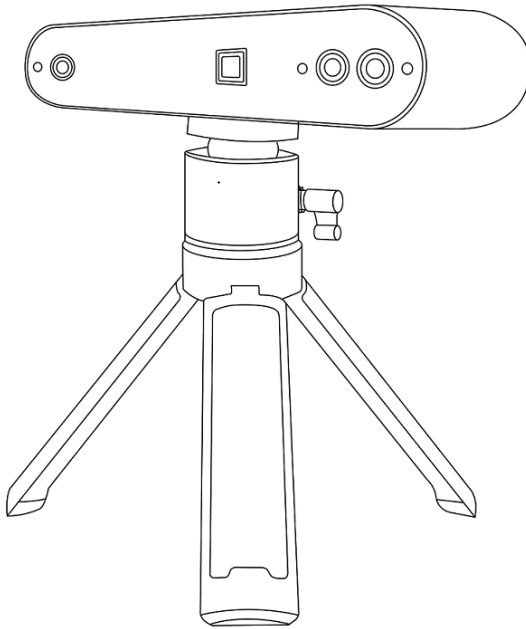


INSPIRE 3D SCANNER

Quick Start Guide

V1.0



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.

Table of Contents

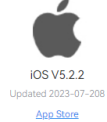
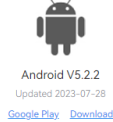
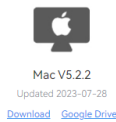
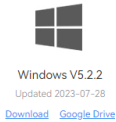
Read Before Your First Scan.....	1
Software Download	1
Scanning Dark, Transparent, or Reflective Objects	1
Scanning Objects with Plain Surfaces	2
Color Scanning.....	2
About INSPIRE.....	3
What's in the Box?	4
INSPIRE on Windows or macOS Devices	5
System Requirements	5
Connection Methods	5
Connecting INSPIRE to a PC via USB	5
Connecting INSPIRE to a PC via Wi-Fi	6
INSPIRE on Smartphones.....	7
System Requirements	7
Connection Methods.....	8
Connecting INSPIRE to Phones via Wi-Fi	8
Appendix	10
Specifications	10
LED Indicators.....	12
Updating the Firmware.....	12
Scanner Calibration	12
Maintenance Instructions	12
Troubleshooting	13
Customer Service	14

Read Before Your First Scan Software Download



To use your INSPIRE 3D Scanner, you must first download the Revo Scan software. You can download the Windows or macOS versions from Revopoint's website <https://www.revopoint3d.com/download/>. And for Android or iOS smartphones, search for "Revo Scan" in the Google Play or Apple App Store.

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



To learn more about Revo Scan's functions, please check out the user manual in Revo Scan.

Scanning Dark, Transparent, or Reflective Objects

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

Hard-to-scan Surfaces

Surface Features	Possible Solutions
Black or very dark objects	Apply scanning spray or fine powder materials
Shiny or reflective objects	Apply scanning spray or fine powder materials
Metal or electroplated surfaces	Apply scanning spray or fine powder materials
Transparent objects	Apply scanning spray or fine powder materials

Scanning Objects with Plain Surfaces

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

1. Place the Marker stickers (or Magic Mat under the object) on or around the objects' surface irregularly and ensure there are at least 5 Marker stickers per frame for the entire scan, or the scanner will lose track.
2. 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.

Please scan the QR code to watch a Marker stickers video tutorial.

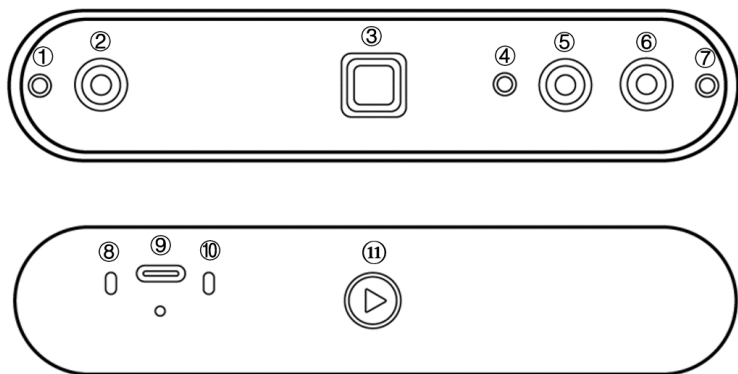


Color Scanning

For optimal color scanning, please ensure that the object is evenly lit with soft light and that there are no dark or hard shadows.

