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(kennisbank)



# Artec LEO

Quick Start Guide  
Scanning with Artec Leo



English

Version 2025.05A

## Charge & Turn On

To charge your Leo, plug in the power adapter.

### Caution

Never use cables or adapters intended for other scanners or devices.

## Press the power button

A greeting screen with the license agreement will appear.  
Read it carefully and accept it.

## Internet Connection

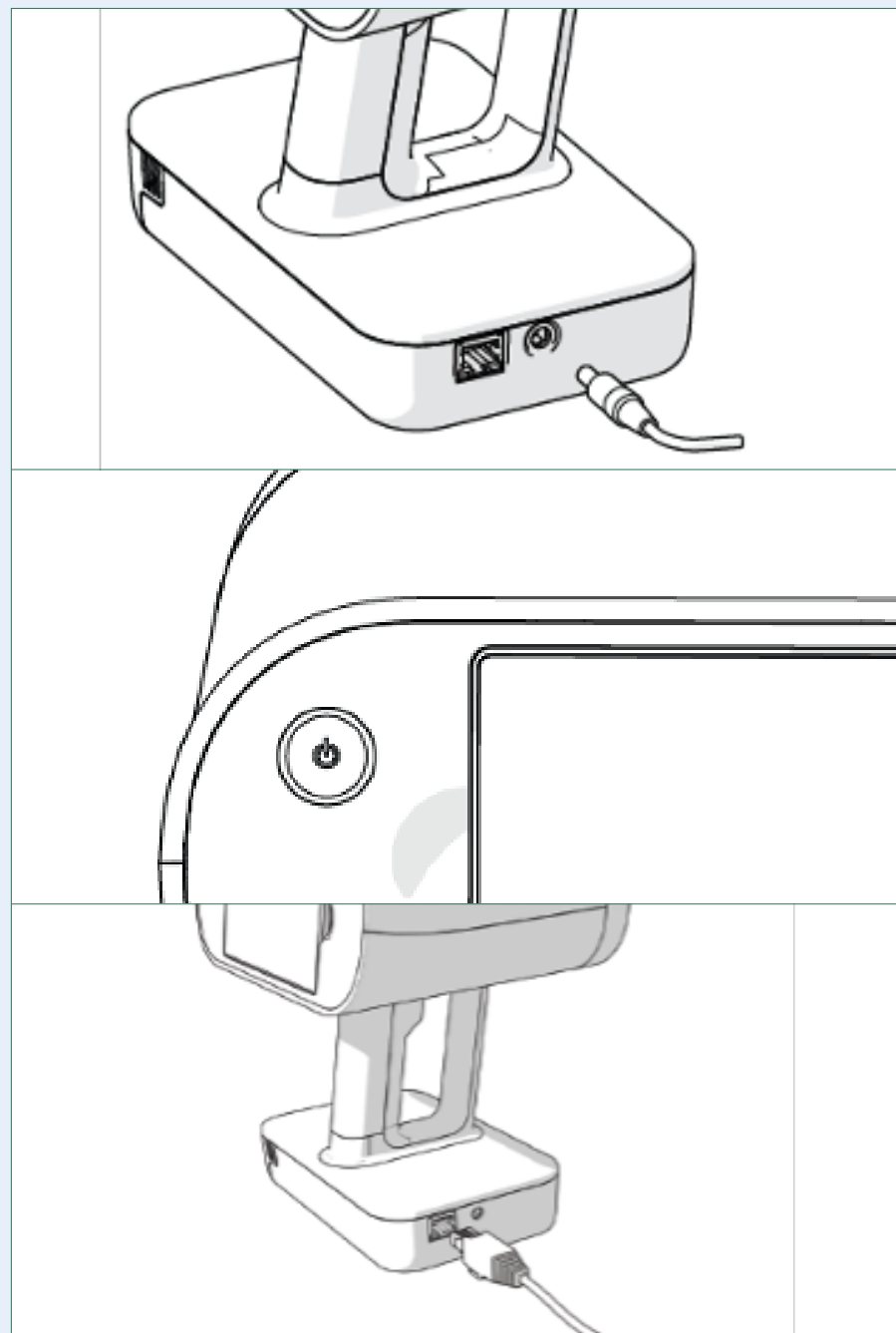
The initial Leo activation requires an Internet connection;  
afterwards, you can use the scanner offline.

