

# VR



*innovation in presentation*

*360° x 90° interactive object photography*



h a r d w a r e  
S P E C I F I C A T I O N S

VRobot features	<ul style="list-style-type: none"> <li>• <b>Single machine 3-axes photorobot for the creation of interactive photographic object presentations containing any number of viewing angles to the object.</b></li> <li>• Automatic as well as manual operation of all axes via software.             <ol style="list-style-type: none"> <li>1. Object disc rotation: 0° - 360°</li> <li>2. Object table elevation: 0 - 460 mm</li> <li>3. Camera arm rotation: 0° - 90°</li> </ol> </li> <li>• Fully programmable number of stops per rotation over both vertical and horizontal axes.</li> <li>• Easy and fast disassembly (30 minutes) allowing for easy transport.</li> </ul>
Max. Objectsize	80 (L) x 80 (W) x 90 (H) cm
Max. Object weight	35 kg.
VRobot dimensions	1600 (W) x 1300 (D) x 1250 (H) (Without camera arm) 1600 (W) x 1300 (D) x 2500 (H) (With camera arm in upright position)
VRobot weight	Total weight approx. 100 kg. Heaviest part in transport mode: 61 kg.
Object table dim.	1260 (W) x 1500 (D) x 8 mm (thick) polycarbonate (Lexan)
Object disc dim.	800 - 1200 mm diameter 8 mm thick polycarbonate (Lexan)
Camera related properties	<ul style="list-style-type: none"> <li>• Camera-to-object distance 300 - 1500 mm (manually adjustable).</li> <li>• Camera always concentric to object due to design and adjustable objecttable elevation. No need for time-consuming alignment!</li> <li>• Counterweights non-critical due to high torque camera-arm drive (120Nm).</li> <li>• Flexible fixation of add-on cameras or lights on camera-arm due to the use of standard aluminium construction profiles.</li> <li>• Operates with every camera (compact and DSLR) that is equipped with remote shutter release that operates by closing a switch (short-circuit action). Note: The VRobot provides separate signals for focussing and shutter release, both with adjustable hold times.</li> </ul>
Background options	<ol style="list-style-type: none"> <li>1. Translucent white polystyrene bend around object(table) for full coverage of background width independant of cameraobjective used.</li> <li>2. White or black PVC sheet hanging from a vertical frame (see picture) that is mounted on the object table.</li> </ol>



Main features	<ul style="list-style-type: none"> <li>• <b>Full programmability to allow for any number of viewing angles in both horizontal and vertical direction.</b></li> <li>• Software acts as real-time robot controller, as well as robot programmer.</li> <li>• Real-time visual feedback of every movement of the robot.</li> <li>• Support for stop-motion animation ("pause-mode"). In this mode the operation of the running program will be paused before taking the next picture, until the operator presses a button. This enables the operator to position the object into the next pose of the total animation.</li> <li>• Support for mirror-lockup mode as is found on many DSLR cameras. Using this mode, the mirror of the DSLR will be locked before taking the picture, thus removing the risk of vibrations caused by movement of the mirror in the camera body, when using long shutter times.</li> <li>• The software provides many features that were specifically build to cope with a huge range of object types with different fragility / stiffness / MOI / surface resistance:             <ul style="list-style-type: none"> <li>• Fully adjustable steppermotor speeds</li> <li>• Fully adjustable hold times (pause times) after each rotation has been completed, in order to allow for dampening of any vibrations in the object and / or the robot.</li> <li>• Fully adjustable acceleration and deceleration of every motion. (eg. a coin on its side can be handled by the VRobot without the occurrence of slip during many revolutions with 72 steps / revolution of the object-disc)</li> </ul> </li> <li>• Create, store and load your own programs.</li> <li>• Variable startup parameters (default program can be altered).</li> <li>• Once all parameters have been set, the robot will automatically take all pictures after pressing the play button.</li> </ul>
User interface	Touchscreen operation using a Full HD ergonomical hands-on user interface! Including a full featured touch keyboard and a preset value pad for fast and easy data input.
Screen	Full HD (1920x1080 pixels) touchscreen. The included touchscreen monitor can either be mounted on the VRobot or used separately.
Computer	Computer system is included with the VRobot. The VRobot controller software will be preinstalled on that system. The computer system can either be left external or build into the VRobot depending on customers wishes.