Seitz 6x17 Digital

The Digital Revolution In 6x17 Panoramic Photography
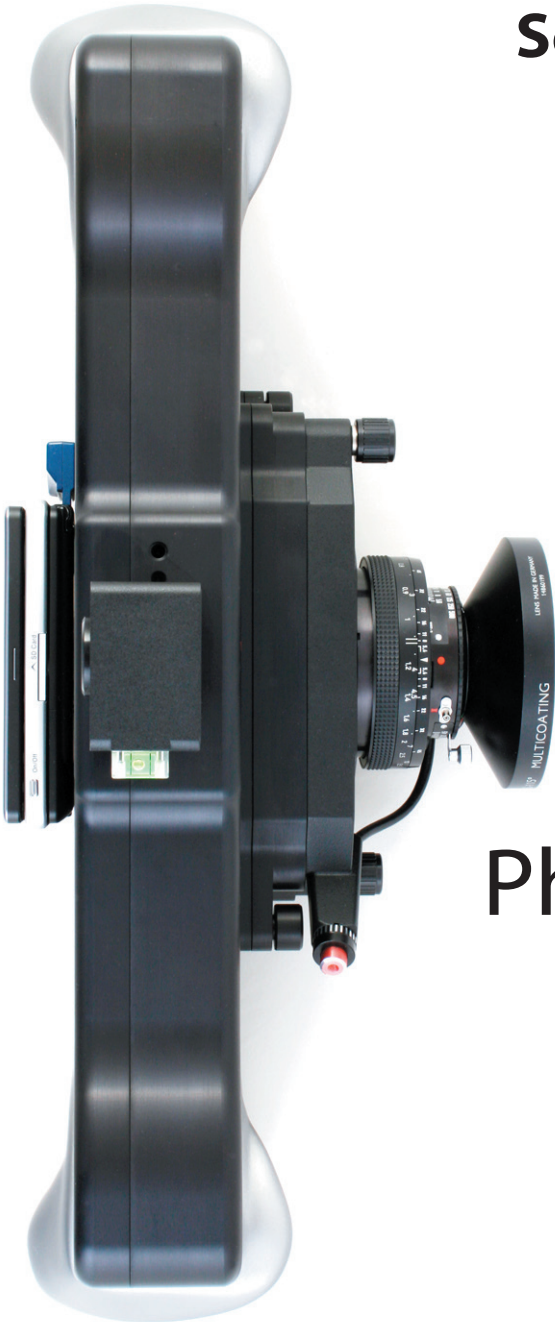
The Digital Revolution In
6x17 Panoramic Photography

We are happy to introduce the Seitz 6x17 Digital camera with its D3 digital scan back. With this new system we expand the current boundaries of digital photography. This scan back is equipped with the first high-speed scanning sensor developed specifically for photography. Over the last years we have worked closely with specialists of DALSA Corporation from sensor design to prototyping and production. In this way, we have been able to tailor the capabilities of the new sensor to the needs of the photographer: very high speed, increased sensitivity and very high image quality as required for photography applications. With the new camera it is possible to create digital 6x17 images of stunning resolution and beauty. But not only that: The new camera system is fully mobile and easy to operate thanks to a handheld device with a graphical touch-screen. We use the latest computer technologies for data transfer and communication. World-class lenses by Schneider, Rodenstock or other large-format brands can be used interchangeably with the new camera. The Seitz D3 sensor cassette can also be fitted to other cameras, such as our new Roundshot D3 360° Panorama camera, which makes the investment in the Seitz D3 technology truly rewarding.

Our new camera system is distinctive in many ways. With the Seitz 6x17 and the Seitz D3 scan back you can:

- Create a 6x17 panoramic image with160 million pixels in one second
- Benefit from a very high image quality in all light situations
- Work with a full-size colour touch-screen and a simple-to-use software
- Invest in a fully mobile camera system with latest computer technology
- Photograph in high definition 6x17, 360° panoramic or medium or large-format

High Speed & Sensitivity

This scan back 6x17 camera is extremely fast. The image results are comparable to a one-shot digital or film back. This is possible thanks to a very high read-out speed of 300 MB per second - 100x faster than for any existing scan back. The fastest exposure speed is 1/20'000 sec. - or one second for the entire 6x17 scan at full resolution!

Compared to previous surface sensors, the sensitivity of the Seitz D3 sensor is significantly higher. Or compared to conventional scanning cameras, the sensitivity is increased by factor 100. This results in a very broad ISO/ASA range of 500 to 10,000, which makes this camera the perfect instrument for virtually all light situations. Our new stage selection technology allows to control sensitivity by selecting smaller or larger areas of the sensor. This means: additional sensitivity without any additional noise!

160 million pixels

7,500 px

21,250 px

Substantial Resolution

What few thought possible has now come true: wide-format digital photography. With a resolution of 7,500 pixels vertically and 21,250 pixels horizontally this camera creates a 160 million pixel image. This substantial resolution makes it possible to create high quality reproductions. A variety of different formats is possible: 6x6, 6x9, 6x15 or a full 6x17 panorama. No limits for high definition photography!

