

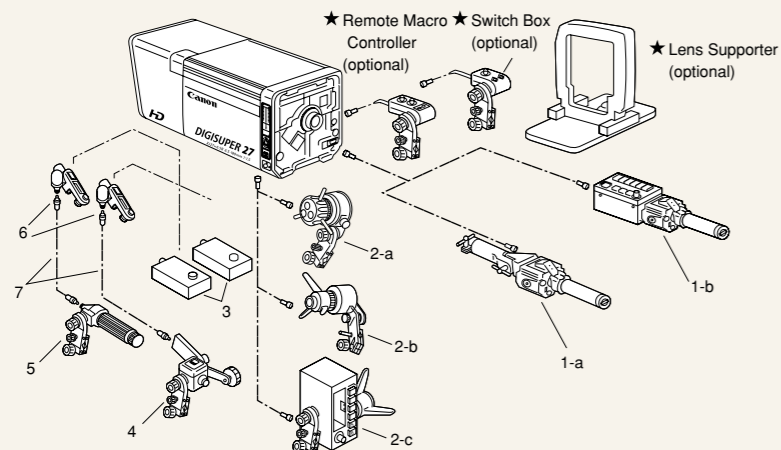
**Canon**

# DIGISUPER 27

XJ27×6.5B 6.5-180mm 1:1.5



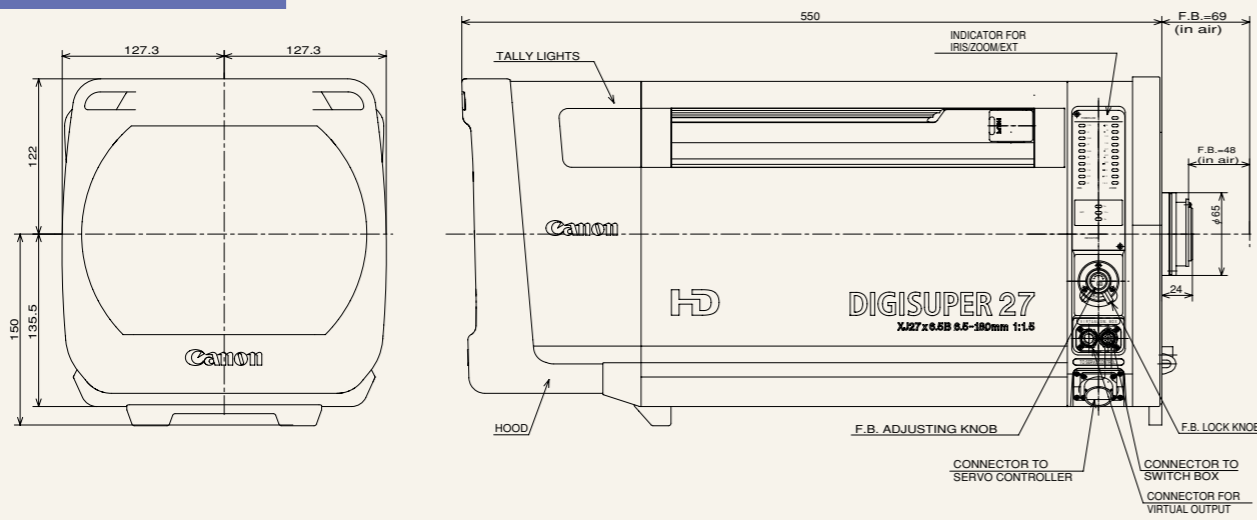
## RECOMMENDED LENS SYSTEM



## Compatibility of Accessories for DIGISUPER 27

No.	DESCRIPTION	
1-a	Digital Zoom Demand	ZDJ-P01
1-b	Digital Zoom Demand W/Pre-set Box	ZPJ-D02
2-a	Digital Focus Demand	FDJ-P01
2-b	Digital Focus Demand Propeller Type	FDJ-D12
2-c	Digital Focus Demand W/Pre-set Box	FPJ-D12
3	Digital Servo Module	SMJ-E01
4	Flexible Zoom Controller	FZP-T61
5	Flexible Focus Controller	FFP-T61
6	Flexible Module	FMJ-702
7	Flexible Cable 30"	—

## DIMENSIONS



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**Canon**

Specifications subject to change without notice



**POWERFUL HD STUDIO LENS  
FEATURING THE VERY LATEST  
OPTICAL AND DIGITAL TECHNOLOGY**



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XJ27x6.5B 6.5-180mm 1:1.5

**POWERFUL HD STUDIO LENS  
FEATURING THE VERY LATEST  
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Recently there has been a great demand for broadcast HDTV studio production. In the field of the HDTV studio production, Canon's DIGISUPER 25xs is the most popular HDTV studio lens in the world and it is known for its outstanding optical performance and ease of operation. Now, Canon is introducing unique technology with the launch of our most advanced HDTV studio lens, the DIGISUPER 27. In addition to the lens' completely new design, the DIGISUPER 27 is also equipped with a digital interface, enabling the lens to be compatible with virtual studio systems. Moreover, newly developed optional functions and accessories that allow for more effective studio production, are available. The unique options available on the DIGISUPER 27 are a "Remote Macro System" and an industry first "Wide Attachment (0.9x)".

## HD Optical performance with an improved 27x zoom ratio and an exceptional 6.5mm Wide Angle while maintaining a compact size.

The DIGISUPER 27 features outstanding HD optical performance that will dramatically improve HDTV studio imagery. The key optical performance features are first, a significantly Reduced Ghosting and Flare. Secondly, Minimized distortion even though the wide angle has been expanded to an exceptional 6.5mm. Reaching this incredible optical quality is only possible because of Canon's unique optical design concept, the POWER OPTICAL SYSTEM.

