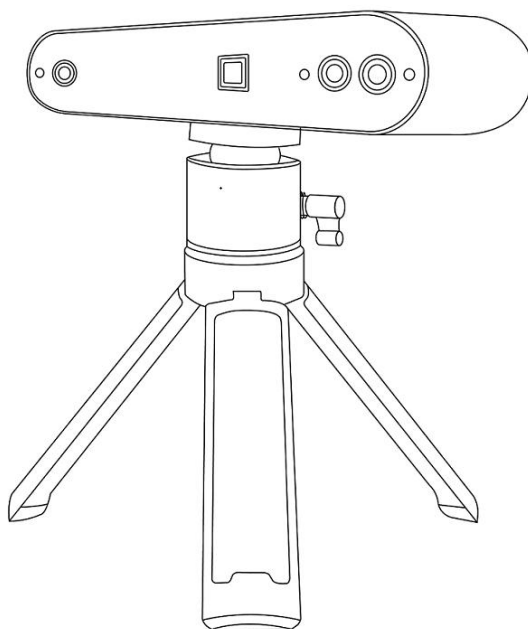


INSPIRE 3D Scanner

Quick Start Guide

V1.0



REVOPOINT

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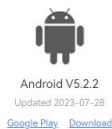
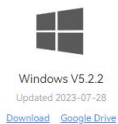
Read Before Your First Scan

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.

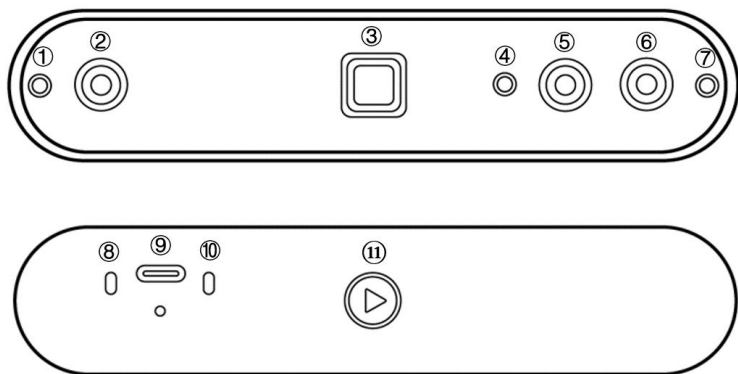


Color Scanning

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

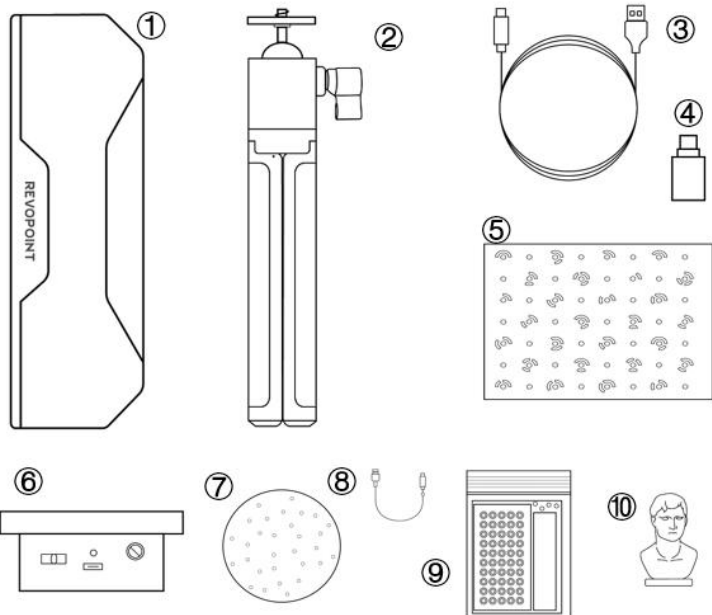
8. Connection Indicator

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 x 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: 1344x768
(1920x1080 is recommended).

