

Canon

SUPER 55



**WIDE ANGLE
FIELD ZOOM LENS**



SUPER 55 WIDE ANGLE FIELD ZOOM LENS

PJ55x9B IE 9-500mm 1:1.4



The extremely high performance levels of the "55xSuper" with its 9mm wide angle have been preferred over all other lenses in its class. This lens will now be appreciated even more in the 16:9 format.

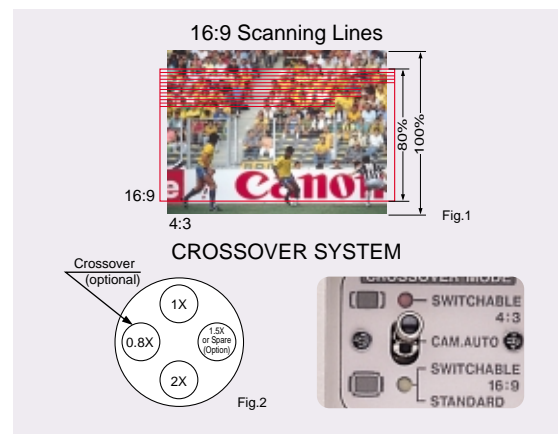
The new and improved "Super 55" can include Canon's optional "Crossover System" which accommodates for the loss of wide angle in the 4:3 mode in some of the dual aspect ratio switchable camera systems. The redesigned circuitry of the "Super 55" realizes improvements in RF noise protection and its improved mechanical design offers a modern look with easy accessibility for user friendly maintenance. Of course, the "Super 55" includes the best features of the 55xSuper like the superb wide angle of 9mm, the light weight of 18kg and the extremely sharp picture quality even at the telephoto side.

HIGH MTF PERFORMANCE

The next generation of 16:9 format has become more widespread world-wide. The height of the 16:9 format is 20% shorter than that of the current 4:3 format, thus the scanning lines are 20% greater (Fig.1). As a result, higher resolution is required for the 16:9 format. In order to achieve this, the SUPER55 provides the optimum balance of aberrations by Hi-UD glasses (High Index Ultra Low Dispersion glass) and Canon's unique fluorite. The SUPER55 succeeds in having the higher MTF performance, correspondent to 6MHz, necessary for the 16:9 format.