## 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 27 has unlimited possibilities.

The DIGISUPER 27 achieves 13 Bit zoom and focus repeatability and offers bi-directional serial data communication in order to facilitate highly accurate and smooth movements that are essential for robotics and virtual applications.

The digital servo system is reliable, consistent and is not affected by electric interference.

## Improved zoom speed and zoom control capabilities

The DIGISUPER 27 features both an improved maximum zoom speed (0.5sec) as well as enhanced control of the zoom movement when operated via the zoom demand. The DIGISUPER 27 enables swift response to the operator's zoom commands and at the same time, provides for a more smooth motion at the beginning of the movement. These features provide camera operators with zoom movement fully meeting their expectations and with intuitive control.

## Compatible with the virtual studio system

The DIGISUPER 27 is capable of supplying various types of positional signals to Virtual systems. The type of signals can be chosen from: an Encoder data signal, an Analog data signal or a Serial data signal, which are common in existing Virtual systems.

## "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 CPU calculates and controls the zoom when focusing in order to counteract these phenomena. Thus the DIGISUPER 27 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.

## Remote Macro System(Optional)

By using the optional Remote Macro controller MCJ-S02, the camera operator can focus on objects within the Macro distance. The Remote Macro controller also allows the camera operator greater creative control through the ability to create intentionally out of focus images.

## Wide Attachment (Optional)

By using the optional 0.9x Wide Attachment, the focal length becomes wider by a factor of 0.9x. The new Wide Attachment has been exclusively designed for the DIGISUPER 27 thus maximizing its optical performance.

## 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.

## WIDE ATTACHMENT (Optional)

## HD OPTICAL PERFORMANCE

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

## WIDE ANGLE OF 6.5mm WITH REDUCED DISTORTION

## COUNTERMEASURES AGAINST "GHOSTING" AND "FLARE"

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

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

ZOOM RATIO:27X

## CROSSOVER COMPATIBILITY (Optional)

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

## 4 - POSITION TURRET

(built in extender, master lens, crossover unit and option).

## VERSATILE ZOOM/FOCUS CONTROLLERS

(See figure on the next page)

- New ergonomic design.
- Countermeasures against dust, rain, and radio interference.

## REMOTE MACRO SYSTEM (Optional)

## NEW GENERATION DIGITAL SERVO SYSTEM

## SERVO SYSTEM MATCHING ROBOTIC AND VIRTUAL REQUIREMENTS

- High resolution zoom and focus servo 13 bit repeatability.

## 10 BIT IRIS COMPATIBILITY

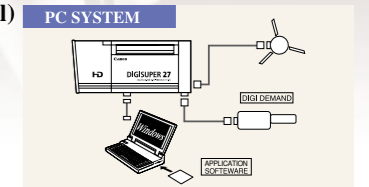
- High resolution iris control.

## WIDE DYNAMIC RANGE OF ZOOM AND FOCUS SERVO SPEED

- From ultra slow to high speed. Max. speed: Zoom 0.5 sec, Focus 0.8sec.

## COUNTERMEASURES AGAINST RADIO FREQUENCY NOISE(INTERFERENCE)

## PC SYSTEM (Optional)



## SPECIFICATIONS

	NORMAL4:3		16:9		SWITCHABLE 4:3		
	1.0X	2.0X	1.0X	2.0X	1.0X	1.2X	2.4X
Built-in Extender							
Zoom Ratio	27X						
Range of Focal Length	6.5 - 180mm	13 - 360mm	6.5 - 180mm	13 - 360mm	5.35 - 148mm	6.5 - 180mm	13 - 360mm
Maximum Relative Aperture	1:1.5 at 6.5~123mm 1:2.2 at 180mm	1:3.0 at 13~246mm 1:4.4 at 360mm	1:1.5 at 6.5~123mm 1:2.2 at 180mm	1:3.0 at 13~246mm 1:4.4 at 360mm	1:1.5 at 5.35~120mm 1:1.85 at 148mm	1:1.5 at 6.5~123mm 1:2.2 at 180mm	1:3.0 at 13~246mm 1:4.4 at 360mm
Angular Field of View	68.2° x 53.8° 2.8° x 2.1°	37.4° x 28.5° 1.4° x 1.1°	72.9° x 45.1° 3.1° x 1.7°	40.5° x 23.5° 1.5° x 0.9°	68.2° x 53.8° 2.8° x 2.1°	58.0° x 45.1° 2.3° x 1.7°	31.0° x 23.5° 1.1° x 0.9°
Minimum object Distance(M.O.D.)	0.6m from front lens vertex						
Object Dimensions at M.O.D.	97.0 x 72.8cm at 6.5mm 3.5 x 2.6 at 180mm	48.5 x 36.4cm at 13mm 1.8 x 1.3 at 360mm	106.1 x 59.7cm at 6.5mm 3.8 x 2.1 at 180mm	53.1 x 29.9cm at 13mm 1.9 x 1.1 at 360mm	97.0 x 72.8 at 5.35mm 3.5 x 2.6 at 148mm	79.6 x 59.7cm at 6.5mm 2.8 x 2.1 at 180mm	39.8 x 29.9cm at 13mm 1.4 x 1.1 at 360mm
Size	250.6(W) x 255.5(H) x 550(L) mm *1						
Mass	21.9kg(48.3lbs)						

\*1 Dimensions vary depending on type of the lens mount.