### Wi-Fi

Select a Wi-Fi network and specify the password.

### Wired (Ethernet)

Plug in the cable. The connection (DHCP) will set up  
automatically.



## Activate Leo

To activate your Leo, you need a valid account at [my.artec3d.com](https://my.artec3d.com). Use the account your Artec reseller registered for you, or create a new account using either a mobile device or a computer.

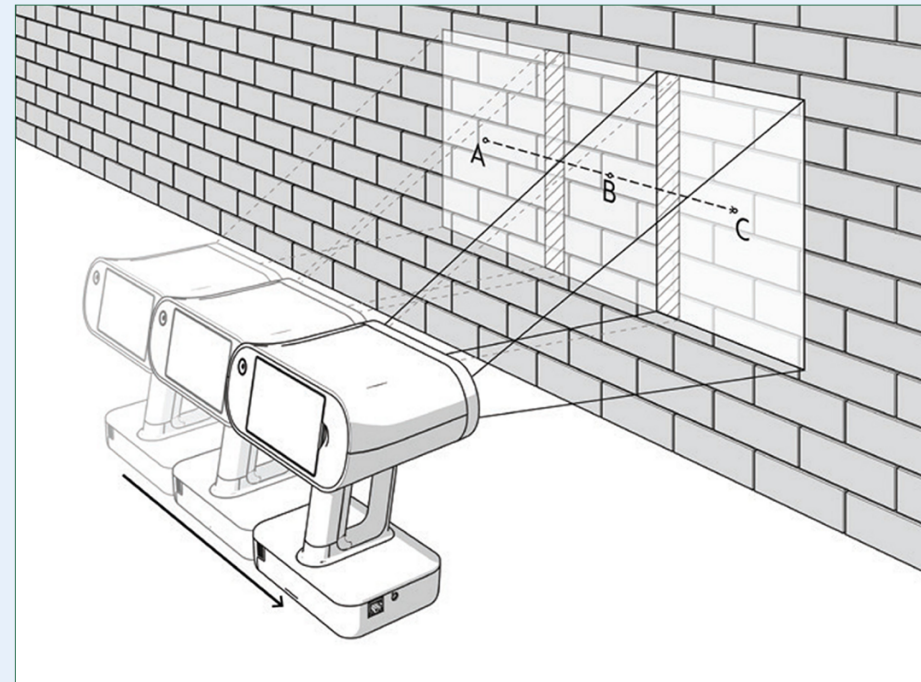
Once you've logged in, name your Leo and you're ready to go.

## How It Works

The scanner has two modes: Preview and Recording. Preview mode is designed for users to practice moving the device and holding it at the optimal distance, and to adjust settings.

Pressing the red trigger button once will take you to Preview mode.

Pressing it again activates **Recording mode** in which Leo records surfaces to a project.