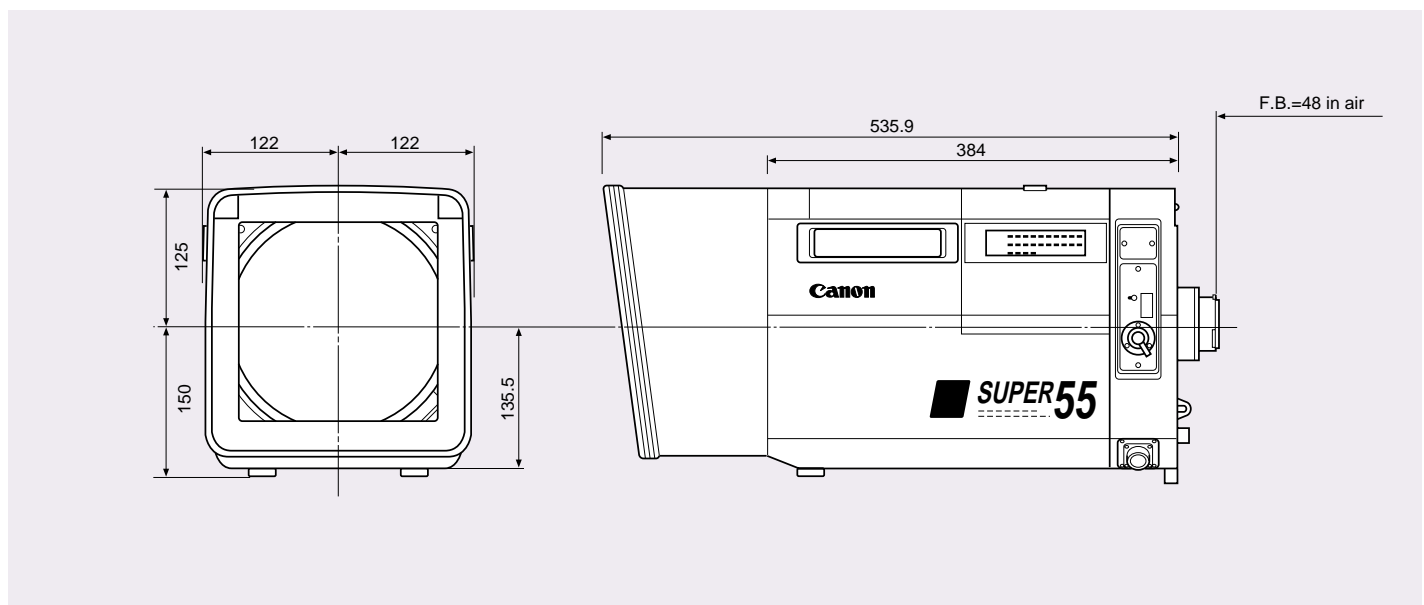
CANON "CROSSOVER" SYSTEM

All the Super series of lenses, including the new Super 55 are now optionally available with "CROSSOVER" compatibility. The 4 position extender turret incorporates a 0.8x "CROSSOVER" unit in addition to the normal extenders i.e. 1.0x, 1.5x, or 2.0x (Fig.2). When the CCD switches to the 4:3 mode, the extender turret rotates to the 0.8x position. The 0.8x "CROSSOVER" unit reduces the diameter from 11mm to 9mm thus shortening the focal length to produce an identical picture angle. In essence, the 0.8x "CROSSOVER" unit acts as a 1.0x extender for the switched 4:3 aspect ratio. Fig.3 shows the relation between focal length and the magnification of the extenders.



16:9 (dia 11mm)			4:3 (dia 9mm)		
Extender	Focal Length	F stop	Extender	Focal Length	F stop
0.8X			1.0X	7.4-407mm	1.4
1.0X	9-500mm	1.4	1.2X	9-500mm	1.4
2.0X	18-1000mm	2.8	2.4X	18-1000mm	2.8

Fig.3



ACCESS WINDOW FOR EASY MAINTENANCE

- Easy adjustment of lens functions (Built-in pattern projector, Iris gain) through a large-size window.



CROSSOVER COMPATIBILITY (Optional)

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

MACRO FUNCTION-M.O.D.=0.4M

EXCELLENT SERVO SYSTEM

- Faster and quieter servo system
- maximum speed zoom: 0.8 sec
- focus: 0.8 sec
- Low power consumption

4-POSITION TURRET

(built in extender, pattern projector, master lens, crossover unit).

- Micro Computer Controlled Turret.
- Built in Effect Filter available as option e.g Cross, Sunny, etc.

WIDE ANGLE OF 9MM WITH REDUCED DISTORTION (ZOOM RATIO:55X)

LATERAL CHROMATIC ABERRATION

- Full zoom range.....maximum=6 microns

HIGH AND FLAT MTF

- Realization of high contrast in all areas of the picture (center and corner)

PROTECTION FILTER (Optional)

COUNTERMEASURES AGAINST "GHOSTING" AND "FLARES"

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



VERSATILE ZOOM/FOCUS CONTROLLERS

(See figure on the next page)

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

COUNTERMEASURES AGAINST RADIO FREQUENCY NOISE (INTERFERENCE)

