

Camera Mount — Next Steps

Overhead iPhone SE scanning rig · two 10-ft strut rails · 5-ft-wide sheets, variable length · goal: one stitched panorama

1 · Decide the resolution question (do this before buying anything)

Single lane at 4.2 ft rail height gives ~67 ppi across the 5-foot sheet width. Two half-width lanes at ~2.1 ft give ~134 ppi but double the passes and require shifting rails or sheet one lane-width sideways. This choice sets the rail height and everything downstream.

2 · Create a free Onshape account

onshape.com — free plan, browser-based. Your email and password, your typing. Two minutes.

3 · Import the scene model

New Onshape document, then drag scan-rig-scene.step from Documents / Claude / Projects / Camera Mount onto the page. Orbit, measure, and check the rig against the actual room.

4 · Add real trolley hardware

With Onshape open in Chrome, Claude drives: import genuine strut-channel trolley models from McMaster-Carr and mate them to the rail so the carriage slides in the model.

5 · Extract the parts list

Once the assembly uses real catalog parts, the bill of materials falls out: channel, trolleys, hardware, phone mount — a priced Home Depot / McMaster shopping list.

6 · Plan the physical mounting

4-plus feet of height means ceiling-hung rails or a freestanding frame, decided against the real workspace. Even, glare-free lighting belongs to this step.

7 · Prove the software first (actually do this one now)

Take overlapping handheld shots of a test sheet from ~4 ft and stitch them in Hugin (free). If the stitch satisfies at that height, build; if not, the two-lane height wins — before a dollar is spent on steel.

Key numbers: lens height 4.2 ft (single-lane) · one shot every ~2.6 ft at 35% overlap · 8-ft sheet = 3 shots, 10-ft = 4 · iPhone SE main camera 28mm-equiv, ~65° horizontal field. Files in Documents / Claude / Projects / Camera Mount.