polyga VISION V1 3D SENSOR User Guide

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Contents

GETTING STARTED

This quick start guide provides you with the resources to get you started on 3D scanning.

- Factory Calibrated Scanner for capturing 3D data
- FlexScan3D 3.5, SBSDK 3.0 for 3D scanning, mesh processing and measurement tools.

Downloading FlexScan3D Software

You can download the software from the Polyga Accounts Page or by contacting your distributor.
To create a download account, please contact us at Email: **support@polyga.com**
Web: **www.polyga.com/contact/**

FLEXSCAN3D

Instructions for installing and activating FlexScan3D using an installation ID or dongle can be found in the **User Manual**

SETTING UP THE VISION V1

- Connect the 3d sensor to the computer via a USB 3.0 A to B cable. Plug in and fasten the 12V DC power connector. Make sure the port used on the computer side supports USB 3.0 data transmission speed. It is suggested to use a powered USB hub for this connection.
- Turn on the sensor using the back plate button.
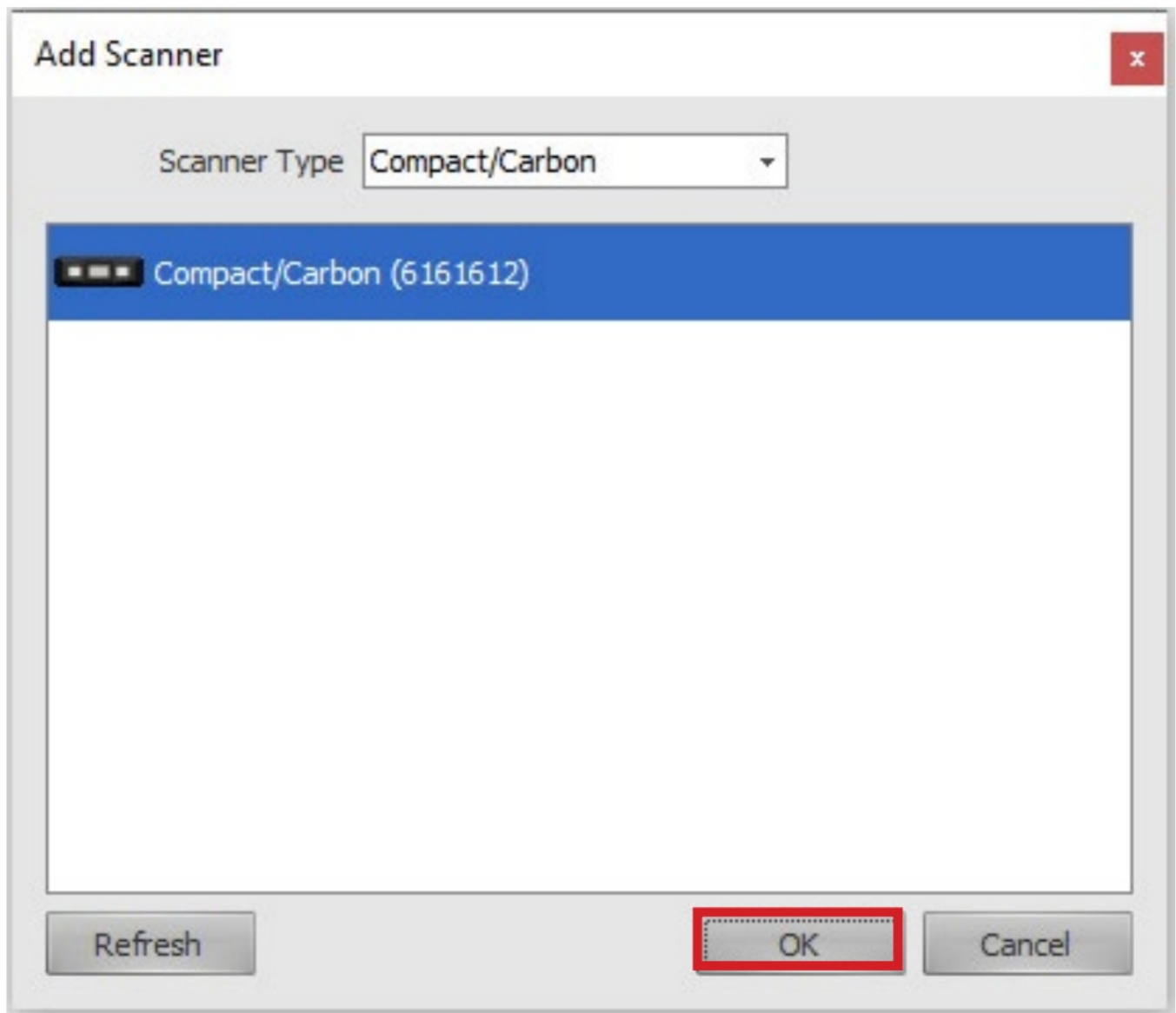 The blue LED should light up once the button is pressed.

