Revo Scan V5

User Guide V1.0



REVOPOINT

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Introduction

Revo Scan is your gateway software for creating 3D scans with Revopoint 3D scanners and post-processing. Revo Scan supports Windows, macOS, Android, and iOS systems. All Revopoint scanners can be connected to mobile phones, tablets, and computers via USB or Wi-Fi connections. The software's clear UI design makes it easy to operate, and Revo Scan can output STL, PLY, and OBJ model formats compatible with most mainstream 3D software on the market.

This manual will explain how to use the mobile version of Revo Scan to quickly perform 3D scans and easily create a complete 3D model.

Scanners Supported

All Revopoint scanners.

Download and Installation



Android: ≥Android 9.0

RAM: ≥ 6GB

* Harmony OS is supported.



iPhone: iPhone 8 Plus or later iPad: 6th generation iPad or later

System Version: ≥ iOS 13.0

Download

To use your Revopoint 3D scanner, you must download the Revo Scan software. It can be found by searching for "Revo Scan" in the Google Play or Apple App store.

Connection Method

	Android	iOS/iPadOS
USB Mode	√	×
Wi-Fi Mode	\checkmark	√
Note: iOS and iPadOS can only be connected via Wi-Fi.		

Read Before Scanning

- Before opening Revo Scan, please power on your scanner and 1. connect it to your smartphone. Refer to your scanner's User Manual for details
- 2. If you need more post-processing functions, export the project captured on your smartphone to a PC or app. Refer to the Export Your Projects section.
- 3. The following screenshots are from Revo Scan on iOS 16.4. There are slight differences for Android devices, but all the essential processes are the same.

Scanning Procedure

New Project—> Scan Settings—> Start Scanning—> Complete Scanning—> Post-processing—> Model Checking or Exporting

New Project: Tap New Project on the Home page to enter scan settings. **Scan Settings**: Here, you can select the Accuracy, tracking, object type, and texture settings.

Start Scanning: Tap the Start Scanning button to enter the scanning interface.

Post-processing: Tap the button to fuse and mesh the captured point cloud data automatically.

Model Checking or Exporting: Check your scans or share them with a

PC for more editing options.

Special Objects Scanning

With all structured light 3D scanners, particular objects can be difficult to scan due to their surface properties. However, these limitations can be addressed by correctly preparing the object before scanning.

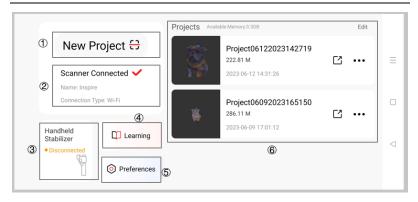
Hard-to-scan Surfaces

Surface Features	Possible Solutions
Black or very dark objects	Apply scanning spray
Shiny or reflective objects	Apply scanning spray
Metal or electroplated surfaces	Apply scanning spray
Transparent objects	Apply scanning spray
Few geometric features	Stick markers on or around the object.

User Interface

Home Page

Tap the Revo Scan icon to open the application. The app's Home page shows the scanner's connection status, Handheld Stabilizer's connection status, Learning, Settings (Refer to the Settings section), and Projects (Refer to the Projects section).



1 New Project

Tap the New Project button to enter the scan settings menu and start your scan. Refer to the New Project Settings section for more details.

② Scanner Connection

Displays the scanner's connection status (Connected or Disconnected), which 3D scanner (POP, POP 2, MINI, RANGE or POP 3) is connected, and its connection type (Wi-Fi or USB).

3 Handheld Stabilizer Connection

Displays the Handheld Stabilizer's connection status (Connected or Disconnected). Tap the button to find available devices and connect.

4 Learning

Find tutorials here that show you how to use the app and Revopoint 3D scanners.

⑤ Preferences

Here you can select the app's language, check the app version, and send feedback to our support team. Refer to Settings on the Home Page for more details.

6 Projects

Here you can view and share projects with a PC or app (Refer to the Exporting Your Projects section for more details). Tap the More icon to continue scanning, rename, or delete the project.

Workspace Interface



1 Distance Indicator

Displays a visual indicator representing the distance between the object and the scanner. When the color bars are green, the distance is optimal.

2 Tool Bar

Color: Shows or hides the object's texture.

Clear Surfaces: Enables the automatic removal of unwanted flat background surfaces during the scan.

Range: Allows you to adjust the depth cameras' working distance.

Screenshot: Allows you to take screenshots of the image on the central preview window captured before or during the scanning process.

③ Camera Exposure Adjustment

RGB Camera: Here, you can turn on/off the RGB camera's automatic infrared fill light, and adjust the exposure to get better color scans.

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Depth Camera: Here, you can adjust the depth cameras' exposure to get more details. To ensure an accurate scan, adjust the exposure until there are as few blue and red patches on the object as possible in the Depth camera's preview window.

(4) Central Preview Window

Displays the 3D model preview, the data being captured during the scan, or the final completed model.

⑤ Scanning Buttons

Start/Pause: Tap to start or pause scanning.

Complete: Tap to finish your scan.

6 Model Information

Frames: Displays the current scan's number of frames.

Memory Usage: Displays the amount of memory used by the current project.

? Redo/Undo/Delete Buttons

Redo: Tap to remove 15 scanned frames.

