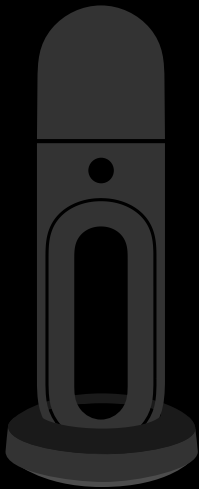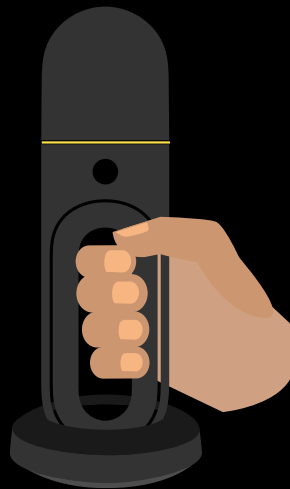# BLK2GO DATA CAPTURE FOR BEST RESULTS

The user's behavior while scanning with the BLK2GO will have a significant influence on data quality and the results of the scan, so we recommend following these steps for best scanning results.
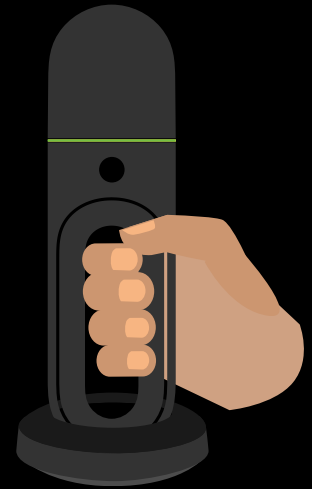
START THE SCAN

1. Start the scan on a level surface using the table stand delivered with the BLK2GO.

2. While initializing (LED blinking yellow) hold the device stable on the table stand.

3. Take the device and start walking only when the initialization has finished and the LED turns green.
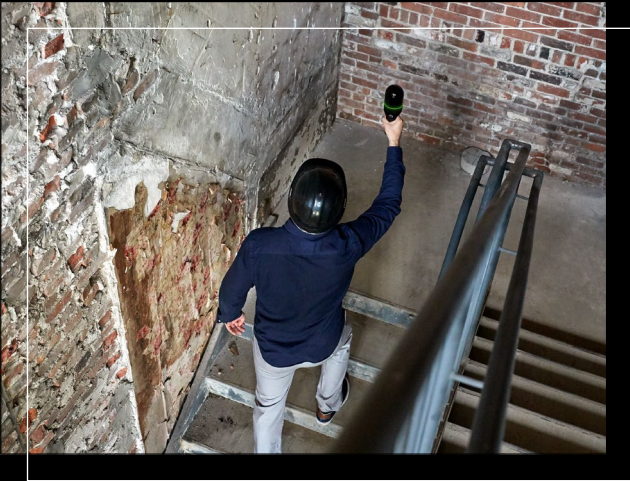
WHILE SCANNING

For handheld scanners, as they are based on SLAM technology, the user behavior influences the data quality and therefore the result of the scan. Following the steps below will lead to better results.

- Hold the BLK2GO with as much field of view as possible. Make sure that you hold the device away from your body at a comfortable arms-length distance and consider lifting the device above your head to maximize field of view, especially for stairwells or if there are people moving through the area.

- Walk slowly and in a constant pace with smooth turns and changes of direction.

- If you are scanning around other people, make sure that nobody walks directly in front of or behind you while scanning which may block the LiDAR or cameras.

- When going into a new environment (for example, entering a new room or turning around a corner), slow down your pace. This way the SLAM will have time to recognize new features and connect them to features it already knows.

- In order to open a closed door, keep your back to the door in order to give the BLK2GO as much field of view as you possibly can. If possible, try to open the doors prior to starting the scan session.

- Keep in mind that the minimum range is 0.5 m horizontal and 0.7 vertical. Ideally, maintain at least 1-meter distance from walls and other objects.

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- To start and end the scan at the same position will help with the robustness of the SLAM solution and completeness of the scan; this is highly recommended but not required. To help you determine that while scanning, the BLK2GO Live app will give you the first visual impression of the data quality by checking how close the start and end point positions are.

- Two passes through an environment completed sequentially (e.g. a room, corridor, stairwell, etc.) will provide better coverage of LiDAR capture for greater detail in your scans.

- If the BLK2GO Live app is used while scanning, be sure that the smartphone is out of the field of view of the BLK2GO (e.g. below or behind the BLK2GO).

CHALLENGING ENVIRONMENTS FOR SLAM

Long and narrow areas, like corridors, tunnels or caves as well as stairs and sloped areas can be challenging for SLAM. For these scenarios, follow the recommendations below.

- Lift the device over your shoulder or head to ensure the BLK2GO will scan points behind you. By holding it in front of your body, the area behind you gets blocked. This technique can of course be used in any circumstance, but in challenging environments like narrow corridors, it becomes more important.

- To scan corridors, keep the device in the middle of the corridor both horizontally and vertically.

- Slow down your pace while walking through challenging environments, as well as when going up or down stairs or slopes, which improves robustness of the SLAM solution and completeness of the scan when moving through and entering new to spaces.

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