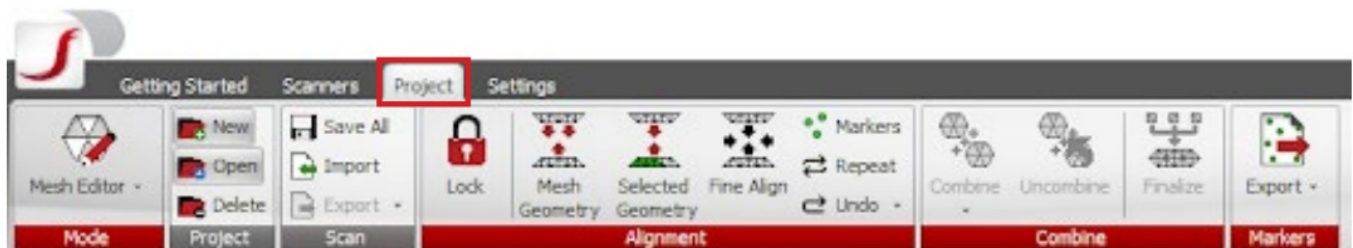Open FlexScan3D 3.5 and go to the **Scanners Panel** tab.
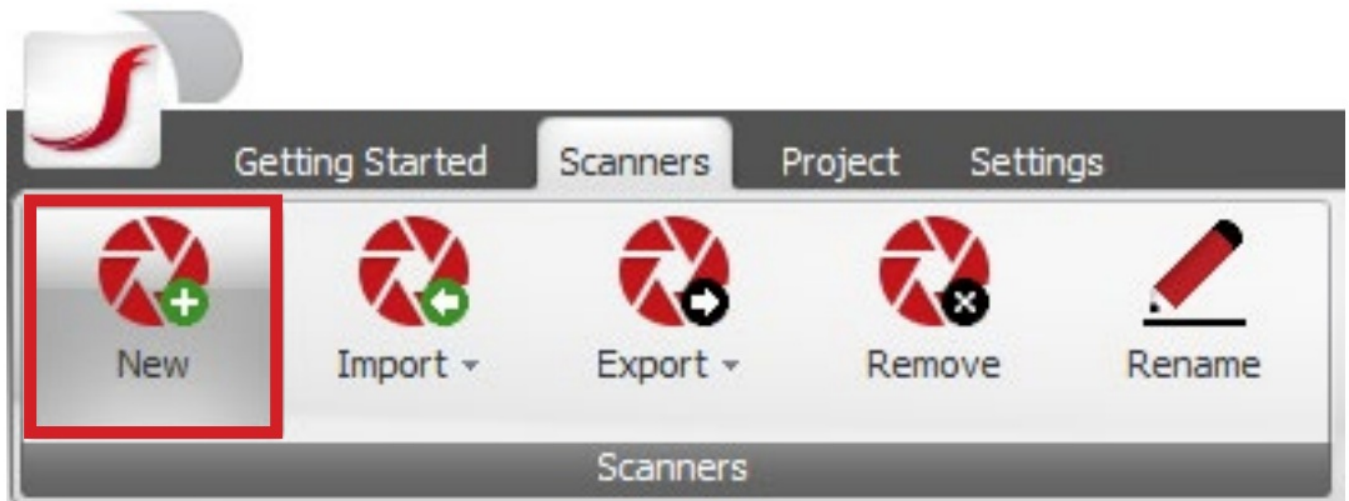
Select the **New** button to connect to a new scanner.
