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.

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

System Requirements



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 Apple App Store.

Connection Method

	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 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 16.3. There are slight differences for Android devices, but all the essential processes are the same.

Scanning Procedure

Connect a 3D Scanner—> Scan Settings—> Start Scanning—> Complete Scanning—> Post-processing—> Model Checking or Exporting

Connect a 3D Scanner: Connect your 3D scanner via Wi-Fi or the 2-in-1 USB cable to enter scan settings (iOS phones only support Wi-Fi connection).

Scan Settings: Select the Accuracy, tracking, object type, and texture settings, adjust the scan distance and the Depth and RGB cameras' exposure settings.

Start Scanning: Tap the Start Scanning button to begin capturing data. **Complete Scanning**: Tap the Complete Scanning button if all data

required is captured.

Post-processing: Find the model scanned in the Project list, and tap the Post-processing button to fuse, mesh, and texture map (if color scanning is selected) the captured point cloud data automatically.

Model Checking or Exporting: Check your scans or share them with a PC or more applications for more editing options.

Special Objects Scanning

With all structured light 3D scanners, some object characteristics 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
Smooth object with few 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 distance indicator, the scanner's connection status, Preferences (Refer to the Preferences section), scanning settings and control buttons, and model hub (Refer to the Edit Projects section).



1) Scanner Connection

Displays the scanner's connection status and the connection guide. Tap **Scanner Disconnected** to quickly navigate to your smartphone's Settings for Wi-Fi connection.

2 Preferences

Here, you can check the Handheld Stabilizer's connection status and find available devices, see the app's User Guide, select the app's language, check the app version, and send feedback to our support team.

③ Scan Settings and Control

Scan Settings : Tap to select the settings for the object before scanning.

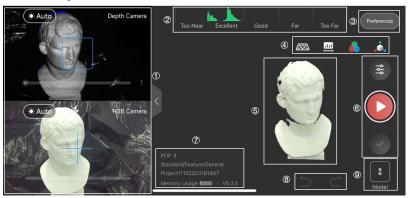
Start/Pause Scanning Tap to start/pause the scan.

Note: These buttons are not functional when a scanner is not connected.

4) Model

Tap to enter the Model to view a model, perform post-processing, and share projects with a PC or app (Refer to the **Exporting Your Projects** section for more details).

Workspace Interface



① Camera Adjustment

Depth Camera: Here, you can adjust the Depth Cameras' exposure so the scanner can clearly see the object. Tap the Auto icon to turn on/off auto exposure. When auto exposure is turned off, the slider can be dragged to adjust the exposure value.

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 Cameras' preview window.

RGB Camera: Here, you can adjust the RGB Camera's exposure to get better color scans. Tap the Auto icon to turn on/off auto exposure. When auto exposure is turned off, the slider can be dragged to adjust the exposure value. Tap the jicon to turn on/off the white LEDs (INSPIRE & POP 3 only).

② Distance Indicator

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

③ Preferences

Here, you can check the settings of the accessory and the app. Refer to the **Scanning Settings and More** section for more details.

(4) Tool Bar

Scan Distance : Allows you to adjust the Depth Cameras' working distance.

Color Shows or hides the object's texture.

3D Coordinates Click the icon to center the model on the chosen face.

⑤ Central Preview Window

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

6 Scan Settings and Scanning Buttons

Scan Settings ₹ /Cancel ×: Before scanning, tap the icon **₹** to enter the scan settings page. During a scan, tap the icon **₹** to delete the captured data.

Start Pause Tap to start or pause scanning.

Complete Tap to finish your scan.

⑦ Connection and Project Information

Displays the connected 3D scanner's name, scan settings, the project name, and memory usage.

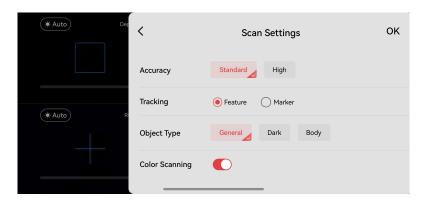
® Redo & Undo Buttons

Redo : Tap to remove 15 scanned frames.

Undo : Tap to regain 15 removed frames.

View all the projects and perform post-processing and other operations on the models or projects.

Scan Settings



1 Accuracy

Standard: A scan 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 frame rate increases up to 18fps, making it suitable for scanning large objects and people. (Only RANGE, POP 3, and INSPIRE support this mode.)

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 items 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 items 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.

Face: Use to scan people's faces.

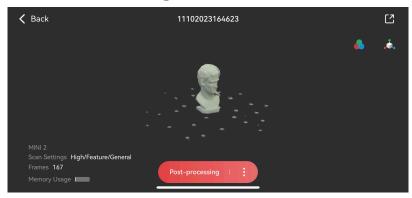
Body: Designed to scan people or larger objects from a greater distance than is used for the other modes.

Large Object: Allows the fastest scanning rate.

4 Color Scanning

Toggle **Color Scanning** if you want to capture the object's color. Untoggle it if you don't need to capture the object's color. (Revo Scan can only export color models in the PLY & OBJ file formats). Texture mapping can be applied only when the Color Scanning is enabled.

Model Processing Interface



Here, your captured point clouds will be automatically fused, meshed, and texture mapped (if color scanning is selected). Before post-processing, tap the icon to toggle or untoggle **Hole Filling** and drag to adjust the ratio as required.

Settings and More

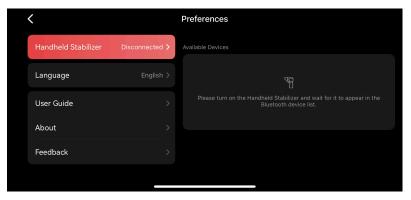
Edit Projects



- 1 New Project: Tap to start a new project.
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- **② Model Preview and Project Info:** Displays the model preview, the project name, the last modified time, and the project's size.
- 3 More: Tap More for options to share, rename, or delete the project.
- (4) Raw/Meshed/Textured: Shows the current status of a model.
- **⑤ More:** Tap More for options to continue scanning, rename, or delete the model.
- (6) Select: Select and then batch-delete projects.
- (7) **New Scan:** Tap to start a new scan in the existing project.

Preferences



Handheld Stabilizer: Check the connection status of the Revopoint Handheld Stabilizer accessory and find available devices.

Language: Switch between various languages.

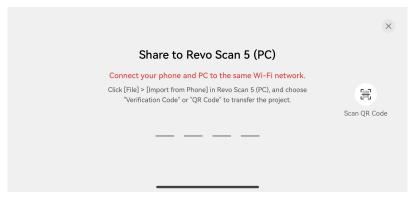
User Guide: See the App's User Guide.

About: Displays the current app version, User Policy, and Privacy Policy.

Feedback: Opens the Feedback interface, where you can send us feedback and suggestions for our software and 3D scanners.

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 connected to the same network or the file transfer will fail.

1) Entering the Verification Code

- a) Tap a Project's More icon, then tap the Share 🖸 icon.
- b) Open Revo Scan on your PC.
- c) Click Import from Phone in Revo Scan's file menu.
- d) Enter the code shown on your PC to your smartphone.
- e) Start the file transfer.

Scan QR Code

- a) Tap a Project's More icon, then tap the Share 🖸 icon.
- b) Open Revo Scan on your PC.
- c) Click Import from Phone in Revo Scan's file menu.
- 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 the file transfer.

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 model to enter the post-processing interface.
- b)Tap the Share [icon on a model.
- c)Tap the More icon.
- d)Tap the **Confirm** button and 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, various activities, and many more things. Check it out at https://forum.revopoint3d.com/ and join the community.

This content is subject to change.



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