

FUJINON



4K
ULTRA HD



Full line of FUJIFILM TV and Cine Lenses

- Covering sports, entertainment, news and filmmaking -

FUJINON Lenses have been highly acclaimed in the world of television broadcasting for many years. As a result of their ultra high quality optical technology and extensive range, Fujinon Lenses are also particularly well-suited for all types of movie production, sports, entertainment and news gathering.

As with all content acquisition lenses are the first point of entry for light. Now with the ever-increasing amount of 4K production for both television and movies, extremely high optical technologies and mobility are required as standard for this level of enhanced, high quality filming. With the advent of 4K broadcasting, we are further enhancing our high precision optical technologies, and are committed to our continued support of those on the front line and cutting edge of motion picture production.

FUJINON

Focused on the Future



FUJINON History of FUJINON TV Lens

1962			Started the research and development for TV lens.
1967	IF	Inner Focus	First inner focus system for TV broadcasting zoom lens.
1969	Super EBC	Electron Beam Coating	Electron Beam Coating dramatically improved zoom lens performance.
1973	CaF2	Calcium Fluorite	Adoption of calcium fluorite for correcting chromatic aberration for TV lens.
1978	EXT	Built in Extender	First built-in extender for ENG / EFP lens.
1986	FS	Floating System	Microcomputer digitally controlled inner floating lens group corrects field curvature and coma aberration for improved corner resolution.
1992	Vgrip	Variable Grip	Adoption of the variable angle servo grip for ENG / EFP lens reduces wrist fatigue.
1993	AT	Aspheric Lens	Patented glass molding process for aspherical lens elements revolutionized TV zoom lens technology.
1994	Find	Aspherical Technology	Computer controlled digital self diagnostics for Studio and Field lens for rapid trouble shooting and preventative maintenance of lens functions.
1995	Vformat	Variable Grip	Ratio converter maintains proper field of view on switchable 16:9⇄4:3 format cameras.
1996	AF	Auto Focus	First auto-focus ENG / EFP lens for professional use.
1997	AZ	Aspherical Technology	Improving on the optical performance mechanism and aspherical lenses.
1998	DIGITAL POWER	Digital Servo System	Utilization of Digital Technology provides control of zoom lens.
2000	Quickframe	Quick Frame	New zooming function for Quick Framing.
2001	OS-TECH	Optical Stabilized System	Utilization of Digital Technology provides control of zoom lens.
2002	HD CINE	FUJINON CINE Lens	2/3 HD CINE / First Cine Style Lens for digital cinema market.
2003	PF	PF	The latest focus assist system to support focus operation.
2009	PL MOUNT	PL Mount Premier Series	PL Mount / Released 35mm PL mount zoom lens used for both Film and Digital cinema cameras.
2015	4K ULTRA HD	4K Ultra HD	First 2/3" sensor 4K lens.

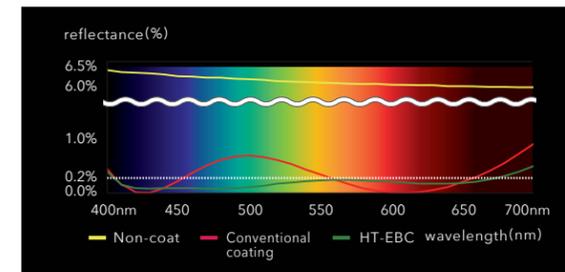
FUJINON Lens Technology

All large-diameter elements designed for broadcast lenses are the end result of our state of the art optical performance and high quality manufacturing technologies.



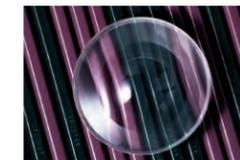
HT-EBC Coating (High Transmittance Electron Beam Coating)

HT-EBC (High Transmittance Electron Beam Coating) is the multi layer coating technology developed to enhance the many high performance lens elements used in broadcast lenses. Lenses with HT-EBC boast high transmittance and low reflectivity over a broad wavelength band. Thanks to the coating, flare and ghost are decreased and realizing high edge to edge transmittance.



Aspherical Lens

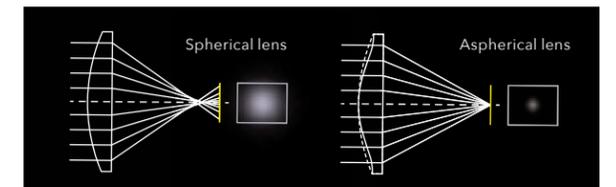
Aspherical lens developed by Fujifilm's own technology will suppress various aberrations such as distortion and spherical aberrations effectively.



Aspherical Lens image

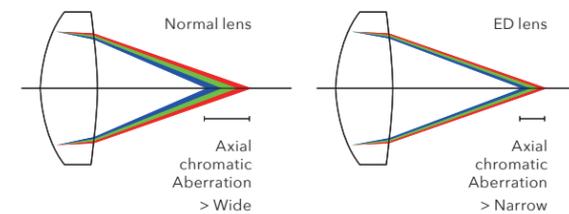


Metal mold for producing the aspherical lens



ED-Glass (Extra-Low Dispersion)

By employing ED Glass elements, it is possible to significantly reduce chromatic aberrations. In addition, the reduced chromatic aberration is consistent from the center to the edge producing a superior image with high contrast and sharpness.



Calcium Fluorite

It equipped fluorite which has high optical performance to broadcast lens. Contribute to suppress chromatic aberrations.

Design Concept

In addition, Fujifilm has employed ergonomic design principles for all operational parts based upon input from talented camera operators. All lenses are also designed to reduce the use of hazardous materials that could pollute the environment. One example is the use of eco-glass, which does not contain toxic substances.

Award of FUJINON Lens

Emmy Award

- 1996 Development of a TV Lens Adapted to CCD
- 2005 Developing High-Performance Lenses Adapted to Hi-Vision
- 2009 Precision Focus Technology



Technology for 8K

Fujifilm has been doing research and development for 8K Super Hi-Vision lenses. The Super Hi-Vision system offers an image beyond ultra high definition with 4,320 scanning lines and 33,000,000 pixels, 16 times that of the High-Vision system. A lens developed for Super Hi-vision must feature extremely high resolution as compared to current lenses. Current 4K High-Vision lenses can not meet the Super Hi-Vision resolution requirement.

Thanks not only to our optical design and production technology but also to our latest optical simulation programs and special materials; Fujifilm has been able to achieve 8K optical performance. At the same time, current lens operability is possible by minimizing the lens size and by employing an electronically controlled drive unit. Currently, the 8K Super Hi-Vision lenses being tested under real shooting conditions with plans for their future introduction.



FUJINON TV Lenses Lineup

4K UHD 2/3" Lenses

Horizontal Field of View (16:9)	94	62	59	56	48	9.3	3.1	0.8	0.6	0.6
Focal Length (mm) 2/3"	4.5	8	8.4	9	10.8	59	176	720	864	900
UA80x9	[Bar chart showing field of view for UA80x9]									
UA80x9 1.2x EXT	[Bar chart showing field of view for UA80x9 1.2x EXT]									
UA107x8.4	[Bar chart showing field of view for UA107x8.4]									
UA13x4.5	[Bar chart showing field of view for UA13x4.5]									
UA22x8	[Bar chart showing field of view for UA22x8]									

HD Studio/Field Lenses

Horizontal Field of View (16:9)	73	69	59	57	54	42	3.6	3.1	1.0	0.8	0.7	0.7	0.6	0.5	
Focal Length (mm) 2/3"	6.5	7	8.4	8.8	8.9	9.5	12.5	154	180	525	732	777	832	900	
XA22x7	[Bar chart showing field of view for XA22x7]														
HA27x6.5	[Bar chart showing field of view for HA27x6.5]														
XA55x9.5	[Bar chart showing field of view for XA55x9.5]														
XA77x9.5	[Bar chart showing field of view for XA77x9.5]														
XA88x8.8	[Bar chart showing field of view for XA88x8.8]														
XA88x12.5	[Bar chart showing field of view for XA88x12.5]														
XA99x8.4	[Bar chart showing field of view for XA99x8.4]														
XA101x8.9	[Bar chart showing field of view for XA101x8.9]														

2/3" HD ENG/EFP Lenses

Horizontal Field of View (16:9)	94	82	67	66	64	59	53	45	39	32	10	8.7	5.5	4.2	4.0	3.9	3.4	3.3	3.2	3.1	1.9	1.3	1.3	1.0		
Focal Length (mm) 2/3"	4.5	5.5	7.3	7.4	7.6	8.5	9.7	11.5	13.5	16.5	54	63	100	130	137	141	161	167	170	175	288	410	413	570		
HA14x4.5	[Bar chart showing field of view for HA14x4.5]																									
HA18x5.5	[Bar chart showing field of view for HA18x5.5]																									
HA18x7.6	[Bar chart showing field of view for HA18x7.6]																									
HA23x7.6	[Bar chart showing field of view for HA23x7.6]																									
HA19x7.4	[Bar chart showing field of view for HA19x7.4]																									
HA22x7.3	[Bar chart showing field of view for HA22x7.3]																									
HA25x11.5	[Bar chart showing field of view for HA25x11.5]																									
HA25x16.5	[Bar chart showing field of view for HA25x16.5]																									
HA42x9.7	[Bar chart showing field of view for HA42x9.7]																									
HA42x13.5	[Bar chart showing field of view for HA42x13.5]																									
ZA12x4.5	[Bar chart showing field of view for ZA12x4.5]																									
ZA17x7.6	[Bar chart showing field of view for ZA17x7.6]																									
ZA22x7.6	[Bar chart showing field of view for ZA22x7.6]																									
XA20sx8.5	[Bar chart showing field of view for XA20sx8.5]																									

SD Lenses

Horizontal Field of View (16:9)	53	39	1.3	1.0
Focal Length (mm) 2/3"	9.7	13.5	410	570
A42x9.7	[Bar chart showing field of view for A42x9.7]			
A42x13.5	[Bar chart showing field of view for A42x13.5]			

1/2" HD ENG Lenses

Horizontal Field of View (16:9)	93	82	65	58	12	9.3	4.2	3.2
Focal Length (mm) 1/2"	3.3	4	5.5	6.3	32	43	94	126
XS13x3.3	[Bar chart showing field of view for XS13x3.3]							
ZS17x5.5	[Bar chart showing field of view for ZS17x5.5]							
XS20sx6.3	[Bar chart showing field of view for XS20sx6.3]							

1/3" HD ENG Lenses

Horizontal Field of View (16:9)	64	60	58	3.9	3.9	3.2
Focal Length (mm) 1/3"	4.2	4.5	4.7	76	77	94
HTs18x4.2	[Bar chart showing field of view for HTs18x4.2]					
XT17sx4.5	[Bar chart showing field of view for XT17sx4.5]					
XT20sx4.7	[Bar chart showing field of view for XT20sx4.7]					

Technical Reference

Feature Indications

Mount Type

2/3" Bayonet 2/3" Bayonet Mount

Mount standard for 2/3" format cameras. Supply power through 12 pin connector.

1/2" Hot Shoe 1/2" Sony Hot Shoe Mount

Mount standard for 1/2" format cameras from SONY. Supply power through hot-shoe.

1/3" Bayonet 1/3" Bayonet Mount

Mount standard for 1/3" format cameras. Supply power through 12 pin connector.

Mechanical Features

IF Inner Focus System

Focusing by fixing the front lens and then moving the lens in the barrel back-and-forth. Provides a stable grip since the length of the lens is unchanged while focusing. In addition, since the front lens does not rotate while focusing, there is very little effect when using a Polarizing filter.

Quickframe Quick Frame

A system that allows manual zoom operation with the servo mode engaged.

Electrical Features

DIGIPOWER DIGIPOWER

Many new functions as well as very accurate lens movement are possible by employing a digital lens operating system. It allows for you for incredible control for every application.

QuickZoom Quick Zoom

High speed zoom (0.7 sec) to the full telephoto position by depressing one button for a focus check, when released, the lens goes back to the original focal length.

Virtual Virtual Connector

Interface to virtual systems by employing miniaturized, light weight high performance encoders.

