## Canon

# DIGISUPER 95

XJ95x8.6B 8.6-820mm 1:1.7



New-generation long-zoom HD field lens delivers enhanced optical performance and extended operational flexibilities







# DIGISUPER 95

XJ95x8.6B 8.6-820mm 1:1.7

The Global expansion of HDTV programming and production has heightened demand for HD lenses designed for live sports and other mobile location applications. Over the past decade, Canon has developed a series of telephoto lenses, including the XJ100x9.3B and XJ86x9.3B/13.5B, to meet the most demanding outside broadcast applications and today these lenses enjoy a high international reputation. To meet end-user's ever-diversifying creative needs, Canon has developed a totally new-generation super-telephoto XJ95x8.6B lens whose overall design is based upon many of Canon's advanced technologies.

The XJ95x's primary advantage is its unprecedented combination of the widest angle of view of any HDTV field lens in the broadcasting industry with an augmented 95x focal range. Its overall optical performance has been significantly elevated and its built-in image stabilization system redesigned to achieve even higher control over picture stability at higher vibration frequencies. This is a lens that offers totally new imaging potential to the global production community involved with HDTV sports and special event coverage.

#### **Main Features**

#### From Wide Angle to Telephoto

The XJ95x offers an enormous range of imaging possibilities that are impossible with conventional field lenses, thanks to its 95x zoom ratio and the widest focal length (8.6mm) of any field lens in the industry. With this extensive image-framing latitude, the lens can dramatically capture every possible on-site sensation, from the emotion of an entire crowded stadium to the facial expression of an individual player.

#### **Incomparable Optical Performance**

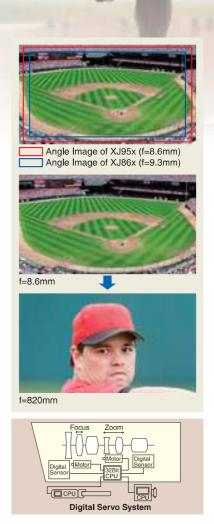
Canon's design and production technologies have been refined through more than 50 years of advanced R&D and extensive experience in broadcast lens development.

The past decade especially has seen dramatic advances in powerful new 3D optical design tools, glass materials, and optical coatings.

Canon's mastery of computer-based 3D optical design techniques and use of the most contemporary optical technologies allow the XJ95x lens to provide a wider angle of view, a higher zoom ratio, and unparalleled overall optical performance. Canon's proprietary large-diameter aspherical lens technology and exotic new glass materials effectively counter lateral chromatic aberration, monochromatic aberrations, and geometric distortion that have always been the particular challenge of large focal-length ranges. Significant reduction of these aberrations further enhance the resolution and contrast in a manner that contributes to the capture of images having superb picture sharpness across the 16:9 HD image plane.

### **CAFS (Constant Angle Focusing System)**

32-bit CPU calculates and controls the zoom when focusing to counteract "breathing" (phenomena where picture size/ angle of view changes when focusing) and has almost zero zoom effect.





#### **Even More Advanced Image Stabilization System**

A persistent problem for telephoto lenses is image blurring at long focal lengths caused by the wind or slight vibrations transmitted through the stadium stand or tower. To minimize this sort of image blurring, the XJ95x comes standard equipped with an improved optical shift-type image stabilizer. When the sensor inside the lens detects a vibration, the compensating optics are shifted at high-speed to instantly deflect the light rays in a direction that cancels out the vibration's effect on the image. The XJ95x's new sensor provides several improvements to Canon's already renowned image-stabilization performance.

#### **Excellent Operability**

The XJ95x offers outstanding tracking capability due to its high-resolution encoders to faithfully reproduce the camera operator's intended movements, whether a slow zoom or a preset sequence. The XJ95x, despite its powerful specs, is similar in size and weight to the XJ86x, making it perfectly viable for panning and tilting.

#### **Support for Many Virtual Systems**

The XJ95x is equipped with high-performance zoom, focus, and iris encoders. With multiple support for encoder outputs, analog outputs, and serial outputs, the XJ95x can work with many kinds of virtual systems. It easily adapts to existing virtual systems because it comes standard equipped with 20-pin lens interface.



20-pin lens interface



To Subject

2. Lens when jerked downward.

Camera shake



Image plane

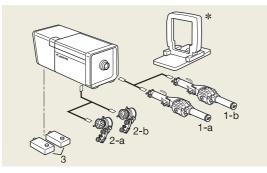
3. Counteraction by IS lens group.