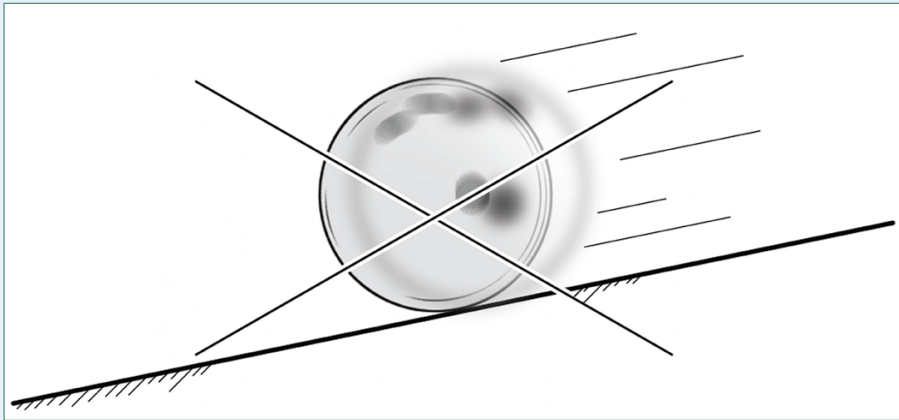


As you move the scanner, it captures a series of frames. Leo uses features in overlapping areas of these frames to automatically align them. This process is called **tracking**. The scanner displays a model built in real time and stores all frames to a project. Using a color-quality indicator, you can evaluate the captured area to determine which parts of the object require additional scanning.

## Objects

Before scanning, ensure the objects meet the following requirements:

- They must be stationary.
- They should have geometry and/or texture (color) features.
- They should have no black, transparent or reflective surfaces.



## Preparations

If the object doesn't meet all the requirements, you can still scan it, but it may need preparation.

## Surface type:

Black, transparent and reflective surfaces

## How to deal with it?

Dust with anti-glare spray

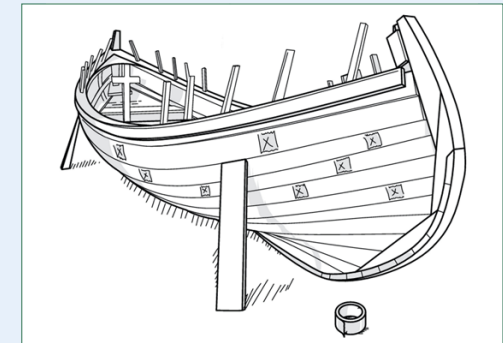


## Surface type:

Thin, flat or repetitive features.

## How to deal with it?

- Add geometry to the object such as crumbled paper
- Add Texture to the surroundings
- Apply masking tape to the background and/or object



