# **FUJIFILM**

Value from Innovation
2017 PRODUCT GUIDE





4K



**UA27x6.5** 

UA14x4.5



UA18x5.5

E-mount



MK18-55



Technology That Inspires...

**FUJ!FILM** 

**FUJINON** 

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Not every product shown in this guide is available worldwide.

#### **Prefix**

HA/XA/HAs 2/3" FORMAT (High Definition) ZΑ 2/3" FORMAT (High Definition) HS/HSs/XS/ZS 1/2" FORMAT (High Definition) HTs/XT 1/3" FORMAT (High Definition) HK/ZK/XK PL MOUNT LENSES MK F-Mount

UA 2/3" FORMAT (Ultra High Definition)

#### Suffix

Extender MD Motor Drive RM

Manual Focus Servo Zoom

ZM Manual Focus Servo Zoom with Quick Frame

RD Full Servo (ENG Style) ZD Full Servo with Quick Frame

SM Manual/Servo Module Interchangeable

#### **Example**



Letter indicates Camera Manufacturer and Correlates to Flange Focal Distance

#### 4K PLUS UHD PREMIER Series

The FUJIFILM flagship UA Series of 4K Plus 2/3" lenses is the world's first for Ultra HD Broadcast applications. The UA Series delivers true 4K optical quality which is a hallmark of our 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 multi-group zoom system. Designed to produce the ultimate performance from today's new 4K 2/3" HD cameras.

#### Main Features

- 4K Plus Ultra HD Optical Performance throughout the entire zoom range
- Utilizes the same Operating System as our current HD Broadcast Lenses
- The 4K Plus UHD 2/3" Box Lens features an 80x zoom ratio from 9~720mm (18~1440mm w/2x) and the latest generation Optical Image stabilization system
- The 4K Plus UHD 2/3"Portable lens offers a 22x zoom ratio from 8~176mm (16~352mm w/2x) and a 13x zoom ratio from 4.5-59mm (9-118mm with 2x's) and feature the latest generation Servo Drive Unit with 16 bit encoders



#### UA80x9BESM 1.2 EXT

Zoom Ratio / Format	80x / 2/3"	
Focal Length	9-720mm	
	(2X) 18-1440mm	(1.2x) 10.8 x 864 mm
Maximum Relative	1:1.7 (9-350mm)	
Aperture	1:3.5 (720mm)	
M.O.D. from Front of Lens	3.7m	
Object Dimensions	9mm 3303mm × 1856mm	
at M.O.D.	720mm 43mm × 24mm	
(Hor. x Vert. in mm)	(2X) 18mm 1714mm × 963mm	
16:9 Aspect Ratio	1440 mm 22 × 12	(1.2x) 2839 x 1596
Angular Field of View	9mm 56° 6 × 33° 20	
16:9 Aspect Ratio	720mm 0° 46 × 0° 26	
	(2X) 18mm 29° 50 × 17° 2	(1.2x) 10.8mm 47° 53′ x 28° 01′
	1440mm 0° 23 × 0° 13	864mm 0° 38' x 0° 21'
Size (HxWxL)	258 x 264 x 610mm	
Weight (w/o Hood)	23.5 kg	
Features	2/3", DIGIPOWER, Virtual,	Serial Com,
	PC, OS-TECH, 2x, RoHS	

#### UA22x8BERD UA13x4.5BERD





Zoom Ratio / Format	22x / 2/3"	13x / 2/3"
Focal Length	8.0-176mm	4.5 - 59mm
	(2X) 16-352mm	(2x) 9 - 118mm
Maximum Relative	1:1.9 (8-124mm)	1:1.8 (4.5-41mm)
Aperture	1:2.55 (176mm)	1:2.6 (59mm)
M.O.D. from Front of Lens	0.85m	0.3m
Object Dimensions	8mm 905mm × 509mn	1 4.5mm 744 x 418
at M.O.D.	176mm 43mm × 24mm	59mm 54 x 30
(Hor. x Vert. in mm)	(2X) 16mm 472 × 265	(2x) 9mm 367 x 206
16:9 Aspect Ratio	352mm 22 × 12	118mm 28 x 16
Angular Field of View	8mm 61° 52 × 37° 14	4.5mm 93° 38′ x 61° 50′
16:9 Aspect Ratio	176mm 3° 7 × 1° 45	59mm 9° 18′ x 5° 14′
	(2X) 16mm 33° 22 × 19° 7	(2x) 9mm 56° 06′ x 33° 20′
	352mm 1° 34 × 0° 53	118mm 4° 39′ x 2° x 37
Size (Dia x L)	110 x 241.5mm	95 x 253mm
Weight (w/o Hood)	2.55kg	2.28kg
Features	2/3", IF, DIGIPOWER, \	/irtual, Serial Com,
	PC, 2x, Macro, RoHS	