SERVO SYSTEM MATCHING ROBOTIC REQUIREMENTS

- High resolution zoom and focus servo - 12 bit repeatability

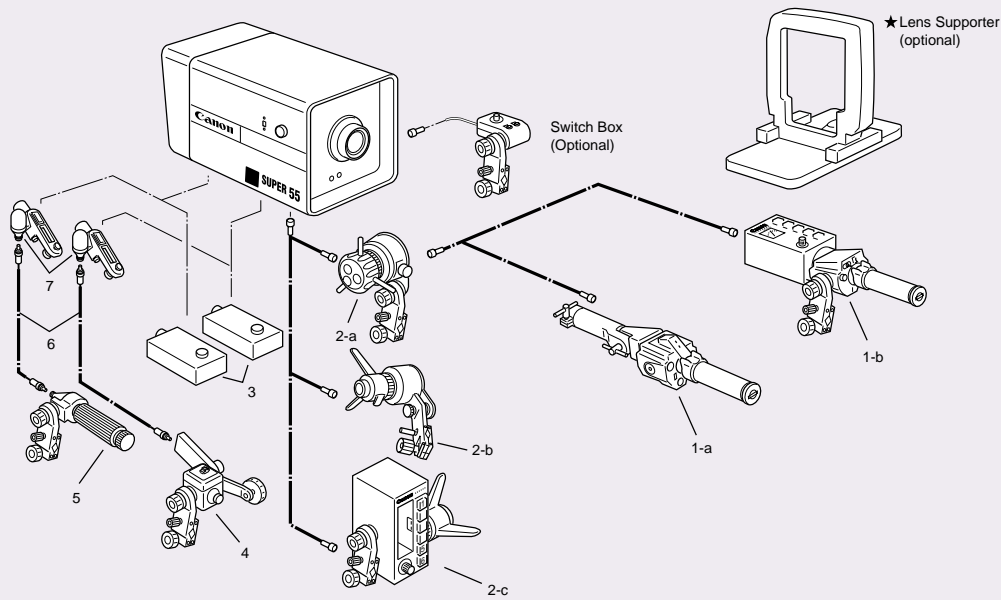
10 BIT IRIS COMPATIBILITY

- High resolution iris control

	NORMAL 4 : 3		16 : 9		SWITCHABLE 4 : 3 (with crossover unit)		
	1.0×	2.0×	1.0×	2.0×	1.0×	1.2×	2.4×
Built-in Extender	1.0×	2.0×	1.0×	2.0×	1.0×	1.2×	2.4×
Zoom Ratio	55×						
Range of Focal Length	9~500mm	18~1000mm	9~500mm	18~1000mm	7.4~407mm	9~500mm	18~1000mm
Maximum Relative Aperture	1:1.4 at 9-202mm 1:2.8 at 500mm	1:2.8 at 18-404mm 1:5.6 at 1000mm	1:1.4 at 9-202mm 1:2.8 at 500mm	1:2.8 at 18-404mm 1:5.6 at 1000mm	1:1.4 at 7.4-216mm 1:2.35 at 407mm	1:1.4 at 9-202mm 1:2.8 at 500mm	1:2.8 at 18-404mm 1:5.6 at 1000mm
Angular Field of View	52.1°×40.3°at 9mm 1.01°×0.76°at 500mm	27.5°×20.8°at 18mm 0.50°×0.38°at 1000mm	56.1°×33.4°at 9mm 1.10°×0.62°at 500mm	29.9°×17.1°at 18mm 0.55°×0.31°at 1000mm	52.1°×40.3°at 7.4mm 1.01°×0.76°at 407mm	43.6°×33.0°at 9mm 0.83°×0.62°at 500mm	22.6°×17.1°at 18mm 0.41°×0.31°at 1000mm
Minimum Object Distance (M.O.D.)	2.2m from front lens vertex (with macro M.O.D.:0.4m)						
Object Dimensions at M.O.D.	190×143cm at 9mm 3.4×2.6cm at 500mm	95×71cm at 18mm 1.7×1.3cm at 1000mm	207×117cm at 9mm 3.7×2.1cm at 500mm	103×58cm at 18mm 1.9×1.1cm at 1000mm	190×143cm at 7.4mm 3.4×2.6cm at 407mm	155×117cm at 9mm 2.8×2.1cm at 500mm	77×58cm at 18mm 1.4×1.1cm at 1000mm
Size	244(W)×260(H)×549(L)mm						
Weight (Approx)	18kg (39.7lbs)						
Built-in Pattern Projector	optionally available						

Note ; SUPER 55 for 1/2 inch cameras is also available.
For details , please contact Canon office.

LENS SYSTEM



NO.	DESCRIPTION	CODE	NO.	DESCRIPTION	CODE
1-a	Zoom Demand ZDJ-A01	BG2-5122	3	Servo Module SMJ-NO2	BG2-5205
1-b	Zoom Demand W/Shot Box ZPJ-A01	BG2-5529	4	Flexible Zoom Controller FZP-T61	BG2-1558
2-a	Focus Demand FDJ-I01	BG2-5001	5	Flexible Focus Controller FFP-T61	BG2-1557
2-b	Focus Demand FDJ-H01	BG2-5003	6	Flexible Cable 30"	
2-c	Focus Demand W/Shot Box FPJ-K02	BG2-5506	7	Flexible Module FMJ-452	BG2-5305

APPLICATION	OPERATION		COMPOSITION	
	ZOOM	FOCUS	ZOOM	FOCUS
Manual	Flexible Cable Drive	Flexible Cable Drive	4, 6, 7	5, 6, 7
Semi-Servo	Servo	Flexible	1, 3	5, 6, 7
Full-Servo	Servo	Servo	1, 3	2, 3

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Specifications subject to change without notice.