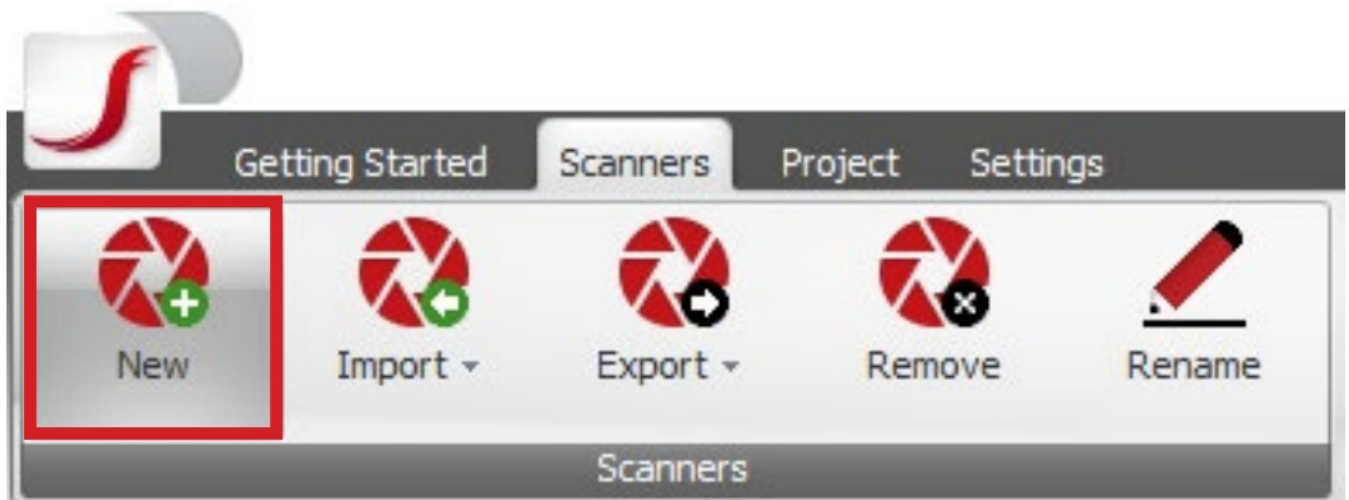
The software will find all connected scanners, select the corresponding serial number.
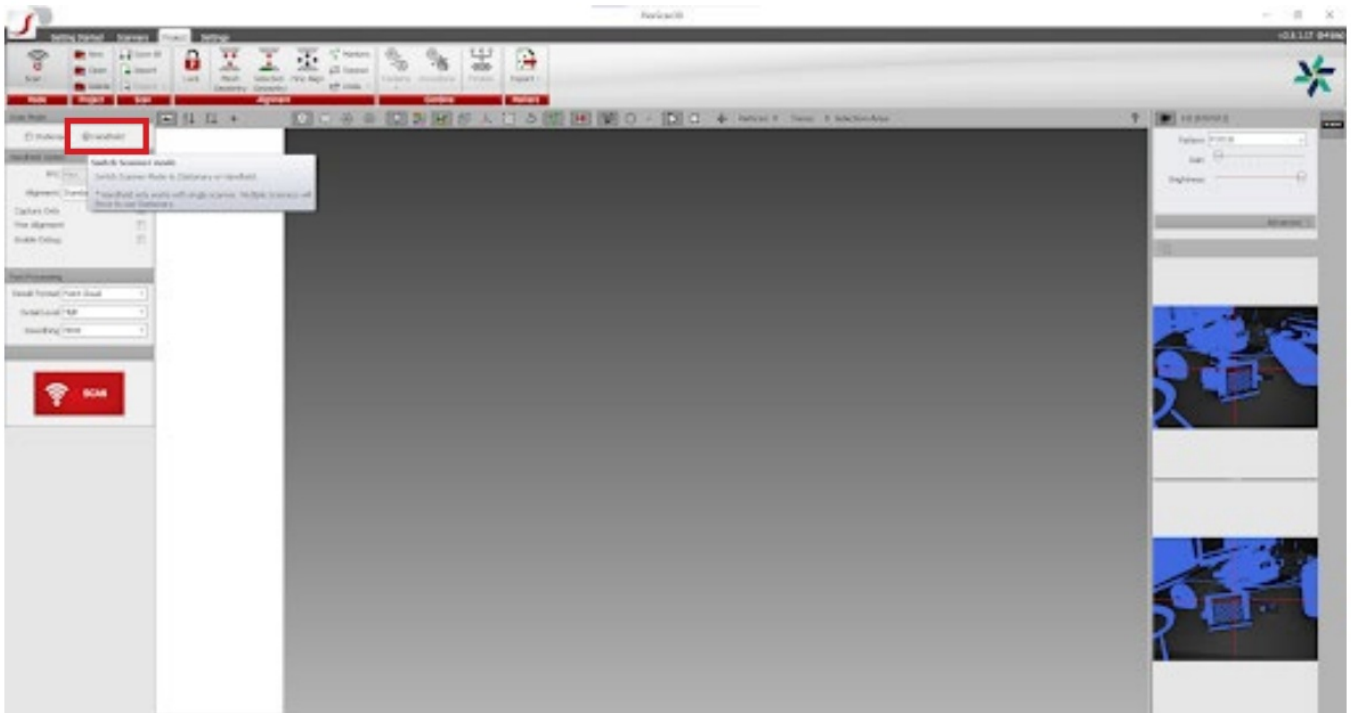Click **OK** to finish adding the device.

