# HASSELBLAD

Taking Photography Further

# Hasselblad Medium Format Photography.

In the more than six decades since the first Hasselblad V System was launched, with its distinctive black and silver cameras, Hasselblad cameras have defined photography for the professional photographer. And from the very start, the compact design and central lens shutters of the V System raised the bar for photographic innovation. Whether used for shooting rock stars or coal miners, landscapes or lunar vistas, the 6x6 Hasselblad cameras and the negatives they produced set a new standard for photographic technology and excellence, one stunning image after another.

Today's range of Hasselblad cameras lead the digital imaging field, with the easy-to-use H4D-31, through the 60 and 200 Multi-Shot with their massive sensors and resolution, to our special aerial cameras with their customized innovations. The image quality that these cameras produce is unmatched, with color reproduction, clarity, detail and depth unfound in any other images.

The Hasselblad raw files you may process in Hasselblad's Phocus software or in leading imaging software such as Adobe Lightroom with no loss of image quality. Every pixel of a Hasselblad RAW image can be tweaked and stretched to meet the most demanding photographic needs, in open imaging environments using tools that out-perform yesterday's photo labs hands down.

One thing stays the same, however: the spirit of innovation and invention that has driven us all these years. Today's incredible Hasselblad images are the result of scores of ground-breaking innovations and product advancements, all designed with one thing in mind – to help photographers take their photography further than ever before.

# The H4D
# Camera System.

The Medium Format Hasselblad H system uses one of the market's largest sensors with super high resolution. With this extreme resolution, Hasselblad can support the shallow depth-of-field shooting that characterizes so much high-end shooting and provide the ultra-high resolution expected by today's most discerning professionals.

H4D cameras range from 31 to 60 megapixels and, with our unique Multi-Shot platform, the latest Hasselblad invention, a whopping 200 megapixels! The H4D platform provides an unsurpassed level of flexibility and customization and its components can be exchanged as needs and technologies develop.

Hasselblad cameras provide many important advantages that other professional cameras cannot, including:

○ The H system lens line, with its unmatched optics, central lens shutters, and integrated communication with the camera.

○ Hasselblad True Focus, for perfect focus when recomposing at open apertures.

○ Customizable features including a range of user buttons and complete camera setup at the touch of the profile button.

○ Modularity, offering flexibility and convenience for a range of photographic needs.

○ Multi-Shot, offering non-interpolated colors and ultra-high resolution, unmatched customization and system flexibility.

Hasselblad's True Focus feature helps solve one of the most lingering challenges facing serious photographers today: true, accurate focusing throughout the image field.

When focusing on a subject outside the center area, you must first lock focus on the subject and then re-compose the image. At close focusing distances particularly, this re-composing causes focus error, as the plane of sharpness follows the movement of the camera, perpendicular to the axis of the lens.

The H4D line is designed to work the way that photographers work. Sometimes we know how you want to work and have made that possible with direct access to all the controls and functions that one would expect from a professional camera.

Other times, we don't know exactly how you want to work in a given situation, so we have simply designed the H System to be as adaptable and customizable as possible.

You have four "user buttons" on the camera grip which can be assigned a user-determined function. Add to this that the complete set-up of the camera can be saved as a custom profile. Simply touch the profile button and select from among your favorite pre-sets, enabling you to adjust to new situations or demands in a matter of seconds.
In short, you customize your H4D System to operate in precisely the way you want to work, depending on your mood, the situation, or the job at hand.

The traditional solution for most DSLR cameras has been to equip the camera with a multi-point AF sensor. Such multi-point AF solutions, however, are often tedious and inflexible to work with and in addition, due to the physics of an SLR-camera, the off-center focus points offered are clustered relatively close to the center of the image. The photographer is still forced to focus first and then shift the camera to reframe, with the resulting loss of focus as a result.

To overcome this problem, Hasselblad has used modern yaw rate sensor technology to measure camera movement in an innovative way. The result is the Absolute Position Lock (APL) processor, which forms the foundation of Hasselblad's True Focus feature. The APL processor accurately logs camera movement during any re-composing, uses these exact measurements to calculate the necessary focus adjustment, and then issues the proper commands to the lens's focus motor so it can compensate. The APL processor computes the advanced positional algorithms and carries out the required focus corrections at such rapid speed that no shutter lag occurs. The H4D's firmware then further perfects the focus using the precise data retrieval system found on all H System lenses.

The upper image shows the result when not using True Focus. While this image looks relatively sharp, the lower image where True Focus has been used, is razor sharp.

### Working with View-Cameras
All H4D cameras have been designed to allow the digital back to be detached and used on a view camera by way of an H system adapter. In this configuration, the digital back can be used with electronic shutters from Rollei, Schneider, and others, either stand-alone using the flash sync signal from the shutter or tethered to a computer with full control of the electronic shutter from the computer.

### A choice of bright viewfinders
One of the most important and appreciated advantages of the medium format is the extra-large and bright viewfinder image, enabling extremely precise compositions and easy operation in dim lighting. An interchangeable waist-level viewfinder, the HVM, is also available for the entire range of H4D system cameras, allowing top-down viewing if desired.

### Tilt/shift photography
Used with the H4D cameras, the HTS 1.5 tilt/shift adapter provides clever tilt/shift capabilities for a range of H System lenses, including the 28mm, 35mm, 50mm, 80mm, and 100mm lenses. Integration of digital sensors on all moving parts provide constant feedback as to the exact tilt/shift movements, enabling the Hasselblad digital lens correction technology to optimize corner-to-corner image quality for the given lens working at a given focusing distance.

This ingenious device combines well-known optical principles with the latest in digital image control to not only solve technical challenges, but to provides exciting creative opportunities that will help you take your photographic expression to entirely new levels.

## H4D-31



Professional Medium Format DSLR camera for studio and location photography featuring a 31 megapixel sensor (4872 x 6496 pixels) with a dimension of 33.1 x 44.2 mm. Two models are available targeted at the high-end 35mm photographer, and the classic V camera photographer. Versatile capture with up to 64 sec exposure time. Sensitivity 100 to 1600 ISO. Image raw size is 40 MB with a 16 bit color depth. Capture rate is 1.2 sec. per capture. Color display is a 3 inch TFT type, 24 bit color with 230.400 pixels solution.

Item no.70480522 incl. HC 80mm lens
Item no.70480521 incl. CF lens adapter

## H4D-40



Professional Medium Format DSLR camera for studio and location photography featuring a 40 megapixel sensor (5478 x 7304 pixels) with a dimension of 32.9 x 43.8 mm. Versatile capture, with up to 256 second exposure time. Sensitivity 100 to 1600 ISO. Image raw size is 50 MB with a 16 bit color depth. Capture rate is 1.1 sec. per capture. Color display is a 3 inch TFT type, 24 bit color with 460.320 pixels solution.

Item no.70380554
Item no.70380534 incl. HC 80mm lens
Item no.70480560 Stainless steel
Item no.70480561 Stainless steel incl. HC 80mm lens

## H4D-50



Professional Medium Format DSLR camera for studio and location photography featuring a 50 megapixel sensor (6132 x 8176 pixels) with a dimension of 36.7 x 49.1 mm. Versatile capture with up to 128 second exposure time. Sensitivity 50 to 800 ISO. Image raw size is 65 MB with a 16 bit color depth. Capture rate is 1.1 sec. per capture. Color display is a 3 inch TFT type, 24 bit color with 460.320 pixels solution.

Item no. 70480542

## H4D-60



Professional Medium Format DSLR camera for controlled lighting studio photography featuring a 60-megapixel sensor (6708 x 8956 pixels) with a dimension of 40.2 x 53.7 mm, to support the utmost in digital capture. Outstanding color rendering, both when shooting with flash and with Tungsten lighting. Maximum exposure time is 32 seconds, with a capture rate of 1.4 sec. per capture. Sensitivity 50 to 800 ISO. Image raw size is 80 MB, with a 16 bit color depth. Color display is a 3 inch double-res TFT, 24 bit color with 460.320 pixels solution.