About INSPIRE

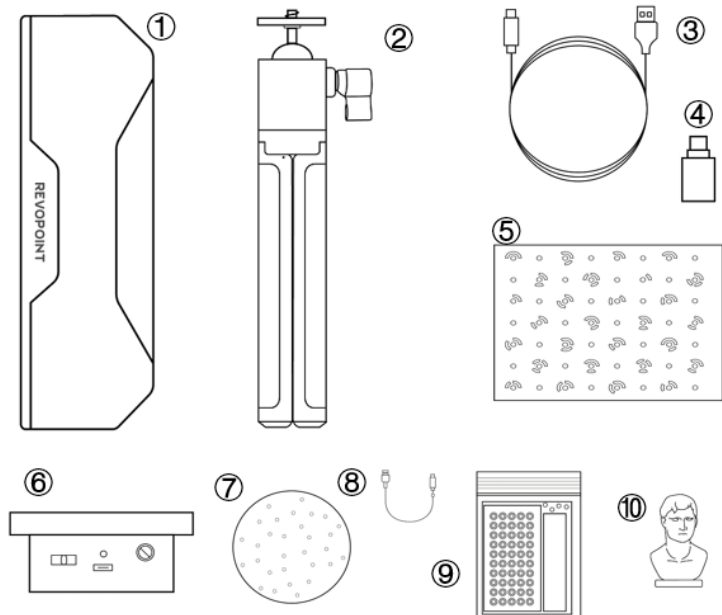
The Revopoint INSPIRE is an infrared structured light 3D scanner. It's packed with smart technology designed to make capturing detailed scans as easy as possible. And with its versatility and adaptability, it's capable of various applications like 3D printing, 3D animation design, VR/AR, historic preservation, and many more.



1. Infrared Fill Light
2. Depth Camera
3. Projector
4. White LED
5. RGB Camera
6. Depth Camera

7. Infrared Fill Light
8. Connection Indicator
9. Type-C Port
10. Power Indicator
11. Start/Pause Scan

What's in the Box?



1. INSPIRE 3D Scanner
2. Tripod
3. USB Type-C Cable
4. Type-C Adapter
5. Calibration Board
6. Mini Turntable

7. Marker Topper
8. Turntable USB Cable
9. Markers, Glue Tack, Magic Mat
10. Sample Bust

INSPIRE on PC Devices

Both Windows and macOS computers are compatible.

System Requirements



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



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

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

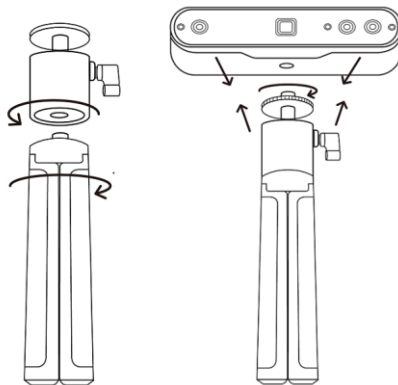
Connection Methods

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

Connecting INSPIRE to a PC via USB

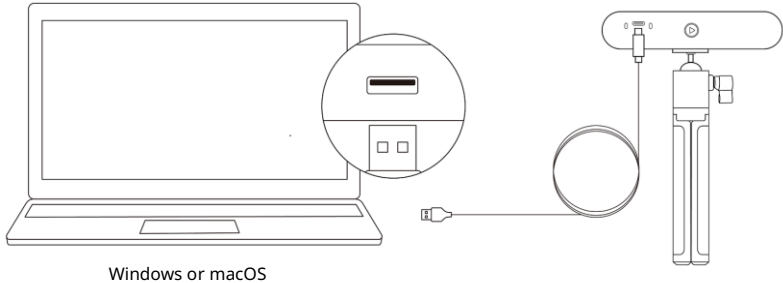
Step 1: Screw the Universal Ball Head onto the Tripod.

Step 2: Screw the INSPIRE onto the top of the Tripod.



Step 3: Connect the USB cable's Type-C end to the INSPIRE's rear port.

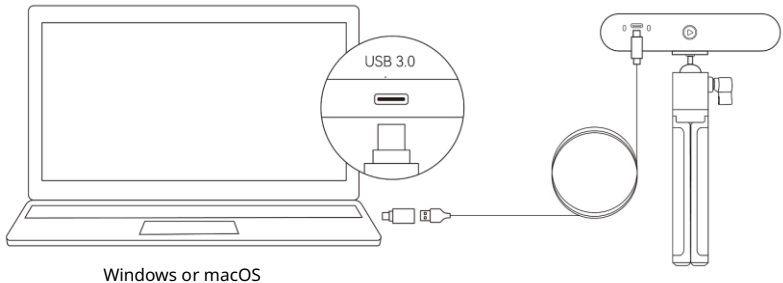
Step 4: Plug the Type-A end into a USB 3.0 port or above on your computer.