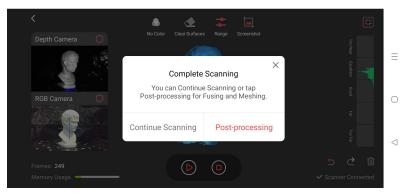
Undo: Tap to regain 15 deleted frames.

Delete: the point cloud data captured.

8 Scanner Status

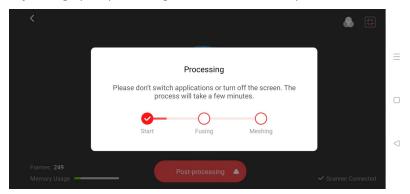
Displays the scanner connection status.

Complete Scanning Interface



When you've finished scanning your object, tap the "Complete" button to finish the scan.

In this popup menu, you can either continue scanning the current object or go post-processing to fuse and mesh the point cloud.



Here, your captured point clouds will be automatically fused and meshed.

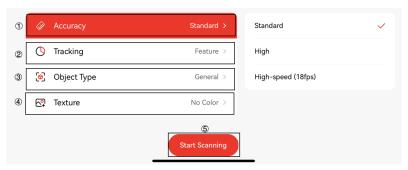
Preference and More

Settings on the Home Page



- (1) Language: Allows you to switch between various languages.
- (2)**About**: Displays the current app version.
- ③ **Feedback**: Opens the Feedback interface, where you can send us feedback and suggestions for our software and 3D scanners.

New Project Settings



1 Accuracy

Standard: A fast scan designed for simple objects with plain surfaces.

High: A slower scan for capturing objects with complex detailed structures with high precision. In High Accuracy mode, the processing time for point cloud fusion/mesh operations takes longer.

High-speed (18fps): The level of accuracy remains the same as Standard. However, the frame rate increases up to 18fps, making it suitable for scanning large objects and people.

Note: Accuracy selection may vary from different 3D scanners.

② Tracking

Two tracking methods are provided: **Feature** and **Marker**.

Feature: For scanning objects with unique shapes and distinct features, such as sculptures or people.

Marker: For scanning objects that have large, smooth areas or regularly-repeating features. Flat planes like a board or symmetrical objects like balls or bowls are usually suitable to scan with this mode. This tracking method requires markers to be placed on or around the object.

③ Object Type

Select the appropriate object type for your scan.

General: Used when not scanning dark objects or people.

Dark: Use to scan dark surfaces, such as black, dark gray, or dark brown objects. However, not all dark objects can be successfully scanned. One example would be black leather shoes because leather absorbs light (or they are so shiny that they reflect too much light). The brightness is set accordingly.

Body: Designed to scan people or larger objects from a greater distance than is used for the other modes. The exposure and gain are set accordingly (no Automatic exposure adjustment).

Large Object: Allows the fastest scanning rate. It is only available for **High-speed (18fps)**. Automatic exposure control is not supported.

(4) Texture

No color: Use this if you don't need to capture the object's color.

Color: Use this if you want to capture the object's color. (Revo Scan can

only export color models in the PLY & OBJ file formats).

⑤ Start Scanning: Tap this to open the scanning interface after selecting your scan settings.

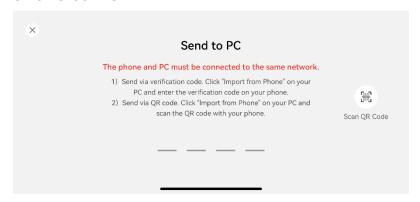
Edit Projects



- (1) Available Memory: Displays your phone's available memory.
- ② **Edit**: Allows you to batch-delete projects.
- ③ **More**: Tap More to see options to rename, delete, or continue scanning.
- ④ **Share**: Share the selected model to a PC or app. Refer to the Exporting Your Projects section.
- (5) Model Preview: Tap any project area to preview the scanned model.

Exporting Your Projects

Share to PC



You can export the scanned projects on your phone to a PC for more post-processing options. Ensure your phone and computer are both connected to the same network, or the file transfer will fail.

- 1) Entering the Verification Code
- a) Tap the Share [icon on a Project.
- b) Open Revo Scan on your PC.
- c) Click the Import From Phone button.
- d) Enter the code shown on your PC to your smartphone. Start file transferring.
- 2) Scan QR Code
- a) Tap the Share 🔀 icon on a Project.
- b) Open Revo Scan on your PC.
- c) Click Import From Phone button.
- d) Click the QR code icon on your PC.
- e) Tap "Scan QR Code" on your smartphone.
- f) Scan the QR code with your phone.
- g) Start file transferring.

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Note: Do not close the app or let your phone's screen turn off during the transfer process, or it will fail.

Share to Other Apps

You can use this to share your scans with other apps installed on your smartphone.

- a) Tap the Share [icon on a Project.
- b) Tap the More icon.
- c) Select the app you want to share with.

Join a Fun Scanning Community

On Revopoint's Official Forum, you can find the latest product information, tutorials, showcases from our users, scanning discussions, experience sharing and various activities, and so on. Check it out at https://forum.revopoint3d.com/ and join the community.

This content is subject to change.



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If you have any questions about this document, Please get in touch with Revopoint by sending a message to support@revopoint3d.com or our forum https://forum.revopoint3d.com/.

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