Item no. 70480543

This special camera is the result of collaboration between two of the world's most iconic brands, reflecting both companies love of design and passion for engineering excellence.

Designed to provide the ultimate in both quality and performance, just as the cars that inspired it, the Ferrari H4D-40 Limited Edition comes in an exclusive hand-made glass topped case featuring a luxurious lining, dual storage layers, and the distinctive Ferrari Racing Shield.

Professional Medium Format DSLR camera for studio and location photography featuring a 40 megapixel sensor (5478 x 7304 pixels) with a dimension of 32.9 x 43.8 mm. Versatile capture, with up to 256 second exposure time. Sensitivity 100 to 1600 ISO. Image raw size is 50 MB, with a 16 bit color depth. Capture rate is 1.1 sec. per capture. Color display is a 3 inch TFT type, 24 bit color with 460.320 pixels solution.

Item no. 70480512
incl. HC 80mm lens





Photo: Nikola Borissov

## H4D-50MS



Professional Medium Format DSLR camera for studio photography featuring a 50 megapixel sensor (6132 x 8176 pixels) with a dimension of 36.7 x 49.1 mm. In addition to standard single-shot captures, multi-shot capture mode supports still photography with the most accurate color rendering and resolution available in the market today. Versatile capture with up to 128 second exposure time. Sensitivity 50 to 800 ISO. Image raw size is 65 MB with a 16 bit color depth. Capture rate is 1.1 sec. per capture. Color display is a 3 inch TFT type, 24 bit color with 460.320 pixels solution.

Item no. 70490543

## H4D-200MS



Based on the 50 Mpix sensor (6132 x 8176 pixels with a dimension of 36.7 x 49.1 mm), the H4D-200MS offers 1-, 4- and 6-shot capability. 6-shot will produce 8 bit TIFF files at 600MB each resulting in the most accurate color rendering and resolution available on the market today in the medium format. Versatile capture with up to 128 second exposure time. Sensitivity 50 to 800 ISO. Capture rate is 1.1 sec. per capture. Color display is a 3 inch TFT type, 24 bit color with 460.320 pixels solution.

Item no. 70490520



Photo: Ripley & Ripley

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# H4D CAMERA TECHNOLOGY: THE H4D-50MS/200MS MULTI SHOT SYSTEM

**Hasselblad Multi-Shot Cameras – The Ultimate in Studio Photography**
Our unique Multi-Shot technology, available in 50 and 200 megapixel resolutions, provides the ultimate in still subject capture.

Whether for the extremely high demands of archiving and art reproduction or for obtaining the absolutely highest resolution in high-end product, architectural, and other still-life shooting, or for any other kind of shooting where detail or resolution are important, Hasselblad Multi-Shot cameras bring mind blowing detail and open new creative and commercial doors.

Both the H4D-50MS and the H4D-200MS are capable of live shots in 50 Mpix format, providing in essence two cameras in the same solution. Both can also provide four-shot, 50Mpix Multi-Shot capture for high detail images of still subjects. The H4D-200MS raises the bar a bit further, uses our proprietary multi-shot capture technology, and applies a clever technical solution to bring six-shot, 200 megapixel resolution to your still-life and studio photography. The H4D-50MS/200MS digital back is made for use on view cameras by way of an H System adapter.



Single Shot
(1-Shot mode)
Detail

The digital back works with electronic shutters like those from Rollei and Schneider, either stand-alone using the flash sync signal from the shutter or together with Phocus, allowing full control of the electronic shutter from the computer.

Hasselblad Multi-Shot cameras use a 50Mpix sensor mounted onto our patented symmetrical multi-shot frame, which positions the sensor with extreme accuracy, using piezo-electrical actuators. The camera then captures 4 or 6 shots, by moving the sensor 1 and ½ pixel at the time, to create a 50Mpix or 200Mpix capture.



Multi Shot
(4-Shot mode)
Detail

This process eliminates the issues which single-shot interpolation can sometimes introduce, such as moiré and color rendering issues, thereby capturing the red, green and blue information in each individual pixel point and then combining these captures into one amazing file.

The H4D-50MS and the H4D-200MS are the ultimate choice for still life studio photography, providing moiré free images that exhibit a level of sharpness, resolution and color fidelity that you have to experience to believe.



Photo: Milo profi fotografie

# H System Lenses.

Images that are destined for digital should be designed for digital. If your lenses cannot resolve extreme high resolution detail, then you will never get the most from your extreme high resolution sensor.

Hasselblad lenses are just that; designed with digital corrections and processing and extremely high resolution in mind. Our lenses are the entry point for an exacting image processing chain, from lens to body to back to software and print, where all elements are designed to function and communicate seamlessly with one another.

Today's Hasselblad lenses are characterized by the finest grade of glass available, and designed for optimal rendering of the finest detail, with perfect sharpness from corner to corner, for each and every image.

All Hasselblad lenses have central lens shutters and feature fast and super-accurate auto focus, built around extremely rapid and precise in-lens motors. A unique manual override design offers the convenience of working seamlessly between auto-focus and manual focus with all lenses.

## Central Lens Shutters

To enable flash shooting at the fastest shutter speeds, quiet operation and steady exposures, all lenses are equipped with a central lens shutter. High speed follow through shots are also much more realistic when shooting with a central lens shutter system, without the compression or elongation that lateral focal plane shutters can create.

Central lens shutters have characterized Hasselblad lenses for over 50 years, and still play a key role in the flexibility and creative application of the Hasselblad system.

## Tilt and Shift, True Focus, Digital Lens Correction and More

Hasselblad lenses have evolved alongside the digital age, incorporating new techniques such as digital lens correction and True Focus.

All lenses, no matter how well designed, exhibit some minor flaws. It is not the Hasselblad philosophy, however, to accept such shortcomings, no matter how minor. That's why we developed Digital Lens Correction. Using exact knowledge of the design of each lens, Hasselblad digital lens correction automatically corrects any traces of color aberration, distortion, or light fall off. In addition, this feature enables 5 H System lenses, ranging from 28mm to 100mm, to now perform tilt and

shift photography using the innovative Hasselblad HTS 1.5 tilt/shift adapter.

Medium format lenses also have a shallower depth-of-field than 35mm DSLR cameras at the same aperture. A medium format camera therefore needs a very accurate focus control when working in near field with open apertures. Our True Focus feature does just that – and does it fully automatically.

## Solutions for Aerial Photography

A range of specialized industrial solutions, in particular Aerial Photography, have developed around the H System, based upon the outstanding optical results achieved with the H4D cameras and the H System lenses.
For more information on these solutions, please contact us at: special.applications@hasselblad.com.

| HCD 4/28 | HC 3.5/35 | HC 3.5/50-II | HC 2.8/80 |

| HC 2.2/100 | HC MACRO 4/120-II | HC 3.2/150N | HC 4/210 |

This retro focus lens has a 95° diagonal angle of view making it the most extreme wide-angle lens presently available in the medium-format. Outstanding results are achieved throughout the focusing range exhibiting excellent corner-to-corner sharpness.

Item no. 3023028

A retro focus lens with 89° diagonal angle of view. This lens offers outstanding corner-to-corner sharpness, low dispersion glass, even illumination, and features an advanced optical design with rear focus mechanism to ensure high performance even at the close focusing range.

Item no. 3023035

An all-round, wide-angle lens. A versatile all-purpose lens, incorporating a moderate wide-angle effect, and featuring advanced optical design with rear focus mechanism. Corner-to-corner illumination is very even at all aperture settings, and distortion and stray light are extremely well controlled.

Item no. 3023052

The 80mm is the standard lens for the H system. The high-performance design ensures great color correction, a flat image plane, and low distortion. The large aperture facilitates photography in poor light and provides a bright viewfinder image. A lens suited for almost any task in general photography.

Item no. 3023080

The 100mm is a fast lens particularly suited to low-light situations or for action shots where higher shutter speeds are required. The slightly longer than standard length coupled with its shorter depth-of-field makes it an interesting choice for portraits too in many instances.

