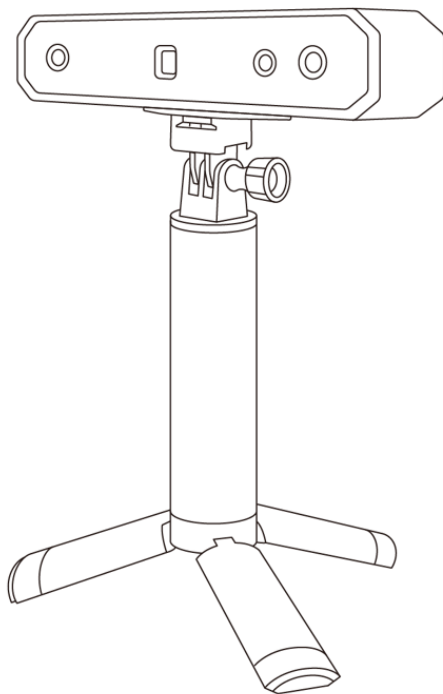


MINI 3D SCANNER

Quick Start Guide

V 3.0



REVOPOINT

Searching for Keywords

Search for keywords such as "windows" to find a topic. If you are using Adobe Acrobat Reader to read this document, press Ctrl+F on Windows or Command+F on macOS to begin a search.

Navigating to a Topic

View a complete list of topics in the table of contents. Click on a topic to navigate to that section.

Printing this Document

This document supports high-resolution printing.

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Read Before Your First Scan

Software Download



To use your Revopoint MINI 3D Scanner, you must download the Revo Scan software. It can be found on Revopoint's website <https://www.revopoint3d.com/download/> for PC users, and for smartphones, it can also be found by searching for "Revo Scan" in the Google Play or Apple App Store.

Revo Scan 5

Revo Scan is the companion scanning software for the Revopoint POP, POP 2, POP 3, MINI and RANGE.



Windows V5.2.1

Updated 2023-07-24

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Mac V5.2.1

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Android V5.2.0

Updated 2023-07-20

[Google Play](#) [Download](#)



iOS V5.2.0

Updated 2023-07-20

[App Store](#)

For the detailed functions of Revo Scan, please refer to the how-to-use guide in Revo Scan.

Scanning Dark, Transparent, or Reflective Objects

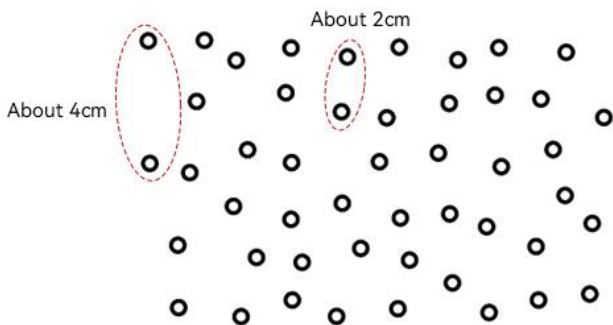
Like most 3D scanners, the MINI will struggle to scan transparent, reflective, or black objects without first treating the object's surface with scanning spray, baby powder, or dry shampoo.

| Surface Features | Possible Solutions |
|---|---|
| Black or very dark objects | Apply Scanning Spray / powder materials |
| Shiny or reflective objects | Apply Scanning Spray / powder materials |
| Metal / Electroplating surfaces | Apply Scanning Spray / powder materials |
| Transparent objects (Glass, certain kinds of plastic) | Apply Scanning Spray / powder materials |
| Few geometric features | Stick markers on or around the object |

Scanning Objects with Plain Surfaces

Scanning objects with simple geometric features, like a football or wine bottle, requires using Marker stickers or marker points and scanning in Marker Mode.

1. Place markers at random distributions on the surface of objects, and it is recommended to place them at a distance of 2~4 cm. Refer to the image below:



2. Place the Marker stickers on the objects' surface irregularly and ensure that there are at least 5 Marker stickers in the frame for the entire scan, or the scanner will lose track.