Ext.Remote Extender Remote

Built-in motorized extender unit.

Serial Com Serial Communication

Serial data communications are possible with particular cameras. This function allows for smooth operation with those cameras.

PC PC Control

Lens control is possible when connected to a PC with the serial control system.

Optical Features

OS-TECH OS-TECH

Built-in Fujifilm own optical anti-vibration system. The OS-TECH system will correct vibration.

2x 2x Extender

Equipped with a built-in 2x extender

Macro Macro

Equipped with a Macro feature which allows focus closer than the lens MOD.

1.2x 1.2x Extender

Equipped with a built-in 1.2x extender

2.2x 2.2x Extender

Equipped with Fujifilm's exclusive 2.2x extender, allowing new shooting applications.

Other Features

RoHS RoHS

Meets international environmental regulations.

FUJINON Lens Model Explanation

Studio/Field Box Lenses

1 2 3 4 5 6 7 8 9
XA 99 x 8.4 B E SM - S 35 E

1	Camera Image Sensor Format	UA	2/3" Sensor Format
		XA	2/3" Sensor Format
		HA	2/3" Sensor Format
2	Zoom Ratio		
3	Wide End of Focal Length		
4	Bayonet Mount		
5	Extender	E	with Extender
6	Lens Control Type	SM	Servo / Manual Module Interchangeable
		S	Servo Only
7	Lens Type	S/T	Field Lens with OS-TECH
		F	Studio Lens
		D	Minibox Lens
8	Lens Mount	48/35	For Studio Standard Camera Mount (BTA Type)
		8/5	For Sony Camera Original Mount (Octagon Type)
9	Special Function	E	with 1.2x Extender

ENG / EFP Portable Lenses

1 2 3 4 5 6 7 8
H X A S 19 x 7.4 B E ZD RM - T K **

1	ENG / EFP Portable Lens Category	U	UHD Premier Series
		H	High Definition Premier Series
		Z	High Definition Select Series
		X	High Definition eXceed Series
		Non	Standard Definition
2	Camera Image Sensor Format	A	2/3" Sensor Format
		S	1/2" Sensor Format
		T	1/3" Sensor Format
3	Zoom Ratio		
4	Wide End of Focal Length		
5	Bayonet Mount		
6	Extender	E	with Extender
		Non	No Extender
7	Lens Control Type	RM	Zoom Servo, Focus Manual
		RD	Zoom Servo, Focus Servo
		ZD	Zoom Servo, Focus Servo, with Quick Frame
		MD	Remote Control
8	Drive Unit Type	M	Digital Drive Unit / Zoom Servo, Focus Manual
		S	Digital Drive Unit / Zoom Servo, Focus Servo
		F	Digital Drive Unit / Zoom Servo, Focus Servo, with Extender Remote
		U	Digital Drive Unit / Zoom Servo, Focus Servo, with OS-TECH
		G	Digital Drive Unit / Zoom Servo, Focus Servo, with OS-TECH, Extender Remote
		T	Digital Drive Unit / Zoom Servo, Focus Servo, with Quick Frame
		K	eXceed Drive Unit / Zoom Servo, Focus Manual
		DSD	Remote Control Drive Unit / Video Control (Zoom, Focus, Iris)

Television Lenses

Fujifilm has been engaged in the development and production of TV Lenses for over 50 years. FUJINON TV Lenses have supported image creation throughout the world with our own unique technologies such as, optical design development, advanced manufacturing capabilities and exceptional quality. All FUJINON lenses are intentionally designed keeping in mind the optical, mechanical and electronic requirements of visual creators. Making use of our highly accurate design, manufacturing and assembly skills, Fujifilm will continue to develop unique products, and answer the diverse needs of videographers worldwide.

Studio / Field Box Lenses

FUJINON's Studio / Field Lenses are essential for applications requiring the ultimate in control and optical quality. Our latest box lenses have advanced unique technologies, and they compliment various production styles. All FUJINON box zoom lenses can be utilized for large sporting events, entertainment and studio program production. Fujifilm will continue to develop products used in a wide-range of productions.



ENG / EFP Portable Lenses

Fujifilm offers a large variety of FUJINON Portable TV Lenses, each uniquely suited to every application. From a wide 4.5mm to a telephoto 1140mm focal length, more than 40 original lenses complete our product line. All FUJINON ENG / EFP Lenses are designed to fulfill the requirements and aspirations of visual creators.



4K
ULTRA HD

HD
HIGH-DEFINITION





4K
ULTRA HD

UA Series - 4K Ultra HD 2/3" Lenses for Broadcast -

The new Fujifilm flagship UA Series of 4K 2/3" lenses is the world-first for Ultra HD Broadcast applications. The UA Series delivers true 4K optical quality which is a hallmark our "ZK series" of Cine Lenses. The optical quality is based on large diameter aspherical elements designed by latest optical simulation system. Also, the lens achieves 4K UHD optical performance from center to corner throughout the zoom range while suppressing image distortion due to a newly developed zoom method.

FUJINON is blazing a trail in 4K imaging, with outstanding 4K optical performance.

Introducing the New Expanded 4K Broadcast Lens Lineup from FUJINON.

4K demands a higher dimension of performance, and the expanded FUJINON 4K broadcast lens lineup meets the challenge.

Extending the limits of "High Resolution", "High Contrast" and "High Dynamic Range", FUJINON's cutting-edge optical technology presents the next standard in optical performance - image quality that exceeds the high expectations of imaging professionals.



HIGH RESOLUTION

Crystal clear and crisp 4K image quality is achieved by using optical simulation technologies to reduce every kind of aberration to unprecedented low levels.



HIGH CONTRAST

Excellent 4K imaging quality of even distant detail is faithfully conveyed to the camera by elevating optical performance in the frequency bands that cover the most commonly viewed imaging.



HIGH DYNAMIC RANGE

High-fidelity transmittance of "blacks" to the camera is essential to imaging expression, and FUJINON achieves this with advanced optical material and the latest in lens coating technology. Transmittance is increased to achieve 4K class imaging expression rich in color gamut reproduction.

Reach the summit of 4K optical performance with FUJINON's state-of-the-art technologies

OPTICAL TECHNOLOGY

Minimal aberrations over the entire zoom range and extremely high contrast are achieved by our newly developed zoom approach and our floating focus system.

MANUFACTURING TECHNOLOGY

Advanced manufacturing technology enables ideal configuration and positioning of lens elements for optimized performance while ultra-high resolution is attained by nano-level precision polishing of the large-diameter aspherical lens elements.

CONTROL TECHNOLOGY

Boasting focusing control with 4 times the accuracy of a conventional lens system, the extreme focusing precision of FUJINON exceeds even the level demanded by 4K.

COATING TECHNOLOGY

4K imaging expression rich in color reproduction is realized by the increased red and blue transmittance ratio - a benefit of the HT-EBC coating with the highest transmittance and lowest reflectivity ratios possible.

4K Plus Premier Series

Flagship series with surpassing 4K optical performance



NEW



Model Name	UA80x9BESM	UA80x9BESM 1.2x EXT	UA22x8BERD
Focal Length	(1x)/(1.2x)/(2x) 9-720mm / 18-1440mm	9-720mm/10.8-864mm/18-1440mm	8.0-176mm / 16-352mm
Zoom Ratio	80 x	80 x	22 x
Extender	2 x	1.2 x 2 x	2 x
Maximum Relative Aperture (F-No.)	1:1.7 (9-350mm) 1:3.5 (720mm)	1:1.7 (9-350mm) 1:3.5 (720mm)	1:1.8 (8-124mm) 1:2.55 (176mm)
Minimum Object Distance (M.O.D.) from Front Lens	3.7m	3.7m	0.85m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 9mm 3303mm x 1856mm 720mm 43mm x 24mm	(1x) 9mm 3303mm x 1856mm 720mm 43mm x 24mm	(1x) 8mm 905mm x 509mm 176mm 43mm x 24mm
Angular Field of View 16:9 Aspect Ratio	(1x) 9mm 56° 6' x 33° 20' 720mm 0° 46' x 0° 26'	(1x) 9mm 56° 06' x 33° 20' 720mm 0° 46' x 0° 26'	(1x) 8mm 61° 52' x 37° 14' 176mm 3° 7' x 1° 45'
Filter Thread	-	-	M127x0.75 (Filter attaches to the lens hood)
Approx. Size	258 x 264 x 610mm	258 x 264 x 610mm	Φ110 x 241.5mm (ΦxLength)
Approx. Mass	23.5kg	23.5kg	2.55kg (without Lens Hood)
Features	B/S, IF, Macro, Visual, Serial Com, PC, OBT, 2x, RoHS	B/S, IF, Macro, Visual, Serial Com, PC, OBT, 2x, RoHS	B/S, IF, Macro, Visual, Serial Com, PC, 2x, RoHS



NEW

Model Name	UA13x4.5BERD
Focal Length	(1x)/(2x) 4.5-59mm / 9-118mm
Zoom Ratio	13 x
Extender	2 x
Maximum Relative Aperture (F-No.)	1:1.8 (4.5-41mm) 1:2.6 (59mm)
Minimum Object Distance (M.O.D.) from Front Lens	0.3m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 4.5mm 744mm x 418mm 59mm 54mm x 30mm
Angular Field of View 16:9 Aspect Ratio	(1x) 4.5mm 93° 38' x 61° 50' 59mm 9° 18' x 5° 14'
Filter Thread	M127x0.75 (Filter attaches to the lens hood)
Approx. Size	Φ95x 253mm (ΦxLength)
Approx. Mass	2.28kg (without Lens Hood)
Features	B/S, IF, Macro, Visual, Serial Com, PC, 2x, RoHS

4K Premier Series

Excellent 4K optical performance for versatile shooting scene



NEW

Model Name	UA107x8.4BESM
Focal Length	(1x)/(2x) 8.4-900mm / 16.8-1800mm
Zoom Ratio	107 x
Extender	2 x
Maximum Relative Aperture (F-No.)	1:1.7 (8.4-340mm) 1:4.5 (900mm)
Minimum Object Distance (M.O.D.) from Front Lens	3.05m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 8.4mm 3053mm x 1717mm 900mm 30mm x 17mm
Angular Field of View 16:9 Aspect Ratio	(1x) 8.4mm 59° 26' x 35° 35' 900mm 0° 37' x 0° 21'
Filter Thread	-
Approx. Size	258 x 264 x 610mm
Approx. Mass	23.9kg
Features	B/S, IF, Macro, Visual, Serial Com, PC, OBT, 2x, RoHS

Studio / Field Box Lenses



DIGIPOWER Digital Servo Technology for Studio/Field Zoom Lens

Quick Zoom

QUICKZOOM speed is 0.6sec from end to end. QUICKZOOM provides a rapid zoom movement to the telephoto position to check focus by the simple push of a switch. Releasing the button returns the lens to the previously selected zoom position. QUICKZOOM can be performed remotely from zoom rate demand units.



1. Frame your shot. Press Q+Z button.



2. Lens automatically zooms in. Check focus and release Q+Z button.



3. Lens zooms back to original frame in full focus.

Zoom / Focus 3 Fine Mode Select

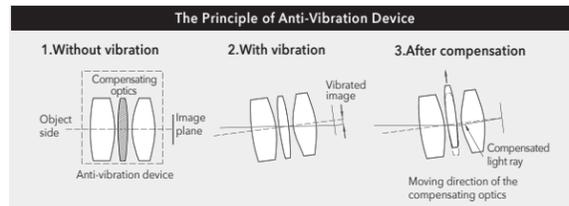
Zoom / Focus mode switch provides the option to change the zoom response from "normal" to more sensitive action.

One Shot Preset

Zoom and focus can be preset and memorized in advance at a selected position. One touch of the switch during shooting will instantly return to the memorized position for time saving production.

OS-TECH Optical Stabilized Technology

OS-TECH features "The Optical Shift System" where a shift correction signal is generated to optically compensate for vibration according to the amount of the movement detected. This system responds quickly and reduces the phenomenon to a minimum allowing for a natural looking image. The conveniently located control allows the operator to switch the anti-vibration system on and off.