#### 4K UHD PREMIER Series

The FUJIFILM 4K UA Series of 2/3" lenses feature excellent 4K optical performance for versatile shooting for all applications. The lenses employ the latest High Transmittance Electron Beam Coating (HT-EBC) resulting in richer colors and greatly improved blue response and transmittance. The high resolution, high contrast, and high dynamic range will produce images that will impress. The line is designed to produce exceptional 4K UHD images while at the same time featuring the focal lengths, F Stops and size seen in our line of HD lenses. Like the 4K PLUS series, the optical quality is based on large diameter aspherical elements designed by the latest optical simulation system. The lenses achieve 4K UHD optical performance from center to corner throughout the zoom range while suppressing image distortion due to a multigroup zoom system.

#### Main Features

- 4K Ultra HD Optical Performance throughout the entire zoom range
- Utilizes the same Operating System as our current HD Broadcast Lenses
- The 4K UHD 2/3" Box Lenses feature an exceptional 107x zoom ratio from 8.4~900mm (16.8~1800mm w/2x) with the latest generation stabilization system as well as a 27x zoom ratio from a wide 6.5~180mm (13~360mm w/2x) for studio applications.
- The 4K UHD 2/3"Portable lenses offer the famous "2 in 1 Lens" 18x zoom ratio from 5.5~100mm (11~200mm w/2x) while the 14x features a super wide 4.5~63mm (9~128mm w/2x), both have the latest generation Servo Drive Unit with 16 bit encoders

#### UA107x8.4 UA27X6.5







Zoom Ratio / Format	107X / 2/3"	27X
Focal Length	8.4 ~ 900 mm	6.5-180mm
	(2X) 16.8 ~ 1800 mm	(2X) 13-360mm
Maximum Relative	1:1.7 (8.4 ~ 340 mm)	1:1.5(6.5-123mm)
Aperture	1:4.5 (900 mm)	1:2.2(180mm)
M.O.D. from Front of Lens	3.05 m	0.6m
Object Dimensions	8.4 mm 3053 x 1717	6.5mm 1063x597mm
at M.O.D.	900 mm 30 x 17	180mm 38x21mm
(Hor. x Vert. in mm)	(2X) 16.8 mm 1594 X 896	(2X) 13mm 529x297mm
16:9 Aspect Ratio	1800 mm 15 X 9	360mm 20x11mm
Angular Field of View	8.4 mm 59° 26′ X 35° 35′	6.5mm 72.8°x45.0°
16:9 Aspect Ratio	900 mm 0° 37'x 0° 21'	180mm 3.1°x1.7°
	(2X) 16.8 mm 31° 52′ x 18° 14′	(2X) 13mm 40.5°x23.4°
	1800 mm 0° 18′ x 0° 10′	360mm 1.5°x0.9°
Size (HxWxL)	258 m x 264 x 610 mm	258x264x536mm
Weight (w/o Hood)	23.9 kg	22.8kg
Footures	2/2// DICIDOMED Vietual C	Covial Com. DC OC TECH 2v Dalle

