

**Canon**

# DIGISUPER 80

XJ80x8.8B 8.8-710mm 1:1.7



80x Third Generation Premium Field Lens with  
Superb Quality and Advanced Image Stabilizer



**INNOVATION**

In TV Optics Since 1958

Toward 100 years anniversary



# DIGISUPER 80



XJ80x8.8B 8.8-710mm 1:1.7

The unparalleled quality offered by the DIGISUPER Series by Canon has made it a permanent fixture at sporting events around the world and a heavy favorite of professional camera operators.

As one of Canon's leading lens series for broadcast use, the DIGISUPER line has introduced numerous technological innovations while capturing memorable scenes with the best possible quality, so that they may be enjoyed by future generations.

Amid the rapid growth in high-definition program production in recent years, Canon has maintained a strong relationship with content producers, to ensure that our products continue to satisfy the needs of such a dynamic industry. A common refrain has been to make field lenses wider and with higher magnification to convey the intensity and dynamism of the scene at hand, as well as to make our image stabilization feature more high-performance in order to film elegant video footage free of blurring.

Our answer to these needs is the new XJ80x8.8B. This next-generation Premium Field lens successfully offers both enhanced width and higher magnification by bringing together the very best of the technology Canon has developed over the last half-century, and also incorporates a more advanced version of Canon's reputed image stabilization feature as a standard function.

## Main Features

**Simultaneously offers a maximum wide angle of 8.8mm and a high magnification of 80x for wider and longer-distance shooting.**

The XJ80x8.8B is capable of a maximum wide angle of 8.8mm (57.2° perpendicular angle of view), which is approximately 5% wider than previous long-zoom lenses. This enables the lens to pull back and fully capture the scene even in limited space, and also capture images that exhibit a stunning degree of intensity.

With high magnification boasting a zoom factor of 80x, the XJ80x8.8B allows any and all scenes, from a panoramic view of a stadium to the detailed expressions on players, to be taken with a single lens.

**Incorporates an advanced image stabilizer, a formidable ally of cameramen everywhere for mitigating vibration of all kinds, as a standard function.**

The image stabilizer feature by Canon has been faithfully used over the years at many of the world's highest-profile sporting events, and is now considered a must when shooting sports. With the XJ80x8.8B, a more advanced version of Canon's image stabilizer has been incorporated as a standard feature.

With a new sensor and sped-up control circuit, this latest version of the image stabilizer significantly curbs vibration, particularly in the high-frequency range. By successfully suppressing all kinds of vibration, such as that generated by wind and excited fans in the stands, the XJ80x8.8B's image stabilizer allows the capture of stable, clear video even at super-telephoto range. It also makes camerawork a comfortable endeavor by largely mitigating the "aftershock" phenomenon that occurs when an image moves after the camera operator stops panning.



Angle Image of XJ80x (f=8.8mm)  
Angle Image of XJ75x (f=9.3mm)



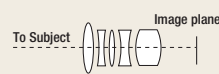
f=8.8mm



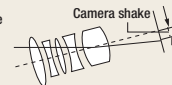
80x  
f=710mm



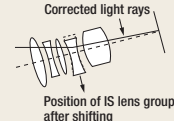
1. Lens when still.



2. Lens when jerked downward.



3. Counteraction by IS lens group.







## DIGISUPER Field Lens Series

The DIGISUPER series represents a crystallization of the unsurpassed technology offered by Canon. The DIGISUPER series offers zoom lenses that range from its 100x super-telephoto zoom flagship model to a 60x middle-range zoom model, as well as focal lengths between 8.6mm and 2,322mm, to completely cover any and all ranges that are required for field production.

Category	Zoom Ratio	IS	AF	Focal Length (mm)																						
				8.6	8.8	9	9.3	13.5	540	675	690	700	710	800	820	930	1080	1161	1350	1380	1400	1420	1600	1640	1860	2322
Flagship	100x	○	○																							
Flagship	100x	○	—																							
Ultra Telephoto	86x	○	—																							
New Telephoto	95x	—	—																							
Telephoto	86x	○	○																							
Telephoto	86x	○	—																							
New Premium	80x	—	—	8.8mm																						
Premium	75x	○	—																							
New Standard	76x	—	—																							
Standard	72x	—	—																							
Affordable	60x	—	—																							

IS : Image Stabilizer AF : Auto Focus

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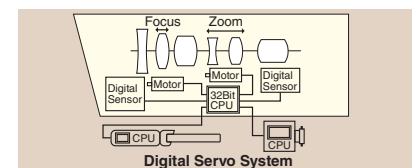
## Superior operability and tracking enables you to capture images exactly as you want to.