Dust Proof and Anti-Fogging

All field lenses incorporate a fixed front element, which reduces dust contamination and serves as protection for the front focus group.

Automatic Compensation of Focus Breathing

This compensation mechanism enables the image size to remain constant when focusing by synchronizing the zoom movement to the focus movement, then reducing image size change when focusing.

FIND System

"FIND" is a self-diagnostic system to provide immediate analysis of the lens electronics systems. Installing software for DIGIPOWER in your PC allows a graphical user interface and provides improved diagnostic functions. In addition, the FIND system also works with portable lenses.

Virtual Connector

An interface connector which provides an output of lens positional data is conveniently located on FUJINON's latest box lenses for interface with virtual systems.



Advanced Back Focus

This system allows macro shooting as close as 0.3m (0.05m on HA27x6.5) from the object.

New Unique Zoom / Focus Demands for Studio and Field Lenses

The new digital zoom / focus demand series are designed to enhance usability and heighten ease of operation for DIGIPOWER studio and field lenses. The new demands continue to offer all conventional operability and DIGIPOWER features because the "AUX" switch can be assigned for customized functions, allowing operators to expand their capabilities.

Studio / Field Box Lenses



Model Name	XA55x9.5BESM	XA77x9.5BESM	XA88x12.5BESM
Focal Length (1x)/(2x)	9.5-525mm / 19-1050mm	9.5-732mm / 19.0-1464mm	12.5-1100mm / 25-2200mm
Zoom Ratio	55 x	77 x	88 x
Extender	2 x	2 x	2 x
Maximum Relative Aperture (F-No.)	1:1.7(9.5mm-308mm) 1:2.9(525mm)	1 : 1.7(9.5-335mm) 1 : 3.8(732mm)	1 : 2.3(12.5-477mm) 1 : 5.3(1100mm)
Minimum Object Distance (M.O.D.) from Front Lens	3.0m	2.7m	2.9m(12.5-200mm) 3.5m(201-1100mm)
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 9.5mm 2782 x 1564mm 525mm 51 x 29mm (2x) 19mm 1406 x 790mm 1050mm 26 x 15mm	(1x) 9.5mm 2425 x 1363mm 732mm 32 x 18mm (2x) 19.0mm 1241 x 697mm 1464mm 16 x 9mm	(1x) 12.5mm 2091 x 1175mm 1100mm 24 x 13mm (2x) 25mm 1046 x 588mm 2200mm 12 x 7mm
Angular Field of View 16:9 Aspect Ratio	(1x) 9.5mm 53°34' x 31°41' 525mm 1°03' x 0°35' (2x) 19mm 28°20' x 16°09' 1050mm 0°32' x 0°18'	(1x) 9.5mm 53°34' x 31°41' 732mm 0°45' x 0°25' (2x) 18.6mm 28°20' x 16°09' 1464mm 0°23' x 0°13'	(1x) 12.5mm 41°58' x 24°20' 1100mm 0°30' x 0°17' (2x) 25mm 21°43' x 12°18' 2200mm 0°15' x 0°08'
Approx. Size (HxWxL)	253 x 253 x 876mm	253 x 253 x 656.4mm	265 x 270 x 593mm
Approx. Mass	24.8kg	22.4kg	24.5kg
Features	2/3" HD, DIGIPOWER, Virtual, Serial Com, PC, OSTECH, 2X, RoHS		

*XA55x9.5BESM without lens supporter model is also available.



Model Name	XA99x8.4BESM	XA101x8.9BESM	XA22x7BES
Focal Length (1x)/(2x)	8.4-832mm / 16.8-1664mm	8.9-900mm / 17.8-1800mm	7-154mm / 14-308mm
Zoom Ratio	99 x	101 x	22 x
Extender	2 x	2 x	2 x
Maximum Relative Aperture (F-No.)	1 : 1.7(8.4-341mm) 1 : 4.15(832mm)	1 : 1.7(8.9-291mm) 1 : 4.7(900mm)	1 : 1.8(7-116mm) / 1 : 2.4(154mm)
Minimum Object Distance (M.O.D.) from Front Lens	2.9m	2.9m	0.8m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 8.4mm 2950 x 1658mm 832mm 31 x 17mm (2x) 16.8mm 1538 x 864mm 1664mm 16 x 9mm	(1x) 8.9mm 2865 x 1610mm 900mm 28 x 16mm (2x) 17.8mm 1433 x 805mm 1800mm 14 x 8mm	(1x) 7mm 1197 x 673mm 154mm 54 x 31mm (2x) 14mm 599 x 337mm 308mm 27 x 15mm
Angular Field of View 16:9 Aspect Ratio	(1x) 8.4mm 59°26' x 35°35' 832mm 0°40' x 0°22' (2x) 16.8mm 31°52' x 18°14' 1664mm 0°20' x 0°11'	(1x) 8.9mm 56°38' x 33°42' 900mm 0°37' x 0°21' (2x) 17.8mm 30°09' x 17°13' 1800mm 0°18' x 0°10'	(1x) 7mm 68°49' x 42°7' 154mm 3°34' x 2°0' (2x) 14mm 37°49' x 21°48' 308mm 1°47' x 1°0'
Approx. Size (HxWxL)	258 x 264 x 610mm	265 x 270 x 660mm	179 x 187 x 340mm
Approx. Mass	23.5kg	23.8kg	6.6kg
Features	2/3" HD, DIGIPOWER, Virtual, Serial Com, PC, OSTECH, 2X, RoHS		



Model Name	HA27x6.5BESM
Focal Length (1x)/(2x)	6.5-180mm / 13-360mm
Zoom Ratio	27 x
Extender	2 x
Maximum Relative Aperture (F-No.)	1 : 1.5(6.5-123mm) / 1 : 2.2(180mm)
Minimum Object Distance (M.O.D.) from Front Lens	0.6m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 6.5mm 1053 x 592mm 180mm 39 x 22mm (2x) 13mm 527 x 296mm 360mm 20 x 11mm
Angular Field of View 16:9 Aspect Ratio	(1x) 6.5mm 72°50' x 45°02' 180mm 3°03' x 1°43' (2x) 13mm 40°30' x 23°25' 360mm 1°32' x 0°51'
Approx. Size (HxWxL)	233 x 231 x 539mm
Approx. Mass	22.3kg
Features	2/3" HD, DIGIPOWER, Virtual, Serial Com, PC, 2X, RoHS

ENG / EFP Portable Lenses



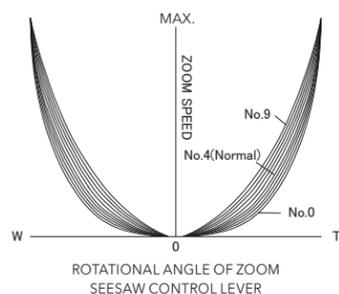
DIGIPOWER Digital Servo Technology for Studio/Field Zoom Lens

Auto Cruising Zoom

Pressing the C-Z button while zooming will set the zoom speed at that rate. Slightly pressing the seesaw switch a second time will return the zoom speed to normal.

Zoom Mode Select

The zoom mode switch provides the option to change the servo zoom response from "normal" to more sensitive at the wide or telephoto positions. With the 10-zoom mode feature for ENG / EFP lenses, the user can select the most suitable sensitivity for their production.



Zoom Limit

By using this function the zoom movement toward both the wide and telephoto side can be limited.

Zoom Maximum Speed Adjustment

The maximum zooming speed obtained when pressing the seesaw switch to the end can be adjusted.

Serial Digital Remote Control / PC Control

Remote control of zoom, focus and iris for DIGIPOWER is possible via serial digital link.

Quick Zoom

QUICKZOOM speed is 0.7sec, end to end. QUICKZOOM provides a rapid zoom movement, by the simple push of a button, to the full telephoto position in order to check focus. Releasing the button returns the lens to the original zoom position. The QUICKZOOM function can be performed either from the drive unit or remotely from the zoom rate demand controller.



Quick Frame (Optional)

Quick Frame allows for quick manual framing of a shot without the need to select the operation. Adjusting the zoom manually or automatically disengages the servo, which is then automatically re-engaged, when the manual zoom operation is stopped.



Virtual Connector

The DIGIPOWER drive unit now features built-in high resolution 16 bit encoders as standard for highly accurate positioning in some virtual studio, robotic and other applications.



OS-TECH External Optical Stabilized Technology

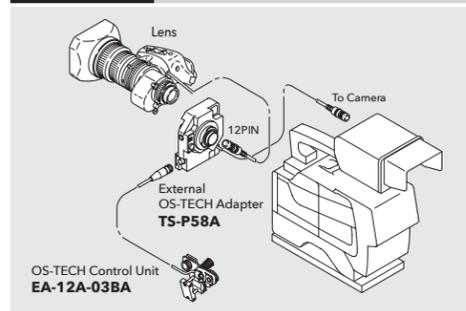
This feature optically compensates for image vibration by use of the optical shift system. In addition, the TS-P58A adapter provides stabilization for any applicable ENG lens.

Model Name	TS-P58A
Stabilization System	Optical Shift System
Magnification of Focal Length	1.25 ×
Power Consumption	DC12V, 4.2W (from Camera)
Approx. Size (HxWxL)	150 × 120 × 58mm
Approx. Mass	0.84kg
Applicable Lens	HA14x, HA16x, HA18x, HA19x, HA23x, HA25x, A42x



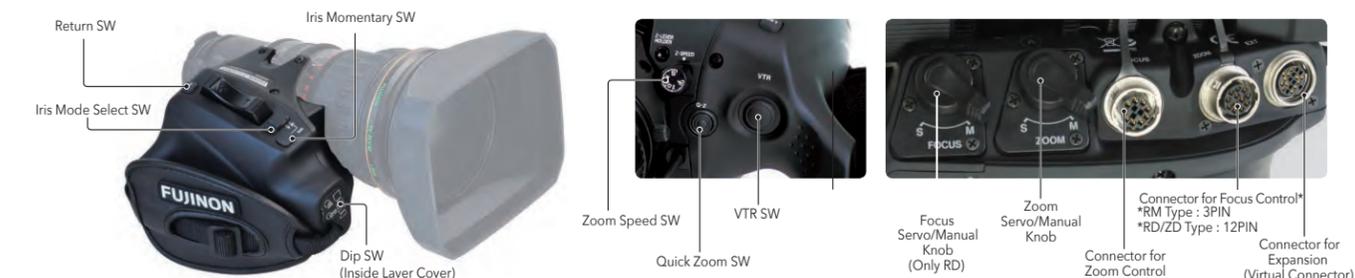
F-No. on the master lens becomes 1.25x.

For TS-P58A



OS-TECH Control Unit
EA-12A-03BA

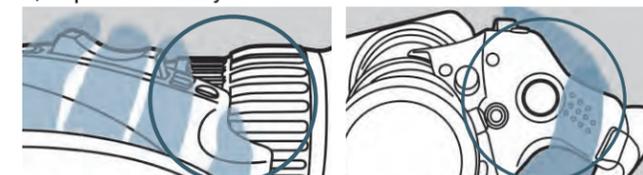
Digital Servo Grip



Ergonomic Design

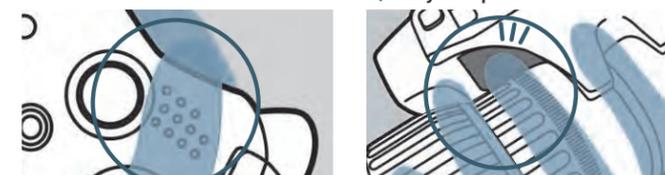
The beauty of our New Drive Grip is that it is focused on usability and comfort. We have worked closely with a number of talented camera operators and implemented their design input in the new drive grip. The grip features a comfortable feel and the controls are naturally placed making a seamless interface.

1) Improved Usability



The design features a place for the operator's pinky finger helping to make for an improved fit for the hand. The overall Grip design was developed for enhanced operator comfort.

2) Easy of Operation



A space was created as a thumb rest when not using the VTR switch and the handle area is increased to reduce right hand strain.

Left hand access to the focus ring has been improved for easier manual focus operation.