#### UA14X4.5 UA18X5.5





Zoom Ratio / Format	14x	18x
Focal Length	4.5-63mm	5.5-100mm
Maximum Relative	1:1.8(4.5-41mm)	1:1.8(5.5-62mm)
Aperture	1:F2.8(63mm)	1:F2.9(100mm)
M.O.D. from Front of Lens	3.05 m	0.4m
Object Dimensions	4.5mm 744mmx418mm	5.5mm 800mmx450mm
at M.O.D.	63mm 51mmx29mm	100mm 44mmx25mm
(Hor. x Vert. in mm)	(2X) 9mm 365mmx205mm	(2X) 11mm 395mmx222mm
16:9 Aspect Ratio	126mm 27mmx15mm	200mm 22mmx12mm
Angular Field of View	4.5mm 93.6°x61.8°	5.5mm 82.2°x52.2°
16:9 Aspect Ratio	63mm 8.7°x4.9°	100mm 5.5°x3.1°
	(2X) 9mm 56.1°x33.3°	(2X) 11mm 47.1°x27.5°
	126mm 4.4°x2.5°	200mm 2.7°x1.5°
Size (HxWxL)	95x238.5mm	95x240.5mm
Weight (w/o Hood)	2.21kg (without hood)	2.04kg(without hood)
Features	2/3", DIGIPOWER, Virtual,	Serial Com, PC, OS-TECH, 2x, RoHS

#### **MK CINE LENS SERIES**

FUJINON Cine Lenses are used to shoot movies, commercials, and television dramas all over the world. These lenses have world-class performance and quality ingrained in their DNA. Now, with the debut of the MK Lens series, that heritage finds a new form. Fujifilm has developed a new pair of cinema lenses to resolve the less-than-satisfactory aspects of DSLR lenses when used for cine applications. These new lenses produce the high performance and high-quality images demanded by newly developing production markets such as movie distribution services, independent film production, and wedding videos.



LENS (Focal Length)	18-55 mm T2.9 (MK18-55)	50-135 mm T2.9 (MK50-135)
T-No.	T2.9 18-55 mm	T2.9 50-135 mm
Close Focus Limit	0.85m/2ft 9in (with macro function	1.2m/3ft 11in (with macro function
	0.38m/1ft 2.9in)	0.85m/2ft 9in)
Mount	E-mount	E-mount
Object Dimensions at Close Focus	18 mm 924mm x 520 mm	50 mm 534 mm x 300 mm
16:9 Aspect Ratio	55 mm 291 mm x 164 mm	135 mm 196 mm x 110 mm
Angular Field of View	18 mm 69.2° × 42.4°	50 mm 27.9° x 15.9°
16:9 Aspect Ratio	55 mm 25.5° x 14.5°	135 mm 10.5° x 5.9°
Dia ø x Length	ø 206.3 mm	ø 206.3 mm
Weight	980 kg	980 kg

<sup>\*</sup>Note: MK50-135 T.29 will be available summer 2017.

#### SUPPRESS FOCUS SHIFTS WHILE ZOOMING

With a conventional DSLR lens, the focal point shifts while zooming. This means you have to refocus the lens each time you change the angle of view. MK Lenses suppress focus shifts by driving the front focus group and the zoom group independently. Since MK Lenses suppress optically and mechanically, it also eliminates the time lags you get with electric controls.

#### Before zooming



#### After zooming



MK Lens Focal point does not move while zooming



#### DSLR Lens

Need to refocus since the focal point moves while zooming

# SUPPRESS LENS BREATHING

When you are focusing with a conventional DSLR lens, you may notice an unnatural change in the angle of view—making it look as if you are zooming. This effect, called "lens breathing," is suppressed thanks to MK Lenses' front inner focus system. This allows you smooth and comfortable focusing of dramatically important scenes.

#### Before focusing



## After focusing



MK Lens No lens breathing while focusing

#### Before focusing



After focusing



DSLR Lens Lens breathing occurs while focusing

#### **MK CINE LENS SERIES**

#### SUPPRESS OPTICAL AXIS SHIFTS WHILE ZOOMING

In a conventional DSLR lens, optical axis shifts occur while zooming, causing the lens to skew off center from the subject. MK Lenses suppress such skewing by adopting assembly technologies proven in FUJINON Cine Lenses. This lets you shoot a composition just the way you intended.