With its superior operability, the XJ80x8.8B makes nimble camerawork possible while also offering enhanced width and higher magnification despite no intrusive increases in physical lens size.

Moreover, the use of a high-speed CPU and high-resolution encoder, coupled with improvements in control algorithms, have yielded significant enhancements in handling subjects entering motion and subsequent tracking when zooming at super-slow speeds. The results are shots taken exactly as you intended to take them.

## Reduces shifts in angles of view caused by focusing to nearly zero. CAFS (Constant Angle Focusing System)

A 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.



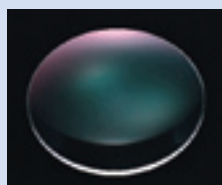
## Support for Various Virtual System

The XJ80x8.8B is equipped with high-performance zoom, focus, and iris encoders. With multiple support for encoder outputs, analog outputs, and serial outputs, the XJ80x8.8B 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

## Ultimate Optical Performance



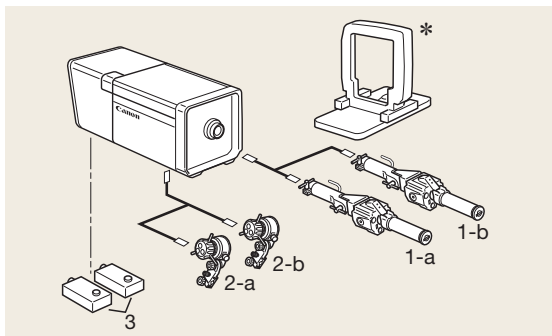
Canon's design and production technologies have been refined through more than 50 years of advanced R&D and extensive experience in broadcast lens development.

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 XJ80x8.8B 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.

## RECOMMENDED LENS SYSTEM

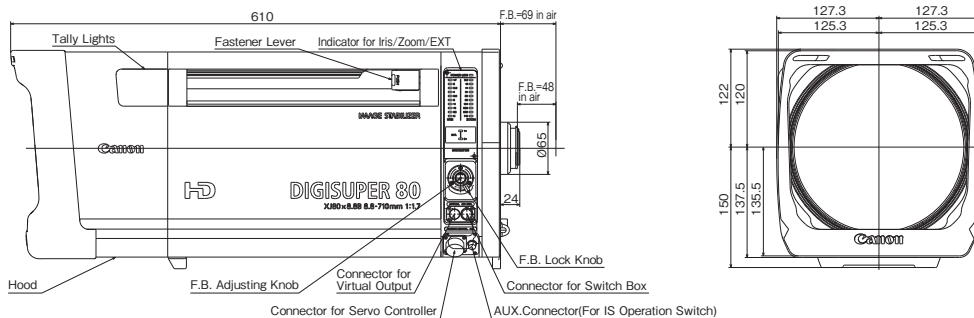


## ■ Compatibility of Accessories for DIGISUPER 80

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

\* Lens Supporter is necessary for portable camera mounting.

## DIMENSIONS



## SPECIFICATIONS

DIGISUPER 80	16:9		4:3	
Built-in Extender	1.0x	2.0x	1.0x	2.0x
Zoom Ratio	80x			
Range of Focal Length	8.8~710mm	17.6~1420mm	8.8~710mm	17.6~1420mm
Maximum Relative Aperture	1:1.7 at 8.8~340mm 1:3.55 at 710mm	1:3.4 at 17.6~680mm 1:7.1 at 1420mm	1:1.7 at 8.8~340mm 1:3.55 at 710mm	1:3.4 at 17.6~680mm 1:7.1 at 1420mm
Angular Field of View	57.2°×34.1° at 8.8mm 0.77°×0.44° at 710mm	30.5°×17.4° at 17.6mm 0.39°×0.22° at 1420mm	53.1°×41.1° at 8.8mm 0.71°×0.53° at 710mm	28.1°×21.2° at 17.6mm 0.36°×0.27° at 1420mm
Minimum Object Distance (M.O.D.)	3.0m from front lens vertex			
Object Dimentions at M.O.D.	290.0×163.1cm at 8.8mm 3.7×2.1cm at 710mm	145.0×81.6cm at 17.6mm 1.9×1.1cm at 1420mm	266.8×200.1cm at 8.8mm 3.4×2.6cm at 710mm	133.4×100.1cm at 17.6mm 1.7×1.3cm at 1420mm
Approx. Size	W×H×L=250.6×255.5×610mm			
Approx. Mass	23.2kg (51.1lbs)			

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