

SUPPORT NOTE

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GEO 7X HANDHELD RANGEFINDER: ALIGNING THE CAMERA AND RANGEFINDER

SUMMARY

The sensors in the Geo 7X handheld camera and rangefinder module must be aligned so that you can accurately point and aim the rangefinder at your target objects using the camera.

You should perform the alignment:

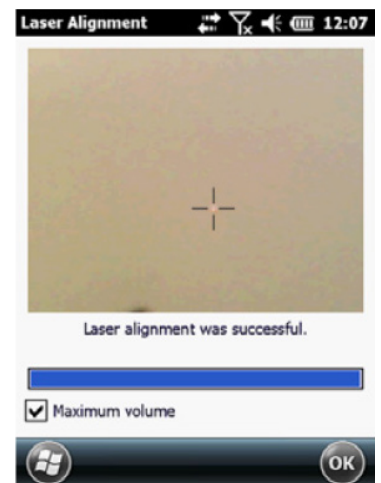
- if you attach or re-attach a Geo 7X rangefinder module to the handheld
- if you drop the handheld
- any other time you suspect that the camera and the laser pointer are not aligned

PROCEDURE

The alignment utility works by looking for the position of the red laser pointer in the camera's field of view. Because the rangefinder laser is active, the application can determine how much to adjust the targeting cross-hair when using laser workflows so that you are always pointing in the same direction as the rangefinder laser.

To perform the alignment:

1. Stand 4 to 6 meters away from a suitable target, for example a wall. The surface should not be too reflective, but reflective enough that the camera can still detect the red laser pointer.
2. Tap *Start / Settings / System / Laser Alignment* to run the camera-laser alignment utility.
3. Point the camera at the surface and keep the handheld steady. Tap **Begin**. The utility activates the laser and searches for the red pointer in the video stream from the camera.



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4. When the red pointer is successfully detected, the alignment application beeps, and displays the cross-hair over the top of the pointer. The confirmation message Laser alignment was successful appears. Tap **OK**.

ALIGNMENT ENVIRONMENT

You can align the camera with the laser in any environment, indoors or outdoors.

The alignment application works best in the following conditions:

- Pointing at walls at distances of 3 to 6 meters away.
- When you can see the red dot yourself.
- In dull light conditions.
- At walls or surfaces with a plain, moderately reflective texture (for example, a concrete or painted wall).
- With the handheld perpendicular to the wall.

When performing the alignment, avoid:

- Standing too far away from the target wall. The camera sensor cannot detect the red dot.
- Standing too close to the wall (closer than 2 to 3 m). The distance sensor measurement becomes unreliable.
- Pointing at highly reflective surfaces. It is difficult to locate the exact center-point of the red dot in the camera frame.
- Pointing at surfaces with a lot of shadow/light movement (for example, tree shadow).
- Pointing at highly textured surfaces.
- Not holding the handheld perpendicular to the wall.
- Not standing still, or waving the handheld around during the alignment process.