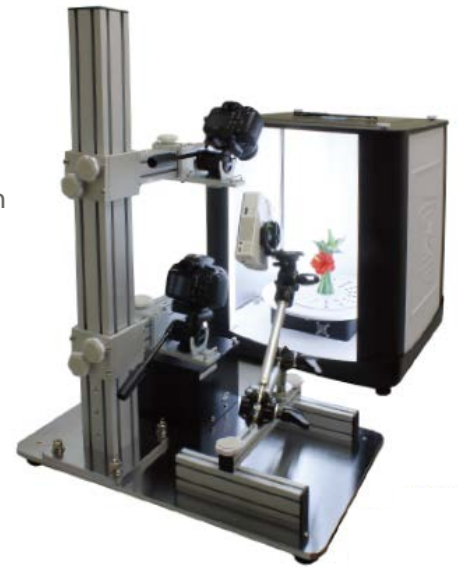# Ortery 3D Modeling Solutions

Create professional 3D models from a combined process of structured light and 360 photography with Ortery's photography automation equipment and BOB Capture™ 3D modeling software. These systems are designed to maximize image capture efficiency, reliability and 3D Model accuracy to provide a practical way of digitizing a large number of 3D objects in a realistic timescale, without the need for 3D modeling expertise.

Highlights

- Photography-based 3D model creation is familiar and easy
- Output colorful texture maps and high quality 3D models
- Computer-controlled systems automate image capture, processing & model creation
- Utilizes structured light to produce sharp features
- Turntable & fixed camera positions yield consistent and reliable results over time
- Features AutoPNG and other automated background removal capabilities
- Digitize objects of almost any size
- Fast, complete solution from capture to publishing
- Export OBJ, STL, Collada, X3D, 3DS formats or send models to BigObjectBase.com for hosting and publishing in the cloud
- Use captured images for many applications: 3D models, professional stills, 360 and 3D product views in HTML5

3D600 with Photosimile 50 & PhotoCapture 360

Applications

Product Visualization • 3D Print • eCommerce • Product Design & Development • Rapid Prototyping • Quality Control • Product Presentations • Collaboration • Archival • Augmented Reality • 360, Hemispherical, Spherical Product Views in HTML5 • Video Games • Rendering • Flyby Movies and more…

Wireframe   Flat Mesh   Texture Map

How It Works

1. **Calibrate** – Place calibration mat on the turntable. Arrange and adjust camera settings. Capture a 360 view of the mat. Calibration results can be reused for multiple objects.

2. **Capture** – Place object on turntable. Capture a complete 360 view. (Optional) Create another 360 view with structured light.

3. **Professional Results** – Captured images are automatically passed to BOB Capture for 3D Model creation. Export 3D Models in common formats (Collada, X3D, 3DS, OBJ and STL) for editing and 3D print or send to www.BigObjectBase.com for hosting and publishing from the cloud.

BOB Capture Software

This 3D modeling software combines the advantages of photogrammetry silhouette (profile) modelling & structured light techniques to create amazing 3D models and colorful texture maps from the results of 360-degree photography.

Product with Stuctured Light

VR for 3D Software

Merge VR into reality by overlaying 3D models with high resolution photographs to yield photorealistic product views with click and drag mouse control, deep zoom and measurement capabilities.

Integrated 3D Modeling Solutions

All solutions below feature control software for automating and simplifying the entire photography and 3D modeling workflow. Picture taking is synchronized with turntable movement, lamp control and projector use with captured images seamlessly passed to BOB Capture for 3D model and texture map generation. In addition, professional still, 360 and 3D images can be created and used for almost any application.

3D MFP - Features a built in Canon T5i camera, patented camera positioning, tilt and zoom control, a transparent turntable, pico image projector and dimmable LED lights (bottom, back and corners) to automate still, 360 and 3D image capture and 3D animation/model creation. Takes professional pictures on pure white or transparent backgrounds.

PhotoModeling 3D300 - Ideal for smaller objects, 3D300 utilizes 2 compatible Canon cameras and works best with a 3D PhotoBench 160/260, PhotoCapture 360 series turntable and a Photosimile 50 or 200 studio.
- BOB Capture 3D Modeling Software
- Flexible Two-Arm Camera Stand
- Integrated Pico Image Projector and Calibration Mats
- Control Image Capture Automatically

PhotoModeling 3D600 - Ideal for smaller objects, 3D600 utilizes 2 compatible Canon cameras and works best with a 3D PhotoBench 160/260, PhotoCapture 360 series turntable and a Photosimile 50 or 200 studio.
- BOB Capture 3D Modeling Software and Lifting Blocks
- Flexible Two-Arm Camera Stand
- Integrated Pico Image Projector and Calibration Mats
- Control Image Capture, Structured Light and Lighting Automatically

PhotoModeling 3D800 - Ideal for mid-sized items, 3D800 utilizes three compatible Canon cameras. Works best with 3D PhotoBench 160/260 or can also be used with PhotoCapture 360M, 360L or 360XL and lights.
- BOB Capture 3D Modeling Software
- A Flexible Three-Arm Camera Stand
- Integrated Pico Image Projector and Calibration Mats
- Control Image Capture, Structured Light and Lighting Automatically

PhotoModeling 3D2000 / 3000 / 4000 - These solutions offer maximum coverage and speed. Works best with 3D PhotoBench 160/260 or can also be used with PhotoCapture 360M, 360L or 360XL and lights. Capture images using up to 5 compatible Canon cameras shooting simultaneously.
- BOB Capture 3D Modeling Software
- MultiArm 2000, 3000 or 4000 System
- Projector Lens Control, Positioning and Lighting Control System
- Control Image Capture, Structured Light and Lighting Automatically

Required Turntable & Lighting Options

PhotoCapture 360, 360M, 360L or 360XL - Turntables with 25lbs, 200lbs, 400lbs and 1,000lbs capacities and any external lights.

3D PhotoBench 160/260 - Featuring dimmable LED lights (bottom, back and corners) and a transparent turntable (33 lbs capacity) can create pictures with transparent backgrounds to accelerate 3D model creation.

Compatibility Chart

	3D300	3D600	3D800	3D2000	3D3000	3D4000
*PhotoCapture 360	X	X	X	X		
PhotoCapture 360M	X	X	X	X	X	X
PhotoCapture 360L	X	X	X	X	X	X
PhotoCapture 360XL	X	X	X	X	X	X
3D PhotoBench 160	X	X	X	X	X	
3D PhotoBench 260	X	X	X	X	X	

*PhotoCapture 360 is plug and play inside Photosimile 50 and 200

Specifications

OS: Windows 7/Windows 8 (latest Service Packs) (Administrator Account for all Windows OS)
CPU: Intel Core™ 2 Duo E6600 (2.2 GHz) or AMD Athlon 64 X2 5000+ (2.6 GHz) or better
RAM: 4 GB
Internet connection with active email account (optional)
Min. 2 USB Ports, CD/DVD ROM drive

Compatible Cameras

Canon DSLR: 1Ds Mark IV, 5D Mark II, 5D Mark III, 6D, 7D, 40D, 50D, 60D, 60Da, 70D, Rebel XS, XSi, T1i, T2i, T3 & T3i, T4i, T5i & SL1

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