Energy Saving Design

The electronics in the new Grip achieve a 50% reduction (approx.) in standby current power and significant operational noise as compared to its predecessor.

Enhanced Motor Mechanism

The accuracy of the motors allow for extremely long and steady zooms. In addition, the precision of the drive exhibits minimal gear backlash.

PREMIER Series

Premier Series lenses are designed to complement and enhance the quality of HDTV systems. Great consideration in the design and development of these high-end HD lenses has been taken to incorporate the highest optical and mechanical specifications while ensuring unmatched performance in the most rugged and demanding of production environments.



Model Name	HA14x4.5BERM / BERD	HA18x5.5BERM / BERD	HA18x7.6BERM / BERD
Focal Length (1x)/(2x)	4.5-63mm / 9.9-139mm	5.5-100mm / 11-200mm	7.6-137mm / 15.2-274mm
Zoom Ratio	14 x	18 x	18 x
Extender	2.2 x	2 x	2 x
Maximum Relative Aperture (F-No.)	1 : 1.8 (4.5-41mm) / 1 : 2.8 (63mm)	1:1.8(5.5mm-62mm) / 1:2.9(100mm)	1 : 1.8 (7.6-103mm) / 1 : 2.4 (137mm)
Minimum Object Distance (M.O.D.) from Front Lens	0.3m	0.4m	0.6m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 4.5mm 743 x 418mm 63mm 51 x 29mm (2.2x) 9.9mm 329 x 185mm 139mm 24 x 13mm	(1x) 5.5mm 800 x 450mm 100mm 44 x 25mm (2x) 11mm 395 x 222mm 200mm 22 x 12mm	(1x) 7.6mm 696 x 392mm 137mm 41 x 23mm (2x) 15.2mm 362 x 204mm 274mm 21 x 12mm
Angular Field of View 16:9 Aspect Ratio	(1x) 4.5mm 93°38' x 61°50' 63mm 8°42' x 4°54' (2.2x) 9.9mm 51°41' x 30°27' 139mm 3°57' x 2°13'	(1x) 5.5mm 82°10' x 52°13' 100mm 5°29' x 3°05' (2x) 11mm 47°06' x 27°32' 200mm 2°45' x 1°33'	(1x) 7.6mm 64°30' x 39°03' 137mm 4°01' x 2°15' (2x) 15.2mm 35°01' x 20°07' 274mm 2°00' x 1°08'
Filter Thread	M127 x 0.75 (Filter attaches to the lens hood.)	M127 x 0.75 (Filter attaches to the lens hood.)	M82 x 0.75
Approx. Size (ØxLength)	Ø95 x 238.5mm	Ø95 x 240.5mm	Ø85 x 204mm
Approx. Mass (without Lens Hood)	2.08kg(RM) / 2.14kg(RD)	1.97kg(RM) / 2.05kg(RD)	1.62kg(RM) / 1.69kg(RD)
Features			
Option			



Model Name	HA19x7.4BERM / BERD	HA23x7.6BERM / BERD	HA22x7.3BERM / BERD
Focal Length (1x)/(2x)	7.4-141mm / 16.3-310mm	7.6-175mm / 15.2-350mm	7.3-161mm / 14.6-322mm
Zoom Ratio	19 x	23 x	22 x
Extender	2.2 x	2 x	2 x
Maximum Relative Aperture (F-No.)	1 : 1.8(7.4-98mm) / 1 : 2.6(141mm)	1 : 1.8 (7.6-122mm) / 1 : 2.65 (175mm)	1 : 1.9(7.3-113mm) / 1 : 2.7(161mm)
Minimum Object Distance (M.O.D.) from Front Lens	0.55m	0.8m	0.85m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 7.4mm 773 x 434mm 141mm 42 x 24mm (2.2x) 16.3mm 359 x 202mm 310mm 20 x 11mm	(1x) 7.6mm 915 x 514mm 175mm 41 x 23mm (2x) 15.2mm 473 x 266mm 350mm 21 x 12mm	(1x) 7.3mm 1222 x 687mm 161mm 55 x 31mm (2x) 14.6mm 609 x 342mm 322mm 28 x 16mm
Angular Field of View 16:9 Aspect Ratio	(1x) 7.4mm 65°53' x 40°01' 141mm 3°54' x 2°11' (2.2x) 16.3mm 32°49' x 18°48' 310mm 1°46' x 1°00'	(1x) 7.6mm 64°30' x 39°03' 175mm 3°08' x 1°46' (2x) 15.2mm 35°01' x 20°07' 350mm 1°34' x 0°53'	(1x) 7.3mm 66°36' x 40°32' 161mm 3°25' x 1°55' (2x) 14.6mm 36°22' x 20°55' 322mm 1°42' x 0°58'
Filter Thread	M95 x 1 / M107 x 1 (Filter attaches to the lens hood.)	M95 x 1 / M107 x 1 (Filter attaches to the lens hood.)	M127 x 0.75 (Filter attaches to the lens hood.)
Approx. Size (ØxLength)	Ø100 x 239.5mm	Ø100 x 223.6mm	Ø110 x 287.3mm
Approx. Mass (without Lens Hood)	2.21kg(RM) / 2.28kg(RD)	1.88kg(RM) / 1.95kg(RD)	3.15kg(RM) / 3.22kg(RD)
Features			
Option			



Model Name	HA25x11.5BERD	HA25x16.5BERD	HA42x9.7BERD	HA42x13.5BERD
Focal Length (1x)/(2x)	11.5-288mm / 23-576mm	16.5-413mm / 33-826mm	9.7-410mm / 19.4-820mm	13.5-570mm / 27-1140mm
Zoom Ratio	25 x	25 x	42 x	42 x
Extender	2 x	2 x	2 x	2 x
Maximum Relative Aperture (F-No.)	1 : 2 (11.5-206mm) / 1 : 2.8 (288mm)	1 : 2.8 (16.5-289mm) / 1 : 4 (413mm)	1 : 2 (9.7-225mm) / 1 : 3.7 (410mm)	1 : 2.8 (13.5-307mm) / 1 : 5.2 (570mm)
Minimum Object Distance (M.O.D.) from Front Lens	2.2m	2.2m	2.8m	2.8m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 11.5mm 1740 x 978mm 288mm 70 x 39mm (2x) 23mm 870 x 489mm 576mm 35 x 20mm	(1x) 16.5mm 1213 x 682mm 413mm 49 x 27mm (2x) 33mm 606 x 341mm 826mm 24 x 14mm	(1x) 9.7mm 2619 x 1472mm 410mm 64 x 36mm (2x) 19.4mm 1339 x 753mm 820mm 33 x 19mm	(1x) 13.5mm 1888 x 1061mm 570mm 45 x 25mm (2x) 27mm 944 x 530mm 1140mm 22 x 13mm
Angular Field of View 16:9 Aspect Ratio	(1x) 11.5mm 45°16' x 26°23' 288mm 1°54' x 1°04' (2x) 23mm 23°33' x 13°22' 576mm 0°57' x 0°32'	(1x) 16.5mm 32°25' x 18°33' 413mm 1°20' x 0°45' (2x) 33mm 16°32' x 9°20' 826mm 0°40' x 0°22'	(1x) 9.7mm 52°37' x 31°03' 410mm 1°20' x 0°45' (2x) 19.4mm 27°46' x 15°49' 820mm 0°40' x 0°23'	(1x) 13.5mm 39°07' x 22°35' 570mm 0°58' x 0°33' (2x) 27mm 20°08' x 11°24' 1140mm 0°29' x 0°16'
Filter Thread	M107 x 1 / M127 x 0.75 (Filter attaches to the lens hood.)	M107 x 1 / M127 x 0.75 (Filter attaches to the lens hood.)	M127 x 0.75	M127 x 0.75
Approx. Size (ØxLength)	Ø110 x 265mm	Ø110 x 278mm	Ø130 x 338.5mm	Ø130 x 358.5mm
Approx. Mass (without Lens Hood)	2.81kg	2.9kg	5.3kg	5.4kg
Features				
Option				

SELECT Series

Select Series lenses are designed to meet the high performance needs of the next generation of cost-effective high performance HD camera systems. Fujifilm's unique Select Series concept for HDTV lenses was directly derived from our high-end Premier Series technology.



Model Name	ZA12x4.5BERM / BERD	ZA17x7.6BERM / BERD	ZA22x7.6BERM / BERD
Focal Length (1x)/(2x)	4.5-54mm / 9-108mm	7.6-130mm / 15.2-260mm	7.6-167mm / 15.2-334mm
Zoom Ratio	12 x	17 x	22 x
Extender	2 x	2 x	2 x
Maximum Relative Aperture (F-No.)	1 : 1.8 (4.5-41mm) / 1 : 2.4 (54mm)	1 : 1.8 (7.6-102mm) / 1 : 2.3 (130mm)	1 : 1.8 (7.6-120mm) / 1 : 2.5 (167mm)
Minimum Object Distance (M.O.D.) from Front Lens	0.3m	0.6m	0.8m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 4.5mm 757 x 425mm 54mm 59 x 33mm (2x) 9mm 373 x 210mm 108mm 31 x 17mm	(1x) 7.6mm 696 x 392mm 130mm 43 x 24mm (2x) 15.2mm 362 x 204mm 260mm 22 x 12mm	(1x) 7.6mm 915 x 514mm 167mm 43 x 24mm (2x) 15.2mm 473 x 266mm 334mm 22 x 12mm
Angular Field of View 16:9 Aspect Ratio	(1x) 4.5mm 93°38' x 61°50' 54mm 10°09' x 5°43' (2x) 9mm 56°06' x 33°20' 108mm 5°05' x 2°52'	(1x) 7.6mm 64°30' x 39°03' 130mm 4°13' x 2°23' (2x) 15.2mm 35°01' x 20°07' 260mm 2°07' x 1°11'	(1x) 7.6mm 64°30' x 39°03' 167mm 3°17' x 1°51' (2x) 15.2mm 35°01' x 20°07' 334mm 1°39' x 0°55'
Filter Thread	M127 x 0.75 (Filter attaches to the lens hood.)	M82x0.75	M95x1 / M107x1 (Filter attaches to the lens hood.)
Approx. Size (ØxLength)	Ø95 x 237.5mm	Ø85 x 204mm	Ø100 x 220.4mm
Approx. Mass (without Lens Hood)	2.0kg (RM) / 2.07kg (RD)	1.67kg (RM) / 1.74kg (RD)	1.85kg (RM) / 1.92kg (RD)
Features			

eXceed Series

eXceed series lenses are designed to complement a new generation of cost-effective HD camera systems, extracting the most performance with the greatest value.



Model Name	XA20sx8.5BERM	XA20sx8.5BERM
Focal Length (1x)/(2x)	8.5-170mm / -	8.5-170mm / 17-340mm
Zoom Ratio	20 x	20 x
Extender	-	2 x
Maximum Relative Aperture (F-No.)	1 : 1.8 (8.5-113mm) / 1 : 2.7 (170mm)	1 : 1.8 (8.5-113mm) / 1 : 2.7 (170mm)
Minimum Object Distance (M.O.D.) from Front Lens	0.9m	0.9m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 8.5mm 910 x 511mm 170mm 47 x 26mm (2x) -	(1x) 8.5mm 910 x 511mm 170mm 47 x 26mm (2x) 17mm 469 x 264mm 340mm 24 x 13mm
Angular Field of View 16:9 Aspect Ratio	(1x) 8.5mm 58°51' x 35°11' 170mm 3°14' x 1°49' (2x) -	(1x) 8.5mm 58°51' x 35°11' 170mm 3°14' x 1°49' (2x) 17mm 31°30' x 18°01' 340mm 1°37' x 0°54'
Filter Thread	M82 x 0.75	M82 x 0.75
Approx. Size (ØxLength)	Ø85 x 180.8mm	Ø85 x 200.8mm
Approx. Mass (without Lens Hood)	1.5kg	1.6kg
Features		

*1: It is necessary to set lens up to use Quick Zoom function.