Item no. 3023100

The Macro 120mm has exceptionally high performance making it a very versatile lens not only for close-up work but general applications too where a slightly long lens is required.

Item no. 3023122

An ideal portrait lens, providing the ideal perspective for head and shoulder portraits. Also very suitable for landscape photography.

Item no. 3023150

A universal telephoto lens with outstanding performance. The longer focal length is excellent for tightly framed shots, enabling a shallow depth-of-field to be used to make the main subject stand out noticeably.

Item no. 3023210
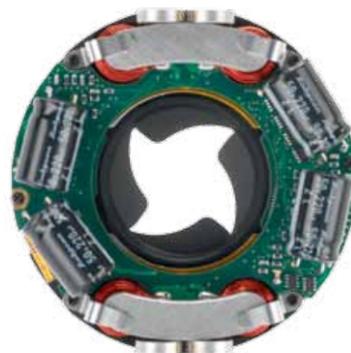
The integral central lens shutters in every Hasselblad lens reduce camera vibration, resulting in a more stable platform and improved digital image quality, and allow flash sync at all shutter speeds up to 1/800s, opening the door to many creative shooting solutions that are otherwise impossible.

Table showing the equivalent 35mm DSLR focal length with different formats as reference.
E.g. the HC 50mm lens used on the H4D-50 will produce a similar image as a 35mm lens on 35mm DSLR format.

| | 35mm DSLR equivalent focal length | | |
|---|---|---|---|
| Lens | H4D-60 | H4D-50/50MS | H4D-40/31 |
| HCD 4/28 | 18 | 20 | 22 |
| HC 3.5/35 | 23 | 25 | 27 |
| HC 3.5/50-II | 32 | 35 | 39 |
| HC 2.8/80 | 52 | 56 | 63 |
| HC 2.2/100 | 64 | 71 | 78 |
| HC 4/120-II | 77 | 85 | 94 |
| HC 3.2/150N | 97 | 106 | 118 |
| HC 4/210 | 135 | 148 | 165 |
| HC 4.5/300 | 193 | 212 | 235 |
| HCD 4-5.6/35-90 | 23-58 | 25-64 | 27-71 |
| HC 3.5-4.5/50-110 | 32-71 | 35-78 | 39-86 |

| HC 4.5/300 | HC 3.5-4.5/50-110 | HCD 4-5.6/35-90 | CONVERTER H1.7X | | ADAPTERS | VIEWFINDERS |



**The 300mm lens** is the longest lens in the present HC lens range. It has a fast autofocus reaction making it suitable for certain sports and wildlife applications.

Item no. 3023300

**The HC 50-110mm zoom** lens has a range from wideangle to short telephoto.
This lens boasts exceptionally high image quality at all focal length settings, whether shooting film or digital, and is comparable with corresponding fixed focal length lenses.

Item no. 3023511

The result of our constant striving for ultimate performance, the new HCD 4.0-5.6/35-90 zoom lens combines our advanced optical design models and the H-system's unique digital lens correction with a new aspheric lens element design to create what we think is the highest performing zoom lens on the market today.

Item no. 3023590

The Converter 1.7 attaches between the lens and body to increase the focal length by a factor of 1.7. This provides a convenient way to expand your range of lenses.

Item no. 3023717

**CF Adapter
for Carl Zeiss lenses**
The CF lens adapter allows all C-type (lens shutter) lenses from the V system to be used on any H system camera.

Item no. 3043500

**HTS 1.5
tilt and shift adapter**
The HTS 1.5 tilt/shift adapter provides a powerful new focusing and creative tool that can help you take your photographic expression to entirely new levels. The tilt/shift adapter works with the following range of lenses and extension tubes. All movements are digitally recorded as metadata for use with Hasselblad's DAC lens corrections.

Item no. 3043400

**HVD 90x viewfinder**
For 36×48mm sensor cameras or smaller.
Item no. 3053330

**HV 90x viewfinder**
For cameras using film.
Item no. 3053326

**HV 90x-II viewfinder**
For H4D-60.
Item no. 3053334

**HVM viewfinder**
Waist-level viewfinder for all H cameras.
Item no. 3053328

**Correction lens holder**
Holder for correction lenses for HVM viewfinder.
Item no. 3053348

**HTS 1.5 (rear)**
Not for sale in the USA.

**GIL GPS**
Adds GPS coordinates to the images.
Item no. 3053300

**Tripod Quick Coupling**
Facilitates rapid attachment and removal of the camera to a tripod.
Item no. 3043326

**Quick Coupling Plate S**
For adapting earlier Hasselblad camera models and accessories as well as cameras and accessories from other manufacturers to the Tripod Quick Coupling H.
Item No.: 3045152

**Extension tube H26**
26mm extension tube for close-up photography.
Item no. 3053526

**Extension tube H13**
13mm extension tube for close-up photography.
Item no. 3053513

**Proshade 6095 V/H**
Professional bellows type lens shade for all H- and V-system lenses.
Item no. 3040740

**Proshade adapter 67mm**
Adapter with bayonet mount for 67mm HC lens front.
Item no. 3043415

**Proshade adapter 77mm**
Adapter with bayonet mount for 77mm HC lens front.
Item no. 3043417

**Tripod Mount Extender for HTS 1.5**
Increases the clearance between the camera body and tripod head. Height 30.5 mm. Features 1/4" camera lock screw and tripod connection with quick-coupling shoe, 1/4" and 3/8" threads.
Item no. 3043405

**Extension tube H52**
52 mm extension tube for close-up photography.
Item no. 3053542

**Flash adapter SCA3902**
Adapter for the Metz range of external flashes. Provide fulll TTL/OTF dedication.
Item no. 3053393

**Film magazine HM 16-32**
Film magazine for 120 or 220 film.
Not available in the EU.
Item no. 3033016

**Magazine film holder**
Separate insert for film magazine HM 16-32.
Item no. 3053320

**Proshade adapter 95mm**
Adapter with bayonet mount for 95mm HC lens front.
Item no. 3043419

**Rectangular mask for Proshade 6095 V/H**
Item no. 3053431

**Camera strap H**
Extra wide camera strap with anti-slip backing. Delivered with each camera.
Item no. 3053616

**Strap with quickplate H**
Improves comfort and security in hand-held photography. Attaches to the grip. Can be used with tripod quick coupling H.
Item no. 3045154

**Battery grip Li-ion**
Removable and rechargeable battery grip. Capacity of 1850 mAh.
Item no. 3043348

**Battery grip CR-123**
Removable grip with battery compartment for use with three CR-123 Lithium batteries. Only suitable for non-digital H System cameras.
Item no. 3043340

**DC Power Grip**
Removable H-camera grip with AC power adapter for supplying camera power from mains.
Item no. 3043350

**Remote release cord**
Remote release cord for use with H cameras.
Cable Length: 0.5 m.
Item no. 3043370

**Focusing screen HxD-22/39/50**
Spherical Acute-Matte D type focusing screen. Central markings for spot (Ø7.5 mm) and AF metering area. Masked for the format used in 22, 39 and 50 megapixel cameras.
Item no. 3043328
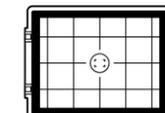
**Focusing screen HxD-22/39/50 Grid**
Central markings for spot (Ø7.5 mm) and AF metering area. With grid markings and masked for the format used in 22, 39 and 50 megapixel cameras.
Item no. 3043311

**Focusing screen HxD-31/40**
Spherical Acute-Matte D type focusing. screen. Central markings for spot (Ø7.5 mm) and AF metering area. Masked for the format used in 31 and 40 megapixel cameras.
Item no. 3043336
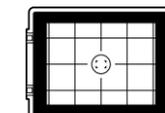
**Focusing screen HxD-31/40 grid**
Spherical Acute-Matte D type focusing screen. Central markings for spot (Ø7.5 mm) and AF metering area. Grid provides a visual aid for various applications including technical and architectural work. Masked for the format used in 31 and 40 megapixel cameras.
Item No. 3043338

