LEICA BLK ARC-UI
AUTONOMOUS REALITY CAPTURE

RELEASE NOTES
BLK ARC-UI VERSION 3.0.0 –29th of FEBRUARY 2024

These Release Notes contain essential information about the Leica BLK ARC-UI latest version 3.0.0 which can be installed on Spot CORE I/O from Boston Dynamics.
Please note that the version 3.0.0 (and further versions) 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	4.0.1 or later
BLK ARC-UI	3.0.0
Cyclone 3DR scripts for offline mission planning	4.0.0
Cyclone 3DR (scripts pre-installed)	v2024.0 or later
Spot firmware	4.0.0
Spot CORE I/O firmware	4.0.0
Cyclone REGISTER 360 PLUS	v2023.1 or later
Cyclone REGISTER 360 PLUS BLK Edition	v2023.1 or later

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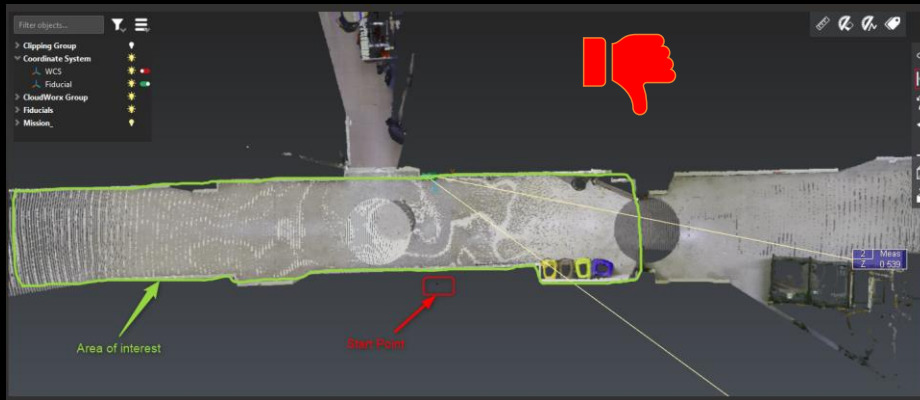
WHAT'S NEW

- **Introducing RTK correction services for Autonomous outdoor missions with GNSS.** It allows to improve accuracy of outdoor navigation. The RTK GNSS data is **not used** yet for post processing enhancements, however the data is being saved into the b2g.
- Updated scripts for path planning:
  - Removed automatic Start / Return Point placement to allow for more flexible mission planning.
  The Start Point (before, placed automatically at a certain distance from a Fiducial) has been removed from the workflow. Currently, there is no intermediate step between localization of the mission and approaching the first waypoint defined by a user.

That allows for starting an autonomus mission in a limited space environment and eliminates the risk of a Start Point landing automatically outside of the GO Zone or generally area of interest.

- o Introduced manual Return Point placement for missions with docking station. Now user can define manually the location of the Return Point where the carrier will perform the docking action.

- **UI improvements**
  Map graphics and symbols update:
  - o Possibility to interact with waypoints in both Autonomus Outdoor missions as well as pre-planned missions.
  - o Path:
    - Grey dashed line – pre-designed path.
    - Blue dashed line – currently planned and executed path.
    - Green line – already visited part of path.
  - o Waypoint symbols:

– no action.

– Static scan

– Fiducial

– Docking station location

General UI refreshment:

- o Single page approach by merging Autonomus Mission and Manual Control pages into one and removing the dashboard starting page.
- o Modernization of tabs and panels within the UI.

All details about the available features and how to use our integration system can be found in **BLK ARC-UI - How to use v3.0.0** which has been updated.

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.
  - o Restart the BLK ARC from device webpage (10.1.1.1 / WiFi) or by unplugging power & USB cables.
- While executing an autonomus mission, switching to the My Files page and returning to mission tab might cause disturbance in the mission preview map.
  - o Interact with the mission map (minimize/maximize) to refresh the mission preview.
- Incorrect notification pop up when trying to initialize a mission with docking station without 3D model imported – **on PC only.**
  - o Remember that missions with docking action can be run **only** with 3D model imported & attached.

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.