SDTV LENSES



Model Name	A42x9.7BERD	A42x13.5BERD
Focal Length (1x)/(2x)	9.7-410mm / 19.4-820mm	13.5-570mm / 27-1140mm
Zoom Ratio	42 x	42 x
Extender	2 x	2 x
Maximum Relative Aperture (F-No.)	1 : 2.0 (9.7-225mm) / 1 : 3.7 (410mm)	1 : 2.8 (13.5-307mm) / 1 : 5.2 (570mm)
Minimum Object Distance (M.O.D.) from Front Lens	2.8m	2.8m
Object Dimensions at M.O.D. 4:3 Aspect Ratio	(1x) 9.7mm 2404 x 1803mm 410mm 58 x 44mm (2x) 19.4mm 1229 x 922mm 820mm 30 x 23mm	(1x) 13.5mm 641 x 481mm 570mm 37 x 28mm (2x) 27mm 333 x 249mm 1140mm 19 x 14mm
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 9.7mm 2619 x 1472mm 410mm 64 x 36mm (2x) 19.4mm 1339 x 753mm 820mm 33 x 19mm	(1x) 13.5mm 1888 x 1061mm 570mm 45 x 25mm (2x) 27mm 944 x 530mm 1140mm 22 x 13mm
Angular Field of View 4:3 Aspect Ratio	(1x) 9.7mm 48°48' x 37°35' 410mm 1°14' x 0°55' (2x) 19.4mm 25°33' x 19°18' 820mm 0°37' x 0°28'	(1x) 13.5mm 36°06' x 27°28' 570mm 0°53' x 0°40' (2x) 27mm 18°31' x 13°56' 1140mm 0°27' x 0°20'
Angular Field of View 16:9 Aspect Ratio	(1x) 9.7mm 52°37' x 31°03' 410mm 1°20' x 0°45' (2x) 19.4mm 27°46' x 15°49' 820mm 0°40' x 0°23'	(1x) 13.5mm 39°07' x 22°35' 570mm 0°58' x 0°33' (2x) 27mm 20°08' x 11°24' 1140mm 0°29' x 0°16'
Filter Thread	M127 x 0.75	M127 x 0.75
Approx. Size (ØxLength)	Ø130 x 337.5mm	Ø130 x 357.5mm
Approx. Mass (without Lens Hood)	5.3kg	5.4kg
Features		
Option		

1/2" Series

SELECT Series



eXceed Series



HD HIGH-DEFINITION 1/2"

Model Name	XS13x3.3BRM	ZS17x5.5BERM	XS20sx6.3BRM
Focal Length (1x)/(2x)	3.3–43mm / –	5.5–94mm / 11–188mm	6.3–126mm / –
Zoom Ratio	13 x	17 x	20 x
Extender	–	2 x	–
Maximum Relative Aperture (F-No.)	1 : 1.4 (3.3–32mm) / 1 : 1.9 (43mm)	1 : 1.4 (5.5–77mm) / 1 : 1.7 (94mm)	1 : 1.4 (6.3–88mm) / 1 : 2.0 (126mm)
Minimum Object Distance (M.O.D.) from Front Lens	0.3m	0.6m	0.9m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 3.3mm 752 x 423mm 43mm 54 x 30mm	(1x) 5.5mm 692 x 389mm 94mm 42 x 24mm	(1x) 6.3mm 904 x 508mm 126mm 47 x 26mm
Angular Field of View 16:9 Aspect Ratio	(1x) 3.3mm 93°07' x 61°25' 43mm 9°16' x 5°13'	(1x) 5.5mm 64°43' x 39°14' 94mm 4°15' x 2°23'	(1x) 6.3mm 57°54' x 34°34' 126mm 3°10' x 1°47'
Filter Thread	M127 x 0.75 (Filter attaches to the lens hood.)	M82 x 0.75	M82 x 0.75
Approx. Size (ØxLength)	Ø95 x 240.5mm	Ø85 x 206.6mm	Ø85 x 181.9mm
Approx. Mass (without Lens Hood)	1.93kg	1.67kg	1.4kg (RM)
Features	1/2" HD, I/F, 4K/30FPS, Video, Serial Com, PC, Macro, RoHS	1/2" HD, I/F, 4K/30FPS, Video, Serial Com, PC, 2X, Macro, RoHS	1/2" HD, I/F, QuickZoom, Serial Com, Macro, RoHS

1/3" Series

PREMIER Series



eXceed Series



HD HIGH-DEFINITION 1/3"

Model Name	HTs18x4.2BERM	XT17sx4.5BRM	XT20sx4.7BRM
Focal Length (1x)/(2x)	4.2–76mm / 8.4–152mm	4.5–77mm / –	4.7–94mm / –
Zoom Ratio	18 x	17 x	20 x
Extender	2 x	–	–
Maximum Relative Aperture (F-No.)	1 : 1.4 (4.2–76mm) / 1 : 2.8 (8.4–152mm)	1 : 1.6 (4.5–77mm)	1 : 1.4 (4.7–88mm) / 1 : 1.5 (94mm)
Minimum Object Distance (M.O.D.) from Front Lens	0.6m	0.95m	0.9m
Object Dimensions at M.O.D. 16:9 Aspect Ratio	(1x) 4.2mm 697 x 392mm 76mm 41 x 23mm	(1x) 4.5mm 999 x 562mm 77mm 60 x 34mm	(1x) 4.7mm 901 x 506mm 94mm 47 x 26mm
Angular Field of View 16:9 Aspect Ratio	(1x) 4.2mm 63°49' x 38°35' 76mm 3°56' x 2°13'	(1x) 4.5mm 60°19' x 36°11' 77mm 3°53' x 2°11'	(1x) 4.7mm 58°11' x 34°44' 94mm 3°11' x 1°48'
Filter Thread	M82 x 0.75	M82 x 0.75	M82 x 0.75
Approx. Size (ØxLength)	Ø85 x 214.1mm	Ø85 x 175.6mm	Ø85 x 189.8mm
Approx. Mass (without Lens Hood)	1.66kg	1.28kg	1.48kg
Features	1/3" HD, I/F, 4K/30FPS, Video, Serial Com, PC, 2X, Macro, RoHS	1/3" HD, I/F, QuickZoom, Macro, RoHS	1/3" HD, I/F, QuickZoom, Macro, RoHS

*1: It is necessary to set up the lens to use Quick Zoom function.

Remote Control Lenses



FUJINON Videoconferencing series offer a complete line of remote control lenses from wide to telephoto. FUJINON Videoconferencing lenses are ideal for a wide variety of applications.

HD HIGH-DEFINITION 2/3"

Model Name	ZA12x4.5BEMD	ZA17x7.6BEMD	ZA22x7.6BEMD
Focal Length (1x)/(2x)	4.5–54mm / 9–108mm	7.6–130mm / 15.2–260mm	7.6–167mm / 15.2–334mm
Zoom Ratio	12 x	17 x	22 x
Extender	2 x	2 x	2 x
Maximum Relative Aperture (F-No.)	1 : 1.8(4.5–41mm) 1 : 2.4(54mm)	1 : 1.8(7.6–102mm) 1 : 2.3(130mm)	1 : 1.8(7.6–120mm) 1 : 2.5(167mm)
Minimum Object Distance (M.O.D.)	0.3m	0.6m	0.8m
Macro	Standard	Standard	Standard
Filter Thread	M127 x 0.75 (Filter attaches to the lens hood.)	M82 x 0.75	M95x1 / M107x1 (Filter attaches to the lens hood.)
Approx. Size (ØxLength)	Ø95 x 237.5mm	Ø85 x 204mm	Ø100x220.4mm
Approx. Mass (without Lens Hood)	1.96kg	1.68kg	1.81kg



HD HIGH-DEFINITION

Model Name	XA20sx8.5BEMD	XA20sx8.5BEMD	XT17sx4.5BEMD
Focal Length (1x)/(2x)	8.5–170mm / –	8.5–170mm / 17–340mm	4.5–77mm / –
Zoom Ratio	20 x	20 x	17 x
Extender	–	2 x	–
Maximum Relative Aperture (F-No.)	1:1.8(8.5–113mm) 1:2.7(170mm)	1:1.8(8.5–113mm) 1:2.7(170mm)	1 : 1.6(4.5–77mm)
Minimum Object Distance (M.O.D.)	0.9m	0.9m	0.95m
Macro	Standard	Standard	Standard
Filter Thread	M82x0.75	M82x0.75	M82 x 0.75
Approx. Size (ØxLength)	Ø85x200.8mm	Ø85x200.8mm	Ø85 x 175.6mm
Approx. Mass (without Lens Hood)	1.47kg	1.55kg	1.38kg

Cine Lenses

Fujifilm has been developing the FUJINON Digital Cine Lens Series since 2002. We not only are making excellent use of our optical, mechanical, and electronic knowledge which have been cultivated in the broadcast lens field, but we also have enhanced those technologies to achieve superb Cine Lenses. FUJINON Cine Lenses allow cinematographers to explore the possibility of creating new images around the world that represent the broad range of human emotions.

FUJINON
4K
CINE LENSES



HK 4K Plus Premier Series

Fujifilm engineers exhaustively developed the 4K+ PL mount HK Premier Zoom series utilizing our expertise and knowledge gained from the lens design process honed over many years. The contrast performance is rich, the resolution - superb. The net results are lenses with excellent overall balance.



ZK 4K Premier Cabrio Series

The ZK Series features a unique detachable servo drive unit*. With the drive unit, these lenses operate like traditional ENG TV lenses thanks to the same interface and accessories familiar to TV lens users. On the other hand, with the drive unit removed, this lens has standard 0.8 cine gearing, allowing for the use of traditional third party cine accessories.

*High Zoom Ratio lens Servo Drive Unit is optionally available.



XK 4K Premier Cabrio Series

XK Series also equip operational features of ZK Series. The lens offers 4K optical performance and covers a wide range of focal length from 20mm to 120mm. It also realizes T3.5 brightness in the entire zoom range. Various scenes can be shot with this single lens.



4K Ultimate Optical Performance Lenses for Cinema Production

FUJINON Cine Lenses are developed to cover the "Super 35mm" image sensor that is used today in almost all current digital cinema cameras. Special low dispersion glass, as well as high refractive index glass, are arranged to achieve the best optical balance. The zoom mechanism suppresses aberrations from the WIDE side to the TELE end by adopting our exclusive floating method. These PL mount lenses feature a special HT-EBC multi layer coating technology to reduce flare and ghosts improving image quality. In addition, the contrast performance is rich with a superb 4K resolution. The net result is a lens series with excellent overall balance.

9-Blade Iris for Natural Bokeh

In order to improve the depiction of a more natural out of focus image and a nearly perfect round shape of the aperture, FUJINON PL mount cine lenses have an optimal 9-blade iris. Images of bright objects, not in critical focus, will look more natural and pleasing to the eye.



Detachable Digital Servo Grip*

ZK Series lenses feature an advanced "Detachable" drive unit, a first in the Light Weight Zoom category. These lenses feature hybrid technologies from both our broadcast and cine lenses.

With the drive unit attached, these lenses can be operated like traditional ENG TV lenses thanks to the same interface and accessories. This is exceptionally helpful in simplifying and reducing set up time. Therefore, it is not necessary to use more complicated cine lens drive systems.

* Mounted as standard in ZK2.5x14, ZK4.7x19, ZK3.5x85 and XK6x20; optional on the ZK12x25.



Cinema style

Broadcast style

Mechanical design for good manual operability

FUJINON Cine lenses are designed by emphasizing good manual operability.

- Operation is smooth with free of torque changes and jerkiness.
- Smooth focusing with no torque variation or friction helps accurate focus adjustment
- The gear rings for focus, zoom and iris adjustment have a pitch of 0.8mm, the same as existing FUJINON cine lenses, for compatibility with standard cine accessories.
- An original universal font for markings offers excellent visibility in any shooting situation.
- Available with feet or metric scale.



