

PHANTOM HD

2048 x 1080 @ 1000 frames-per-second

35mm depth-of-field in a high-speed digital HD camera.

Vision Research introduces the Phantom HD. A camera specifically designed to address the demanding needs of the digital cinematographer.



With its new 2,048 X 2,048 active pixel CMOS sensor, Vision Research introduces the advantages of high-speed digital imaging to the world of 2K and HD media production. This new Phantom is not just a high-speed camera, but an instrument that gives the cinematographer 35mm depth of field either at HD or 2K resolutions! The Phantom HD now combines the visual quality of high-definition imaging with the high frame rates of specialty cameras. Whether your imaging needs encompass broadcasts of rapidly moving sports events, the production of commercials, a music video, an award-winning documentary, monitoring a rocket launch, or possibly you are an innovative cinematographer working on a special film project that needs "a new look" to tell the story, the flexibility and virtually limitless control of the HD will provide you with outstanding results.

Creative Control

Now there is a camera that gives you complete creative control over time. The Phantom HD allows you to select any frame rate from 1 to 1,000 fps in increments of one frame per second at HD resolution. Shift the frame rate a little and move the scene to a slightly future viewpoint. Or shift the frame rate a lot and move the scene to some long passing moment in time. With the Phantom camera's shutter, variable to 1/500,000 second, and radically adjustable framing rates, you have seamless control of the duration, speed and time of a story element. Of course with the Phantom you will know exactly how your shot looks immediately. The Phantom HD's sensor is truly unique, capable of 2K imaging for

- PHANTOM HD DATASHEET
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- REQUEST A QUOTE
- PRELIMINARY MANUAL

Phantom
owners & users, new software is here now!
Download it here! 663

We have just released version 663 of the Phantom camera control software. We recommend that most customers upgrade.

focus
Vision Research
insider newsletter

Visit our *Focus* on-line newsletter for up-to-date news from Vision Research.



Watch the demo video shown in the Vision Research booth at NAB. Then, see how it was done in the "making of" video.

cinema, or HD for projects geared towards television production, and the vertical image size can also be changed in 8 pixel increments. Pixels measure 12.5 microns, and 14-bit A/D converters provide sensitivity and image quality that has to be seen to be believed. These features insure excellent image quality even at speeds of 1,000 fps, regardless of the application.



Multi-Standard Compliant Output

The HD has allocated formats for standard HD 16:9 (1920 X 1080 pixels) and 35mm mopic at 1.85:1 using an active pixel area of 25.6mm x 13.85mm (2048 X 1108 pixels) making this camera fully compatible with all 35mm equipment as well. The HD can be configured for "live" broadcast or studio production and has a continuous video output that includes HD (720p, 1080p, 1080i) standards. Multiple triggering and recording modes can also be tailored to your application. Pick your viewing option, the Phantom HD is compatible with any +12vdc YPrPb viewfinder or monitor making shooting any subject clear and precise. The camera can also be controlled and image files downloaded using a Gigabit Ethernet to PC connection, and files can be converted TIFF stacks, MOV, or AVI formats using the included Phantom software package.

Flexible Memory Storage

The Phantom HD arrives with 8 Gigabytes of internal memory standard, 16 Gigabytes as an option. But this is just the start of methods we provide to store your work. Take advantage of the hot-swappable non-volatile solid state recorders -- our Phantom CineMags. These low profile modules (available early 2007) mount snugly to the top of the camera body and store 256 or 512 Gigabytes each. When one of these storage magazines is filled, its CineDock station allows downloading of the images to a PC running the Phantom application.

TEMA Software

In addition to our Phantom software, an introductory version of the world-class TEMA Starter for Phantom motion analysis software is also included with all Phantom cameras. This software provides the ability to automatically track 3 targets, generate X/T diagrams and spreadsheets, plus image export, scaling, and calculations for velocity and acceleration.

Key Features

- HD (1920 X 1080) and 2K (2048 X 1536) resolution using a PL-mount lens.
- Up to 1000 frames-per-second (fps) frame rate at HD resolution
- Adjust frame rate in 1 fps increments
- Shutter speeds as fast as two microseconds (1/500,000 second)
- 14-bit sensor depth (42-bit color)
- * ISO 600
- 35mm depth-of-field
- Circular buffer recording / Run-Stop

Dimensions:

Size: 7.62 x 5.47 x 12.13 inch/HWD (19.4 x 13.9 x 30.8 cm/HWD)

Weight: 12.125 lbs (5.5 kg)

*Stated ISO speeds determined using ISO-12232 specifications.



Abel Cine Tech Inc. is now offering expert sales, rental and technical support for our Phantom HD and Phantom 65 high-speed digital cinema cameras.



This product is on a GSA Schedule, Contract # GS-02F-0086R, expires 31 March 2010