Very High Image Quality

We have achieved a true technological breakthrough not only in speed and resolution but also in its impressive image quality. Our digital technology corrects natural brightness decrease towards the edge without the use of a centre filter. The image has a 48-bit colour depth and a high dynamic range. When shooting directly into the sun, the sensor's anti-blooming feature reduces glare and allows a clean passage between highlights and lowlights. The image is further enhanced by advanced optimisation algorhythms developed by Seitz for ultimate image quality. Or work directly on the raw image and apply your own raw conversion preferences.

Leading Edge Digital Technology

The Digital 3 scan back sensor has been designed and developed exclusively for Seitz by DALSA Corporation. In this multi-year project specialists around the world have brought together the best capabilities in digital technology, computer science, image optimisation and knowledge of photography applications to build a camera system that goes beyond the imaginable.

Handheld & Simple To Work With

The Seitz 6x17 Digital is a pleasure to work with. Thanks to ergonomical hand grips the camera is perfectly stable for handheld images. Operating the camera is easy: a touch screen can be attached to the camera body or removed for wireless control with all camera functions displayed via simple graphical icons. The 640x480 pixel colour screen is the biggest camera screen today and allows perfect preview, editing, zooming and image control.

Latest Computer Technology

A 6x17 digital panorama (uncompressed) represents about 950 MB. To process and store such large amounts of data we have created a state-of-the-art computer system. Data is transferred by gigabit ethernet from the sensor to the storage device. The portable storage device is itself a computer with most advanced characteristics in processing, disk space and memory features. Additionally, the camera and handheld control unit take advantage of the latest IP network technology, making it possible to connect the camera to a network and control it remotely.

Fully Mobile & Open System

We designed this camera to meet the expectations of those photographers who like to take their equipment on exploratory adventures. All components are fully modular - the portable storage device and the handheld device can be adapted to your specific needs. The camera can also be used in the studio, running the software from a computer (Mac, PC, Linux) via ethernet connection.

Equipped With World-Class Lenses

For best image results we recommend using the advanced Schneider or Rodenstock lenses on a Seitz lens board, though large-format lenses of existing 6x17 panoramic cameras such as Linhof Technorama, Fuji and others can also be used. These lenses are connected to the Seitz camera on an optional adaptor plate. All lens types and brands can be interchanged without any restrictions.

A Rewarding Investment

Just like a traditional digital back the Seitz D3 scan back cassette can be removed from the 6x17 camera body and fitted to other cameras, e.g., our new Roundshot D3 360° panorama camera and, in the future, other large or medium format cameras. The possibility of using the scan back in a variety of different cameras makes the system truly versatile - to the benefit of the photographer.

The Rolex Of Cameras

With increasing image resolution the engineering precision of the camera hardware becomes very important. All our cameras are made from solid blocks of aluminium as used in space technology and produced with state-of-the-art CNC machinery. Our machining tolerances are at the decisive 1/100 mm. Uncompromising precision and perfectly adjusted lenses are our guarantee for excellent results. Every Seitz 6x17 camera is hand-made in Switzerland and is unique.

Technical Data

We reserve the right to make technical changes - released: September 2006

Sensor Technology

Manufacturer	DALSA Corporation exclusive for Seitz
Type	TDI
Stages	Multiple for sensitivity control
Vertical resolution	7,500 pixels (60mm)
Pixel size	8µm x 8µm
Noise level	19 electrons / 50,000
Dynamic range	1 : 2,600 (11 f-stops)
Anti-Blooming	> 1,000 x

Seitz 6x17 Digital

Manufacturer	Seitz Phototechnik AG
Lenses (interchangeable)	
- on Seitz lens board	Schneider or Rodenstock large format lenses
- on adaptor plate	Linhof Technorama, Fuji, other large format lenses
Size of 6x17 image	7,500 x 21,250 pixels (60mm x 170mm)
Resolution	160 million pixels
File sizes	raw (16-bit): 307 MB
	uncompressed tiff (48-bit): 922 MB
Time for 6x17 scan	~1 sec. at full speed and resolution
Exposure range	from 1/20'000 sec
Exposure control	automatic or manual
ISO/ASA equivalent	500, 1'250, 2'500, 5'000, 10'000 by stage selection
Image format	up to 6x17; adjustable vertically and horizontally
File format	raw (16-bit), tiff (48-bit), jpg (24-bit), bmp
Image optimisation	Seitz custom-built image optimiser
Camera body*	
- dimensions	width: 495mm, height: 175mm, depth: 95mm
- weight	2.8 kg
Mobility set (optional)	external storage device & external power supply
- dimensions	width: 170mm, height: 170mm, depth: 120mm
- weight	2.6 kg
Image transfer	Gigabit ethernet
External storage device	Portable Mac Mini 1.66Hz Intel Core Duo (2 MB Cache, 2 GB RAM, Mac OS X, Windows XP) Portable industrial PCs on request
External control device	Sharp Zaurus or other handheld PDA devices; connected to camera via WLAN
External power supply (camera, storage device)	12V 9.0A NiMh battery
Power charger	Universal speed charger 100-220V

* body only without lens, viewfinder, control unit and without mobility set

160 million pixels

60 mm (7'500 pixels)

170mm (21'250 pixels)

"Hawaii Surfers" image by Alois Stutz