

# LEICA BLK2GO & BLK ARC

HANDHELD IMAGING LASER SCANNER  
AUTONOMOUS REALITY CAPTURE

## RELEASE NOTES

FIRMWARE VERSION 4.0.0 – 13<sup>th</sup> DECEMBER 2023

These Release Notes contain important information about the Leica BLK2GO and Leica BLK ARC new firmware version 4.0.0.

It is highly recommended to always use the latest version of the BLK2GO and BLK ARC firmware in a compatible configuration.

**Cyclone REGISTER 360 PLUS v2023.1 is required for connection to BLK2GO and BLK ARC updated to the new 4.0.0 firmware.**

BLK2GO firmware	4.0.0
BLK Live app (iOS and Android)	2.0
Cyclone FIELD 360 (iOS and Android)	5.0
BLK2GO Live app (iOS and Android)	1.4.10
Cyclone REGISTER 360 PLUS	v2023.1
Cyclone REGISTER 360 PLUS (BLK Edition)	v2023.1
BLK Data Manager	v2023.1

BLK ARC firmware	4.0.0
BLK ARC-UI	2.1.0 or later
Cyclone 3DR scripts for offline mission planning	3.0
Cyclone 3DR	v2023.1.4
Spot firmware	3.3.x
SpotCORE firmware	3.2.x
SpotCORE I/O firmware	3.3.x
Portainer	2.1.1 or later
BLK ARC API	v0.8.0 or later

The firmware can be downloaded from myWorld @ Leica Geosystems customer portal as well as from the website <https://shop.leica-geosystems.com/blk2go-firmware>.

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## WHAT'S NEW

### BLK2GO ONLY

- BLK2GO support in **BLK Live** and **Leica Cyclone FIELD 360** mobile device apps.

#### **BLK Live**

The BLK Live app is the free-of-charge companion app and offers the simplest and most immersive experience for data capturing with BLK2GO. It is also the common app for the all-new BLK360, BLK2GO and BLK2GO PULSE.

- Allows users to connect to BLK2GO, control the scanner settings, and organize data in jobs.
- Supports all new functionality in BLK2GO firmware 4.0.0 including Press and Go and Smart Scanning Guidance.
- The start, stop scan, detail, and panoramic image can be triggered from the app.
- The capturing screen can be customized where the 2D and 3D views can be minimized or maximized, or both views arranged side-by-side or scaled.
- When the job is done, users can simply export the point cloud to .e57, detail images to .jpeg, or trajectories to .csv. It is also possible to upload the full .b2g or .e57 data directly from the sensor to Reality Cloud Studio, powered by HxDR through the app.
- Provides the possibility to update the firmware as well as to share the service report of the BLK2GO with the support team.

The app can be downloaded free-of-charge and is available immediately on the [Apple App Store](#) and on the [Google Play Store](#).

#### **Leica Cyclone FIELD 360**

Just like BLK Live, Leica Cyclone FIELD 360 allows users to control the BLK2GO scanner and provides an immediate preview of the captured data. In addition, quality assurance, data alignment and data enrichment tools are available for the BLK2GO users in the field.

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Additional tags (image, video, text, voice messages) can be attached to the point cloud data, and multiple BLK2GO walks can be aligned directly in the field.

The full list of features is available in the Leica Cyclone FIELD 360 version 5.0 Release Notes.

The app is available on the [Apple App Store](#) and the [Google Play Store](#).

- Support for organizing the scans in *jobs*

With the new 4.0.0 firmware version and the support in the new companion apps BLK Live and Leica Cyclone FIELD 360, scans can be organized in jobs.

From BLK Live and Leica Cyclone FIELD 360 apps, users can create jobs and add the scans there, helping to better manage and organize scans. Scans started without the app, will be automatically assigned to a default job.

To get the jobs which contain links and tags created with Leica Cyclone FIELD 360, ensure to import directly to Cyclone REGISTER 360 PLUS or download the job using the BLK Data Manager.

