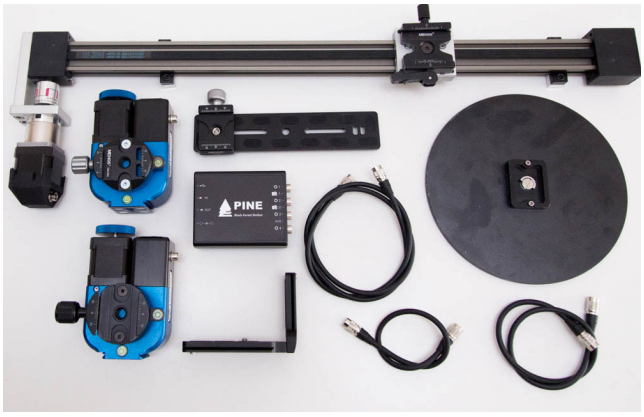
Black Forest Motion
3D Bundle – Quick Start Guide

Black Forest Motion

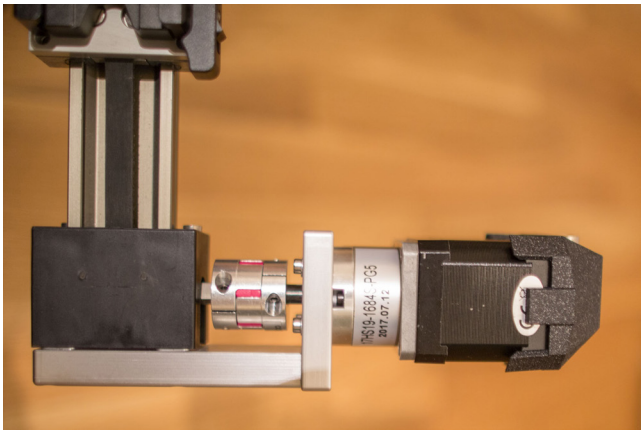
Thank you and congratulations for purchasing the Black Forest Motion 3D photogrammetry bundle. This guide will help you with the first steps to set-up the system. For a quick start guide focusing on the PINE Motion Controller, see our separate guide which is included with each controller.

Bundle Parts

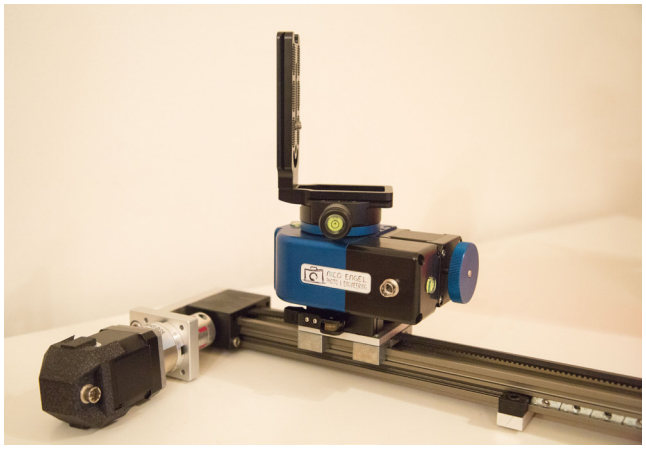
- PINE Motion Controller
- Power supply
- Nic-O-Tilt Head
- Motor Cable 2.0m
- Motor Cable 1.5m
- Motor Cable 0.5m
- Turntable disk
- Slider Rail
- Motor attachment



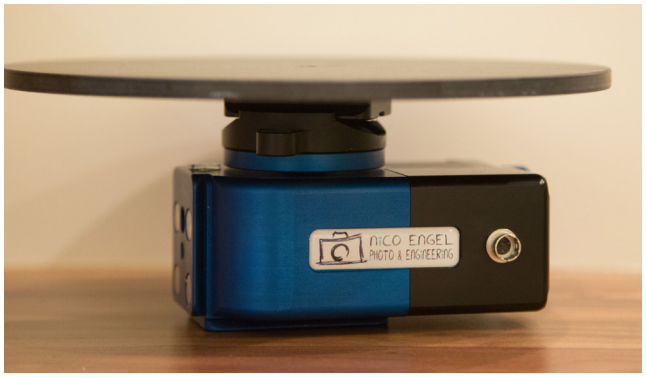
Motor assembly (120cm only)
Mount the motor attachment to the slider rail as shown in the picture below. You need an appropriate Allen Key tool.



Tilt axis assembly
Use one of the Nic-O-Tilt motor units and mount it to the slider as shown in the picture below.



Turntable assembly
Use one of the Nic-O-Tilt motor units and mount the turntable disk to it as shown below. The additional arca rail that is included with the Nic-O-Tilt is not needed if the bundle is used for the 3D scan application.