3. Alternatively, reference objects (these are any objects with distinct features that can be easily tracked) can be used. Place 1 to 3 reference objects around the item you are scanning for the 3D scanner to track. If doing this, you can use the scanner in Feature tracking mode for the scan.

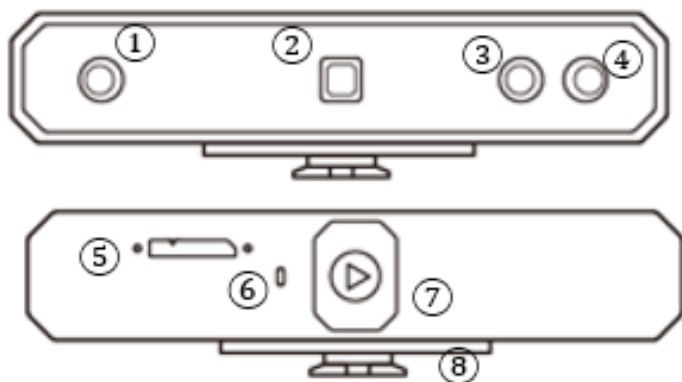
Color Scanning

If you want to accurately capture an object's color during a scan, please ensure that the object is evenly lit with soft light and that there are no dark or hard shadows.

About the Scanner

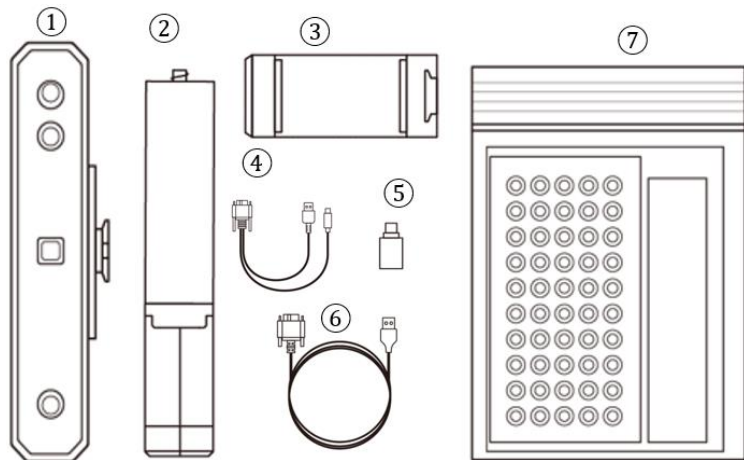
The Revopoint MINI uses binocular blue light technology to project ultra-high-resolution structured light. The high-resolution dual-camera system and intelligent algorithm produce an extremely precise and detailed scanned model, helping professionals quickly achieve accurate 3D data reconstruction. The MINI 3D scanner can output models with a point distance of up to 0.05mm and a single-frame precision of up to 0.02mm.

The MINI is a necessary modeling tool for professionals such as designers, engineers, makers, and medical and scientific research workers, and dramatically lowers the threshold for 3D creative production, allowing you to quickly build a 3D digital world while improving modeling efficiency by more than ten times.



- | | |
|-----------------|----------------------------|
| 1. Depth Camera | 5. Micro-B USB Port |
| 2. Projector | 6. LED Indicator |
| 3. RGB Camera | 7. Start/Pause Scan Button |
| 4. Depth Camera | 8. Quick Setup Board |

What's in the Box?



1. MINI 3D Scanner
2. Tripod
3. Phone Holder
4. 2-in-1 Mobile Cable
5. Type-C Adapter
6. USB Cable(Micro-B to Type-A)
7. Gifts (Markers, Glue Tack, Black Sheet)

Note:

Except the parts listed above, there is a turntable added in the MINI Standard Package. Refer to sales page for the MINI Premium Package and others.

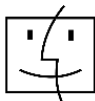
MINI on a Windows or Mac Device

Both Windows and macOS computers are compatible.