Change to the Project tab on FS3D. Create or open a project to manage your captured meshes.


CONFIGURE SCANNER

Select **Handheld** Mode to set the scanner to continuous capture.

Place the object being scanned within 400 to 600 mm from the front plate of the sensor. Change the projector pattern to PHASE/FOCUS for live view with the scanning parameters.
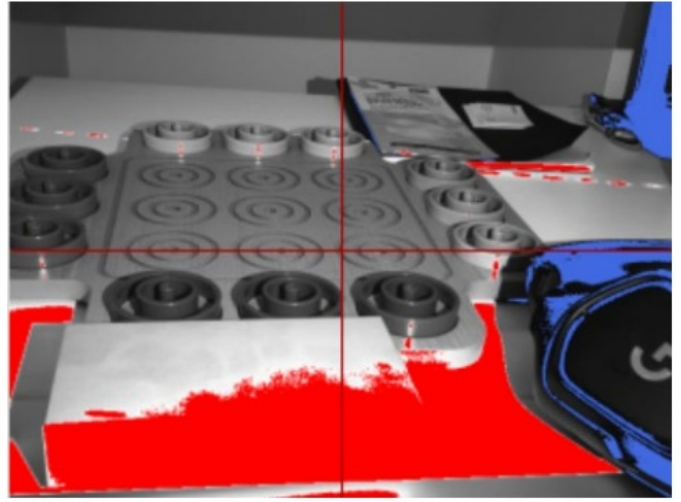
Set the gain slider to its lowest value. If the live view still seems to be dark, slowly adjust the gain value until the live view has proper brightness
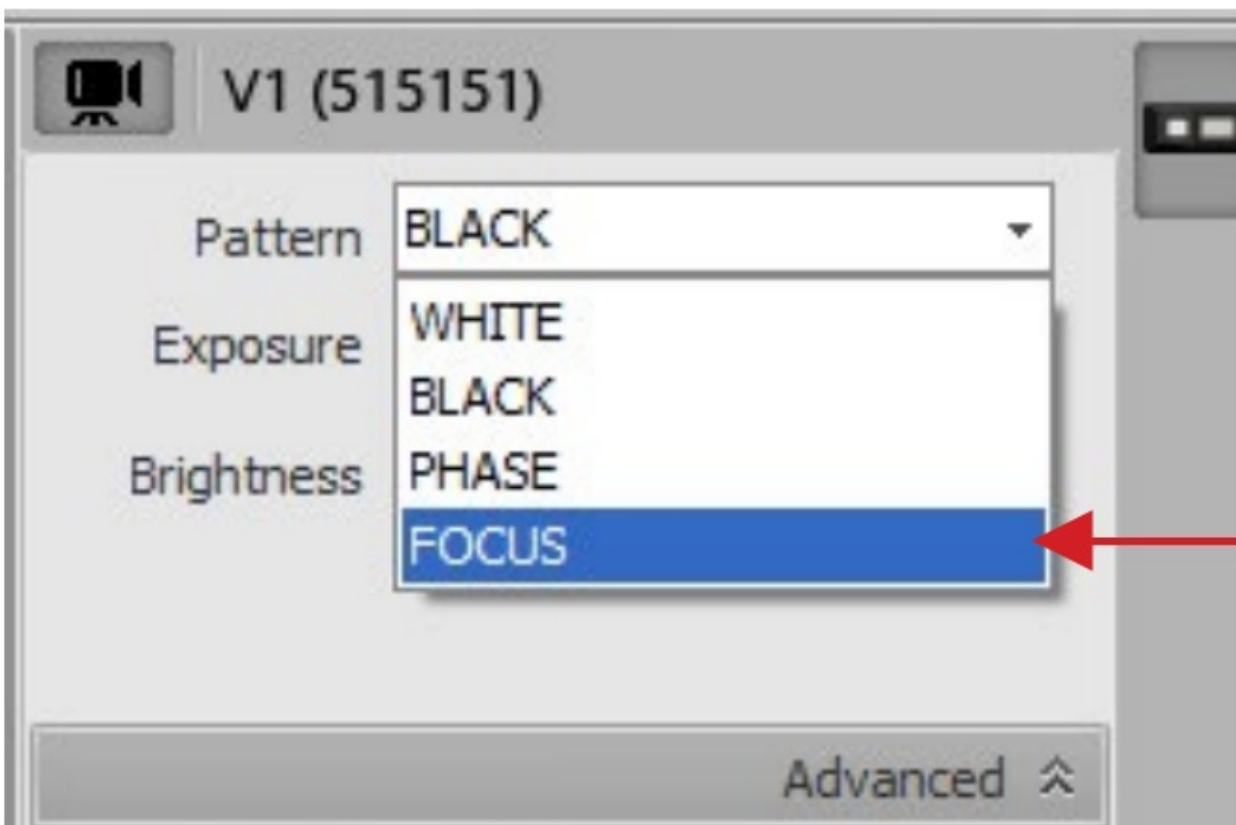
Toggle the projector brightness making sure the object of interest is not under-exposed (blue) nor over-exposed (red).
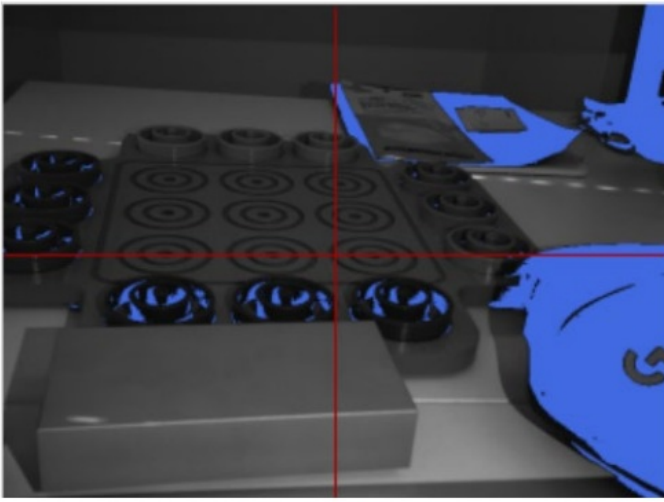
Underexposed live view