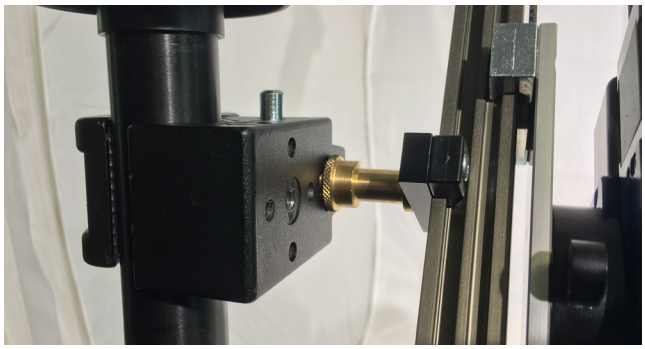
Camera assembly
Mount your camera to the additional arca L-bracket and mount everything to the tilt axis as shown below. Connect an appropriate camera release cable to your camera and the camera 1 port of the PINE Controller (both camera ports on the controller can be used).

Recommended Setup

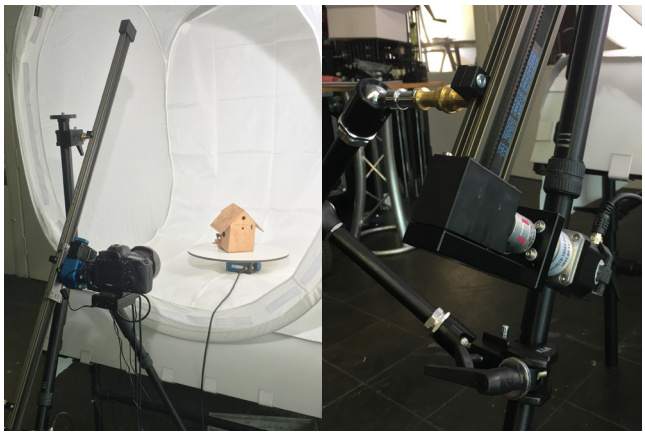
The following pictures show our recommended constellation for the 3D scan application. Use the longest 2m cable to connect the turntable to the PINE Controller. Use the 1.5m cable for the slider motor and the 0.5m cable for the tilt axis. Connect motors to the PINE Controller as follows:

1 – Turntable
2 – Slider
3 – Tilt

You are free to choose the motor ports, but we recommend to use the above sequence. Mount the turntable unit to a tripod. Mount the slider rail vertically to a tripod (using additional clamps – not included) or mount the slider to a table. Please make sure to not twist the slider rail in any way with mounting brackets. This can result in the slider plate getting stuck during movement. If the slider gets still stuck during movement, try to mount the slider with a slight angle. This also gives better results in terms of distance and focus.

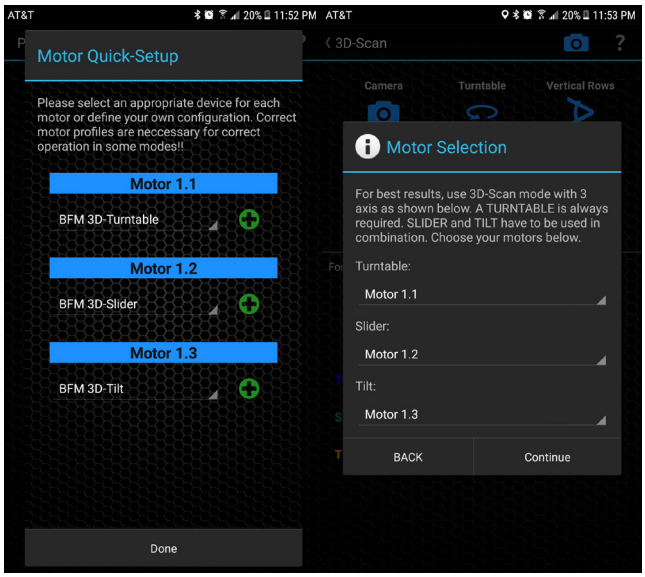


Mount the PINE Motion Controller directly under the camera to the L-bracket using the small arca plate which is included with the Nic-O-Tilt. Mount the plate directly to the bottom of the controller and slide it to the L-bracket.



Power up the controller

Once the entire system is assembled and all motor units are connected to the PINE Controller, power on the controller by connecting the included power supply. Please refer to the included quick start guide for the controller.
Once the controller has booted up and the status led is blinking green, open the PINE Motion App on your phone and connect to the controller.
Once the motor quick setup screen appears, select motor profiles as follows:



It is very important and crucial that all motor profiles are set correctly to guarantee proper operation of the 3D scan mode. You are now ready to start the 3D Scan mode in the app. On the right picture you can see the assignment of the motors in 3D-mode.