System Requirements



Windows: Win 10/11 (64-bit)
 Memory: \geq 8GB
 Processor: Intel Core i5 or better



Mac with Intel \times 86 chip: Mac OS 10.15 and models after
 Mac with Apple M1 chip: Mac OS 11.0 and models after
 Memory: \geq 8GB

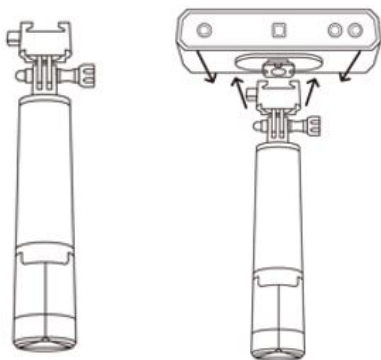
* Minimum PC Display Screen Resolution: 1344 \times 768 (1920 \times 1080 is recommended.)

Connection Methods

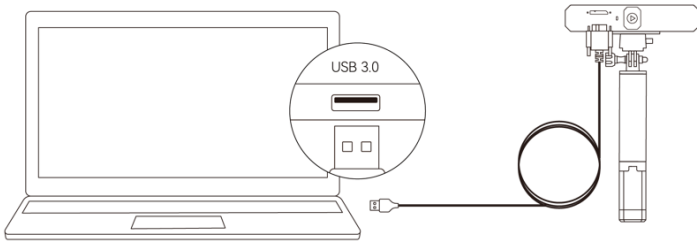
| | Windows | macOS |
|------------|---------|-------|
| USB Mode | √ | √ |
| Wi-Fi Mode | √ | √ |

Connect the MINI to a PC Via USB

Step 1: Clip the MINI to the top.



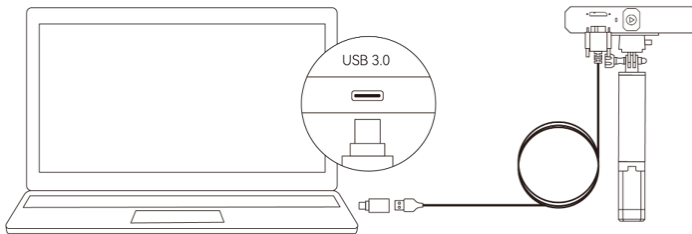
Step 2: Connect the Micro-B end of the cable to the back of your MINI.
 Step 3: Plug the Type-A end into your computer.



Windows or macOS

Note: 1) Connect the MINI to a USB 3.0 port or above, as USB 2.0 will not supply sufficient operating power. Ensure your USB 3.0 port is not damaged or worn out.

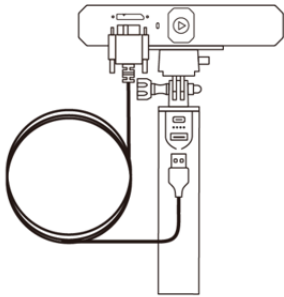
2) If there is no Type-A port on your laptop, use the Type-C Adapter.



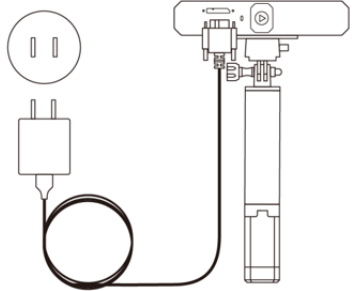
Step 5: Open Revo Scan on your computer.

Connect the MINI to a PC Via Wi-Fi

Step 1: Power the MINI on with a **Power Bank Handle** or an **AC adapter**.
(Note: Don't plug it into your PC, or it will be in USB mode by default.)



Or



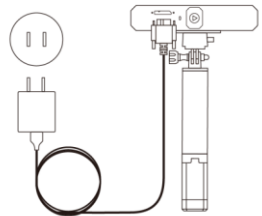
Step 2: Connect the PC to the MINI.

- 1) Go to your Wi-Fi setting, search for a network called MINI-XXXXXX and connect. (No password is required.)
- 2) Wait a few seconds for the scanner to be connected.



Windows or macOS

Wi-Fi



Step 3: Open Revo Scan on your computer.

MINI on Smartphones

Android devices can connect via either USB or Wi-Fi. However, iOS devices only support Wi-Fi mode.

