

Canon

DIGI SUPER 72 XS

XJ72×9.3B IE 9.3-675mm 1:1.7



NEXT GENERATION STANDARD
FIELD LENS WITH HDTV
PERFORMANCE



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Canon's XJ72x has been developed with the **XS** technology as the successor of our industry standard 70x, which is the best selling field lens in the world. The XJ72x features high optical quality and high specifications in a lightweight design.

HD Optical Performance with 72x Zoom Ratio and 9.3mm Wide Angle

The DIGISUPER 72 xs is an extraordinary field lens that utilizes Canon's new optical design concept "POWER OPTICAL SYSTEM" and "**X-Element**".

By adopting this new technology and concept, the DIGISUPER 72 xs realizes the necessary optical performance for HDTV, with increased zoom ratio of 72x, improved wide angle of 9.3mm while still maintaining the size equivalent to that of current SDTV lenses.

X-Element & POWER OPTICAL SYSTEM

Canon has developed this breakthrough optical design concept using a newly developed optical element in the most effective way.

We have named this design concept the "Power Optical System" which achieves higher specifications and quality using the optical "**X-Element**" which virtually eliminates aberrations.

Latest Generation DIGITAL SERVO SYSTEM

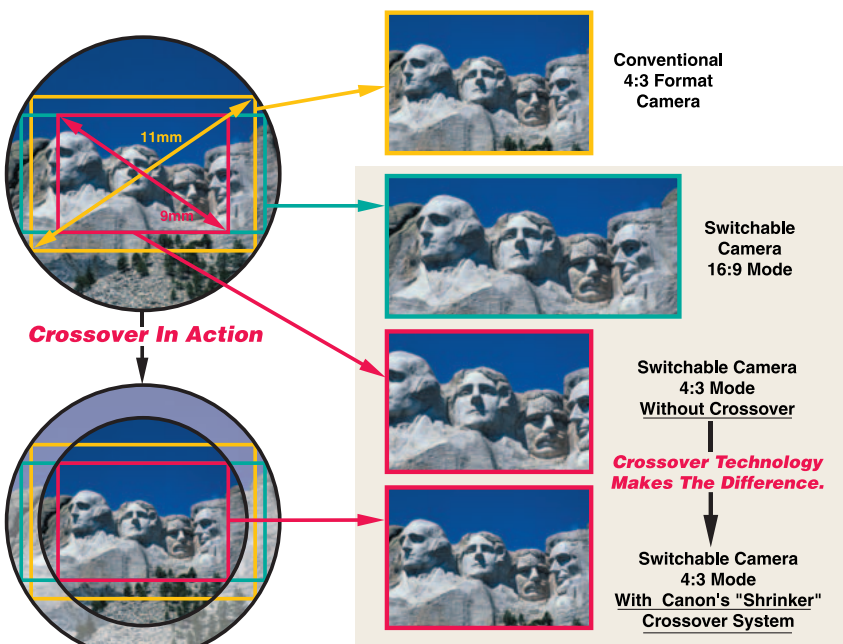
Canon's latest generation digital servo system allows the use of many new functions such as constant angle of view while focusing "CAFS" and the selection of different servo characteristics. These functions are only possible with a digital servo system. In addition to these new functions, the upgrading of software will be possible when new functions become available in the future. This means that the DIGISUPER 72 xs has unlimited possibilities.

"CAFS" Constant Angle Focusing System

The zooming effect of focus is the phenomena where the picture size (angle of view) changes when focusing (breathing). However, a 32bit CPU calculates and controls the zoom when focusing in order to counteract these phenomena. Thus the DIGISUPER 72 xs has ZERO zooming effect of focus throughout the whole zoom range.

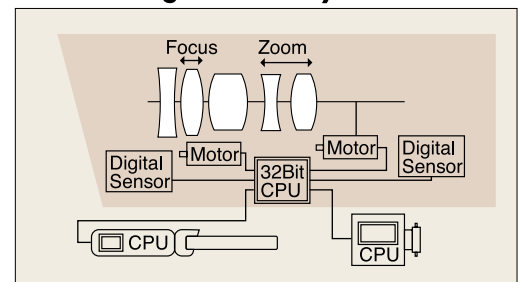
CROSSOVER COMPATIBILITY

Available optionally is the dual aspect ratio switching system, "CROSSOVER", for switchable 16:9/4:3 cameras.

