Airplot – User guide

With Airplot you scan a technical space in 3D, measure directly in the scan and use AR to show how an installation fits.

Getting started

Airplot runs on iPhone and iPad with iOS 18 or later, including iPhone Duo. Scanning requires a device with a LiDAR sensor.

Device	What you can do
iPhone 12 Pro or later (Pro models), iPad Pro from 2020	Everything: scanning, measuring, AR and export
iPad Pro from 2021 or a recent iPhone Pro	Also object capture and 3D models from photos
Devices without LiDAR, such as iPhone Duo or iPad Air	Open scans, measure, measurement photos, AR preview and export

First launch

1. Open Airplot. You see the language screen with Nederlands, English, Français and Deutsch. Your device language is already selected.
2. Tap a language, then **Continue**.
3. You arrive in **Projects**. Tap **New capture** to begin.

On iPhone, **Projects** and **Settings** are tabs at the bottom. On iPad and an unfolded iPhone Duo they appear in a sidebar.

Settings you choose

Setting	Options
Appearance	Automatic (follows the device), Light or Dark
App language	System language, Nederlands, English, Français or Deutsch
Unit of measurement	Millimetres (mm) or Inches (in)

The unit applies everywhere: when measuring, on measurement photos and on floor plans. Saved measurements are converted straight away.

Projects

Everything you capture goes into a project: scans, photos, measurements, notes and annotations.

- **New project:** tap **New capture** and choose how to start. Choose **Empty project** if you only want a name and notes first.
- **Search:** type in **Search projects** at the top of the list.
- **Sort and filter:** tap **Sort and filter** and sort by name, creation date or last modified, or filter by scan type and status.
- **Rename, duplicate, delete:** swipe a project to the left, or touch and hold it. Deleting is permanent and cannot be undone.
- **Edit:** open the project and tap **Edit** to change the name and notes or add annotations.

On iPhone projects appear as a list, on iPad as a grid with thumbnails.

Capturing

Tap **New capture** and choose one of the options below. Anything your device cannot do is greyed out, with the reason shown.

Option	What you get	Requires
Colour 3D scan	The whole room as a 3D model with colour and sharp photo texture	LiDAR
Scan floor plan	Walls, doors, windows and furniture with dimensions, plus a 2D floor plan	LiDAR
Capture object	A photorealistic 3D model of a machine or object	iPhone Pro or iPad Pro (2021+)
AR preview	Recognised surfaces and snapshots, no 3D model	AR
Import photos	Photos from your library; from 20 photos also a 3D model	–
Import 3D file	A USDZ or GLB model, or a colleague's Airplot scan (PLY)	–

Colour 3D scan

1. Choose **Colour 3D scan** and point the camera at a wall.
2. Move calmly through the room and scan everything from several sides. The counter shows how many photos and details have been captured. A scan can hold up to 600 photos; if your device runs out of storage, the app tells you and you finish the scan.
3. Need readable text, such as a rating plate? Hold the phone 30 to 50 cm away and tap **Capture detail**.
4. Tap **Done**. Check the result and tap **Save to project**.

Scan floor plan

1. Choose **Scan floor plan** and follow the on-screen instructions.
2. Point the camera along all walls, the floor and the furniture.
3. Tap **Done** and save the scan. In the project, open **View floor plan** for the 2D plan with wall lengths.

Editing the floor plan

Is a dimension off, a wall missing or the plan at an angle? Open **View floor plan** and tap **Edit**.

- **Select:** tap a wall, door, window, opening or object. Its length is shown at the bottom.
- **Lengthen or turn a wall:** drag a handle at its end. Connected corners move along, and the handle snaps to other corners and to horizontal or vertical.
- **Move:** drag the element itself.
- **Exact dimension:** tap **Length** and type the dimension in mm or inches. The start point stays in place.
- **Add, rename and delete:** tap **Add** in the bottom bar, **Name** for an object, or **Delete**.
- **Add blocks:** tap **Add** and choose a cabinet, chair, table, desk, sofa, bed or a plain block under **Blocks**. Each block gets a common size and height, for example a 100 × 60 × 200 cm cabinet.
- **Copy:** select a block or other element and tap **Duplicate** (the copy button). The copy appears slightly offset, with the same size and height, and you can drag it straight away.
- **Block size:** tap **Dimensions** and enter width, depth and height. **Rotate 90°** turns a single block around its own centre.
- **Rotate the whole plan:** turn it with two fingers, or tap **Rotate** and choose **Rotate 90° left**, **Rotate 90° right** or **Straighten**. Straighten makes the longest wall exactly horizontal or vertical. The plan snaps at right angles.
- **Mistake:** tap **Undo** or **Redo**.

Tap **Save** when you are done. The original scan is always kept: **Edit › More › Restore original scan** takes you back. An edited floor plan is marked as manually adjusted, and all floor plan exports use the edited version.

Capture object

1. Place the object on a plain surface and tap **Detect object**.
2. Adjust the box so the whole object fits inside and tap **Start taking photos**.
3. Walk slowly around the object until the circle is full. For a better result, do another round from a different height.
4. Tap **Done taking photos**, remove blurry photos and tap **Create 3D model**. Processing takes several minutes; keep the app open.

Importing photos and 3D files

- With **Import photos** you choose which photos the app receives. With 20 or more, tap **Create 3D model from photos** in the project.

- With **Import 3D file** you pick a file from the Files app. A colleague's scan is shared via AirDrop and imported the same way. In an existing project you can also use **Import model (USDZ, GLB or PLY)**.