Step 5: Open Revo Scan on your computer.

Notes:

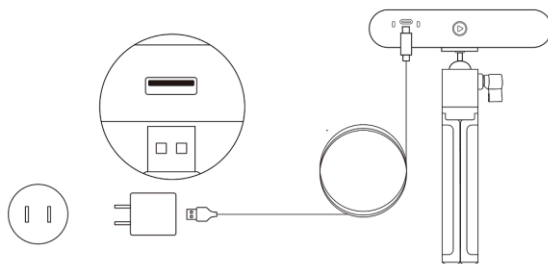
- 1) Connect INSPIRE to a USB 3.0 port or above (USB 2.0 will not supply sufficient operating power). Ensure your USB 3.0 port is not damaged or worn out.
- 2) If there is no Type-A port on your computer, use the Type-C Adapter.



Connecting INSPIRE to a PC via Wi-Fi

Step 1: Powering INSPIRE via the Power Bank Handle or a power socket.

Note: Do not plug it into your PC, or it will default to USB mode. The Power Bank Handle is not included with INSPIRE. However, you can use your own power bank if it's rated 5V/1A or buy one from the Revopoint Store.



Step 2: Connect a PC to INSPIRE.

- 1) Go to your Wi-Fi settings, search for the network called **INSPIRE-REVO-XXXXXXX**, and connect (No password is required).
- 2) Wait a few seconds for the scanner to be connected.



Windows or macOS

Step 3: Open Revo Scan on your computer.

INSPIRE on Smartphones

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 or models after
System Version: \geq iOS 13.0

Connection Methods

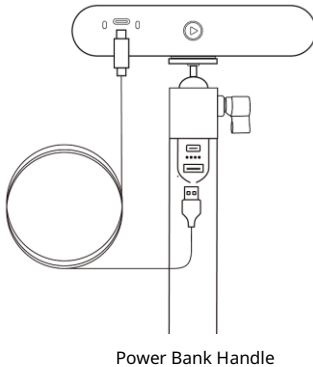
	Android	iOS/iPadOS
USB Mode	√	×
Wi-Fi Mode	√	√

Note: Android devices support both USB and Wi-Fi connections. A 2-in-1 Mobile USB Cable is needed to connect INSPIRE to a phone and power bank. One can be purchased from the Revopoint store. The following provides a detailed introduction to Wi-Fi connection for both Android and iOS OS.

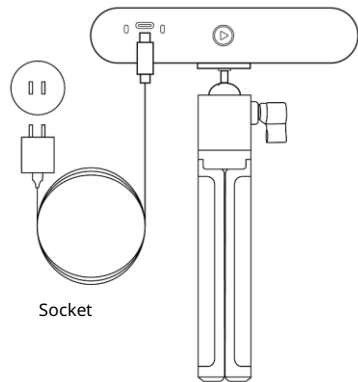
Connecting INSPIRE to Phones via Wi-Fi

Step 1: Powering INSPIRE via the Power Bank Handle or a power socket.

1) Powered by a Power Bank Handle.



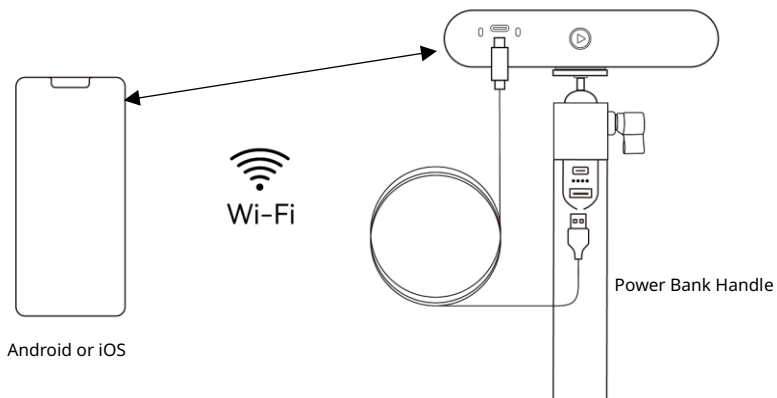
2) Powered by a power socket.