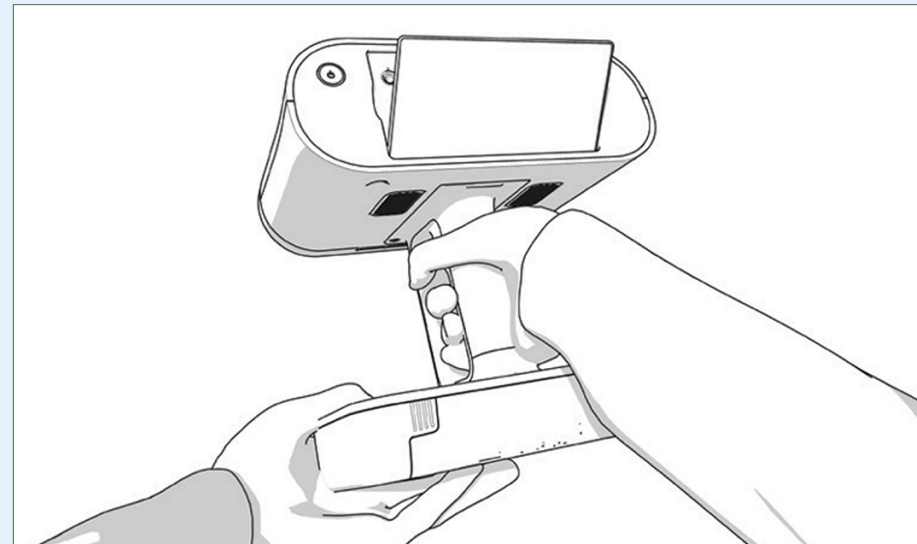
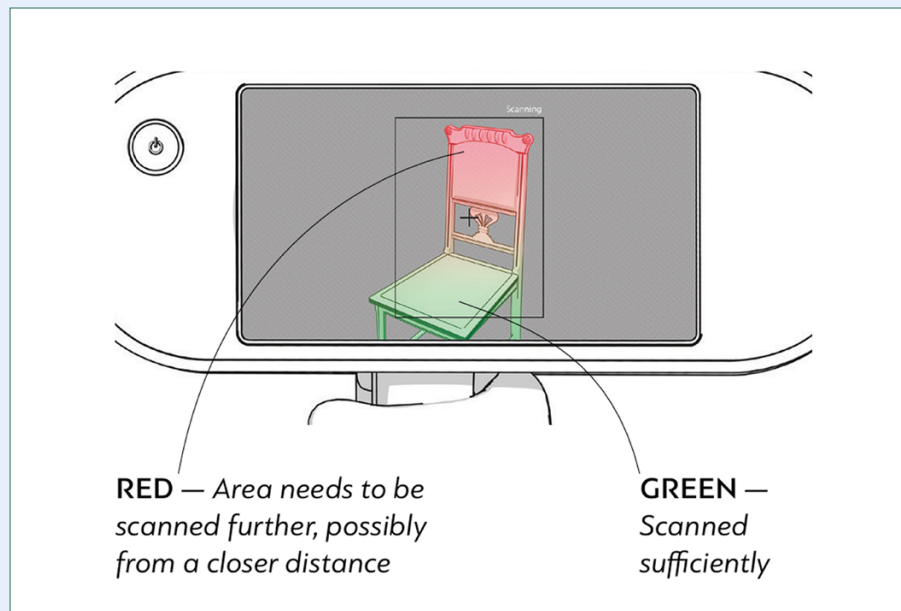
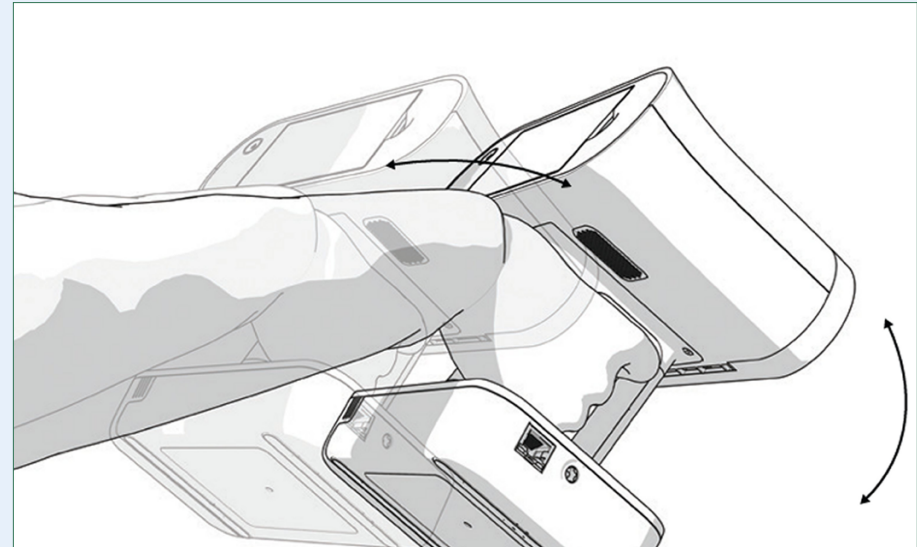
## Scanning

### Focus on Display & Be Flexible

The scanner's field of view must encompass a sufficient surface area.

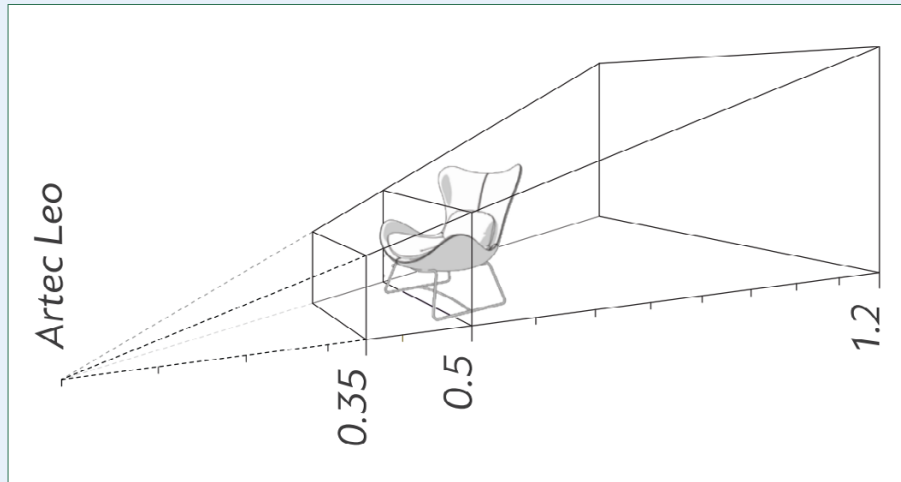
To this end:

- Pay closer attention to the object on the screen than to the actual object.
- Direct the scanner at the object from different angles.
- Move your wrist to turn and tilt the scanner, as necessary.
- Use the tiltable display.



## Optimal Distance

Maintain an average distance of about 0.5 m from the object.

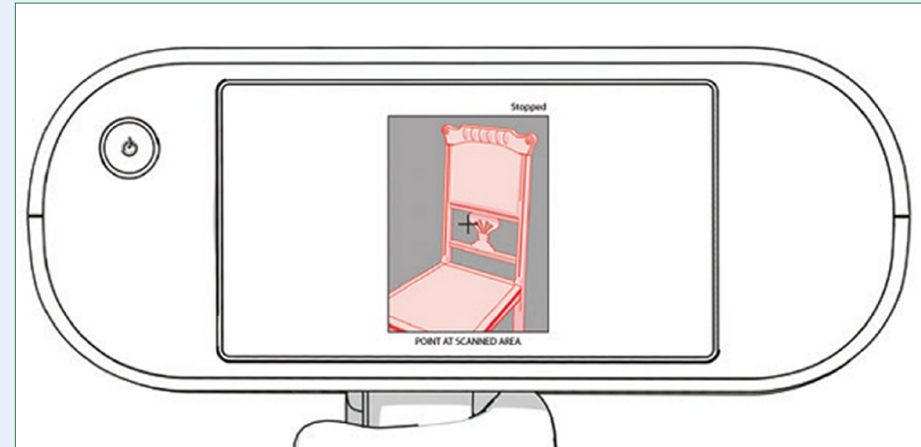


## Scan Background

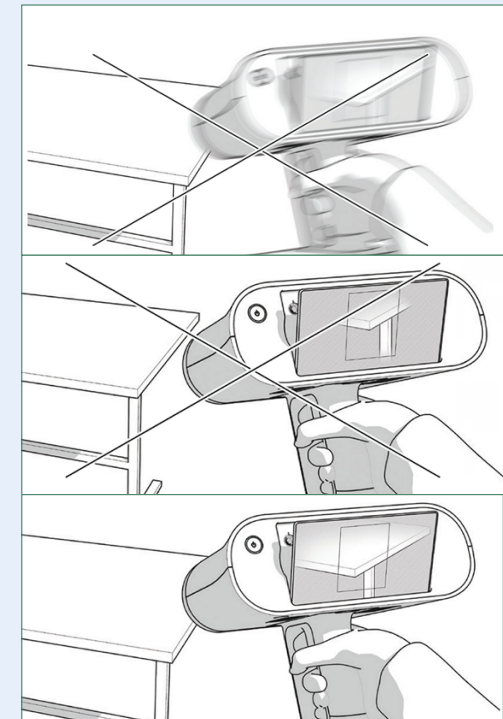
Even though scanning extraneous surfaces appears unhelpful, it may improve tracking (alignment of sequentially **captured frames**).

## Troubleshooting - Lost Tracking

If Leo is unable to continue building an object surface, it enters the **Tracking Lost** mode.