**Battery charger for Li-Ion batteries**
Charger for rechargeable Li-Ion battery grip 3043348.
Item no. 3053568

**Battery charger for NiMH batteries**
Charger for rechargeable NiMH battery grip.
Item no. 3053564

**Battery charger kit CFV**
Charger and battery for the CFV digital back.
Item no. 3051096

**Battery charger CFV**
Battery charger for the CFV digital back.
Item no. 3051092

**Battery CFV**
Battery for the CFV digital back.
Li-ion, 7.2V / 2100mAh
Item no. 3051094
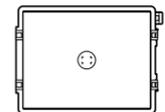
**Focusing screen H4D-60**
Spherical Acute-Matte D type focusing screen. Central markings for spot (Ø7.5 mm) and AF metering area. Masked for the format used in 60 megapixel cameras.
Item no. 3043332
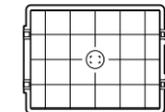
**Focusing screen H4D-60 Grid**
Central markings for spot (Ø7.5 mm) and AF metering area. With grid markings and masked for the format used in 60 megapixel cameras.
Item no. 3043334
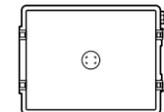
**Focusing screen HS-standard**
Spherical Acute-Matte D type focusing screen. Central markings for spot (Ø7.5 mm) and AF metering area.
Item no. 3043305
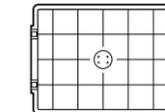
**Focusing screen HS-Grid**
Spherical Acute-Matte D type focusing screen with grid and central markings for spot (Ø7.5 mm) and AF metering area. Grid provides a visual aid for various applications including technical and architectural work.
Item no. 3043310

**67mm UV-sky filter**
The 67mm UV-sky filter absorbs UV radiation and reduces blue haze without affecting colors. Protects the front lens surface.
Item no. 3053470

**77mm UV-sky filter**
The 77mm UV-sky filter absorbs UV radiation and reduces blue haze without affecting colors. Protects the front lens surface.
Item no. 3053474

**95mm UV-sky filter**
The 95mm UV-sky filter absorbs UV radiation and reduces blue haze without affecting colors. Protects the front lens surface.
Item no. 3053478

**67mm polarizing filter**
The C-pola 67mm filter reduces reflection and increases color saturation in e.g. green foliage or the sky.
Item no. 3053482

**Lens pouch HC/3**
Leather lens pouch.
Item no. 3053647

**Lens pouch HC/4**
Lens pouch for HC 300.
Item no. 3053649

**Top cover camera body**
Top cover for the H camera body.
Item no. 3053340

**Bottom cover camera body**
Bottom cover for the H camera body.
Item no. 3053342

**77mm polarizing filter**
The C-pola 77mm filter reduces reflection and increases color saturation in e.g. green foliage or the sky.
Item no. 3053486

**95mm polarizing filter**
The C-pola 95mm filter reduces reflection and increases color saturation in e.g. green foliage or the sky.
Item no. 3053490

**Lens shade HCD 28/HC 35**
Item no. 3053402

**Lens shade HC 50-110mm and HCD 35-90mm lenses**
Item no. 3053427

**Front cap camera body**
Front cap for the H camera body.
Item no. 3053344

**Rear cover camera body**
Rear cover for the H camera body.
Item no. 3053346

**Cover camera accessory mount**
Cover for the H camera accessory mount.
Item no. 3053349

**Protective cover battery grip**
Item no. 3053354

**Lens shade HC 50**
Item no. 3053406

**Lens shade HC 80**
Item no. 3053410

**Lens shade HC 100**
Item no. 3053412

**Lens shade HC Macro 120**
Item no. 3053414

**Magazine cover**
Cover for HM 16-32 film magazine.
Item no. 3053371

**Cover flash shoe**
Cover for the flash shoe (HV 90x, HV 90x and HVD 90x-II).
Item no. 3053387

**Rear lens cap H**
Rear lens cap for HC/HCD lenses.
Item no. 3053357

**Front lens cap H 67mm**
Front lens cap for HC/HCD lenses with 67mm front.
Item no. 3053360

**Lens shade HC 150/HC 210**
Item no. 3053418

**Lens shade HC 300**
Item no. 3053423

**Lens pouch HC/1**
Leather lens pouch.
Item no. 3053639

**Lens pouch HC/2**
Leather lens pouch.
Item no. 3053643

**Front lens cap H 77mm**
Front lens cap for HC/HCD lenses with 77mm front.
Item no. 3053362

**Front lens cap H 95mm**
Front lens cap for HC/HCD lenses with 95mm front.
Item no. 3053364

**Cover viewfinder**
Bottom cover for HV 90x, HVD 90x, HV 90x-II and HVM.
Item no. 3053384

**Protective cover digital capture unit**
Cover for the digital capture units.
Item no. 3053372

# V System Digital Solutions.

The iconic Hasselblad V System cameras were the number one choice of world-class photographers for decades. Thousand upon thousand of these cameras are still out there working, still serving as the camera of choice for many top photographers.

In today's digital world, many photographers do not wish to be forced to choose between their tried and true V System workhorses and the many benefits of digital shooting. They no longer have to. Hasselblad produces a range of adapters and digital V System products to provide a convenient digital bridge between the best of yesterday and the best of today.

### CF Lens Adapter – "New life to iconic lenses"
With the CF adapter you can breathe new, digital life into your prized collection of Hasselblad V System Zeiss lenses. This adapter allows all lenses from the V system to be used on H system camera bodies and their 31, 40, 50, or 60 megapixel sensors, automatically expanding the potential lens range for H System cameras by more than a dozen different focal lengths.

The CF adapter does not transform manual lenses into AF lenses, but it does provide you with focus confirmation feed-back which is used as a guide for manual focus setting. Light is measured at full aperture with all lenses which produces aperture and shutter speed information display in the camera for manual setting. In addition, gets the most from your Carl Zeiss lenses, with correct use of their central lens shutters, unlike other so called adapters that do not utilize these unique shutters nor deliver the benefits they provide. A truly useful accessory for professional photographers who need occasional access to specific lenses not used in their everyday work. Together with the CF Lens Adapter, you can use the camera and lens combination that makes the most sense for each specific job.

### CFV Digital Back
Add a digital magazine to the V camera body. We have the specially designed CFV back featuring 50 Mpixels that will transform your loved V camera to a modern high performance digital workhorse providing image quality at a completely new level.

Bringing your V System photography into the digital world allows you to process images using digital lens correction on all images captured with the Carl Zeiss lenses.

This can take the image quality from these classic, favorite lenses from great to unbelievable. Even the tiniest traces of color aberration, distortion, or vignetting are effectively removed, providing an entirely new level of image perfection.

### Digital Auto Correction (DAC) for V Lenses
With the CF lens adapter and your V System lenses, using manual settings, you can achieve full automatic correction of color aberration, distortion and vignetting. Our Phocus software makes use of its detailed knowledge of each lens's design and calculates the optical corrections for every shot at the given distance and aperture setting, providing perfect images, and an ideal basis for optimal image rendering and further processing.
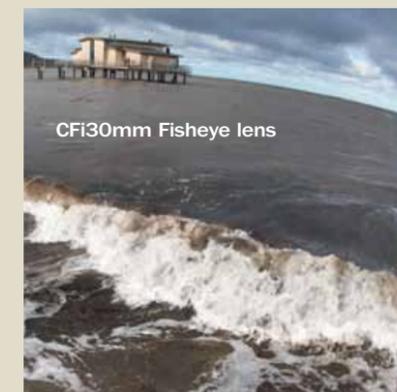

CFi30mm Fisheye lens
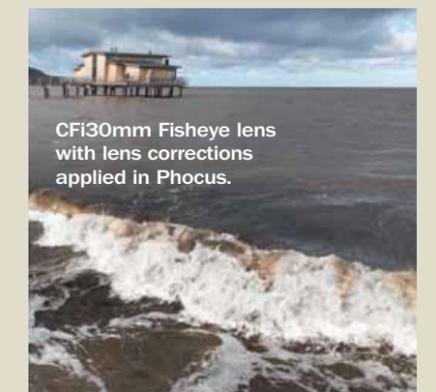

CFi30mm Fisheye lens with lens corrections applied in Phocus.

