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CANON U.S.A. INC. MAKES HISTORIC ANNOUNCEMENT OF ITS MOST ADVANCED, WIDEST-ANGLE PORTABLE HDTV LENS: THE HJ14ex4.3B



After nearly a decade of advances in Canon's world-renowned optical R&D - and ongoing dialogue with hands-on users worldwide - Canon is introducing the evolutionary next step in HDTV imaging: the HJ14ex4.3B IRSE/IASE wide-angle portable HDTV lens. Totally new and unique in its design, the HJ14ex4.3B is the product of Canon's latest development tools (entailing powerful computers with sophisticated design software), newly developed glass elements, and highly advanced optical coatings. The HJ14ex4.3B combines an extended 14 times zoom range and unprecedented 4.3mm wide angle while also improving on the exceptional optical performance of its predecessor. In addition, the HJ14ex4.3B's newly developed Digital Drive unit provides improved operability and ergonomic advances for user comfort and convenient control of lens functions.

Canon's new HJ14ex4.3 wide-angle portable HDTV lens features a minimum focal length of 4.3mm and an angular field of view of 96.3° at the wide end of the 16:9 HDTV aspect ratio. This optical performance is combined with a 14x zoom range reaching to 60mm (120mm with extender), which greatly expands creative options for the acquisition of crystal-clear, and virtually distortion-free HDTV video images.

Canon's mastery of computer-based optical design techniques and use of the most contemporary optical technologies (including aspherical elements) has resulted in a unique optical layout for the HJ14ex4.3 portable HDTV lens that enables it to maintain higher resolution at both the center of the picture and the extremities of the 16:9 image plane. In addition, the adoption of new multilayer optical coating technologies facilitate rich black reproduction, excellent transmittance efficiency and spectral response, and enhanced contrast range, while also contributing to control of undesirable ghosting artifacts caused by strong light sources. Innovative optical design techniques were also mobilized to further diminish focus breathing and light fall-off from picture center to corners (especially at longer focal length settings). New benchmarks in the minimization of chromatic aberrations and geometric distortion are also achieved.

Canon pioneered Digital Drive units for its portable lenses. The updated design of the Digital Drive unit for the new HJ14ex4.3B

incorporates Canon developed ultra-compact rotary encoders capable of 0.1um position detection. They employ our unique Micro Roofmirror Array (MRA) technology to produce 16-bit resolution of the positions of the zoom, iris, and focus controls. These provide a means by which camera operators can - if they wish - digitally program precise and repeatable settings into their lenses for zoom positions and speeds, lens focus, and iris. An LCD display built into the Digital Drive unit makes precise customization quick and convenient. The Digital Drive unit extends programmability of all lens operations and also provides (via three connectors) for the simple and direct digital integration of this new portable HDTV lens into virtual studio systems.



Canon also redesigned its Digital Drive unit to enhance user operability and reduce operator stress and fatigue, especially during prolonged shooting. The new HJ14ex4.3B also employs a smaller hood, which helps the camera operator view more of the actual scene.

CANON USA PRESENTS NAB 2009 DEBUT OF THE BU-50H REMOTE-CONTROL ROBOTIC INDOOR PAN-TILT-ZOOM 16:9 HDTV CAMERA SYSTEM

Canon's new BU-50H remote-control robotic indoor pan-tilt HD camera system is engineered to provide exceptional HD video imagery and versatile performance in such locations as houses of worship, legislative chambers and other POV applications. The BU-50H is an extremely quiet P/T system and features a maximum noise level of NC30.

The system incorporates a Canon HD camera equipped with three 1/3-inch (1.67 million-pixel) CCD sensors (1440 H x 1080 V), a Canon HD zoom lens with 20X optical zoom ratio (4.5 - 90mm), an advanced Canon Auto Focus function, and Canon's sophisticated Image Stabilizer technology.

Advanced connectivity features include genlock input; outputs include uncompressed HD-SDI and SD-SDI with embedded audio or standard-definition (SD) composite NTSC video. The HD-SDI can be used for HD recording and the HD-SDI or NTSC will support simultaneous SD monitoring.

The total weight of the Canon BU-50H is 11 kg. (approx. 24 lbs.).



Canon has introduced a "second generation" member to its line of affordable HDgc lenses: the KJ17ex7.7B. Canon developed its original line of HDgc portable lenses in response to the introduction of lower-cost tapeless HD ENG cameras with 2/3-in., 1/2-in., and 1/3-in. imagers from all major manufacturers.

CANON USA ADDS "SECOND-GENERATION" 2/3-INCH PORTABLE ZOOM LENS WITH NEW DIGITAL DRIVE TO ITS COST-EFFECTIVE HDgc LINE

The new KJ17ex7.7B features a newly designed Digital Drive unit derived from long-term market research into users of all of Canon's portable HD zoom lenses. Using 3D CAD-CAM programs, Canon significantly improved the tactile interface for the control of zoom, iris, and focus. The Digital Drive unit was reduced in width to position the palm of the camera operator's hand closer to the optical axis, thus reducing the angle at which operators must bend their arm; the result is the alleviation of physical stress during long-term shooting. The curvature of the Digital Drive unit was also optimized to fit more comfortably the operator's hand.

CANON USA BROADENS ITS LONG-ZOOM PORTABLE HD LENS FAMILY TO INCLUDE A NEW DAY/NIGHT LENS TO SIGNIFICANTLY EXTEND IMAGING APPLICATIONS

Canon HJ40x14B and HJ40x10B high definition long-zoom portable lenses have established a stellar reputation for facilitating challenging remote shooting. Now this powerful imaging system is being extended with the addition of a new family member -- the DJ40x14B. This remarkable lens offers the additional capability of shooting subjects in total darkness when illuminated by near infrared light.

Special optical coatings have extended the spectral transmittance of the lens into the near infrared region. The DJ40x lens retains the same built-in optical

stabilization system for which the HJ40 lens family is well known. The stabilization on/off control and extender functions is also motorized to be controlled remotely. The combination of very long focal length, optical image stabilization, and infrared imaging has produced an important new lens that offers innovative imaging flexibility for addressing multiple applications.



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