- **Press and Go**

In addition to the previous initialization using the table stand, it is now also possible to start the scan while walking. The BLK2GO will initialize the scan on the go while being in movement within typically less than 10 seconds.

To ensure fastest and best initialization, it is recommended to:

- Start in a well-lit and medium sized area.
- Keep steadily moving in one direction.
- Walk with normal walking speed.

It is possible to choose how to start the scan in the companion app (BLK2GO Live, BLK Live and Leica Cyclone FIELD 360) or in the device webpage.

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Note that scan data starts to be collected once the initialization has finished and the LED turns green. During the initialization data is not being collected and will not be part of the scan data.

- **Smart Scanning Guidance**

With the Smart Scanning Guidance, BLK2GO provides real-time feedback to the user to ensure optimal scanning. The scanner will detect if scanning conditions can be improved and will notify the user with instructions through the companion app.

Firmware version 4.0.0 provides smart scanning guidance messages, including:

- *Hold the device steady* when movement is detected during the initialization with the table stand.
- *Start walking* when there is not enough movement during Press and Go initialization.
- *Slow down* when walking too fast during data capture.

Further advanced guidance functionalities are planned to be rolled-out via upcoming firmware releases.

Smart Scanning Guidance is available in BLK Live and Leica Cyclone FIELD 360 companion apps. It is not available in BLK2GO Live app.



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- **BLK2GO Live app deprecation**

While BLK2GO Live app supports firmware version 4.0.0, the app is deprecated and will be delisted soon. We recommend BLK2GO users to switch now to the new companion apps BLK Live or Leica Cyclone FIELD 360.

## BLK ARC ONLY

- Static scans can be triggered from the device webpage.

## BUG FIXES

- General system and stability improvements.
- Fixes for minor bugs.
- Fixed a rare issue where the device WiFi SSID would not become visible after booting up, making wireless connections impossible.

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## KNOWN ISSUES

- When deleting scans, it is recommended to do it in small batches, preferably one or two at a time. To delete bigger number of scans, it is recommended to do a factory reset. When scanning with BLK Live or Leica Cyclone FIELD 360 companion apps also use the same companion app to delete the scans. In those cases, deleting scans through BLK Data Manager or through the device webpage could cause issues with the job and might require a factory reset after.
- Download of the scan data through the device webpage or direct upload to Reality Cloud Studio does not yet have the jobs, tags and links information available. Ensure to directly import the scan data into Leica Cyclone REGISTER 360 PLUS or download using the BLK Data Manager to benefit from the work done within the new companion apps.
- For jobs created from the companion app (BLK Live or Leica Cyclone FIELD 360), it is recommended to also use the button on the app to start and stop the scan. Pressing the power button on the device when the job has been created with the companion app can lead to an incorrect scan name pattern.
- BLK2GO and BLK ARC devices updated to firmware version 3.2.0 and newer cannot connect to older Cyclone REGISTER 360 PLUS and BLK Data Manager versions. REGISTER 360 PLUS v2023.0.3 and newer is required.
- In some rare cases, the LED might be blinking red after booting or during the firmware upgrade. If this happens, wait for the LED to be in solid state, no blinking. If the LED is solid red, turn off the device and turn it on again. If LED is solid green, the device is ready.
- In some rare cases, connecting the device via USB-C cable can lead to red LED. If this happens, unplug and plug again the USB-C cable. This should help solve the issue and get a green LED.
- Occasionally, it can take longer to boot up the device, so as to ensure, that the system is 100% ready for scanning when the LED is green.
- In some rare scenarios, the initialization process is skipped, and the user will not get notified on the companion app. The symptoms are:
  - The LED will turn green immediately after starting the scan;
  - The companion app will be blocked on the initialization screen and the point cloud will not be visible.

If that happens, please stop the scan and restart the device.