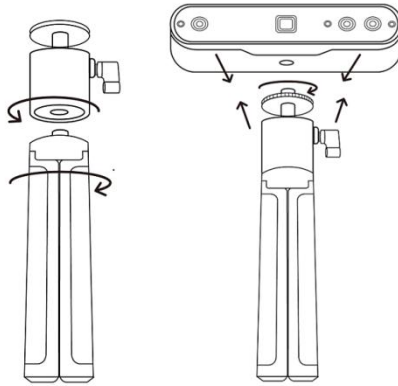
Connection Methods

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

Connecting INSPIRE to a PC via USB

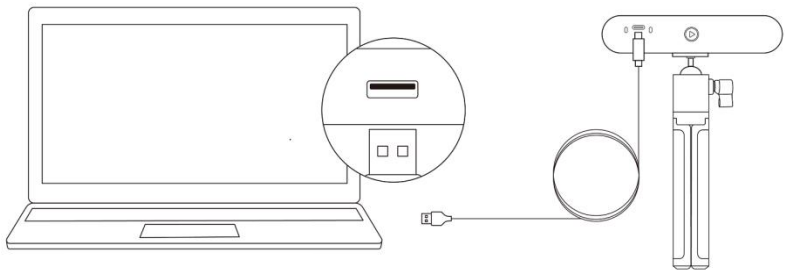
Step 1: Screw the Universal Ball Head onto the Tripod.

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.



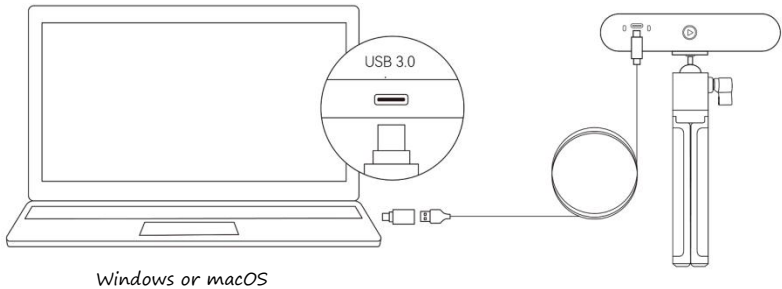
Windows or macOS

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

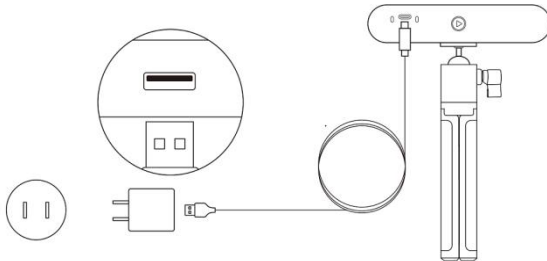
Adapter.



Connecting INSPIRE to a PC via Wi-Fi

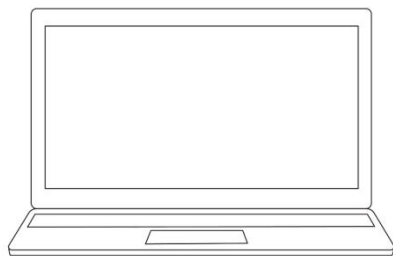
Step 1: Powering INSPIRE via the Power Bank Handle or a power socket.

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.

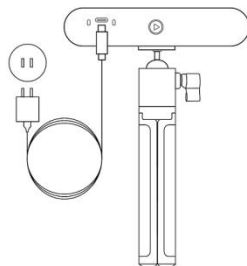


Step 2: Connect a PC to INSPIRE.

- 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	√	√

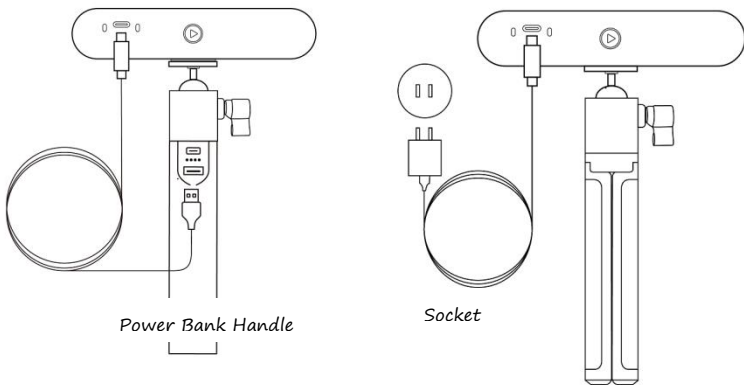
Note: Android devices support both USB and Wi-Fi connections. A 2-in-1 Mobile USB Cable is needed to connect INSPIRE to a phone and power