Overexposed live view

The object of interest should have a light-grey/white appearance on the live view.
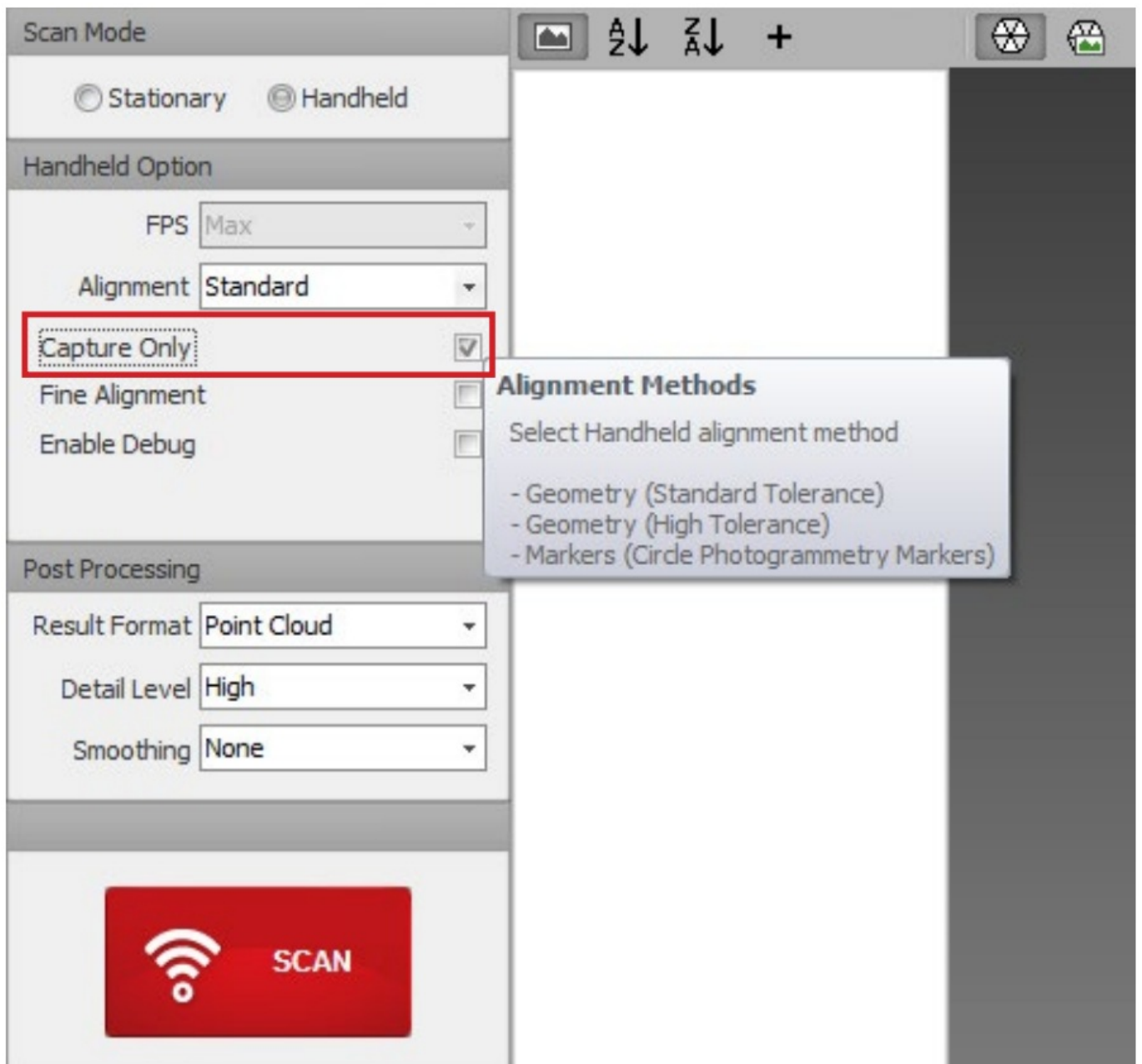
Correct live view

