TECHNICAL BULLETIN

HCD LENSES AND LARGE SENSORS

The HCD Lens line is designed to have absolute maximum performance for the 36×48mm format. A format that was used in the H Series 22, 39 and 50 MP CCD-based digital cameras. This design choice has resulted in a smaller and better lens compared to a lens designed for the full 41,5×56mm format. When the HCD Lenses are used on the 60 MP CCD or the 100 MP CMOS sensors with its larger format (53×40mm), the image area outside the 36×48mm format is outside of the specification for the lens, and therefore, Hasselblad does not guarantee the highest performance in the extreme corners.

The sample images on the following pages show that HCD Lenses can also be fully used on both the H5D-60 and H6D-100c without visible shading or vignetting.

HCD LENS AUTO CROP

When an image shot with an HCD Lens and a large sensor camera is imported into Phocus, a crop mask with the dimensions 36×48mm format will automatically be added. This crop mask can easily be removed to get the full image. Use the shortcut CMD + D (Mac) or Ctrl + D (Windows) or select Remove Crop from the Image Menu.

A setting in Preferences, Auto crop HCD Images, allows you to choose if the crop mask shall be added to images that are imported from a card or shot thethered. The default setting is to add the crop mask.

SAMPLE IMAGES

The following pages show sample images shot with HCD Lenses on an H5D-60 and an H6D-100c camera. No editing has been applied to the images.



Phocus showing an H6D-100c image when an automatic crop mask is added.



Phocus showing an H6D-100c image with the crop tool selected to show the actual crop mask.



Resulting image when the crop mask is removed. The full 100 MP image is shown.

TECHNICAL BULLETIN

HCD 24MM





Image with crop.

HCD 24MM, F/4,8 - H6D-100C - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 24MM





Image with crop.

HCD 24MM, F/9,5 - H6D-100C - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 24MM





Image with crop.

HCD 24MM, F/4,8 - H5D-60 - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 24MM





Image with crop.

HCD 24MM, F/9,5 - H5D-60 - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 28MM





Image with crop.

HCD 28MM, F/4 - H6D-100C - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 28MM





Image with crop.

HCD 28MM, F/8 - H6D-100C - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 28MM





Image with crop.

HCD 28MM, F/4 - H5D-60 - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 28MM





Image with crop.

HCD 28MM, F/8 - H5D-60 - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 35-90MM AT 35MM





Image with crop.

HCD 35-90MM AT 35MM, F/4-H6D-100C -FULLIMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 35-90MM AT 35MM





Image with crop.

HCD 35-90MM AT 35MM, F/8 - H6D-100C - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 35-90MM AT 35MM





Image with crop.

HCD 35-90MM AT 35MM, F/4-H5D-60-FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 35-90MM AT 35MM





Image with crop.

HCD 35-90MM AT 35MM, F/8 - H5D-60 - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 35-90MM AT 60MM





Image with crop.

HCD 35-90MM AT 60MM, F/5 - H6D-100C - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 35-90MM AT 60MM





Image with crop.

HCD 35-90MM AT 60MM, F/9,5 - H6D-100C - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 35-90MM AT 60MM





Image with crop.

HCD 35-90MM AT 60MM, F/5-H5D-60-FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 35-90MM AT 60MM





Image with crop.

HCD 35-90MM AT 60MM, F/9,5 - H5D-60 - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 35-90MM AT 90MM





Image with crop.

HCD 35-90MM AT 90MM, F/5,6 - H6D-100C - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 35-90MM AT 90MM





Image with crop.

HCD 35-90MM AT 90MM, F/11 - H6D-100C - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 35-90MM AT 90MM





Image with crop.

HCD 35-90MM AT 90MM, F/5,6-H5D-60-FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

HCD 35-90MM AT 90MM





Image with crop.

HCD 35-90MM AT 90MM, F/11 - H5D-60 - FULL IMAGE



Dashed line indicating cropped format

TECHNICAL BULLETIN

DAC LENS CORRECTIONS

Lens corrections are also designed to work on the full fithe image. However, this effect will be removed by the large sensor format when using HCD Lenses. With theutomatic DAC Lens Corrections. The following pages HCD 24mm, HCD 28mm or the HCD 35-90mm lenses at how examples with and without lens corrections for the full open aperture, there will be some natural vignettin GCD Lenses used on the H6D-100c.

HCD 24, F/4,8, H6D-100C, FULL IMAGE - NO CROP, LENS CORR = OFF



HCD 24, F/4,8, H6D-100C, FULL IMAGE - NO CROP, LENS CORR = ON



HCD 28, F/4, H6D-100C, FULL IMAGE - NO CROP, LENS CORR = OFF



HCD 28, F/4, H6D-100C, FULL IMAGE - NO CROP, LENS CORR = ON



HCD 35-90 AT 35, F/3,5, H6D-100C, FULLIMAGE - NO CROP, LENS CORR = OFF



TECHNICAL BULLETIN

HCD 35-90 AT 35, F/3,5, H6D-100C, FULL IMAGE - NO CROP, LENS CORR = ON



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