Measuring and measurement photos

You measure in a colour 3D scan or a USDZ model. Measurements are saved in the project and appear under **Measurements**.

1. Open the project and tap **Measure in 3D model**, or open the model in **Full screen**.
2. Tap the ruler icon to start measuring.
3. Tap the starting point in the model, then the end point. The distance appears on screen.
4. Tap **Save measurement** and give it a name, for example “Door width”.
5. Tap the model again to start a new measurement.

Moving around the model: drag to look around, drag with two fingers or pinch to move. Choose **Orbit** to rotate around the model, or **Walk around** to move through it. **Reset camera** takes you back to the starting view.

Taking a measurement photo

1. Bring the dimensions you want to show into view.
2. Tap the photo button (**Take measurement photo**).
3. Choose **Save to Photos** to add it to your photo library, or **Share…** to send it right away.

Managing measurements: in the **Measurements** list, swipe a measurement to the left to rename or delete it.

For an imported model, Airplot cannot be sure the file was made in metres. Check a known dimension before relying on the measurements.

AR and export

Viewing in AR

In a project, tap **View in AR**. Point the camera at the floor and place the model at real size in the actual space, so a customer sees right away how an installation fits. To only see which floors and walls your device recognises, choose **AR preview** under **New capture**; there you save what you see with **Snapshot**.

Export and share

In a project, tap **Export and share** and tap a format. You can share it via AirDrop or Mail, save it to Files or send it to another app.

Format	Contents	Opens in
USDZ	3D model with photo texture	AR Quick Look, Keynote, Reality Composer and many 3D programs

Format	Contents	Opens in
PLY	3D scan with colour per point	Blender, MeshLab, CloudCompare, or Airplot on another device
GLB	The original imported file	3D programs
STL (3D model for CAD and 3D printing)	The 3D scan or object scan without colour, in millimetres	SketchUp, Fusion, SolidWorks, 3D printing slicers
Floor plan	Top view with wall lengths, as an image	Any image app
STL (floor plan in 3D)	Walls at full height with openings for doors and windows, objects as blocks, in millimetres	SketchUp, CAD programs
DAE (floor plan in 3D with colours)	The same model in metres, with walls and objects as separate groups	SketchUp Go, Pro and Studio
RoomPlan data (JSON)	All walls, doors, windows and objects with dimensions	Your own software or drawing programs
Photos	All source photos of the project	Photos, Files
Notes	Name, notes, annotations and scan information as text	Any text editor

Formats that do not fit the project are listed under **Not available for this project**, with the reason.

Continuing in SketchUp

1. Export **Floor plan in 3D** (STL or DAE) or **3D model for CAD and 3D printing** (STL) and move the file to your computer, for example via AirDrop.
2. In SketchUp, choose **File › Import** and select the file.
3. For an STL file, choose **millimetres** as the unit.

Creating a SketchUp file (SKP) is not possible: it is a closed format. In the 3D model of the floor plan, walls are 10 cm thick because a scan does not measure wall thickness. Block heights are included in the 3D model. For a floor plan edited before this version, Airplot uses standard heights: walls 2.60 m, doors 2.10 m and windows from 0.90 to 2.10 m.

Tips for good scans

- **Light:** make sure lighting is even. Too little light gives patches and blurry texture.
- **Pace:** move slowly and calmly. If the app says “Move more slowly”, slow down.
- **Distance:** keep 0.5 to 3 metres from walls and objects. For readable text, move closer and tap **Capture detail**.
- **Overlap:** scan every part from several sides and from different heights.
- **Shiny and black surfaces:** glass, mirrors and matt black metal give weaker results. Scan them at an angle or leave them out.

- **Heat:** a long scan warms up your device. Finish the scan when the app asks and let the device cool down.
- **Object capture:** place the object freely on a plain surface, walk around it twice at different heights and take at least 20 photos with plenty of overlap.

Troubleshooting

What you see	What to do
A scan option is greyed out	Your device has no LiDAR sensor or does not support that feature. The reason is shown below it. Open a colleague's scan via **Import 3D file** instead.
“Airplot has no access to the camera”	Turn on the camera in Settings › Apps › Airplot › Camera, or tap **Open iOS app settings** in Airplot's Settings.
“The camera will not start”	Close other apps that use the camera, or quit Airplot completely and open it again.
“Position lost” while scanning	Point the camera back at what you just scanned and move more slowly.
“Your device is warm”	Finish the scan and let the device cool down.
“You tapped next to the model”	When measuring, tap the surface of the scan, not the background.
A GLB file is not shown	Airplot can store and share GLB files but cannot display them yet. Use USDZ where possible.
A PLY file is rejected	Only PLY scans made with Airplot are supported.
SketchUp cannot import the file	An STL file works in all versions of SketchUp. A DAE file needs SketchUp Go, Pro or Studio; otherwise use STL.
“There is not enough free space”	Free up space on your device. Settings › Storage shows how much Airplot uses.

Privacy, accuracy and contact

Privacy: all your projects, scans, photos and measurements stay on your own device. Airplot needs no account, sends nothing to the internet, does not use your location and contains no tracking. The camera is only used while scanning, capturing and in AR. Deleting the app also deletes your projects, so export important scans first. Read the full privacy policy at airplot.eu/privacy.

Accuracy: with a good LiDAR scan, distances are usually within a few centimetres. Measurements taken with a phone or tablet are an aid, not a certified survey. They are not suitable as a construction, legal or land survey. Always check critical dimensions on site.

Contact: email support@airplot.eu or visit airplot.eu/support. Include your device, iOS version and what goes wrong; a screenshot helps.