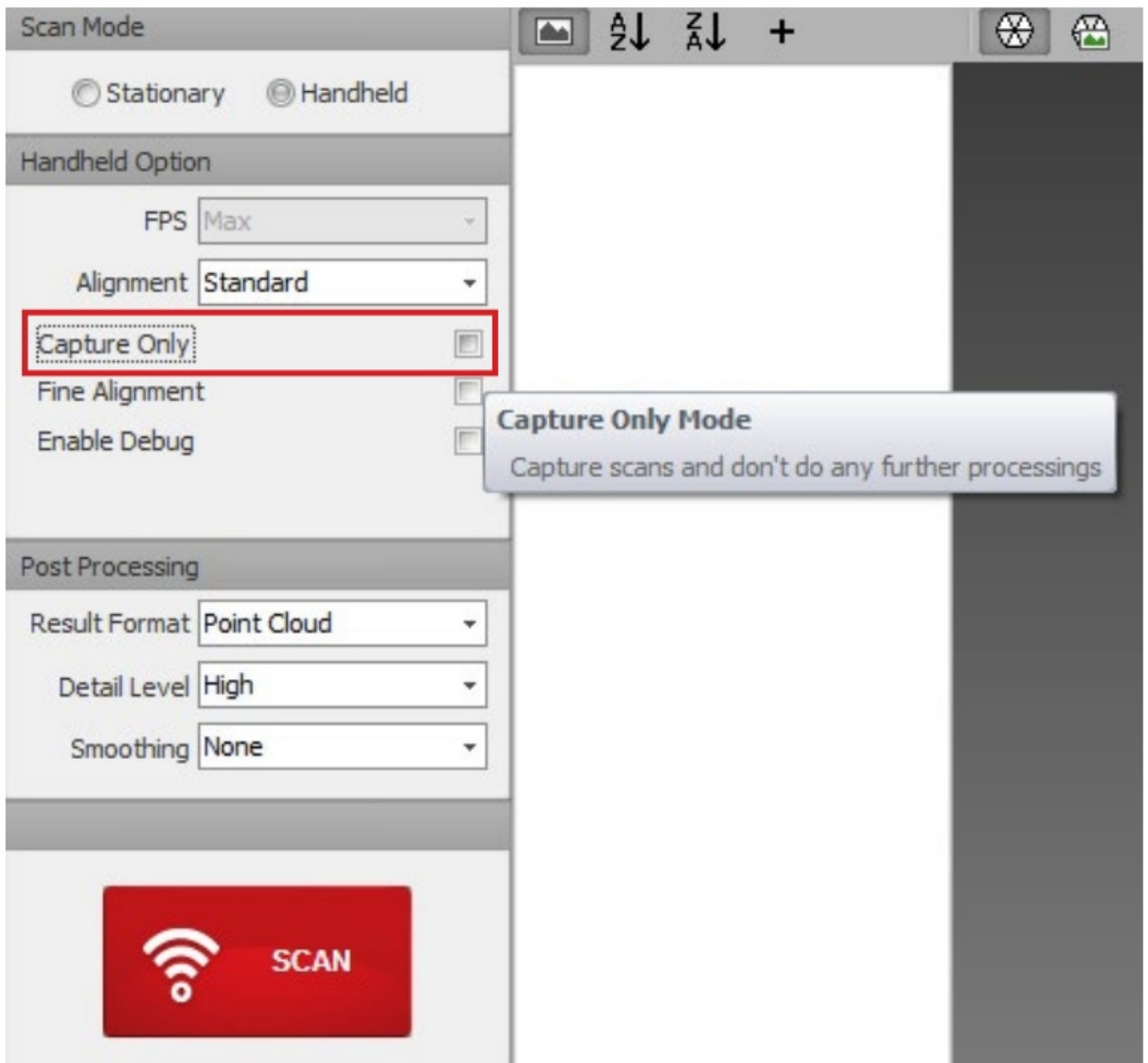## CAPTURE DATA

Live Point Cloud Visualization

Check the Capture Only option on the left pane.

