

Product of the month: **Seitz VR-Drive**

Allround success

A special tripod head of the Swiss company **Seitz Phototechnik** enables perfect panorama images.

What you need for professional panoramic photography is a stable tripod and a special tripod head with a computer-driven engine that turns in a cylinder and releases images in previously set positions. That is how a series of images is created that can then be combined into a digital panorama on the computer.

Seitz Phototechnik AG of Lustdorf in Switzerland markets such an engine under the brand name VR-Drive (www.roundshot.ch). The product is distributed in Germany by Mark Kaires Panorama Systeme in Buchholz – for 1600 Euro.

We climbed on top of a mountain in the Allgäu, set up the system and returned 30 minutes later with a panorama.

The instruction manual was – at that stage – available only in a draft version. Despite that we did everything correctly.

Computers are, by the way, not just quality-compressing emergency solutions to create panoramas but rather the preferred medium, as the photographer can zoom into the image and detect even the finest detail. At the same time, the scroll function allows a better feeling for space than a two-dimensional photo paper. At the same time, geometrical structures of rooms and interiors can be the source of fascinating creations.

What is possible when professionals work with the VR-Drive is pictured above in the panorama image by Henning Kramer. To avoid that people walk into the image a full blocking of the photographic space

is not required; the VR-Drive remains idle on request and waits for remote release after having rearranged the scene.

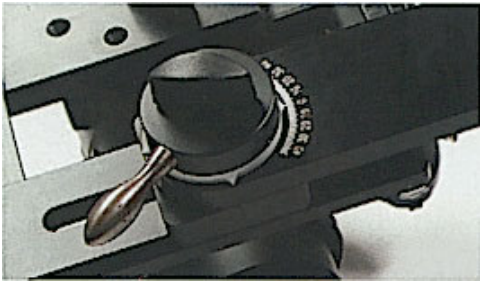
In normal situations, however, the four blue buttons on the cylinder allow to control the rotation speed of the camera, the waiting time before and after the shot and releases the images automatically over a small release cable. A pre-condition for that is the possibility for remote control of the digital camera which is possible for the cameras listed in the box on the following page. The waiting time before the shot is required to reduce possible vibrations caused by the rotation, and the time after the shot for saving the image. A bit more tricky is the setting of angles by which the camera turns from image to image until a full panorama is completed. The single images are then combined in a stitching software into a digital panorama.

The degree of overlap between images is by experience at least 25% to allow reliable stitching and avoid distortions than can occur towards the edge of the image. The shorter the focal length of the lens, the less images are needed. The camera holder consisting of two precision rails fixes the camera vertically to enable a higher vertical resolution. Thanks to these rails and the water bubble indicators on the cylinder the perfect positioning of the lens is very simple. As we said before: we did this without using (the now completed) instruction manual. We just made sure that the lens is positioned exactly at the very centre of the cylinder.

However: the professional will soon start to do multi-row-images and starts to tilt the camera using the highly precise tilt-lever. By doing this it is possible to create spherical presentations of space, theoretically up to a full bowl. For that the camera must be centered not only in the x- and y- but also in its z-axis.



A connection cable between engine and camera allows to control the bracketing and release of the camera.



Precision by the millimeter: the fine adjustment of the tilting angle enables multi-row shots.



The blue buttons allow to control the rotation speed, the angle as well as the waiting time between the shots.



The vertical positioning of the camera makes it possible to capture a significantly higher vertical angle than in horizontal position.



1. Precision rail for adjusting the position of the lens. 2. VR-Drive engine with control/display. 3. Holder for positioning the camera lens.

Compatible cameras

Canon: EOS 1D, D60, 10D, 1DS
Nikon: Coolpix 5000, Coolpix 5700, D1, D1X, D100, F5, D70 and more on demand

Models that are not listed but that have an optional electronic shoe can be released using an electro-mechanical release finger. To do this, a small motor controls the finger that pushes the camera release button. Price: about 150 Euro.

Which requires more intuitive precision. But the VR-Drive holds even more in store: The clever cylinder also controls the bracketing function, i.e. a series of exposures with different f-stops. This is helpful to balance significant differences in light within a room, as the automatic function of the camera must be turned off. Instead of one image 3 or 5 images are created in every position. This allows to select the best images for the panorama. Photographers who want to create object movies (for animation on the internet) can attach a stable turntable on top of the cylindrical engine and position the camera on a tripod next to it. A very simple way to capture a full sequential linear scan of an object. In the next issue of COLORFOTO we will also publish techniques on how to edit panoramas using different stitching software.

Martin Biebel