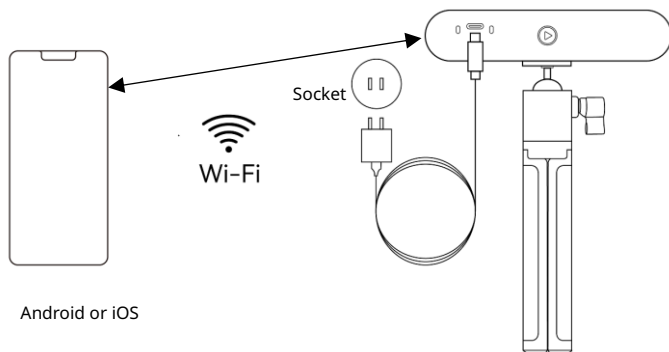
Step 2: Connect a Smartphone to INSPIRE.

1) Go to your smartphone's Wi-Fi settings, search for the network called **INSPIRE-REVO-XXXXXXX**, and connect (No password is required).

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



Or



Step 3: Open Revo Scan on Your Phone.

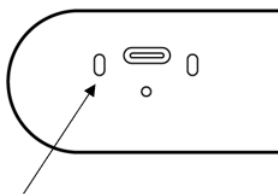
Appendix

Specifications

Product Name	INSPIRE 3D Scanner
Technology	Binocular Dual-Camera Infrared Light
Accuracy	Up to 0.2 mm
Single Capture Range	230mm × 140 mm@310 mm
Working Distance	250mm – 500 mm
Minimum Scan Volume	50 mm × 50 mm × 50 mm
Scanning Speed	14 fps - 18 fps
Light Source	Class 1 Infrared Light
Tracking Methods	Feature, Marker
Color Scanning	Yes
Output Formats	PLY, OBJ, and STL
Point Distance/ Resolution	0.3 mm
Special Object Scanning	Use scanning spray for transparent, dark, or highly reflective objects.
Scanning Environment	Indoors and Outdoors
Outdoor Scanning	The INSPIRE cannot scan objects well in direct bright sunlight.
Scanner Dimensions	132 mm × 45 mm × 27 mm

Scanner Weight	140 g
3D Printing Compatible	Yes
Compatible OS	Windows, Android, iOS, macOS
Hardware Button	Start/Pause scanning
LED Indicators	Connection indicator shows the connection status.
	Power indicator shows the power status.
PC Display Screen Resolution	>1344×768 (1920×1080 is recommended)
Wi-Fi	Wi-Fi 6
Connection Port	USB Type-C
<p>Note:</p> <ol style="list-style-type: none">1. Accuracy was acquired in a controlled lab environment. Actual results might vary, subject to the operation environment.2. iOS devices only support Wi-Fi connection.3. Class 1 Laser: Avoid direct eye exposure for extended periods! Refer to Standards for Class 1 Lasers for details.4. Warning: This product has flashing lights which may not be suitable for people with photosensitive epilepsy.	

LED Indicators



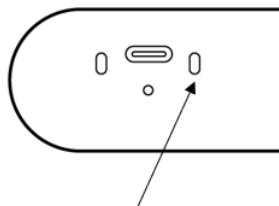
Connection Indicator

No Light: Not Connected

Solid Blue Light: Connected

Flashing Blue Light: Working

Properly



Power Indicator

No Light: Not Powered

Solid Red Light: Powered

Flashing Red Light: Starting

Solid Green Light: Started Successfully

Updating the Firmware

A Revo Scan (PC) pop-up will notify you when you connect your INSPIRE if a firmware update is available. If you want to update your firmware, follow the install wizard's prompts and ensure your INSPIRE has a stable power supply.

Scanner Calibration

Your INSPIRE 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.

Maintenance Instructions

1. Small parts, such as markers, are dangerous if swallowed. Keep all components out of reach of children and animals to avoid serious injury.
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. Wipe it with a soft, absorbent cloth if it gets wet. Operating a scanner that has gotten wet may cause permanent component damage.
4. Keep the cameras and projector (the two IR cameras, one RGB camera, and a 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 of this product is 0°C to 40°C (32°F to 104°F).
7. Do not disassemble 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 INSPIRE turns on, but its LED never turns solid green, indicating it's ready to connect?

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

3. What to do if the INSPIRE lose tracking when scanning?

Try using scanning spray, dry shampoo, or baby powder to lightly coat any shiny or dark surfaces on the object. If the object has plain surfaces, you must 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 to 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 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 INSPIRE to a power source, then press the Start/Pause button 10 times continuously to restore the 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 at www.revopoint3d.com. Click the speech bubble on the bottom right corner of the screen.

Warning

The product cannot be returned
if the "**Warranty Void If Seal Is Broken**"
label is damaged or removed.

This content is subject to change.



www.revopoint3d.com

If you have any questions about this document,
Please contact Revopoint by sending a message
to support@revopoint3d.com or our forum
<https://forum.revopoint3d.com/>.

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