## CFV-50

The Hasselblad approach to cameras and digital backs is built on the concepts of versatility and user friendly operation. A typical result of this is the unique CFV 50 digital back. It is the only digital back that can be used on all lens shutter or focal plane shutter based V System cameras produced from 1957 onwards.

The CFV 50 digital back boasts a list of many beneficial features. Features such as Digital Lens Correction place Hasselblad in a very strong forefront position. This sophisticated fine tuning takes place in Phocus and removes all distortion, vignetting and chromatic aberration. It is available for virtually all V System Carl Zeiss lenses allowing a new level of quality from your old and trusted lenses.

The CFV-50 is the only digital back which ensures cable-free operation when mounted on a Hasselblad V-system camera while at the same time enabling full integration with various technical camera and shutter configurations.

The CFV offers the choice of shooting to the classic and beloved square format giving 38 megapixel images and to the full rectangular format giving 50 megapixel images.

CFV-50 Item no. 3034216

| TECHNICAL SPECIFICATIONS | CFV-50 |
|---|---|
| Sensor size | 50 Mpixels (6132 x 8176 pixels) / 38 Mpixels (6132 x 6132 pixels) |
| Sensor dimensions | 36.7 x 49.1 mm or 36.7 x 36.7 mm |
| Pixel size | 6.0 µm |
| Image size | RAW 3FR: 65 MB. RGB TIFF 8 bit: 150 MB |
| Storage capacity | 8 GB CF card holds 120 images on average |
| Color definition | 16 bit |
| ISO speed range | ISO 50, 100, 200, 400, 800 |
| Image storage | CF card type U-DMA (e.g. SanDisk extreme IV) or tethered to Mac or PC |
| Color display | TFT 2.5" |
| Platform support | Macintosh: OS X 10.7, 10.6, 10.5. Windows: XP, Vista, Windows 7 (32 and 64 bit) |
| Camera support | All Hasselblad V System cameras manufactured since 1957. 2000 cameras and 201F with C-type lenses only. 202FA/203FE and 205FCC camera types need a minor camera modification to use F/FE lenses. SWC cameras older than SWC/M and ArcBody cameras cannot be used. All other cameras with Hasselblad V interface |
| Host connection type | FireWire 800 (IEEE1394b) |
| Battery capacity | Sony™ InfoLithium L, up to 8 hours of shooting capacity |
| Operating temp. | 0 - 45° C / 32 - 113° F |
| Dimensions | 91 x 90 x 61mm (W x H x D) |
| Weight | 530 g (Excluding battery and CF card) |
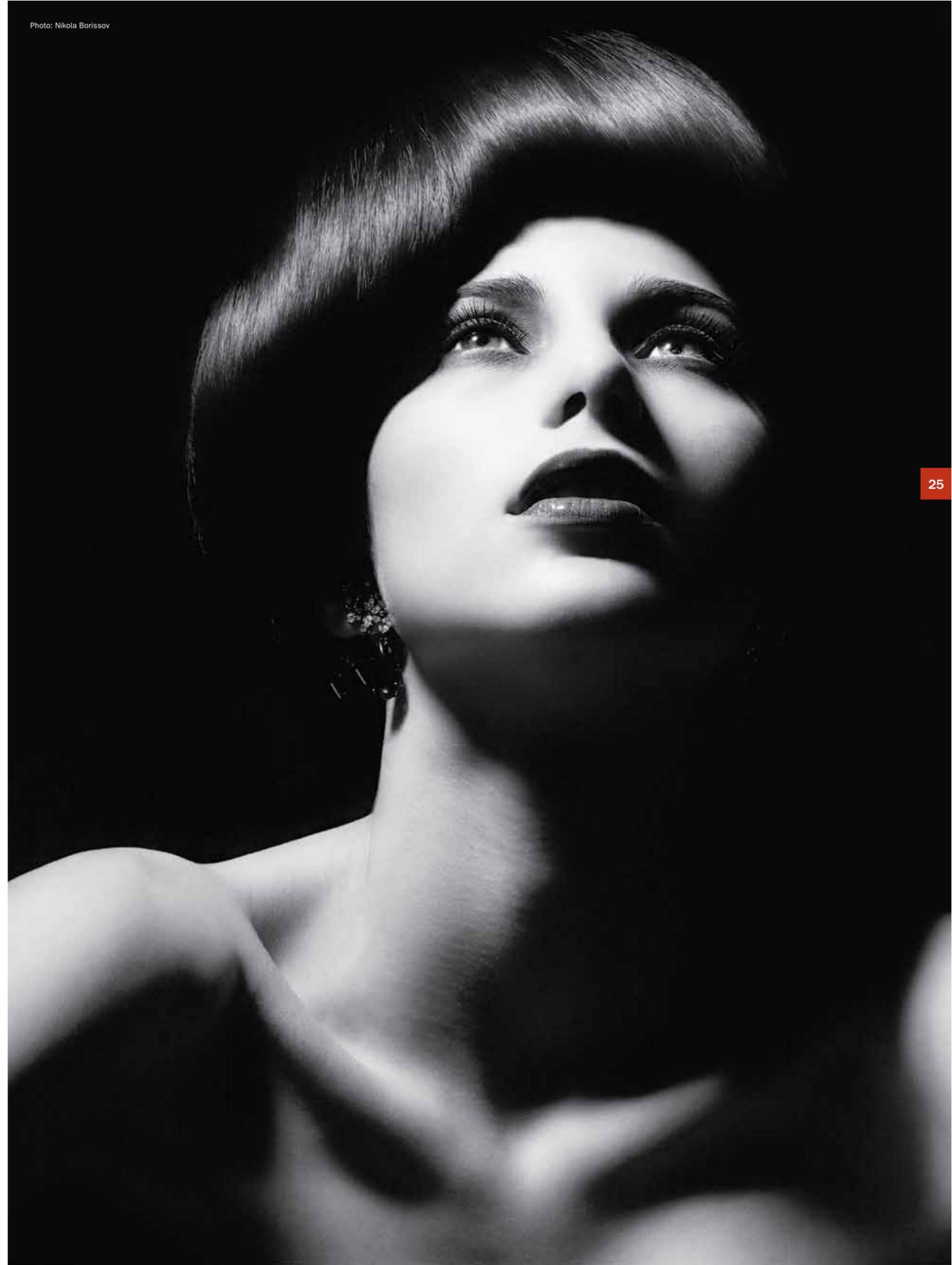
# Phocus by Hasselblad
# – the final step towards
# uncompromising image quality.

Phocus, Hasselblad's powerful, free image processing software, has both brains and brawn. Brains in its attractive working environment and in the advanced tools that form the core of this amazing program, and brawn in its sheer power and performance.

## Why Phocus?

We at Hasselblad have always pushed the technological envelope – always seeking to provide photographic innovations that will enable photographers to take their photography further. The Hasselblad System has long been at the forefront of photographic technology – and we intend to keep it that way. We are continuing to introduce new lens technologies, new processing algorithms and other advances to our system. Only by having a dedicated image processing application can we ensure that Hasselblad photographers get the most out of every innovation.

We are pleased to be able to enable photographers to work with their Hasselblad files with some of the most widespread third party software, but we cannot expect other companies to always keep immediate pace with our developments. With Phocus, photographers have a platform that allows them to take advantage of every feature and every aspect of the Hasselblad system, including a range of proprietary tethered camera controls not available with other software.

## The Phocus Workflow

Achieving an efficient and effective workflow can be the difference between a commercially successful photographic career and a very expensive hobby. With this in mind, we have designed Phocus to be as intuitive and easy to use as humanly possible and to be flexible enough for you to configure the precise workflow that suits your particular process. In addition to is powerful RAW processing engine, Phocus provides you with comprehensive tethered camera controls as well as unique mobile solutions for more flexible studio work, client review, and so on.

Every aspect of the Phocus interface has been developed and designed to reflect the way that photographers work and to help ensure that you can spend as much time as possible taking images – not processing them. Phocus incorporates some of the most common features found in the most popular image processing environments, combined with a collection of advanced tools, all designed to easily provide you with optimum image quality – each and every time!