Corrected light rays

Position of IS lens group after shifting



#### RECOMMENDED LENS SYSTEM

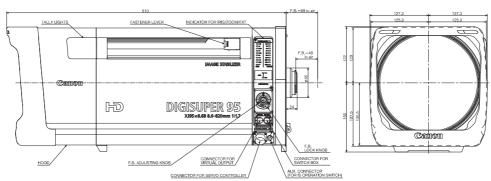


#### ■Compatibility of Accessories for DIGISUPER 95

No.	DESCRIPTION	MODEL NAME		
1-a	Digital Zoom Demand	ZDJ-P01		
1-b	Digital Zoom Demand	ZDJ-D02 FDJ-P01		
2-a	Digital Focus Demand			
2 <b>-</b> b	Digital Focus Demand	FDJ-D02		
3	Digital Servo Module	SMJ-E01		
	Protection Filter	PFJ-951		
	IS Switch	SBJ-IS2		

<sup>\*</sup>Lens Supporter is necessary for portable camera mounting.

#### **DIMENSIONS**



#### **SPECIFICATIONS**

DIGISUPER 95	16	:9	4:3			
Built-in Extender	1.0x	2.0x	1.0x	2.0x		
Zoom Ratio	95x					
Range of Focal Length	8.6 - 820mm	17.2 - 1640mm	8.6 - 820mm	17.2 - 1640mm		
Maximum Relative Aperture	1:1.7 at 8.6~340mm 1:4.1 at 820mm	1:3.4 at 17.2~680mm 1:8.2 at 1640mm	1:1.7 at 8.6~340mm 1:4.1 at 820mm	1:3.4 at 17.2~680mm 1:8.2 at 1640mm		
Angular Field of View	58.3°×34.9° at 8.6mm 0.67°×0.38° at 820mm	$31.2^{\circ} \times 17.8^{\circ}$ at $17.2$ mm $0.34^{\circ} \times 0.19^{\circ}$ at $1640$ mm	54.2°×42.0° at 8.6mm 0.61°×0.46° at 820mm	28.7°×21.7° at 17.2mm 0.31°×0.23° at 1640mm		
Minimum Object Distance (M.O.D.)	3.0m from front lens vertex					
Object Dimentions at M.O.D.	298.1×167.7cm at 8.6mm 3.2×1.8cm at 820mm	149.1×83.9cm at 17.2mm 1.6×0.9cm at 1640mm	274.1×205.6cm at 8.6mm 3.0×2.3cm at 820mm	137.1×102.8cm at 17.2mm 1.5×1.2cm at 1640mm		
Approx. Size	W×H×L=250.6×255.5×610.0mm					
Approx. Mass	23.2kg (51.1lbs)					

## North & South America Canon U.S.A., Inc. Imaging Technologies & Communications Group

Broadcast and Communications Sales & Marketing Division (Headquarters) 65 Challenger Road, Ridgefield Park, NJ 07660 Tel:(201)807-3300/(800)321-4388 Fax:(201)807-3333

Fmail:bctv@cusa canon com http://www.canonbroadcast.com/

Chicago 100 Park Blvd. Itasca, IL 60143 Tel:(630)250-6236 Fax:(630)250-0399

5625 Oakbrook Pkwy. Norcross, GA 30093 Tel:(770)849-7890 Fax:(770)849-7888

#### **Los Angeles**

15955 Alton Parkway Irvine, CA 92618 Tel:(949)753-4330 Fax:(949)753-4337

#### **Dallas**

3200 Regent Blvd. Irving, TX 75063 Tel:(972)409-8871 Fax:(972)409-8869

#### **Latin America**

Tel:(954)349-6975 Fax:(201)807-3333

#### Canada Canon Canada, Inc.

Broadcast and Communications Div. 6390 Dixie Road Mississauga, Ontario, L5T 1P7, Canada Tel:(905)795-2012 Fax:(905)795-2140

#### Europe/Africa/Middle East Canon Europa N.V.

Broadcast and Communications Div. Bovenkerkerweg 59-61 Tel:+31(0)20-5458905 Fax:+31(0)20-5458203 Email:tvprod@canon-europe.com http://www.canon-europe.com/tv-products

### Australia Canon Australia Pty. Ltd.

Optical Products Division 1 Thomas Holt Drive, North Ryde, NSW 2113, Tel:+61(0)2-9805-2000 Fax:+61(0)2-9805-2444

#### China Canon (China) Co., Ltd.

Distributed by

Broadcast Equipment Products 15F Jinbao Building No.89 Jinbao Street Dongcheng District, Beijing 100005, China Tel:86-10-8513-9999 Fax:86-10-8513-9128 http://www.canon.com.cn

#### Asia/Japan Canon Inc. (Broadcast Equipment Group)

23-10, Kiyohara-Kogyo-Danchi, Utsunomiya-shi, Tochigi-ken, 321-3298, Japan Tel:+81(0)28-667-8669 Fax:+81(0)28-667-8672 http://www.canon.com/bctv

Specifications subject to change without notice.



http://www.canon.com/bctv