1. Avoid fast movement
2. Avoid insufficient surface area in the field of view
3. Keep sufficient surface area in the field of view at all times



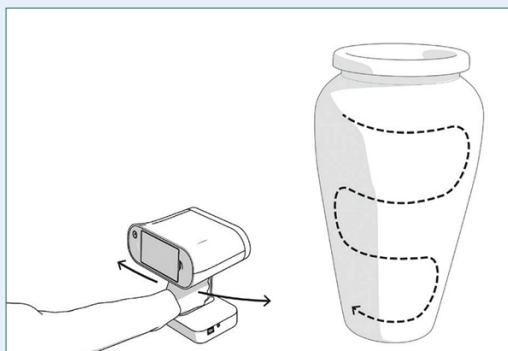
## Resume Scanning

To resume scanning, direct Leo at a region you've already captured, maintaining the original scanner orientation toward this region. Then, once Leo recognizes it, press the red button.

## Scan

### To start scanning

1. Press the red trigger button on the handle to open a preview.
2. Direct the scanner at the object while watching the screen.
3. Press the button once more to start recording.
4. Press the red button and either scan the remaining surfaces or tap **Close**.
5. Press the red button and either scan the remaining surfaces or tap Close.



## Obtain Model

Once the scans are ready, you can process them in Artec Studio by cropping them, creating a model, simplifying its mesh structure and texturing it. You can then measure and annotate the model.

### Import data from Leo to Artec Studio

- Make sure that both Leo and your computer are connected to the same network and use the same my.artec3d.com account or one from the Trusted accounts list.
- In Artec Studio, select **File > Import > Leo project (connect to scanner)**.

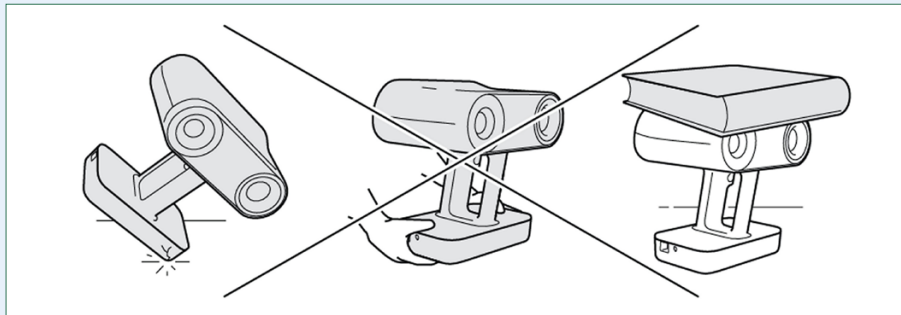
### How to obtain a model

You can use Autopilot. In complex cases, manual processing may yield better results. Consult the **Artec LEO Manual EN** for details.

## Safe Handling

Avoid dropping, vibrating or applying pressure to the scanner.

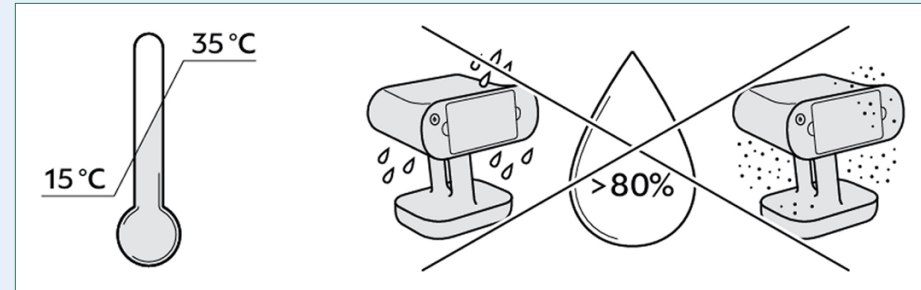
Always grip the scanner with its handle; use your other hand for extra support when necessary.



## Recommended Operating Conditions

Leo is designed to function at ambient temperatures between +15° and +35° with humidity of up to 80%.

Avoid exposure to condensation, liquid or dust.

