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QUICKSTART GUIDE - CARBON XL

Getting Started with the Carbon XL 3D Scanner

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

The Carbon XL 3D Scanner comes with:

- 3D scanning software, FlexScan3D
- Physical capturing unit for capturing 3D data (some assembly is required)

Downloading FlexScan3D Software

The HDI Carbon 3D Scanner is powered by FlexScan3D. You can download the software from the Polyga Accounts Page (https://www.polyga.com/my-account/downloads/) or by contacting your distributor.

To create a download account, please contact us at https://www.polyga.com/contact/

Instructions for installing and activating FlexScan3D using an installation ID or dongle can be found in the User Manual at http://www.polyga.com/FS3DHelp/Manual/Default.htm.

Assembling the Capturing Unit

Instructions for assembly can be found in this Quick Start Guide.

Customer Support

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

If you have any issues, please contact:

Email: support@polyga.com

Phone: +1 (604) 293-1767

Web: https://www.polyga.com/contact/

   Here are the steps to set up the capturing unit for 3D data acquisition. In this tutorial, the Carbon XL 3D Scanner was used. There are slight variations to the instructions depending on which model you have purchased. Please see the following instructions to assemble your 3D scanner.

![polyga logo]

When you receive your HDI CarbonXL 3D Scanner, check that all components are included:

Number	Item
1	Mount with Projector
2	2 x 3MP/5MP Cameras
3	10mm Calibration Board
4	15mm Calibration Board
5	HDMI cable
6	2 x USB 3.0 cable
7	2 x Camera Mount
8	2 x Camera Brackets
9	FlexScan3D Dongle
10	Calibration Stand
11	Power cable for Projector
12	Power cable with 5V Adapter for Trigger Box
13	6 x Camera Screws

1.Tripod Setup

Simply open the tripod legs and place them firmly on the ground.

Attach the tripod head to the legs by firmly twisting the tripod head until it is hand tight. (Some scanners will arrive with the tripod head already attached.)

2.Connect the Scanner to the Tripod

Carefully lift your scanner and locate the mount adapter. Gently place the scanner onto the tripod head. Snap the tripod headlock into place to secure the scanner.

## 3.Attach Cameras to the Mounts

Attach the cameras onto the camera brackets using the screws. You will need hex keys for doing this.

4. Attach the Camera Mount onto the Bracket

Attach each of the assembled cameras mount onto the bracket using Hex Keys. Ensure that the metal pin is in place between the bracket and mount, allowing the camera to rotate. Tighten the screws until they are firm, but do not overtighten.
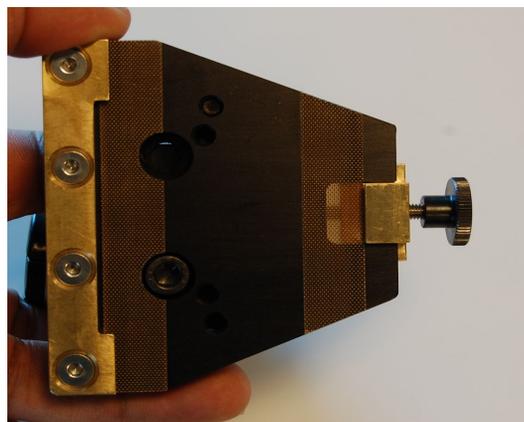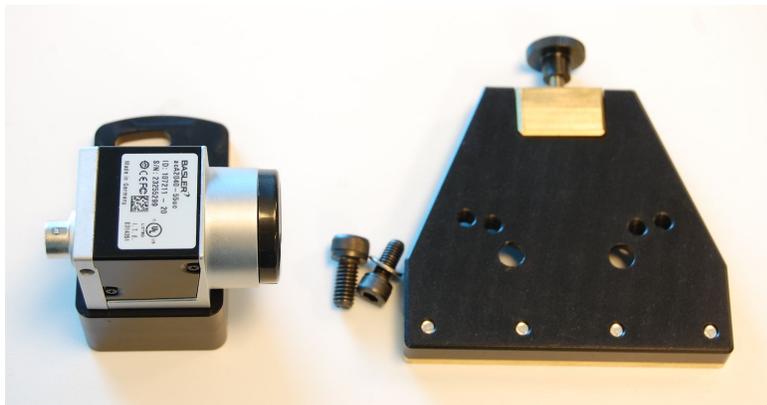
5.Attach Brackets to the Scanner Rail

Attach the mounts onto both sides of the scanner. Tighten the screws until they are firm, but do not overtighten. Adjust the distance between the cameras by loosening the bracket screws as needed.
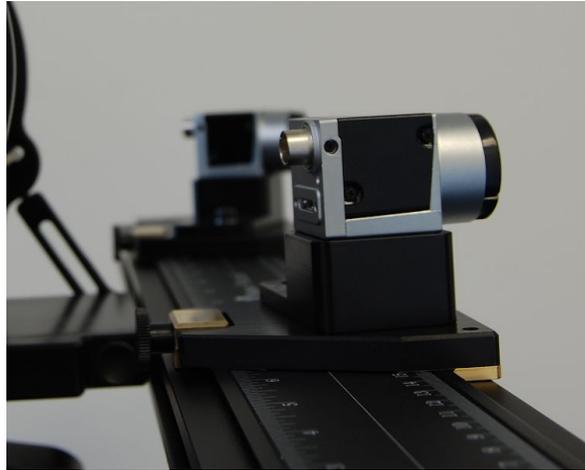
6.Attach the Lenses to the Cameras

Carefully remove the lenses from the packaging and take off the camera lens cap from each camera. The lenses will need to be screwed onto the cameras until they are tight.

7.Connect the USB 3.0 Cables to the Cameras

Attach the USB 3.0 cables to the back of the cameras.
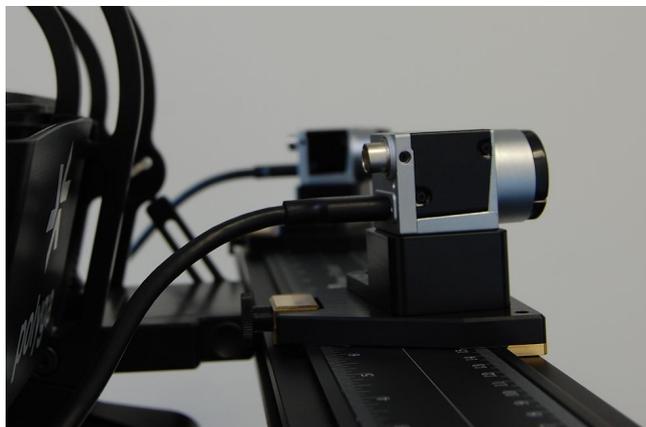
8.Connect all the necessary cables onto the 3D scanner

Your Carbon XL consists of a Trigger Box and a Projector. The Trigger Box is positioned below the projector and both require separate power input. First, plug in the 5V adapter cable into the Trigger Box power jack as shown below.

Next, Plug in the power cord into the power inlet for the Projector.

Connect the HDMI cable between the Trigger Box and the Projector. Take the below image as a reference.

Finally, connect the RJ45 cable to the ethernet port in the Trigger Box. Connect the other end to the ethernet port of your PC on which you intend to use the 3D Scanner.

Once all the necessary connections are made you should be able to Power ON the Projector and add the scanner on FlexScan3D. Visit http://www.polyga.com/FS3DHelp/Manual/ for the next steps in adding your scanner and taking scans on FlexScan3D.