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

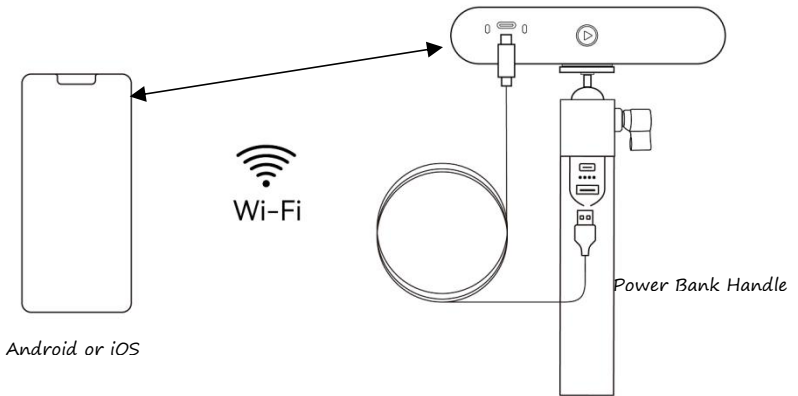
Step 1: Powering INSPIRE via the Power Bank Handle or a power socket.

- 1) Powered by a Power Bank Handle
- 2) Powered by a power socket.

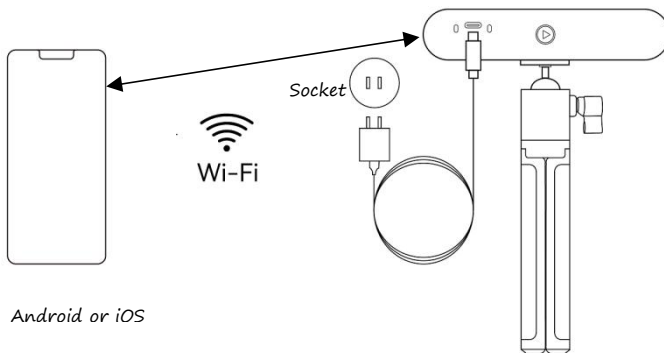


Step 2: Connect a Smartphone to INSPIRE.

- 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

<i>Product Name</i>	<i>INSPIRE 3D Scanner</i>
<i>Technology</i>	<i>Binocular Dual-Camera Infrared Light</i>
<i>Accuracy</i>	<i>Up to 0.2 mm</i>
<i>Single Capture Range</i>	<i>230 mm × 140 mm@310 mm</i>
<i>Working Distance</i>	<i>250mm – 500 mm</i>
<i>Minimum Scan Volume</i>	<i>50 mm × 50 mm × 50 mm</i>
<i>Scanning Speed</i>	<i>14 fps - 18 fps</i>
<i>Light Source</i>	<i>Class 1 Infrared Light</i>
<i>Tracking Methods</i>	<i>Feature, Marker</i>
<i>Color Scanning</i>	<i>Yes</i>
<i>Output Formats</i>	<i>PLY, OBJ, and STL</i>
<i>Point Distance/ Resolution</i>	<i>0.3 mm</i>
<i>Special Object Scanning</i>	<i>Use scanning spray for transparent, dark, or highly</i>

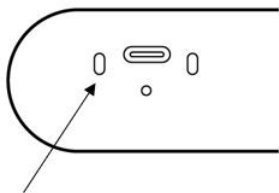
INSPIRE Quick Start Guide

	<i>reflective objects.</i>
Scanning Environment	<i>Indoors and Outdoors</i>
Outdoor Scanning	<i>The INSPIRE cannot scan objects well in direct bright sunlight.</i>
Scanner Dimensions	<i>132 mm x 45 mm x 27 mm</i>
Scanner Weight	<i>140 g</i>
3D Printing Compatible	<i>Yes</i>
Compatible OS	<i>Windows, Android, iOS, macOS</i>
Hardware Button	<i>Start/Pause scanning</i>
LED Indicators	<i>Connection indicator shows the connection status.</i>
	<i>Power indicator shows the power status.</i>
PC Display Screen Resolution	<i>>1344x768 (1920x1080 is recommended)</i>
Wi-Fi	<i>Wi-Fi 6</i>
Connection Port	<i>USB Type-C</i>

Note:

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

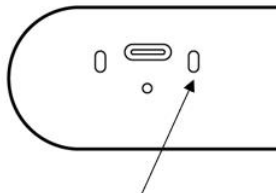


Connection Indicator

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

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.*

FCC STATEMENT :

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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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