HK 4K Plus Premier Series

Horizontal Field of View (16:9)	79	67	53	29	18	16	7.4	3.2
Focal Length S35mm Format*	14.5	18	24	45	75	85	180	400
Focal Length 2/3" Format	5.8	7.2	9.6	18	30	34	72	160
HK3.1x14.5	[Bar chart showing field of view for HK3.1x14.5]							
HK4.7x18	[Bar chart showing field of view for HK4.7x18]							
HK7.5x24	[Bar chart showing field of view for HK7.5x24]							
HK5.3x75	[Bar chart showing field of view for HK5.3x75]							

*Sensor size : 24.0 x 13.5

ZK 4K Premier Cabrio Series

Horizontal Field of View (16:9)	89	72	58	43	18	17	5	
Focal Length S35mm Format*	14	19	25	35	85	90	300	
Focal Length 2/3" Format	4.9	6.6	8.7	12.2	29.7	31.4	104	
ZK12x25	[Bar chart showing field of view for ZK12x25]							
ZK2.5x14	[Bar chart showing field of view for ZK2.5x14]							
ZK4.7x19	[Bar chart showing field of view for ZK4.7x19]							
ZK3.5x85	[Bar chart showing field of view for ZK3.5x85]							

*Sensor size : 27.45 x 15.44

XK 4K Premier Cabrio Series

Horizontal Field of View (16:9)	63	11
Focal Length S35mm Format*	20	120
Focal Length 2/3" Format	7.7	46.3
XK6x20	[Bar chart showing field of view for XK6x20]	

*Sensor size : 24.84 x 13.97

Power supply

The power for the servo drive unit is available via a hot-shoe mount or external power supply.*1

For the external power supply, you can connect to the camera (12 pin) or power-supply box (XLR 4 pin / D-tap) by optional cables.

Equipped 16 bit encoder

16bit encoder provides accurate information of zoom, focus and iris settings, which matches high precision virtual systems.

Lens-data communication system

FUJINON Cine lenses support ARRI LDS system and Cooke /i Technology, which are widely employed in cinema cameras. It allows users to transmit the data of the lens position to the camera and thus to enhance the efficiency of operation.*2

*1: Power supply for the lens varies according to the type of camera.

*2: Lens-data communication system is available with the drive unit attached. Cameras need to be compatible with the communication system.

Compatible with the existing operation accessories

FUJINON Cine lenses can be used with existing wired zoom and focus demands for control, which offers the operability equivalent to conventional TV camera lenses.



ZK/XK series switch for activating the driving unit

Upper side switch

- (1) Quick Zoom ON/OFF switch
- (2) VTR-Quick Zoom switch
- (3) Return-Quick Zoom switch
- (4) Iris default setting for Auto-Manual switch
- (5) Auto-cruising Zoom ON/OFF switch
- (6) Back-up switch
- (7) Iris A-M position selector switch
- (8) Back-up switch

Lower side switch

- (1) Camera communication ON/OFF switch
- (2) Camera communication method selector switch (ON: ARRI LDS; OFF: Cooke /i)
- (3) Analog Zoom Demand and Zoom Mode function ON/OFF switch
- (4) Back-up switch

*The power supply for running the servo drive unit of the ZK series lens varies depending on the camera to be attached.

HK 4K Plus Premier Series



Model Name	HK3.1x14.5	HK4.7x18
Application	35mm PL Mount Camera	35mm PL Mount Camera
Focal Length	14.5–45mm	18–85mm
Zoom Ratio	3.1 x	4.7 x
T-No.	T2.0	T2.0
Iris Blades	9	9
M.O.D.from Image Planes	0.71m / 2'4"	0.82m / 2'8"
Object Dimensions at M.O.D. 1.78 : 1 Aspect Ratio*	14.5mm 693 x 390mm 45mm 215 x 121mm	18mm 656 x 369mm 85mm 139 x 78mm
Angular Field of View 1.78 : 1 Aspect Ratio*	14.5mm 79°13' x 49°56' 45mm 29°52' x 17°04'	18mm 67°23' x 41°07' 85mm 16°04' x 9°05'
Focus Rotation	280°	280°
Zoom Rotation	160°	160°
Approx. Size (ØxLength)	Ø136 x 310mm	Ø136 x 352mm
Approx. Mass	6.5kg	7.0kg

*Sensor Size : 24.0 x 13.5 mm



Model Name	HK7.5x24	HK5.3x75
Application	35mm PL Mount Camera	35mm PL Mount Camera
Focal Length	24–180mm	75–400mm
Zoom Ratio	7.5 x	5.3 x
T-No.	T2.6	T2.8(75-290mm) T3.8(400mm)
Iris Blades	9	9
M.O.D.from Image Planes	1.24m / 4'1"	2m / 6'7"
Object Dimensions at M.O.D. 1.78 : 1 Aspect Ratio*	24mm 924 x 520mm 180mm 119 x 67mm	75mm 580 x 326mm 400mm 113 x 64mm
Angular Field of View 1.78 : 1 Aspect Ratio*	24mm 53°08' x 31°25' 180mm 07°38' x 4°18'	75mm 18°11' x 10°17' 400mm 3°26' x 1°56'
Focus Rotation	280°	280°
Zoom Rotation	160°	160°
Approx. Size (ØxLength)	Ø136 x 405mm	Ø136 x 444mm
Approx. Mass	8.9kg	9.1kg

*Sensor Size : 24.0 x 13.5 mm

ZK 4K Premier Cabrio Series



Model Name	ZK12x25	ZK2.5x14
Application	35mm PL Mount Camera	35mm PL Mount Camera
Focal Length	25–300mm	14–35mm
Zoom Ratio	12 x	2.5 x
T-No.	T3.5(25-273mm) T3.85(300mm)	T2.9
Iris Blades	9	9
M.O.D.from Image Planes	1.2m / 3'11"	0.6m / 2'
Object Dimensions at M.O.D. 1.78 : 1 Aspect Ratio*	25mm 937 x 527mm 300mm 77 x 43mm	14mm 701 x 394mm 35mm 275 x 155mm
Angular Field of View 1.78 : 1 Aspect Ratio*	25mm 57°32' x 34°19' 300mm 5°14' x 2°57'	14mm 88°52' x 57°45' 35mm 42°49' x 24°53'
Focus Rotation	280°	200°
Zoom Rotation	120°	120°
Approx. Size (ØxLength)	Ø136 x 401mm	Ø114 x 231mm
Approx. Mass	8.4Kg (without optional Drive Unit)	2.9kg (with Drive Unit) / 2.4kg (without Drive Unit)

*Sensor Size : 27.45x15.44



Model Name	ZK4.7x19	ZK3.5x85
Application	35mm PL Mount Camera	35mm PL Mount Camera
Focal Length	19–90mm	85–300mm
Zoom Ratio	4.7 x	3.5 x
T-No.	T2.9	T2.9(85–218mm) T4.0(300mm)
Iris Blades	9	9
M.O.D.from Image Planes	0.85m / 2'9"	1.2m / 3'11"
Object Dimensions at M.O.D. 1.78 : 1 Aspect Ratio*	19mm 917 x 516mm 90mm 193 x 109mm	85mm 274 x 154mm 300mm 79 x 44mm
Angular Field of View 1.78 : 1 Aspect Ratio*	19mm 71°41' x 44°14' 90mm 17°20' x 9°48'	85mm 18°21' x 10°23' 300mm 5°14' x 2°57'
Focus Rotation	200°	200°
Zoom Rotation	120°	120°
Approx. Size (ØxLength)	Ø114 x 226mm	Ø114 x 249mm
Approx. Mass	2.8kg (with Drive Unit) / 2.3kg (without Drive Unit)	3.1kg (with Drive Unit) / 2.6kg (without Drive Unit)

*Sensor Size : 27.45x15.44

XK 4K Premier Cabrio Series



Model Name	XK6x20
Application	35mm PL Mount Camera
Focal Length	20–120mm
Zoom Ratio	6 x
T-No.	T3.5
Iris Blades	9
M.O.D.from Image Planes	1.1m / 3'7"
Object Dimensions at M.O.D. 1.78 : 1 Aspect Ratio*	20mm 1109 x 624mm 120mm 182 x 102mm
Angular Field of View 1.78 : 1 Aspect Ratio*	20mm 63°41' x 38°30' 120mm 11°49' x 6°40'
Focus Rotation	200°
Zoom Rotation	90°
Approx. Size (ØxLength)	Ø114 x 239mm
Approx. Mass	2.9kg (with Drive Unit) / 2.4kg (without Drive Unit)

*Sensor Size : 24.84x13.97

Lens-Mechanical Interface

HK Series, ZK12x25



- ① Front lens diameter: 136 mm
- ② Focus ring rotation angle: 280°
- ③ Each gear pitch: 0.8 mm

*Use a lens supporter (of any maker) when using the lens.

ZK2.5x14, ZK4.7x19, ZK3.5x85, XK6x20



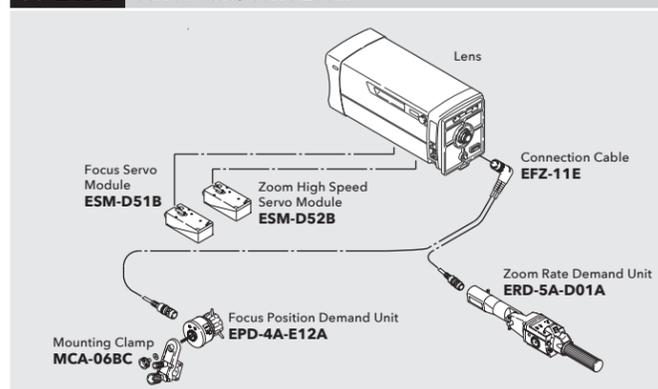
- ① Front lens diameter: 114mm
- ② Focus ring rotation angle: 200°
- ③ Each gear pitch: 0.8 mm

*When the total weight of the lens and its surrounding devices exceed 40 kg, attach the accompanying supporting frame and a lens supporter (of any maker) as well.

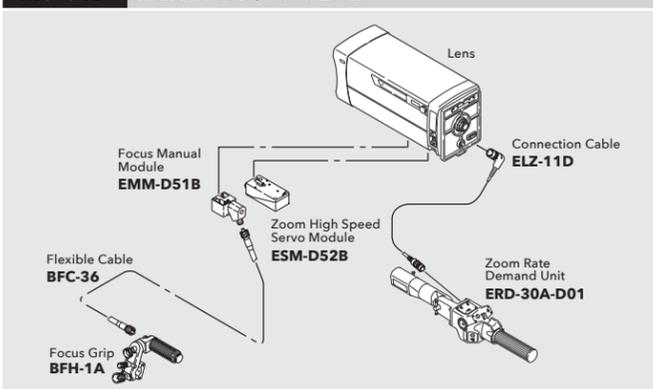
FUJINON Lens Accessory Guide

Studio/Field Lens System Configuration

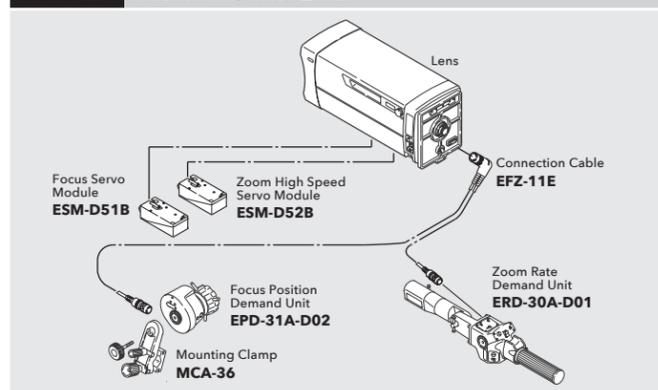
SS-21DB Servo Focus / Servo Zoom **DIGIPOWER**



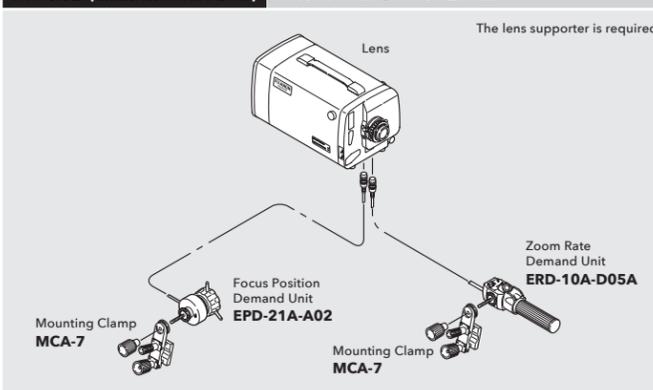
MS-31D Manual Focus / Servo Zoom **DIGIPOWER**