System Requirements



Android: \geq Android 9.0
 Harmony OS is supported.
 RAM: \geq 6GB



iPhone: iPhone 8 Plus or models after
 iPad: 6th generation iPad and models after
 System Version: \geq iOS 13.0

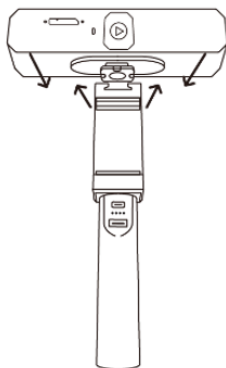
Connection Methods

| | Android | iOS/iPadOS |
|------------|---------|------------|
| USB Mode | √ | × |
| Wi-Fi Mode | √ | √ |

Connect the MINI to an Android Phone via USB

Step 1: Screw the Phone Holder onto the Power Bank Handle.

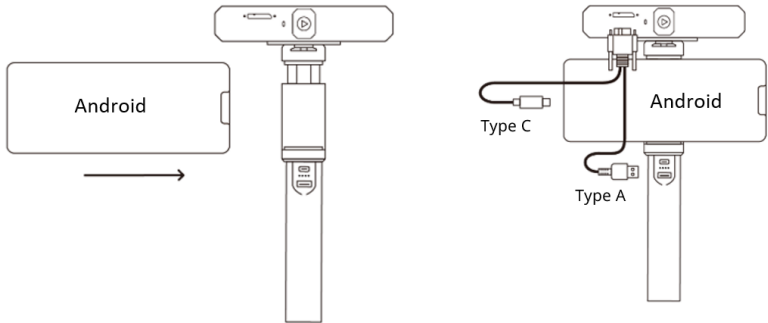
Step 2: Clip the MINI to the top of the Phone Holder.



Step 3: Pull open the Phone Holder's clamps and fit your smartphone.

Step 4: Connect the Micro-B end of the 2-in-1 Mobile Cable to the MINI's port.

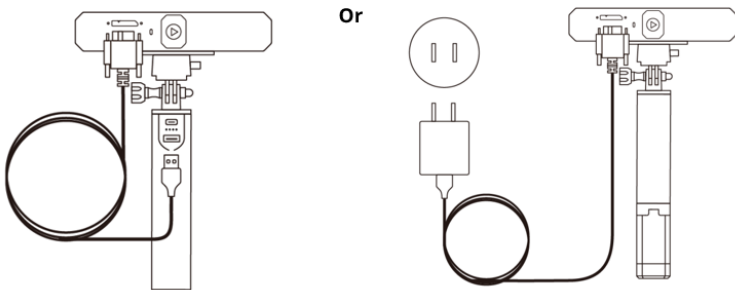
Note: You can prepare a power bank yourself or go to Revopoint Store to buy one.



Connect the MINI to a Phone Via Wi-Fi

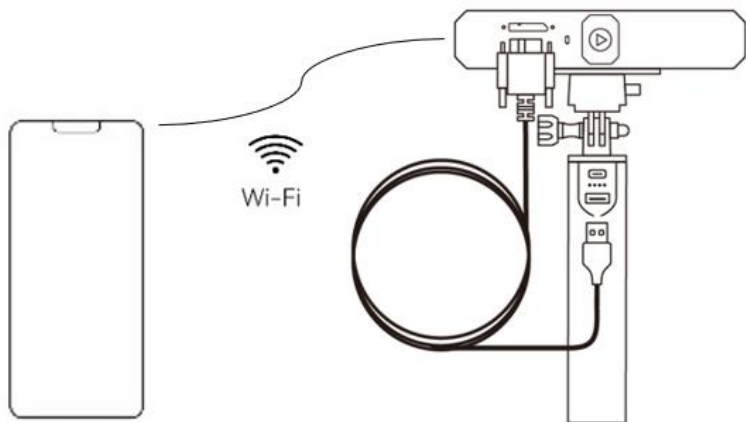
Both Android and iOS Phones are compatible.