In addition to supporting Hasselblad's own files, Phocus running on the Mac platform also offers support for RAW files from around 200 other digital camera RAW formats.

Phocus for Mac and Windows users is available for free download, with unlimited installations and distribution from www.hasselblad.com.

## Natural Colors

Hasselblad's Natural Color Solution (HNCS) enables you to produce outstanding and reliable colors, so that skin tones, specific product colors, and difficult gradations reproduce beautifully every time, straight out of the box.

## Digital Auto Correction (DAC)

Hasselblad's modern lens design has been optimized for digital perfection, including full automatic correction of color aberration, distortion and vignetting. Phocus makes use of its detailed knowledge of the lens design and calculates the optical corrections for every shot at the given distance and aperture setting, providing perfect images, and an ideal basis for optimal image rendering and further processing. Hasselblad DAC technology works automatically with all Hasselblad's H System lenses, even with tilt/shift movements. DAC also works with all the Carl Zeiss lenses from the classic V System, using manual settings.



Photo: Claudio Napolitano

# It's not our Phocus it's yours.

## My Phocus

Most assignments have some form of unique requirement or the other. Requirements that can slow your workflow to a crawl. That's why we designed Phocus to be highly customizable, allowing you to create what we call "My Phocus" – your own personal version of the software, in a form and layout that suits the specific way that you work for the most rapid and effective workflow.

## Layouts

Our 'layout' concept controls the way a complete screen layout and its associated views, tools layout, toolbar, and adjustments is presented. This means that one simple click takes you to the viewing environment of your choice, with the selected tools you need for the job at hand, and unwanted tools and functions kept out of the way and out of sight. We have even provided a few example layouts to get you started. Whatever layout you choose, you retain access to all tools and processing abilities, you merely get to choose when and how they are visible in your workflow.

## Light, Standard, Browse, Tethered…or?

'My Phocus' also means being able to create and save your own layouts, bring them with you on location, or import them when using rented equipment. You can create a specific layout for each specific situation or job. The list of options that can be included in 'My Phocus' layouts or the benefit they bring to various types of adjustments is too lengthy to include here – your imagination is the only limit!


Photo: Claudio Napolitano

The Adjustments Browser offers a unique overview of your adjustments variations as listed history. Adjustments can be used as templates for other images.


Photo: Claudio Napolitano
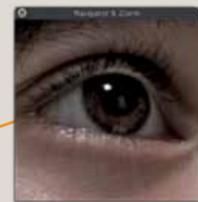
The Navigator & Zoom tool proofs powerful when inspecting images.


Photo: Chris Crumley

Phocus provides special extended controls with which to remotely operate your Hasselblad camera during tethered use.


Phocus Mobile for iPad, iPhone and iPod touch.

Photo: Claudio Napolitano

## Phocus Mobile for iPad, iPhone and iPod touch.

Phocus Mobile is an extension of the current Phocus software that allows iPad, iPhone and iPod touch users to connect wirelessly to Hasselblad's image processing software Phocus, providing browsing, zooming, and rating of images in addition to advanced camera control options, such as remote capture, for your Hasselblad camera. Phocus Mobile is free of charge and available for download from the Apple App store.

## Phocus Quick

If you're looking for a fast and easy way to get from captured image to final print, there is Phocus Quick. Phocus Quick offers automatic import and processing of your Hasselblad files, directly into your preferred imaging software. Phocus Quick is available for free download from www.hasselblad.com.

## The Hasselblad RAW file & Metadata

Hasselblad 3F RAW files provide lossless image compression, which reduces the file size and required storage space by over 33%. 3F files include all raw pixel data, all metadata created by the camera or the photographer, and the full history log of your image adjustments, without the creation of a sidecar file structure.

## RAW workflow with Adobe and Apple – Freedom of choice

With a Hasselblad camera you'll never be locked into a closed world of proprietary RAW files, since Hasselblad RAW files open directly in Apple's or Adobe's imaging environments. This seamless workflow and program compatibility is constantly evolving and improving and those of you working in Adobe Lightroom or Camera Raw have just recieved the added support for Hasselblad enhanced colors and lens corrections.

## 3rd party file support

All Hasselblad digital camera products are supported by Phocus. In addition to supporting Hasselblad's own files, Phocus on Mac platform also supports RAW files from close to 200 other digital camera RAW formats, as well as supporting the most common file formats such as TIFF, JPEG, DNG, and PNG. This added file support results in a single, comprehensive – and free – solution that enables all Hasselblad photographers to streamline their work process and to work with both Hasselblad images and those captured with their 35mm DSLRs in one and the same application.

# Hasselblad Scanners.

Most photographers are speechless the first time they see a file from a 6x6 negative scanned on a Flextight scanner. Images that were traditionally inspected on the light table with a hand held magnifier jump out at you with detail and color rendering that you never even knew was recorded. You never knew your film images were this good!

As film stocks disappear, scanning is increasingly concentrated around the digitalization of photo archives. Such operations are often found in public institutions, such as museums, or in the studios of pro photographers who are re-discovering hidden assets in the form of old photographs.

## FLEXTIGHT X1/X5

The latest generation of Hasselblad scanners, the Flextight X1 and X5, are both built around the same unique and patented foundation. A vertical optical system allows the CCD to face downwards, creating a glass-free optical path between the original and the lens. The patented virtual drum solution produces optimal focusing across the entire original and the flexible holder guarantees easy mounting and safe and secure handling of your originals.
   Both Flextight scanners provide virtually the same scanning quality. The X5 scanner provides a range of productivity features and capabilities designed for those photographers or studios with more intensive or volume scanning needs.

Flextight X1. Item no. 70380201
Flextight X5. Item no. 70380301

| TECHNICAL SPECIFICATIONS FLEXTIGHT X1 | | | |
|---|---|---|---|
| Max optical resolution | 35 mm | 60 mm | 4x5" |
| | 6,300 dpi | 3,200 dpi | 2,040 dpi |
| Max scan speed | 35 mm | 60 mm | 4x5" |
| | 7.15 min | 6.02 min | 5.08 min |
| Optical sensor | CCD (3 x 8000) | | |
| Original type | Neg / Pos | | |
| Color depth | 16 bit | | |
| Auto frame detection | Yes | | |
| Auto focus | Yes | | |
| Batch scanning | Yes | | |
| Batch- and Slide Feeder Compatibility | No | | |
| Interface | Firewire | | |
| Platform | PC / Mac | | |
| Dmax | 4.6 | | |
| Film, max format | 120 x 280 mm | | |
| Reflective scanning | No | | |
| Active cooling | No | | |
| Flextouch | Yes | | |
| 3F scan initiated directly on scanner | Yes | | |
| Light condensator | No | | |
| Dimensions | 230 x 390 x 650 mm | | |
| Weight | 20.5 kg | | |

| TECHNICAL SPECIFICATIONS FLEXTIGHT X5 | | | |
|---|---|---|---|
| Max optical resolution | 35 mm | 60 mm | 4x5" |
| | 8,000 dpi | 3,200 dpi | 2,040 dpi |
| Max scan speed | 35 mm | 60 mm | 4x5" |
| | 1.55 min | 1.10 min | 1.23 min |
| Optical sensor | CCD (3 x 8000) | | |
| Original type | Neg / Pos / Prints | | |
| Color depth | 16 bit | | |
| Auto frame detection | Yes | | |
| Auto focus | Yes | | |
| Batch scanning | Yes | | |
| Batch- and Slide Feeder Compatibility | Yes | | |
| Interface | Firewire | | |
| Platform | PC / Mac | | |
| Dmax | 4.9 | | |
| Film, max format | 100 x 280 mm | | |
| Reflective scanning | A4 | | |
| Active cooling | Yes | | |
| Flextouch | Yes | | |
| 3F scan initiated directly on scanner | Yes | | |
| Light condensator | Yes | | |
| Dimensions | 230 x 390 x 650 mm | | |
| Weight | 20.5 kg | | |