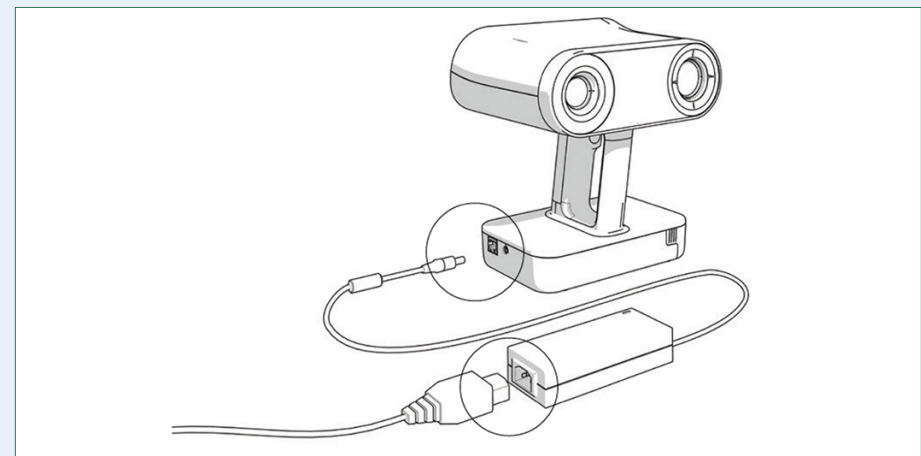


## Electrical Safety

Use only the standard power adapter that comes with Leo. Protect the cables from being stepped on or crushed. Always check cables for damage before use.

**Never operate Leo with damaged cables.**

Before you plug in the power cable, check the connection in the locations as in the picture.



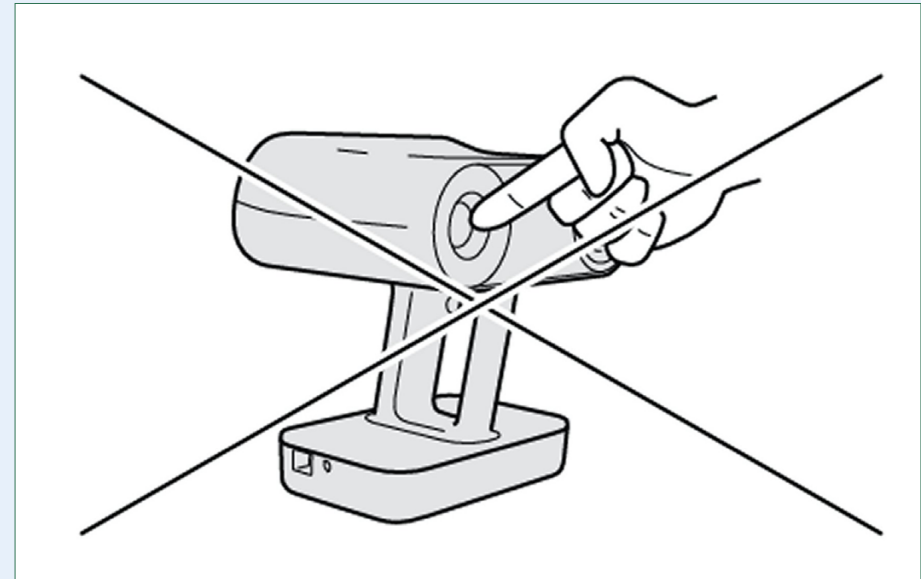
## Transportation

When transporting your Leo and its original accessories, use the hard case. Don't store any extraneous items in this case. Don't alter the case or remove any foam sections.

For cargo shipping, we suggest using the original box your scanner arrived in. Before putting the hard-case packaging in the box, ensure all foam sections are correctly installed. Safely store this box for future use.

## Optics

Avoid touching the scanner's optical components.



Have fun scanning with  
**ARTEC LEO**



## 4C Creative Cad Cam Consultants

4C Creative CAD CAM Consultants is a company specialized in 3D technologies and is located in Emmen, Drenthe. 4C is your partner for delivering professional hardware and software for 3D scanning, reverse engineering, AR & VR and quality control.

### Contact

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For more information, FAQ, updates,  
documents and videos about Artec Leo  
go to [4cccc.nl/kennisbank/artec-leo](https://4cccc.nl/kennisbank/artec-leo)



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