SS-31D Servo Focus / Servo Zoom **DIGIPOWER**



SS-MB (Minibox Studio Lens) Servo Focus / Servo Zoom



Control Accessories List

	Description	Model Name	DIGIPOWER Studio/Field
Lens Focus/Zoom Drive Unit	Servo Digital	Zoom High Speed Servo Module ESM-D52B	●
	Manual	Focus Servo Module ESM-D51B	●
Focus	Servo Digital	Manual Focus/Zoom Module EMM-51B	●
		Focus Position Demand Unit EPD-31A-D02	●
	Manual	Mounting Clamp MCA-36	●
		Focus Position Demand Unit EPD-4A-E12A	●
Zoom	Servo Digital	Mounting Clamp MCA-06BC	●
		Servo Focus Grip EPA-22	●
	Manual	Manual Focus Grip BFH-1A	●
Other	Servo Digital	Zoom Rate Demand Unit ERD-30A-D01	●
		Zoom Rate Demand Unit ERD-5A-D01A	●
	Manual	Zoom Manual Handle BZH-2A	●
		Connection Cable (Y Cable for Full-Servo Kit) EFZ-11E	●
	Connection Cable (Cable for Semi-Servo Kit) ELZ-11D	●	
	Flexible Cable BFC-36	●	
	Range Selector ERS-51B	●	
	Macro Remote Controller EA-3A-10A	●	
OS-TECH Controller EA-12A-05BD	●		
PC Connection Cable SA-206D-005	●		
Lens Supporter (for BTAMount) ELH-112A-35A	●		
Lens Supporter (for Sony Mount) ELH-112A-05A	●		

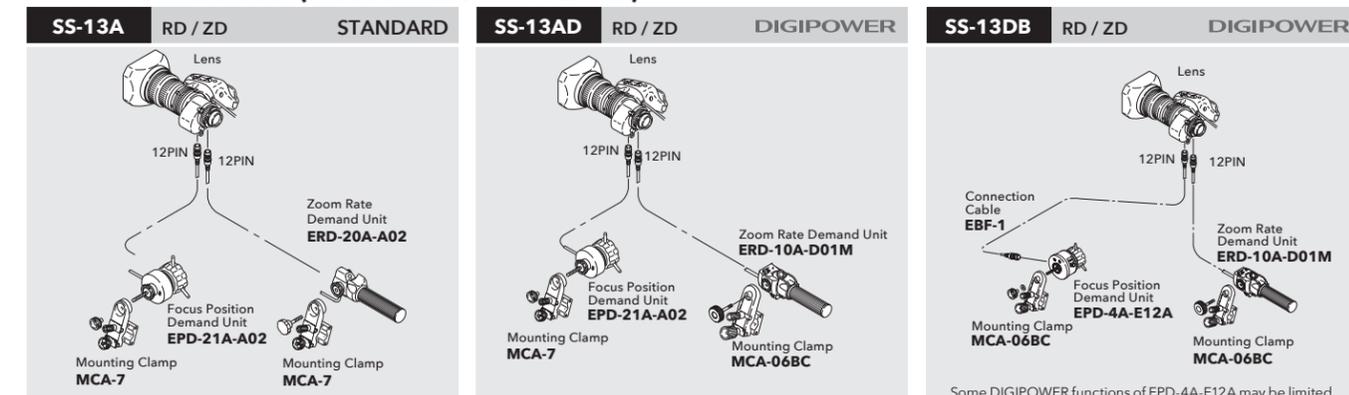
Control Accessories for XA22x7BES (Minibox)

	Description	Model Name
Focus	Focus Position Demand Unit	EPD-21A-A02
	Mounting Clamp	MCA-7
Zoom	Zoom Demand (Featured x2 Extender Remote)	ERD-10A-D05A
Other	Mounting Clamp	MCA-7
	Lens Supporter	ALH-117C-02A



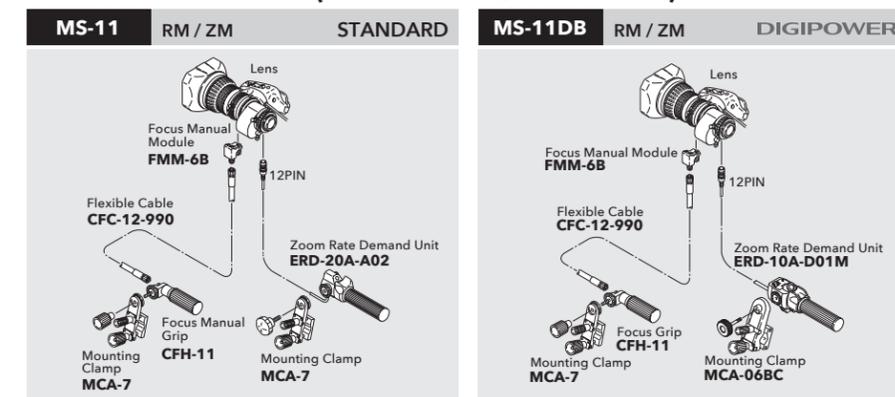
ENG/EPF Portable Lens System Configuration

Full-Servo Control Kit (Servo Focus / Servo Zoom)



Some DIGIPOWER functions of EPD-4A-E12A may be limited.

Semi-Servo Control Kit (Manual Focus / Servo Zoom)

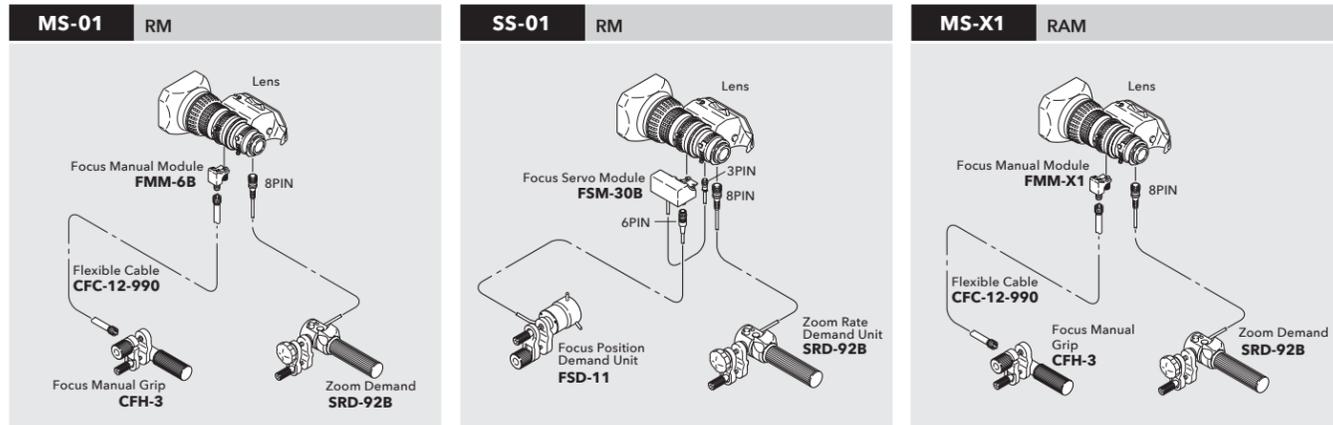


Control Accessories Compatibility (Premier Series, Select Series and Broadcast Lenses)

		Lens Drive Unit Type				
		RM	RD/ZD			
Focus	Manual	Description	Model Name	Standard	DIGIPOWER	
		Focus Grip	CFH-11	●	●	
		Mounting Clamp	MCA-7	●	●	
		Flexible Cable	CFC-12-990	●	●	
	Servo	Manual	Focus Manual Module	FMM-6B	●	●
			FMM-3C (for 42x series, 25x series)		●	●
		Digital	Focus Position Demand Unit	EPD-21A-A02	●	●
			Focus Servo Position Module	FSP-13G	●	●
			Mounting Clamp	MCA-06BC	●	●
			Focus Position Demand Unit	EPD-4A-E12A	●	●
Zoom	Manual	Connection Cable	EBF-1 (for EPD-4A to Lens)	●	●	
		Zoom Handle	CZH-14	●	●	
		Mounting Clamp	MCA-7	●	●	
		Flexible Cable	CFC-12-990	●	●	
	Servo	Manual	Zoom Manual Module	ZMM-6	●	●
			Zoom Rate Demand Unit	ERD-20A-A02	●	●
		Digital	Mounting Clamp	MCA-7	●	●
			Zoom Rate Demand Unit	ERD-10A-D01M	●	●
			Mounting Clamp	MCA-06BC	●	●
			Focus Position Demand Unit	EPD-4A-E12A	●	●
Other	VTR Control Unit	VRS-20		●		
	Return Control Unit	EXT-30		●		
	Lens Supporter	ALH-117C-01A (for 42x series)		●		
	OS-TECH Control Unit	EA-12A-03BA		●		
	Extension Cable For Focus Position Demand Unit/Zoom Rate Demand Unit	ECE-1000 (1m) / -2000 (2m) / -3000 (3m) / -4000 (4m) / -5000 (5m) / -10000 (10m)*1		●		
	Cable for Lens ↔ PC	SA-206D-005 / SA-206A-005 *2		●		
2x Extender Change Unit (Motor Drive)	ECU-2B		●			

*1: Longer Cables are also available.
*2: SA-206A-005 is specifically designed for HA25x, HA42x and A42x lenses.

eXceed Series System Configuration



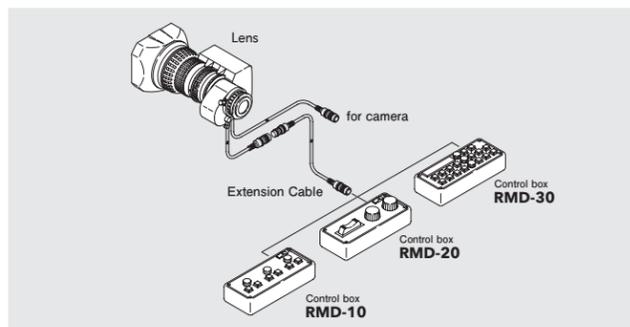
Control Accessories Compatibility (eXceed Series)

XA20s x 8.5 BE RM		Lens Drive Unit Type		RM / RAM
Focus	Manual	Description	Model Name	Standard
Focus	Manual	Focus Grip	CFH-3	●
		Flexible Cable	CFC-12-990	●
		Focus Manual Module	FMM-6B	●
			FMM-X1 (for XA16sx8BRAM)	●
Focus	Servo	Focus Servo Module	FSM-30B	●
		Focus Position Demand Unit	FSD-11	●
				●
Zoom	Manual	Zoom Handle	CZH-14	●
		Mounting Clamp	MCA-7	●
		Flexible Cable	CFC-12-990	●
		Zoom Manual Module	ZMM-6	●
				●
Zoom	Servo	Zoom Rate Demand Unit	SRD-92B	●
				●
Other		VTR Control Unit	VRS-2	
		Extension Cable For Focus Servo Demand Unit	ECA-1000(1m) / -5000(5m) / -10000(10m)*	
		Extension Cable For Zoom Rate Demand Unit	ECC-1000(1m) / -5000(5m) / -10000(10m)*	
		For 12PIN Lens Cable	ECE-R22	

* Longer Cables are also available.