| | H4D-31 | H4D-40 | H4D-50 | H4D-60 |
|---|---|---|---|---|
| Sensor size | 31 Mpixels (4872 × 6496 pixels) | 40 Mpix (5478 × 7304 pixels) | 50 Mpixels (6132 × 8176 pixels) | 60 Mpixels (6708 × 8956 pixels) |
| Sensor dimensions | 33.1 × 44.2 mm | 32.9 × 43.8 mm | 36.7 × 49.1 mm | 40.2 × 53.7 mm |
| Pixel size | 6.8 µm | 6.0 µm | 6.0 µm | 6.0 µm |
| Image size | RAW 3FR capture 40 MB on average. TIFF 8 bit: 93 MB | RAW 3FR capture 50 MB on average. TIFF 8 bit: 120 MB | RAW 3FR capture 65 MB on average. TIFF 8 bit: 150 MB | RAW 3FR capture 80 MB on average. TIFF 8 bit: 180 MB |
| RAW file format | Lossless compressed Hasselblad 3FR | | | |
| Shooting mode | Single shot | Single shot | Single shot | Single shot |
| Color definition | 16 bit | 16 bit | 16 bit | 16 bit |
| ISO speed range | ISO 100, 200, 400, 800 and 1600 | ISO 100, 200, 400, 800 and 1600 | ISO 50, 100, 200, 400 and 800 | ISO 50, 100, 200, 400 and 800 |
| Color management | Hasselblad Natural Color Solution | | | |
| CF storage capacity | 8 GB CF card holds 200 images on average | 8 GB CF card holds 150 images on average | 8 GB CF card holds 120 images on average | 8 GB CF card holds 100 images on average |
| Capture rate | 1.2 sec. per capture. 42 captures per minute | 1.1 seconds per capture. 50 captures per minute | 1.1 sec. per capture. 33 captures per minute | 1.4 sec. per capture. 31 captures per min. |
| Color display | Yes, 3 inch TFT type, 24 bit color, 230.400 pixels | Yes, 3 inch TFT type, 24 bit color, 460.320 pixels | Yes, 3 inch TFT type, 24 bit color, 460.320 pixels | Yes, 3 inch TFT type, 24 bit color, 460.320 pixels |
| Storage options | CF card type U-DMA (e.g. SanDisk Extreme Pro) or tethered to Mac or PC | | | |
| Histogram feedback | Yes | | | |
| IR filter | Mounted on CCD sensor | | | |
| Acoustic feedback | Yes | | | |
| Software | Phocus for Mac and Windows (included) | | | |
| Platform support | Macintosh: OS X 10.7, 10.6, 10.5. Windows: XP, Vista, Windows 7 (32/64 bit) | | | |
| Host connection type | FireWire 800 (IEEE1394b) | | | |
| View camera compatibility | Yes, Mechanical shutters controlled via flash sync. Electronic shutters can be controlled from Phocus | | | |
| Operating temperature | 0 - 45 ˚C / 32 - 113 ˚F | | | |
| Dimensions | Complete camera w. HC80 mm lens: 153 × 131 × 205 mm [W × H × D] | Complete camera w. HC80 mm lens: 153 × 131 × 205 mm [W × H × D] | Complete camera w. HC80 mm lens: 153 × 131 × 205 mm [W × H × D] | Complete camera w. HC80 mm lens: 153 x 131 x 205 mm [W x H x D] |
| Weight | 2290 g (Complete camera w. HC80mm lens, Li-Ion battery and CF card) | 2290 g (Complete camera w. HC80mm lens, Li-Ion battery and CF card) | 2290 g (Complete camera w. HC80mm lens, Li-Ion battery and CF card) | 2290 g (Complete camera w. HC80mm lens, Li-Ion battery and CF card) |

| CAMERA FEATURES | | | | |
|---|---|---|---|---|
| Camera type | Large sensor medium format DSLR | | | |
| Lenses | Hasselblad H System lens line with integral central lens shutter | | | |
| Shutter speed range | 64 sec. to 1/800 second | 256 sec. to 1/800 second | 128 sec. to 1/800 second | 32 sec. to 1/800 second |
| Flash sync speed | Flash can be used at all shutter speeds | | | |
| Viewfinder options | • HVD 90x: 90° eye-level viewfinder w. diopter adjustment (-5 to +3.5D). Image magnification 3.1 times. Integral fill-flash (G.No. 12 @ ISO100). Hot shoe for SCA3002-system flashes from Metz™<br>• HV 90x: 90° eye-level viewfinder w. diopter adjustment (-4 to +2.5D). Image magnification 2.7 times. Integral fill-flash (G.No. 12 @ ISO100). Hot shoe for SCA3002-system flashes from Metz™<br>• HV 90x-II: 90° eye-level viewfinder w. diopter adjustment (-4 to +2.5D). Image magnification 2.7 times. Integral fill-flash (G.No. 12 @ ISO100). Hot shoe for SCA3002-system flashes from Metz™<br>• HVM: Waist-level viewfinder. Image magnification 3.2 times | | | |
| Focusing | Autofocus metering with passive central cross-type sensor. Ultra focus digital feedback. Instant manual focus override. Metering range EV 1 to 19 at ISO 100 | | | |
| Flash control | Automatic TTL centre weighted system. Uses built-in flash or flashes compatible with SCA3002 (Metz™). Output can be adjusted from -3 to +3EV. For manual flashes a built-in metering system is available | | | |
| Exposure metering | Metering options: Spot, Centre Weighted and CentreSpot. Metering range Spot: EV2 to 21, Centre Weighted: EV1 to 21, CentreSpot: EV1 to 21 | | | |
| Power supply | Rechargeable Li-ion battery (7.2 VDC / 1850 mAh) | | | |
| Film compatibility | No | | | |

| | H4D-50MS | H4D-200MS |
|---|---|---|
| Sensor size | 50 Mpixels (6132 × 8176 pixels) | 50 Mpixels (6132 × 8176 pixels) |
| Sensor dimensions | 36.7 × 49.1 mm | 36.7 × 49.1 mm |
| Pixel size | 6.0 µm | 6.0 µm |
| Image size | RAW 3FR capture 65 MB on average. TIFF 8 bit: 150 MB | RAW 3FR capture 75/300/1200 MB on average. TIFF 8 bit: 150/150/600 MB |
| RAW file format | Lossless compressed Hasselblad 3FR | |
| Shooting mode | Single shot / Multi-Shot | Single shot / Multi-Shot |
| Color definition | 16 bit | 16 bit |
| ISO speed range | ISO 50, 100, 200, 400 and 800 | ISO 50, 100, 200, 400 and 800 |
| Color management | Hasselblad Natural Color Solution | |
| CF storage capacity | 8 GB CF card holds 120 images on average | 8 GB CF card holds 120 images on average |
| Capture rate | 1.1 sec. per capture. 33 captures per min. | 1.1 sec. per capture. 33 captures per min. |
| Color display | Yes, 3 inch TFT type, 24 bit color, 460.320 pixels | Yes, 3 inch TFT type, 24 bit color, 460.320 pixels |
| Storage options | CF card type U-DMA or tethered to Mac or PC | |
| Histogram feedback | Yes | Yes |
| IR filter | Mounted on CCD sensor | |
| Acoustic feedback | Yes | |
| Software | Phocus for Mac and Windows (included) | |
| Platform support | Macintosh: OS X 10.7, 10.6, 10.5. Windows: XP, Vista, Windows 7 (32/64 bit) | |
| Host connection type | FireWire 800 (IEEE1394b) | |
| View camera compatibility | Yes, Mechanical shutters controlled via flash sync. Electronic shutters can be controlled from Phocus | |
| Operating temperature | 0 - 45 ˚C / 32 - 113 ˚F | |
| Dimensions | Complete camera w. HC80 mm lens: 153 × 131 × 209 mm [W × H × D] | Complete camera w. HC80 mm lens: 153 × 131 × 209 mm [W × H × D] |
| Weight | 2450 g (Complete camera w. HC80mm lens, Li-Ion battery and CF card) | 2450 g (Complete camera w. HC80 mm lens, Li-Ion battery and CF card) |