Step 1: Power the MINI on via the Power Bank Handle or a Socket.

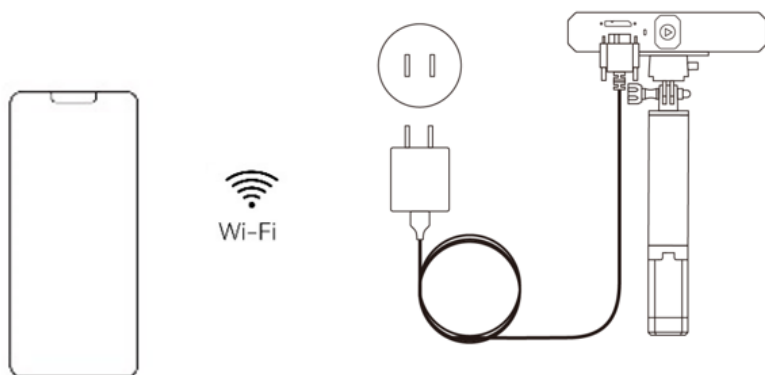


Step 2: Connect the Smartphone to the MINI.

1) Go to your Wi-Fi setting on your smartphone, search for a network called MINI-XXXXXX and connect. (No password is required.)



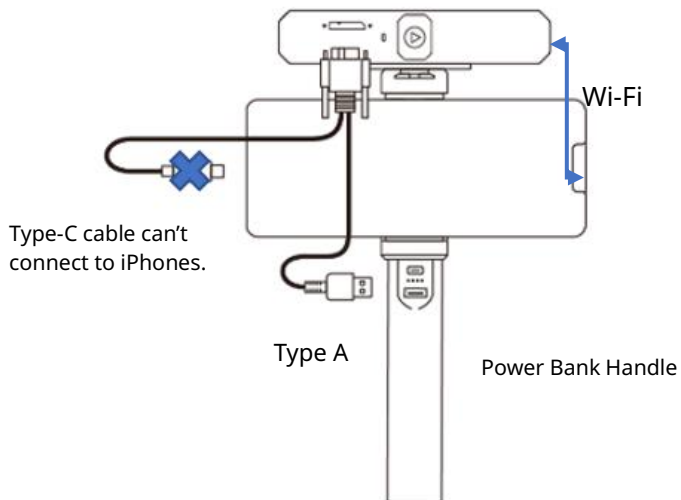
Or



2) Wait a few seconds for the scanner to be connected.

Step 3: Open Revo Scan on your phone.

Note: If you have an iPhone, and want to use the 2-in-1 Mobile cable to scan, it works like:



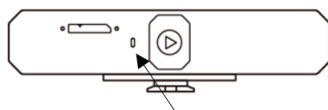
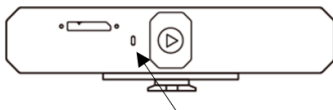
Appendix

Specifications

| | |
|---|---|
| Product Name | MINI 3D Scanner |
| Technology | Dual Camera Blue Light |
| Single-frame Precision¹ | Up to 0.02mm |
| Single-frame Accuracy¹ | Up to 0.05mm |
| Single Capture MINI | 64mm x 118mm |
| Working Distance | 100mm - 200mm |
| Minimum Scan Volume | 10mm x 10mm x 10mm |
| Scanning Speed | Up to 10fps |
| Light Source² | Class 1 Blue Light |
| Alignment | Feature, Marker |
| Color Scanning | Yes |
| Output Formats | PLY, OBJ, and STL |
| Point Distance/Resolution | 0.05mm |
| Special Object Scanning | Use scanning spray for transparent, dark, or highly reflective objects. |
| Scanning Environment | Indoors |
| Scanner Weight | 160g |
| Scanner Dimensions | 120mm x 38.5mm x 25mm |
| 3D Printing Compatible | Yes |

| | |
|---|---|
| Compatible OS | Windows 10/11 (64-bit), Android, iOS, macOS |
| PC Display Screen Resolution | >1344x768 (1920×1080 is recommended.) |
| Hardware Button | Start/Pause Scan |
| Connection Type | Micro-B --- Type-A USB |
| <p>Note: 1. Accuracy was acquired in a controlled lab environment. Actual results might vary, subject to the operation environment.</p> <p>2. Class 1 Laser: Avoid direct eye exposure for extended periods! Refer to Standards for Class 1 Lasers for details.</p> | |

