

LEICA BLK ARC-UI

AUTONOMOUS REALITY CAPTURE

RELEASE NOTES

BLK ARC-UI VERSION 3.1.0 – 5th of September 2024

These Release Notes contain essential information about the Leica BLK ARC-UI latest version 3.1.0 which can be installed on Spot CORE I/O from Boston Dynamics. Please note that the version 3.1.0 is not compatible with Spot CORE.

It is highly recommended to always use the latest version of the BLK ARC-UI and BLK ARC firmware in a compatible configuration. Downgrade to older BLK ARC-UI version is not recommended.

BLK ARC firmware	4.1.0
BLK ARC-UI	3.1.0
Cyclone 3DR scripts for offline mission planning	4.0.0
Cyclone 3DR (scripts pre-installed)	v2024.1.1
Spot firmware	4.0.0 or later
Spot CORE I/O firmware	4.0.0 or later
Cyclone REGISTER 360 PLUS	v2024.1
Cyclone REGISTER 360 PLUS BLK Edition	v2024.1

The BLK ARC-UI installer can be downloaded from myWorld @ Leica Geosystems customer portal.



WHAT'S NEW

- **Visual initialization of autonomous missions**

The Visual Initialization allows to run a mission without the necessity for a physically placed Fiducial on site. To enable the Visual Initialization, it is necessary to use a *.bytes file – 3D map of visual features. It can be generated and exported from the Reality Cloud Studio powered by HxDR.

- **Online mission planning**

The BLK ARC-UI v3.1.0 introduces the possibility to plan the autonomous missions directly within the BLK ARC-UI. Placing the Fiducial, defining GO, NO GO zones and Waypoints – all that can now be done efficiently in the BLK ARC-UI.

Missions can be created and executed immediately or saved for later use.

(For more precise mission planning it is still recommended to use the C3DR desktop software.)

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- **Save & Replay autonomous outdoor missions with GNSS**
The BLK ARC-UI v3.1.0 introduces the possibility to save and replay autonomous outdoor missions. Once created and saved – the mission can then be easily replayed in future - simply navigate Spot to a proximity of the first waypoint and press the Initialize button to start.
- **Enhanced navigation**
 - It is now possible to successfully execute missions on uneven / sloped ground.
 - Introduced **continuous replanning** for best navigation and obstacle avoidance experience.
- **UI improvements:**
 - New mission planning panel – to accommodate for the Online mission planning functionality.
 - Possibility to switch the background between mission map and the preview from Spot cameras.
 - Enable / Disable the dollhouse preview of the 3D model (.glb).
 - 3D visualization of Spot within the missions' map, and more...!

All details about the available features and how to use the system can be found in **BLK ARC-UI - How to use v3.1.0** document.

KNOWN ISSUES

- Displaying the BLK ARC-UI v3.0.0 on iPad with iOS version 16 might cause interruptions, to ensure the best performance update your iOS to 17.
- BLK ARC encounters Lidar failure during an autonomous mission.
 - Restart the BLK ARC from device webpage (10.1.1.1 / WiFi) or by unplugging power & USB cables.
- Downloading logs during ongoing missions may result in the mission getting interrupted. Please end the mission or allow it to finish before downloading the logs.

For details on how to update the version on the BLK ARC-UI, see the **BLK ARC-UI How to use** guide available on myWorld @ Leica Geosystems customer portal. For additional support, please contact your local reseller for first level support.