#### Before zooming



#### After zooming



MK Lens Focal point does not move while zooming



DSLR Lens Need to refocus since the focal point moves while zooming

# SOPHISTICATED OPERABILITY THAT BRINGS OUT ITS FULL POTENTIAL AS A CINEMA LENS

## 200° FOCUS ROTATION

MK Lenses feature a 200° focus rotation angle—more than double that of a typical DSLR lens. This allows you to focus on images with shallow depths of field, which requires high accuracy.

#### 0.8M STANDARDIZED GEAR PITCH

Each of the three operating rings (focus, zoom, and iris) features an identical 0.8M gear pitch — the same as on all FUJINON Cine Lenses. This allows you to use followfocus and other standard cine accessories.



# FULLY MANUAL OPERATION WITH THREE MECHANICAL LENS RINGS

MK Lenses are equipped with three independently operated mechanical lens rings for focus, zoom, and iris. Because you can adjust the zoom, focus, and iris via fully manual mechanisms, you can operate the camera intuitively without the time lags you get with electric controls.

#### **SEAMLESS IRIS**

The iris ring features a seamless mechanism that gives you greater precision when adjusting exposure. It operates without the vibrations and noise that you get with a clicking mechanism.

#### **MK CINE LENS SERIES**



#### 1 Front diameter: 85mm

MK Lenses feature a front diameter of 85mm, ensuring compatibility with standard matte boxes.

#### 2 Filter diameter: 82mm

The filter diameter of MK Lenses is standardized at 82mm, making it easy to share filters between models.

## 3 Gear rings are located at the same position

The gear rings for focus, zoom, and iris are located at the same position on two MK Lenses, so there's no need to readjust the position of accessories.

#### 4 Macro function

MK Lenses feature a macro function that lets you close focus from 0.38 m with the MK18-55m and from 0.85 m with the MK50-135mm at the wide end.

## 5 Flange focal distance adjustment function

MK Lenses feature a flange focal distance adjustment mechanism, which lets you adjust the distance for individual cameras.

#### 6 Bundled zoom lever

A zoom lever is included to improve zoom ring operability.

#### 7 Bundled support foot

A bundled support foot provides stability to reduce blurring due to the weight of the lens.

#### **Bundled lens hood** (not shown)

A dedicated lens hood to suppress flare and ghosting further expands the possibilities for visual representation.

#### COMPACT, LIGHTWEIGHT BODY THANKS TO SUPER 35MM SENSOR COMPATIBILITY AND DEDICATED E-MOUNT DESIGN



#### FUJINON PREMIER PL SERIES

#### FOR FILM AND DIGITAL CINEMATOGRAPHY

Designed for current and emerging digital cinema motion picture and 35mm format film cameras, Fujinon's PL Series offer T-stop, focal range and optical performance previously unavailable in a family of PL zooms. With workable size, industry-inspired functionality and focal range from 14.5 mm to 400 mm, these zooms provide top performance and cost efficiency.







#### **14.5 - 45 mm** (HK3.1x14.5) **18 - 85 mm** (HK4.7x18)

LENS (Focal Length)	14.5 - 45 mm (HK3.1x14.5)	18 - 85 mm (HK4.7x18)
Zoom Ratio	3.1x	4.7x
Focal Length	T2.0 14.5 - 45 mm	T2.0 18 - 85 mm
T-No.		
Iris Range	T2.0 - T22	T2.0 - T22
Close Focus Limit	0.71 m 2.3'	0.82 m 2.7'
Application	35 mm Film and Digital Cinema Camera	35 mm Film and Digital Cinema Camera
Format Cover	S35 (Super 35 Film Format/24x13.5mm)	S35 (Super 35 Film Format/24x13.5mm)
Mount	PL Mount	PL Mount
Angular Field of View	14.5 mm 79° 13′ x 49° 56′	18 mm 67° 23′ x 41° 07′
16:9 Aspect Ratio	45 mm 29° 52′ x 17° 04′	85 mm 16° 04′ x 9° 05′
Object Dimensions	14.5 mm 693 x 390 mm	18 mm 656 x 369 mm
at Close Focus	45 mm 215 x 121 mm	85 mm 139x78 mm
16:9 Aspect Ratio		
Dia ø x Length	ø 136 x 310 mm	ø 136 x 352 mm
Weigh	6.5 kg / 14.3 lbs	7.0 kg / 15.2 lbs