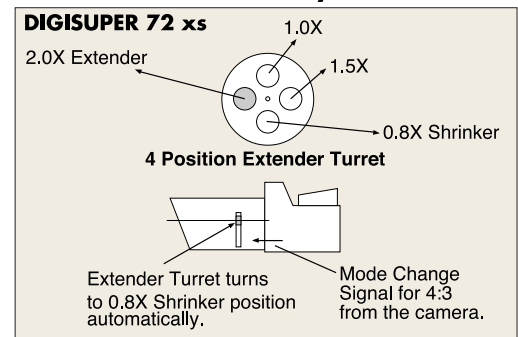


The diagram shows how Canon's exclusive Crossover Technology uses a 0.8X "Shrinker" to restore the loss of diameter and return the 4:3 image of a Switchable Camera to the same as a Standard Camera.

Digital Servo System



CROSSOVER System



INTERNAL FOCUSING SYSTEM

- (Advanced 3 group IF system)
- Realization of wide-angle with reduced distortion.
 - Minimized variation of chromatic aberration while focusing.
 - Anti-Dust, Anti-Fog, thanks to a perfectly airtight Internal Focusing System.
 - Minimized variation of the centre of gravity through focus movement.

"CAFS"

- Constant Angle Focusing System-**
- When focus is operated, the angle of view is maintained by synchronizing zoom movement.

ZOOM RATIO:72X

CROSSOVER COMPATIBILITY (Optional)

- For use with 16:9/4:3 switchable cameras.

4 - POSITION TURRET

- (built in extender, master lens, crossover unit).
- Micro Computer Controlled Turret.

VERSATILE ZOOM/FOCUS CONTROLLERS

- (See figure on the next page)
- New ergonomic design.
 - Countermeasures against dust, rain, and radio interference.



HD OPTICAL PERFORMANCE

- Computer aided design in order to meet the higher level demanded by HDTV.

WIDE ANGLE OF 9.3mm WITH REDUCED DISTORTION

COUNTERMEASURES AGAINST "GHOSTING" AND "FLARES"

- New coatings and anti-reflection paint achieve the elimination of "ghosting" and "flares".

NEW GENERATION DIGITAL SERVO SYSTEM

WIDE DYNAMIC RANGE OF ZOOM AND FOCUS SERVO SPEED

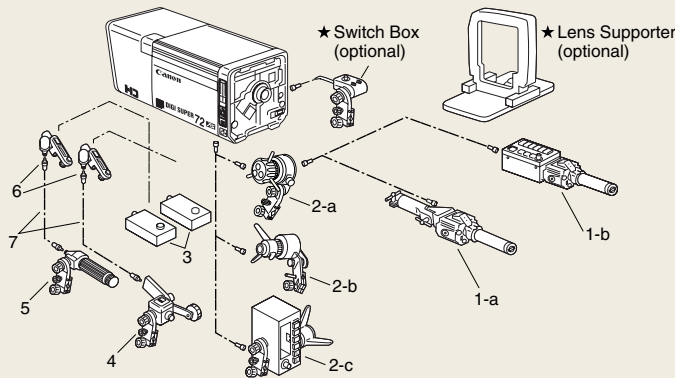
- From ultra slow to high speed. Max. speed: Zoom 0.6 sec, Focus 0.8sec.

COUNTERMEASURES AGAINST RADIO FREQUENCY NOISE(INTERFERENCE)