HD REMOTE CONTROL LENSES

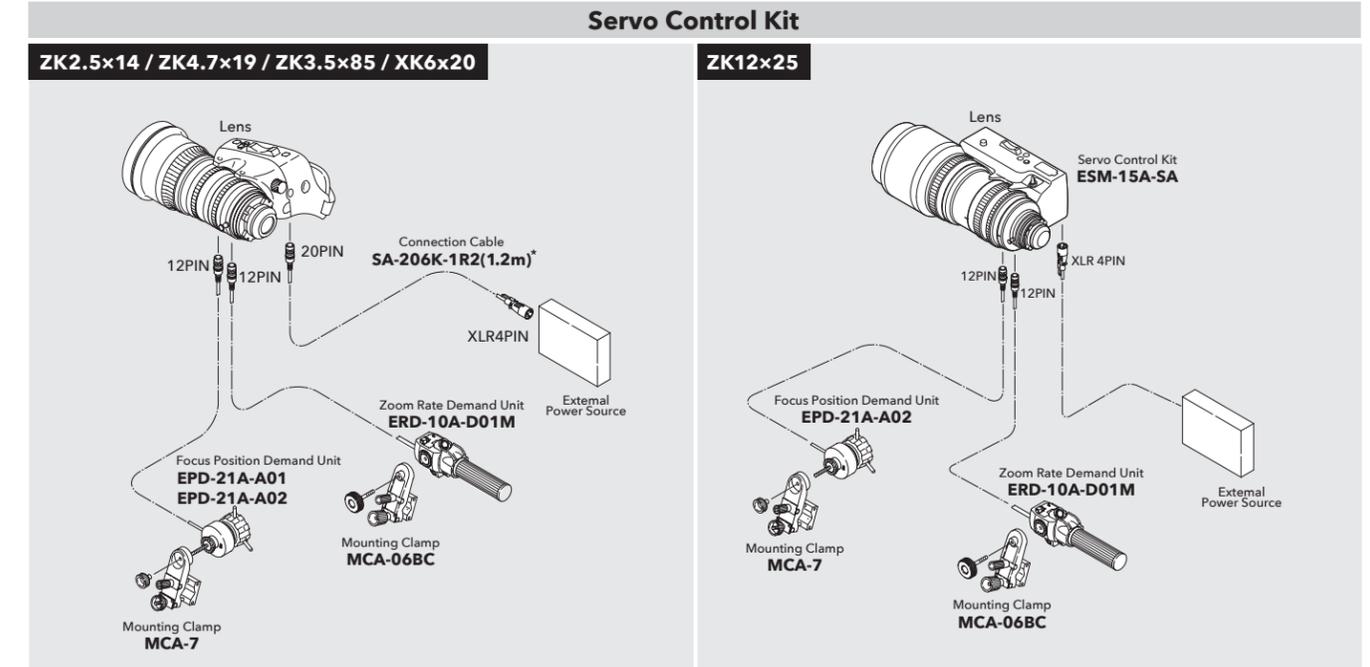


Control Accessories Compatibility

ZA17x7.6 BE MD		MD
Description	Model Name	
Remote Controller	RMD-10	●
	RMD-20	●
	RMD-30	●
Extension Cable	ECM-005(5m) / -010(10m) / -020(20m) / -050(50m) / -100(100m)*	
Extender Change Unit	ECU-12A	

* Longer Cables are also available.

Cinema Lens System Configuration



*Connection cable for external power source is necessary when the power source (over 10V, 1A)can't be supplied from a camera.

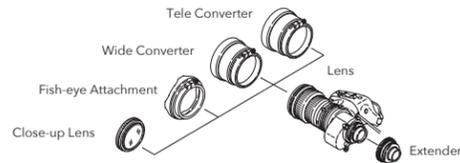
Control Accessories List

Focus Demand	Digital	Description	Model Name
Focus Demand	Digital	Digital Focus Position Demand	EPD-4A-E12A
	Standard	Digital Focus Position Demand	EPD-21A-A02
Zoom Demand	Digital	Digital Zoom Demand (Featured Iris Remote Control)	ERD-10A-D01M
	Standard	Focus Position Demand	ERD-20A-A02
		Mounting Clamp	MCA-7
		Mounting Clamp	MCA-06BC
Other		Connection Cable for EPD-4A-E12A	EBF-1
		Lens Hood for ZK4.7x19, ZK3.5x85	HS-304A-114
		Lens Hood for ZK2.5x14	HS-304B-114
		Digital Servo Module (Designed for ZK12x25)	ESM-15A-SA
		Power Source Cable (Lens:20pin - XLR4pin), L=120cm	SA-206K-1R2
		Power Source Cable (Lens:20pin - D-Tap), L=120cm	SA-206X-1R2
		Power Source Cable (Lens:20pin - Camera:12pin), L=120cm	SA-206M-1R2
		Power Source Cable (Lens:20pin - Camera:12pin), L=40cm	SA-206M-R40
		Power Source Cable (Lens:20pin - Camera:12pin), L=25cm	SA-206M-R25



Optical Accessories for Portable Lenses

Optical accessories expand the capabilities of FUJINON TV lenses.



Tele Converter TCV

►Focal length is multiplied by the magnification of the converter on the telephoto side. ►Zooming possible. ►The F-No. on the master lens remains unchanged. ►M.O.D. is increased. ►Loss of picture edges will occur toward the wide angle side of the zoom range.



Wide Converter WCV

►Focal length is multiplied by the magnification of the converter on the wide side. ►Zooming possible. ►The F-No. on the master lens remains unchanged. ►M.O.D. is decreased.



Wide Attachment WAT

►Converts only the wide end of the lens by the magnification of the attachment. ►Zooming not possible. ►The F-No. on the master lens remains unchanged. ►Focus is adjustable only by the macro lever of master lens located near the lens mount.



Fish-eye Attachment F-AT

►Converts only the wide end of the lens by the magnification of the attachment. ►Zooming not possible. ►The F-No. on the master lens remains unchanged. ►Focus is adjustable only by the macro lever of master lens located near the lens mount.



Close-up Lens

►Close-up lens provides a shorter minimum focusing distance between lens and object. ►Ideal for copy stand or other close up work.



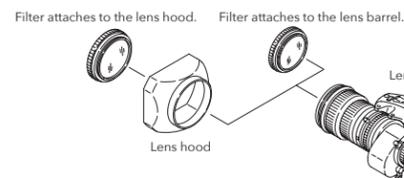
2x Extender

►2x range extender mounts between master lens and camera and doubles the focal length of the master lens. ►F-No. is doubled. ►Includes back focus adjustment.



Effects Filter

Attach to filter screw portion of the zoom lens.



UV Filter UV

►UV filter absorbs ultraviolet rays, cuts haze. ►No effect on exposure and color temperature.



ND Filter ND

►ND (Neutral Density) filter reduces the light of all wavelengths that enter a lens. ►Allow picture taking of bright scenes with wider lens apertures. ►ND2 reduces light by 1/2, ND4 by 1/4, ND8 by 1/8. ►No effect on color temperature.



Polarizing Filter PL

►Polarizing filter reduces polarized light reflections from glass and water surfaces or to improve color saturation. ►Enhances picture quality by blocking harmful reflected light. ►Circular type



XA16s×8	HA18×7.6		
XA20s×8.5	HA21×7.8		HA19×7.4
XS20s×6.4	ZA17×7.6	HA16×6.3	HA23×7.6
XT17s×4.5	ZS17×5.5		ZA22×7.6
XT20s×4.7	XS17×5.5		

Front Lens Diameter			ø 85	ø 95	ø 100
Model Name	Magnification	Approx. Mass(kg)			
TCV-H85		1.00	●		
TCV-H95	1.5×	1.00		●	
TCV-H100		1.00			●

WCV-H85	0.8×	1.05	●		
WCV-H95	0.85×	1.00		●	
WCV-H100	0.8×	1.05			●

WAT - H85			●		
WAT - H100	0.7×	0.53			●

F-ATH85		0.36	●		
F-ATH100	0.7×	0.63			●

	Magnification	Approx. Mass(kg)			
HCL-H8082BSC		0.28	●	M82×0.75	
HCL-H8095SC	0.8m	0.42			M95×1
HCL-80107NSC		0.50		●	
HCL-H5085		0.67	●		
HCL-H50100	0.5m	0.87			●
	Object Distance				
HAeE14-1	1.5×	0.30			
AE20B-2	1.5×	0.17			

HA18×7.6	HA21×7.8	HA19×7.4	HA16×6.3	HA25×11.5	HA14×4.5	HA42×9.7
HTs18×4.2	ZA17×7.6	HA23×7.6		HA25×16.5	HA18×5.5	HA42×13.5
XS17×5.5	ZS17×5.5	ZA22×7.6			ZA12×4.5	A42×9.7
XA20s×8.5	XS20s×6.3				XS13×3.3	A42×13.5
XT17s×4.5	XT20s×4.7					

Lens Barrel Filter Thread Size	M82×0.75	M95×1	—	M107×1	—	M127×0.75
Hood Filter Thread Size	—	M107×1	M107×1	M127×0.75	M127×0.75	—

Model Name					
EFL-82UV	●				
EFL-95UV		●			
EFL-107UV		●	●		
EFL-127UV				●	●
EFL-82 (N2,N4,N8)	●				
EFL-95 (N2,N4,N8)		●			
EFL-107 (N2,N4,N8)		●	●	●	
EFL-127 (N2,N4,N8)				●	●
EFL-82PL	●				
EFL-95PL		●			
EFL-107PLA		●	●	●	
EFL-127PL				●	●

Mount Adapters

Model Name	Camera	Lens	Note
ACM-8B	1/2" Sony Bayonet Mount	2/3" Bayonet Mount	Angle of view is approx. 1.3x shifted to tele side
ACM-19	1/3" Bayonet Mount	1/2" Sony Bayonet Mount	Angle of view is approx. 1.3x shifted to tele side
ACM-17	1/3" Bayonet Mount	2/3" Bayonet Mount	Angle of view is approx. 1.6x shifted to tele side
ACM-21	SONY PMW-EX3	2/3" Bayonet Mount	Angle of view is approx. 1.4x shifted to tele side

Fujifilm has variety of Mount Adapters. For more detail, please ask our sales office.



Mount Adapter ACM-17

Mount Adapter ACM-21

FUJINON Lens Maintenance

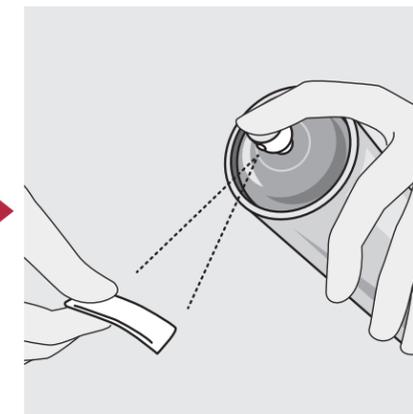
Maintaining high performance levels far into the future

Lens Cleaning

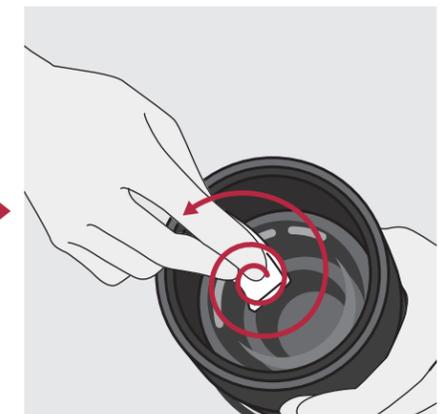
Use commonly available lens cleaner and lens cleaning paper .



First, remove the lens cover and brush the dust from the lens surface with a soft brush or blower brush.



Fold the lens paper into an appropriate size and moisten a part of it with lens cleaner.



Gently wipe the lens with the moistened lens paper in a circular motion, from the center to the edges. Take a dry piece of lens paper and wipe until all smears disappear.

Moisture Removal

If water seeps through to the inner part of the lens, quickly wipe all remaining water on the outer part of the lens with a dry cloth. Next, place the lens into a sealable vinyl bag with a drying agent, seal the bag and allow to completely dehumidify.

Storage

If the lens will not be used for some time, please store it away from high temperatures, high humidity and corrosive gases. High temperatures and high humidity are particular causes of mold. Mold is able to thrive in temperatures of between 20-28°C and between 60-80% humidity levels.

Caution

The lens consists of an optical unit and a power unit. Both units are held in place with screws. Please DO NOT unscrew the units. If the units are separated, the mechanism of the power unit will require realignment.