

Use Your Phone to Make a 3D Scan

A phone can build a 3D model from overlapping photos, and supported Pro iPhones can also capture depth with LiDAR. The best method depends on whether you are scanning an object or a space.

WHY PRO IPHONES HELP Supported iPhone 12 Pro and later Pro models include a LiDAR Scanner. It measures depth while you move, which improves scale, tracking, and fast capture in rooms and around larger objects. Not every newer iPhone has LiDAR.

Choose the right capture method

Method	Best for	What to expect
Photogrammetry	Toys, sculptures, products, and detailed objects	Walk slowly around the object while the app combines many overlapping photos.
LiDAR scanning	Rooms, furniture, people-sized forms, and quick measurements	Depth arrives in real time; capture is fast and scale is usually easier to preserve.
Single-image AI	A new model inspired by one picture	Useful for invention, but it is not a faithful scan of the unseen sides.

Apps to try

App	Useful strengths	Printable export note
Polycam	Object photogrammetry on many phones; LiDAR space and floorplan modes on supported devices	Exports include STL and OBJ on eligible plans; available formats vary by plan.
RealityScan	Guided photo capture for detailed textured objects on iPhone or Android	iPhone projects store OBJ; Android projects store GLB. Convert or repair before slicing when needed.
Scaniverse	Camera scanning with depth information when LiDAR is available	Creates meshes and supports standard 3D exports for additional cleanup.

Capture for a cleaner model

- STEP 1

Use bright, soft light and place the object against a plain, nonreflective background.
- STEP 2

Keep the object still. Move the phone slowly in two or three complete circles at different heights.
- STEP 3

Maintain generous overlap and capture the top, underside edges, and hidden recesses when possible.
- STEP 4

Crop the result, set or confirm the scale, repair holes, and inspect the slicer preview before printing.
- HARD-TO-SCAN SURFACES

Clear, shiny, black, featureless, or moving objects confuse cameras and depth sensors. Temporary removable matte spray or added visual markers can help when appropriate.