SPECIFICATIONS

	NORMAL4:3		16:9		SWITCHABLE 4:3		
Image Format	8.8 x 6.6mm ; ϕ 11.0mm		9.6 x 5.4mm ; ϕ 11.0mm		7.2 x 5.4mm ; ϕ 9.0mm		
Built-in Extender	1.0X	2.0X	1.0X	2.0X	1.0X	1.2X	2.4X
Zoom Ratio			72X				
Range of Focal Length	9.3 - 675mm	18.6 - 1350mm	9.3 - 675mm	18.6 - 1350mm	7.65 - 555mm	9.3 - 675mm	18.6 - 1350mm
Maximum Relative Aperture	1:1.7 at 9.3~333mm 1:3.45 at 675mm	1:3.4 at 18.6~666mm 1:6.9 at 1350mm	1:1.7 at 9.3~333mm 1:3.45 at 675mm	1:3.4 at 18.6~666mm 1:6.9 at 1350mm	1:1.7 at 7.65~331mm 1:2.85 at 555mm	1:1.7 at 9.3~333mm 1:3.45 at 675mm	1:3.4 at 18.6~666mm 1:6.9 at 1350mm
Angular Field of View	50.6° x 39.1° at 9.3mm 0.75° x 0.56° at 675mm	26.6° x 20.1° at 18.6mm 0.37° x 0.28° at 1350mm	54.6° x 32.4° at 9.3mm 0.81° x 0.46° at 675mm	28.9° x 16.5° at 18.6mm 0.41° x 0.23° at 1350mm	50.6° x 39.1° at 7.65mm 0.75° x 0.56° at 555mm	42.3° x 32.4° at 9.3mm 0.61° x 0.46° at 675mm	21.9° x 16.5° at 18.6mm 0.31° x 0.23° at 1350mm
Minimum object Distance(M.O.D.)	2.8m						
Object Dimensions at M.O.D.	234.3 x 175.7cm at 9.3mm 3.3 x 2.5cm at 675mm	117.2 x 87.9cm at 18.6mm 1.7 x 1.3cm at 1350mm	255.6 x 143.8cm at 9.3mm 3.6 x 2.0cm at 675mm	127.9 x 71.9cm at 18.6mm 1.8 x 1.0cm at 1350mm	234.3 x 175.7cm at 7.65mm 3.3 x 2.5cm at 555mm	191.7 x 143.8cm at 9.3mm 2.7 x 2.0cm at 675mm	95.9 x 71.9cm at 18.6mm 1.5 x 1.1cm at 1350mm
Size	250.6(W) x 255.5(H) x 591.5(L) mm						
Approx. Mass	21.8Kg(48.1lbs)						

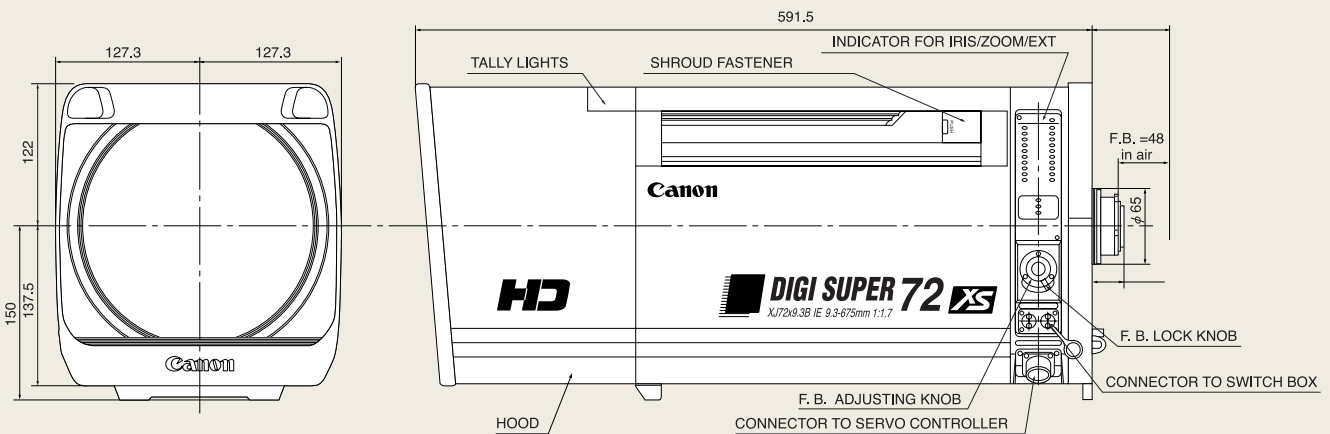
RECOMMENDED LENS SYSTEM



Compatibility of Accessories for DIGI SUPER 72XS

No.	DESCRIPTION	CODE
1-a	Digital Zoom Demand	ZDJ-D02 1822A066
1-b	Digital Zoom Demand W/Pre-set Box	ZPJ-D02
2-a	Digital Focus Demand	FDJ-D02 1822A065
2-b	Digital Focus Demand Propeller Type	FDJ-D12 0024T320
2-c	Digital Focus Demand W/Pre-set-Box	FPJ-D12
3	Digital Servo Module	SMJ-D02 1822A070
4	Flexible Zoom Controller	FZP-T61 1822A005
5	Flexible Focus Controller	FFP-T61 1822A007
6	Flexible Module	FMJ-702 0028T275
7	Flexible Cable 30"	— 1822A018

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Specifications subject to change without notice