REALITY SYSTEMS, LLC

SlamScanner.com

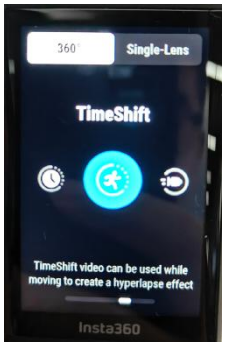
Pano Camera Quick Start Guide

This information pertains to the SLAMM1000, SLAM2000 and SLAM200 series of scanners.

Hardware:

- Each model of scanner requires a specific camera adapter
- SLAM200 adapter includes GNSS capsule receiver
- Adapter connects with slide attachment to scanner multi-clip
- Mechanical integration only, no electronic/digital integration
- Supports Insta360 X4 or X5
- Attach the camera to the adapter with the On/Off button facing forward

Camera Settings:



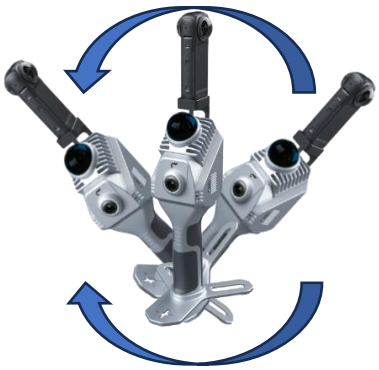
- Time Shift Mode
- 5.7k Resolution, 30Hz capture frequency, 10x time compression
- Color standard, exposure auto or adjust ISO as needed

Operation:

- With scanner on stable surface and no moving objects in front of it…
- Start pano camera session
- Start scanning session within 30 seconds
- Allow scanner to calibrate and beep to signal ready for scanning
- Pick up scanner and “Waggle” side to side to allow pano camera to calibrate its SLAM session (see workflow guidance)
- When finished, (best to) set scanner back down at starting location
- End scanning session
- Ends pano camera session within 30 seconds

Workflow Startup Calibration:

After starting pano camera session and scanner session and scanner has finished startup calibration, pick up the scanner and Waggle it a few times so the pano camera can calibrate its SLAM session.

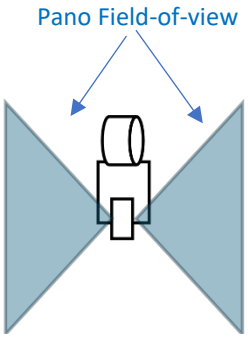


Workflow Scanning Path:

The pano camera needs to collect imagery with enough parallax to be able to reconstruct the scene as a 3DGS. It needs to see the same things from different angles. Therefore, it is best practice to follow a serpentine path during data collection to ensure you meet this requirement.

Workflow Special Considerations:

The pano camera field of view is looking to each side of the scanner as it moves down the collection path. Because of this, there are two specific situations that can benefit from special care in the collection process.



Top-down view of scanner

Narrow Passages and Corridors

It is a best practice to “Cheat” the scanner sideways while traversing corridors so one lens is oriented to the direction of travel.

Passing Through Doorways, Entering/Exiting Rooms

It is always best practice to pause before passing through a doorway. In addition, when using a pano camera, it is best practice to also “Cheat” the scanner sideways so one lens is looking into the room before entering, and again upon exit.