Click on **SCAN** to see the live view captured point cloud.
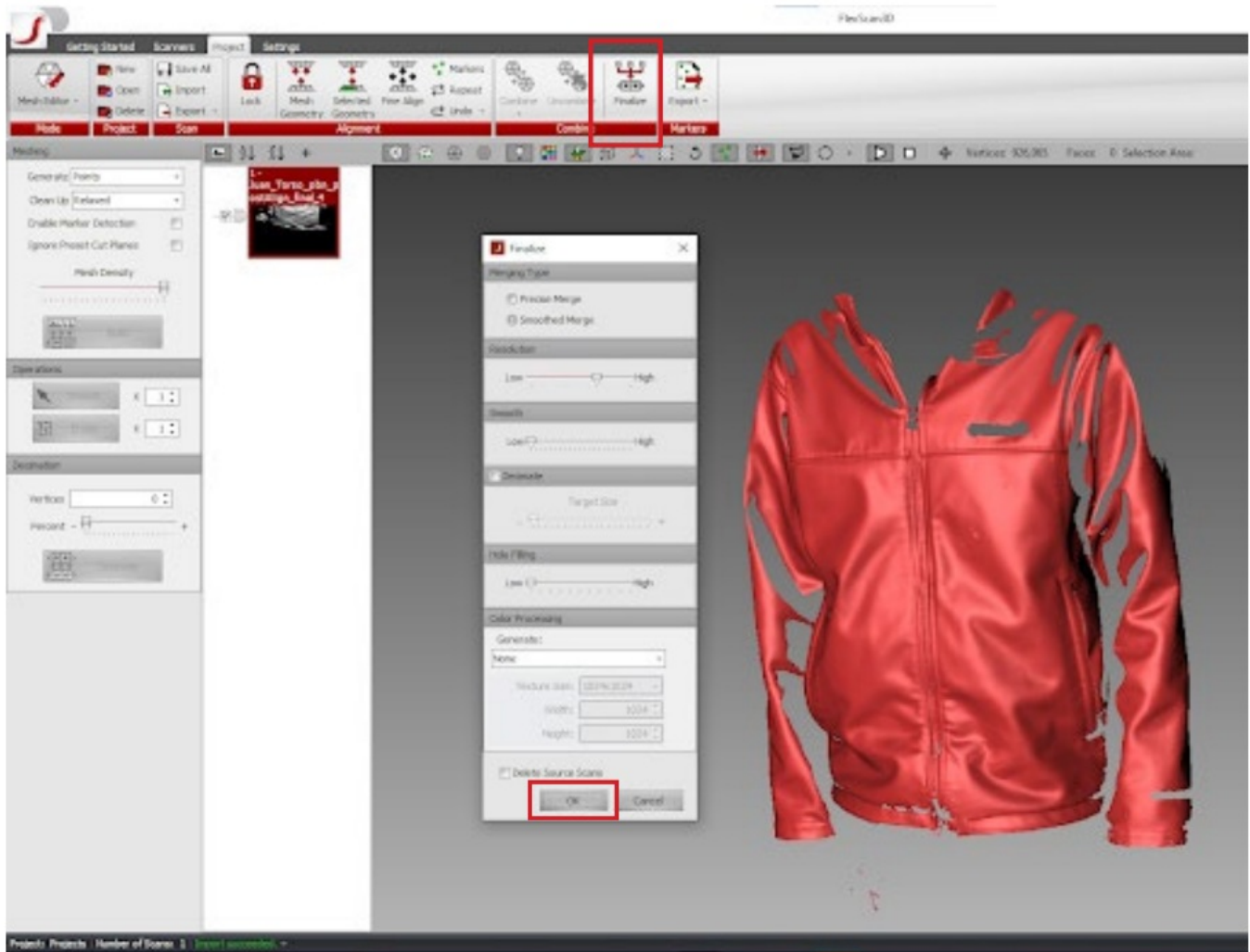
Object Reconstruction

