



# CANON CANADA DEBUTS TWO THIRD-GENERATION DIGISUPER HD FIELD LENSES COMBINING WIDER ANGLES OF VIEW WITH LONG ZOOM RATIOS

NEWS

## Improved Optical Performance, Increased Responsiveness for Camera Operators, and Support for Virtual Studio Systems Among the Features of Cost-Effective HD Lenses

**MISSISSAUGA, ON, April 12, 2012** – In response to input from the worldwide community of HDTV program creators, Canon Canada Inc., a leader in digital imaging solutions, has introduced two HD field lenses designed for improved coverage of sports and other mobile-location productions. Designated as the XJ80x8.8B and the XJ76x9B\*, both lenses combine highly telephoto performance, wider angles of view, and exceptional operability. Integrating Canon's latest optical and digital-control innovations, both lenses are third-generation additions to the DIGISUPER product line, which is renowned as a global favorite for outside broadcast coverage.

"Canon's extensive R&D and new computer-based optical design tools continue to advance the DIGISUPER product line," Ian Macfarlane, Senior Vice-President of Sales and Service Operations, Canon Canada, a wholly owned subsidiary of Canon USA. "The new XJ80x8.8B and XJ76x9B HD field lenses deliver optical performance that has been significantly elevated over previous models. Canon's proprietary large-diameter aspherical lens technology, new glass materials, and sophisticated lens coatings minimize the aberrations and distortion that have always challenged large focal-length ranges. Significant reduction of these factors enhances the excellent resolution and contrast of these lenses in a manner that contributes to superb picture sharpness across the entire 16:9 HD image plane. The new XJ80x8.8B and XJ76x9B lenses deliver the image performance that creative camera operators have asked for, together with the operational enhancements that the HD production industry demands."

### **Dynamic Duo**

The new Canon XJ80x8.8B and XJ76x9B HD field lenses combine augmented telephoto and wide-angle performance. The premium XJ80x8.8B lens delivers an 80x zoom with a maximum wide angle of 8.8mm (a horizontal angle-of-view of 57.2 degrees), which is approximately five percent wider than previous long-zoom lenses. These capabilities enable the XJ80x8.8B to capture everything from a panoramic stadium-wide shot to a telephoto close-up of an individual player's face. The XJ80x8.8B's wide-angle capabilities enable the lens to pull back from a telephoto shot and replace it with a dramatic close-up – thus adding to creative flexibilities.

The new XJ80x8.8B HD field lens also includes a new built-in Optical Shift Image Stabilizer (Shift-IS) as a standard feature. Integrating a new motion sensor, faster control circuit, and new correction algorithm, the improved Canon Shift-IS system significantly curbs vibrations, particularly in the high-frequency range. When the new Canon Shift-IS systemsensor detects vibration, a correction drive signal is created that shifts compensating optics at high-speed to instantly deflect the incoming light rays in a direction that cancels out the vibration's effect on the image. The new Shift-IS systemsuppresses vibrations – such as those generated by excited fans in the stands, or by strong winds, or by acoustic perturbations at rock concerts – especially in video shot at extreme telephoto distances. Of special significance, the new Shift-IS system also improves image tracking by virtually eliminating the image drift that can be caused by the sudden cessation of panning and tilting operations.

The XJ76x9B combines 76x telephoto performance with a maximum wide angle of 9mm (a horizontal angle-of-view of 56.1 degrees), which is approximately three percent wider than previous long-zoom lenses. This enables cameras outfitted with the new XJ76x9B to capture panoramic shots at shorter distances without distortion.

### **Added Benefits**

Further enhancing the exceptional performance and operational ease of both the new XJ80x8.8B and XJ76x9B HD field lenses are such features as Canon's CAFS (Constant Angle Focusing System). CAFS employs built-in 32-bit microcomputer control to help counteract "breathing," the phenomena known to change picture size/angle of view during a focusing operation. Both lenses employ improved digital servo systems using 16-bit miniature optical encoders and improved algorithms for zoom, iris, and focus that deliver increased responsiveness to camera operators in terms of ultra-slow to very high-speed zooms, high-resolution control of both iris and focus, and highly precise repeatability of zoom and focus operations.

Another added benefit of the sophisticated zoom, focus, and iris encoders built into the new Canon XJ80x8.8B and XJ76x9B HD field lenses is their multiple support for discrete digital encoder outputs, analog outputs, and serial digital outputs. This ability to share focus, iris, and zoom-position data makes these new lenses compatible with many kinds of digital virtual studio systems. Both lenses easily adapt to such systems via Canon's standard 20-pin lens-interface connector.

The enhanced telephoto and wide-angle capabilities of the new Canon XJ80x8.8B and XJ76x9B HD field lenses do not increase physical lens size, which facilitates easy panning and tilting operations. Both of these new HD field lenses also feature a charcoal-gray shroud designed to complement today's HD field cameras and blend into stadium surroundings.

### About Canon Canada Inc.

Headquartered in Mississauga, Ontario, the company employs 1,200 people at its offices nation-wide, servicing the Canadian market from coast to coast. Innovation and cutting-edge technology have been essential ingredients in Canon's success. Canon's leadership in imaging, optical and document management technology and solutions is based in large part on the thousands of patents the company has secured throughout its history. Canon Inc. has been among the top four US patent recipients since 1994.

The company's comprehensive product line includes networked multifunction devices; digital copiers (colour and black and white); printers, scanners, image filing systems and facsimile machines; calculators, digital camcorders, digital cameras and lenses; medical imaging equipment, semiconductor, broadcast and other specialized industrial products. Canon Canada is dedicated to its *Kyosei* philosophy of social and environmental responsibility.

For more information, visit www.canon.ca or join us on Facebook at www.facebook.com/CanonCanada

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