| CAMERA FEATURES | | |
|---|---|---|
| Camera type | Large sensor medium format DSLR | |
| Lenses | Hasselblad H System lens line with integral central lens shutter | |
| Shutter speed range | 128 sec. to 1/800 second | 128 seconds to 1/800 second |
| Flash sync speed | Flash can be used at all shutter speeds | |
| Viewfinder options | • HVD 90x: 90° eye-level viewfinder w. diopter adjustment (-5 to +3.5D). Image magnification 3.1 times. Integral fill-flash (G.No. 12 @ ISO100). Hot shoe for SCA3002-system flashes from Metz™<br>• HV 90x, HV 90x-II and HVM waist level viewfinder | |
| Focusing | Autofocus with passive central cross-type sensor. Ultra focus. Instant manual focus override. Metering range EV 1-19 at ISO 100 | |
| Flash control | Automatic TTL centre weighted system. Uses built-in flash or SCA3002 flashes. Output can be adjusted from -3 to +3EV | |
| Exposure metering | Metering options: Spot (EV2 to 21), Centre Weighted (EV1 to 21) and CentreSpot (EV1 to 21) | |
| Power supply | Rechargeable Li-ion battery (7.2 VDC / 1850 mAh) | |
| Film compatibility | No | |

| | CFV-50 |
|---|---|
| Sensor size | 50 Mpixels (6132 × 8176 pixels) or 38 Mpixels (6132 × 6132 pixels) |
| Sensor dimensions | 36.7 × 49.1 mm or 36.7 × 36.7 mm |
| Pixel size | 6 µm |
| Image size | RAW 3FR capture 65 MB on average. Tiff 8 bit 150 MB |
| CF card storage capacity | 8 GB CF card holds 120 images on average |
| Capture rate | 1.1 sec./capture. 33 captures/min. |
| Shooting mode | Single shot |
| Color definition | 16 bit |
| ISO speed range | ISO 50, 100, 200, 400 and 800 |
| Shutter speed | 128 seconds - 1/500 |
| Image storage | CF card type II (write speed >20 MB/sec) or tethered to Mac or PC |
| Color management | Hasselblad Natural Colour Solution - One generic profile |
| Battery type | Sony™ InfoLithium L NP-F series or compatible |
| DAC digital lens correction | Support for DAC for Carl Zeiss lenses included in Phocus |
| Color display | TFT 2.5" |
| Histogram feedback | Yes |
| IR filter | Mounted on CCD sensor |
| Acoustic feedback | Yes |
| IAA – Instant Approval Architecture | Included, with Acoustic feed back and Metadata classification |
| File format | Lossless compressed Hasselblad 3F RAW |
| Software | Phocus for Mac and Windows (included) |
| Platform support | Macintosh: OS X 10.7, 10.6, 10.5. Windows: XP, Vista, Windows 7 (32/64 bit) |
| Camera support | All Hasselblad V System cameras manufactured since 1957. 2000 cameras and 201F with C lenses only. 202FA / 203FE and 205FCC camera types need a minor camera modification to use F/FE lenses.<br><br>The ArcBody is not compatible. SWC/M and newer can be used but has limitations on image quality due to lens design not beeing suitable for digital capture. All other cameras with Hasselblad V interface |
| Host connection type | FireWire 800 (IEEE1394b) |
| Battery capacity | Sony™ InfoLithium L, up to 8 hours of shooting capacity |
| Operating temperature | 0 - 45 ˚C / 32 - 113 ˚F |
| Dimensions | 91×90×61 mm (W × H × D) |
| Weight | 530 g (Excluding battery and CF card) |
| Package contents | Hasselblad CFV-39/CFV-50 digital back with protective cover, adapter cables, EL camera battery adapter, FireWire cable and 4 GB CF card. Focusing screen (Split image/Micro prisms) with dual format markings |

Metz™
System Flash
(not sold by Hasselblad)

SCA 3902
Flash adapter

HVM Waist level
Viewfinder

HVD 90X
Viewfinder
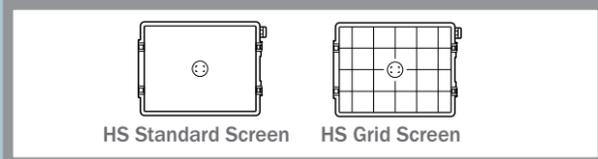
HS Standard Screen    HS Grid Screen

CF Lens Adapter
(H Extension Tubes can be used)

All Carl Zeiss Central Shutter Lenses

Converter H1,7x
(not for use with HCD28, HC35,
HC 50-110, HCD 35-90 or HTS 1.5)

Extension Tubes, H52, H26 and H13

HC Macro 4/120-II    HC 3.2/150N    HC 4/210    HC 4.5/300    HC 3.5-4.5/50-110    HCD 3.5-4.5/35-90
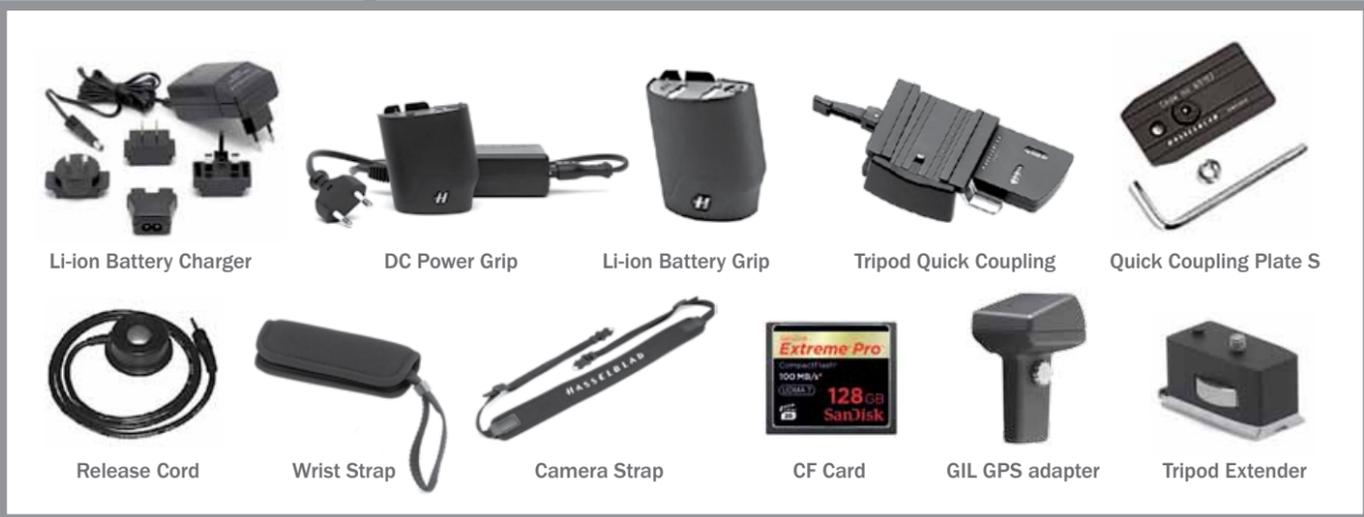
Li-ion Battery Charger    DC Power Grip    Li-ion Battery Grip    Tripod Quick Coupling    Quick Coupling Plate S

Release Cord    Wrist Strap    Camera Strap    CF Card    GIL GPS adapter    Tripod Extender

HTS 1,5x Tilt/Shift Converter    HCD 4/28    HC 3.5/35    HC 3.5/50-II    HC 2.8/80    HC 2.2/100

UV-Sky and Pola filters    Professional Lens Shade

When you purchase a Hasselblad you purchase much more than a camera.
You purchase entry into a complete system of expert lenses and accessories.
You purchase access to unmatched professional service and support.

And you purchase the benefits of a system that has been designed
from the ground up to reflect how professionals think, how they work,
and what they are looking for in a camera system.

# HASSELBLAD

**Taking Photography Further**

www.hasselblad.com