Make sure the Capture Only option is unchecked.

Once you are done capturing, click on the **STOP** button and select YES to save the resulting point-cloud.

To convert the point-cloud to a mesh, use the **Finalize** button on the mesh editor to generate the faces and finalize the raw data.
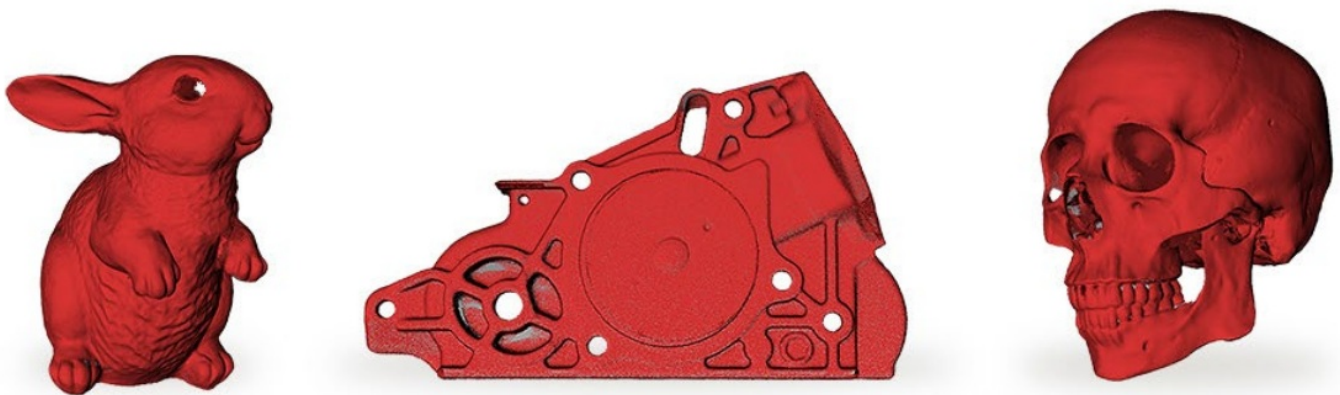
Select the mesh generation parameters and click **OK**.

POLYGA SB SDK

After finish getting started with the V1, take the next step using Polyga's SBSDK 3.0 to integrate your new 3D Sensor with your application.

For SBSDK information visit : **www.polyga.com/sbsdk/**

CUSTOMER SUPPORT

For access to support resources & troubleshooting guides, visit **www.polyga.com/hdi-support-center/**

If you have any questions, please contact:
Email: **support@polyga.com**
Phone: +1 (604) 293-1767
Web: **www.polyga.com/contact/**

Documents / Resources

	polyga VISION V1 3D SENSOR [pdf] User Guide VISION V1 3D SENSOR, VISION V1, 3D SENSOR, SENSOR

References

- ✳ **Polyga - 3D Scanning Hardware and Software - Home**
- ✳ **Polyga Contact**
- ✳ **SB SDK - Programmable API's for Building 3D Scanning Apps**