LED Indicators



Indicator in Red: Powered on, and starting Indicator in Green: Working properly

Update the Firmware

When you connect your MINI to Revo Scan, a pop-up will notify you of any firmware updates. If you want to update your firmware, follow the install wizard's prompts and ensure that your MINI has a stable power supply.

Scanner Calibration

Your MINI 3D Scanner was calibrated in the factory and only needs to be recalibrated after a year of use or if the scanned results do not match the specified accuracy.

If you need to calibrate your MINI 3D scanner, please send messages to our customer service team, or you can visit our Forum to find the calibration package and instructions.

Safety Maintenance Instructions

1. Small parts, such as markers and USB adapters, are dangerous if swallowed. Keep all components out of reach of children and animals to avoid serious injury to them.
2. Store the scanner and all accessories in a cool, dry place away from direct sunlight.
3. Do not allow the scanner to come into contact with or become immersed in water or other liquids. If it gets wet, wipe them dry with a soft, absorbent cloth. Operating a scanner that has fallen in water may cause permanent component damage.
4. Keep the cameras (the two Depth cameras and one RGB camera) and the projector clean. Use 95% isopropyl alcohol and a soft cloth to clean them.
5. Handle the scanner with care to avoid hitting the cameras.
6. The operating temperature MINI of this product is 0°C to 40°C (32°F to 104°F).
7. Do not take apart the scanner. If there are any problems or questions, contact the Revopoint customer service team at customer@revopoint3d.com.

Troubleshooting

1. What to do if you get a “check internet connection” error when trying to download a firmware update?

Check your device's Firewall Settings and confirm Revo Scan is not being blocked or the Firewall is off.

2. What to do if my MINI turns on but its LED never turns solid green, indicating that it's ready to connect?

Connect your MINI to a power source, then press the MINI's Start/Pause scan button ten times to reset the MINI. If that doesn't resolve the issue, please get in touch with customer support.

3. What to do if the MINI always loses tracking when scanning?

Try using scanner spray, dry shampoo, or baby powder to lightly coat any shiny or dark surfaces on the object. If the object has plain surfaces, you'll need to place Marker stickers (place them irregularly and ensure that at least five will always be in the frame when you're scanning) and select Marker mode for the scan.

4. What to do if the object you want to scan isn't clear in the preview window?

Increase the Brightness in Revo Scan till the object looks clearly defined and has as few red and blue patches in the preview window as possible.

5. What to do if your scanned model's surfaces lack detail or the details are smeared?

Unfortunately, you'll need to redo the scan, but be careful and ensure you only scan an area once rather than multiple times. Basically, the smaller the number of frames, the better the scan quality. Scanning the same spot twice will only lower the detail.

6. What to do if you keep running out of memory when scanning?

The object you're scanning is too large for your computer or smartphone's amount of RAM. If this happens, pause the scan, fuse the model, and start a new scan from where you had to pause your previous scan. These separate scans can be merged together in Revo Scan V5 or you can download Revo Studio on Revopoint official website to make a whole model once you've finished scanning the object.

7. What should I do if the firmware upgrade fails and the LED light keeps showing blue?

Connect your MINI to a power source, then press the start/pause button 10 times continuously to restore the MINI scanner to the normal scanning mode.

Customer Service

If you need any assistance with your scanner, please don't hesitate to contact us at customer@revopoint3d.com or drop us a line at +1 (888) 807-3339 or chat with one of our customer service agents online on our website www.revopoint3d.com. click the speech bubble on the bottom right corner of the screen.

This content is subject to change.



www.revopoint3d.com

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Please contact Revopoint by sending a message to
support@revopoint3d.com

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