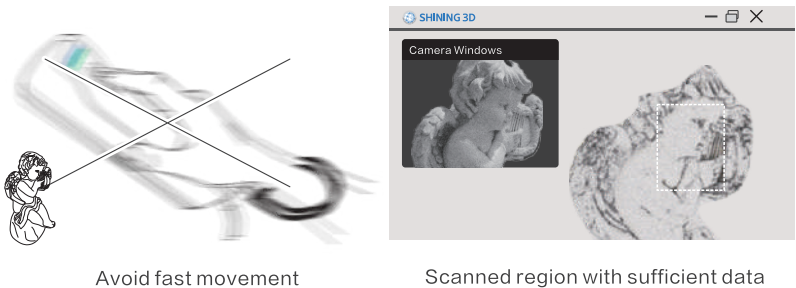
5.2 Distance

During scanning, it is crucial to maintain the distance between the scanner and the object being scanned.



5.3 Movement

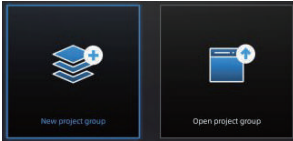
Please move the scanner gently for continuous scan and better data quality.



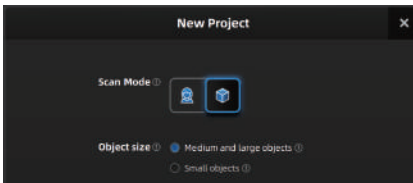
When tracking lost happens, direct the scanner at a region that has already been scanned to resume scanning.

Object mode scanning

1. Create a New project group (or Open project group).



2. Select scan mode "Object" and the suitable Object size.



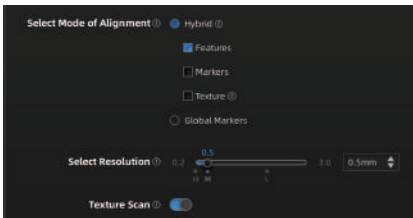
Medium and large objects:

Size larger than 200*200*200mm

Small objects:

50*50*50mm-200*200*200mm

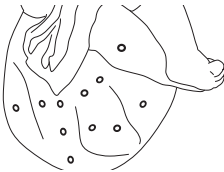
3. Select Mode of Alignment. (One or more)



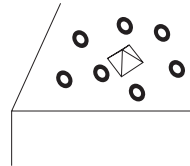
Feature: For objects with obvious geometric information.

Texture: For objects with rich texture or color information.

Markers/Global Marker: If the object does not have enough characteristic features of geometry or texture, as well as if these features make up a periodically repeating pattern.



Large Objects: Apply the markers directly onto the object.



Small Objects: Apply the markers around the object.

Please refer to the Portrait mode scanning for adjustments and scanning.



Scan QR to get object mode demo



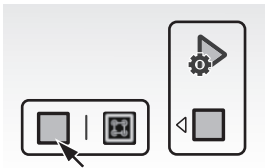
Scan QR to get portrait mode demo



Generate Point Cloud

Editing the data after completing or pausing the scan.



Generate point cloud after scanning and editing data.



-  Generate directly
(fast and takes small memory usage)
-  Optimize and Generate
—Mandatory for Portrait mode
(Select when there is layering problems.
It takes more time and memory usage to
optimize.)

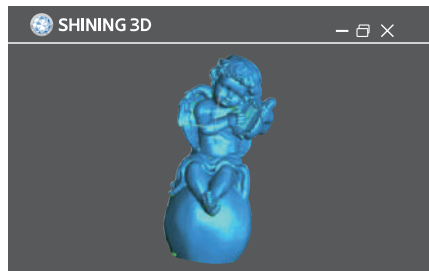
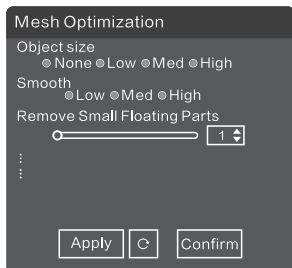
Mesh

Meshing is converting point cloud to triangular surfaces. The mesh data can be used for rendering, measurement and printing, etc.

Select the suitable mesh type for postprocessing.



Click Apply to preview meshing. Click Confirm to go with current result.

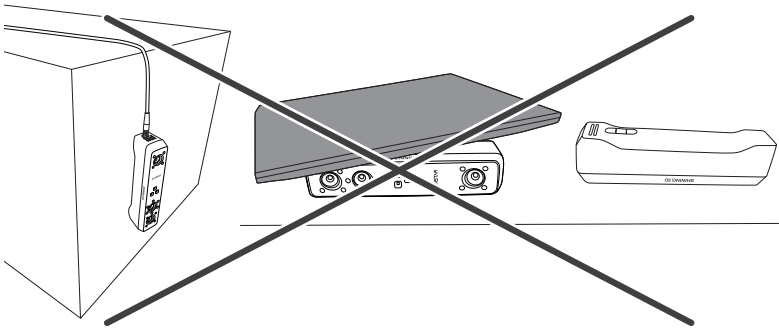


Safe Handling

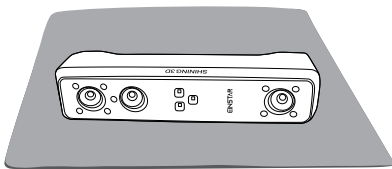
Avoid dropping, hanging or applying force to the scanner.

Avoid placing the scanner camera down.

Place the scanner on a soft blanket when not in use.



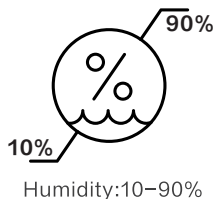
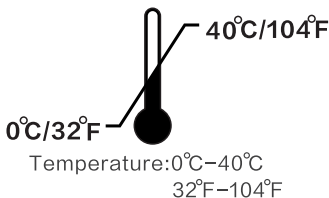
Please store all the items in the original case after each use.



To protect the camera glass



Operating Condition





SHINING 3D

Technical Support

Register at support.einstar.com to submit a support ticket and track your ticket status.
User manual: Get user manual from www.einstar.com--Support--Manual

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Twitter: <https://twitter.com/shining3d>

Instagram: <https://www.instagram.com/einstar3d/>

YouTube: <https://www.youtube.com/Shining3DScanner>

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