# **24 - 180 mm** (HK7.5x24) **75 - 400 mm** (HK5.3x75)





LENS (Focal Length)	24 - 180mm (HK7.5x24)	<b>75 - 400mm (</b> HK5.3x75)
Zoom Ratio	7.5x	5.3x
Focal Length	1:2.6 24 - 180 mm	T2.8 (75-270mm), T3.8 (400mm)
T-No.		75 - 400 mm
Iris Range	T2.6 - T22	T2.8 - T22
Close Focus Limit	1.24 m 4'	2.0 m 6.6'
Application	35 mm Film and Digital Cinema Camera	35 mm Film and Digital Cinema Camera
Format Cover	S35 (Super 35 Film Format/24x13.5mm)	S35 (Super 35 Film Format/24x13.5mm)
Mount	PL Mount	PL Mount
Angular Field of View	24 mm 53° 08' x 31° 25'	75 mm 18° 11′ x 10° 17′
16:9 Aspect Ratio	180 mm 7° 38′ x 4° 18′	400 mm 3° 26′ x 1° 56′
Object Dimensions	24 mm 924 x 520 mm	75 mm 580 x 326 mm
at Close Focus	180 mm 119 x 67 mm	400 mm 113x64 mm
16:9 Aspect Ratio		
Dia ø x Length	ø 136 x 405 mm	ø 136 x 444 mm
Weight	8.9 kg / 19.6 lbs	9.7 kg / 20.0 lbs

#### FUJINON PL SERIES

The Cabrio lenses present a breakthrough design in PL lenses. Cabrio lenses are designed to be the most versatile. The removable ENG style digital drive has focus, iris and zoom motors which allows for dynamic hand-held and documentary style shooting. Fujinon zoom & focus controllers, as well as cine industry standard wired or wireless controllers, can be connected. The 16 bit digital servo can be removed by means of 4 screws. To reattach to the lens, a newly developed self-aligning system is employed for easy and accurate calibration. The lens will accept standard 0.8 geared cine accessories. Power to the lens is through an external connector or the hot shoe Lens data output is provided.

#### Cabrio PL



Unique detachable 16 bit digital drive. Can easily be reattached with 4 screws. With the digital auto-aligning system, it will be quickly and accurately calibrated.

#### Breakthrough Design, Unparalleled Flexibility!



Digital servo interface connector. Barrel markings are luminous for visibility in dark shooting situations. Distance markings are available in feet or meters.



Hot shoe interface, pins shown on rear mount.



Interface on the digital servo allows for control using industry standard cinema controls as well as Fujinon wired and wireless units.

## Cabrio

19 - 90 mm (ZK4.7x19) 85 - 300 mm (ZK3.5x85)



LENS (Focal Length)	19-90 mm (ZK4.7x19)	85-300 mm (ZK3.5x85)
Zoom Ratio	4.7x	3.5x
Focal Length T-No.	T2.9 19 - 90 mm	T2.9 85-218mm T4.0 300mm
Iris Range	T2.9 - T22	T2.9 - T22
Close Focus Limit	0.85 m 2.79'	1.2 m 3.94'
Application	35 mm Film and Digital Cinema Camera	35 mm Film and Digital Cinema Camera
Format Cover	\$35+ (31.5 ø)	\$35+ (31.5 ø)
Mount	PL Mount	PL Mount
Angular Field of View	19 mm 71° 41' x 44° 14'	85 mm 18° 21' x 10° 23'
16:9 Aspect Ratio	90 mm 17° 20' x 9° 48'	300 mm 5° 14′ x 2° 57′
Object Dimensions at Close Focus	19 mm 915 x 515 mm	85 mm 274 x 154 mm
16:9 Aspect Ratio	90 mm 193 x 109 mm	300 mm 79 x 44 mm
Dia ø x Length	ø 114 x 226 mm	ø 114 x 249 mm
Weight	2.85 kg w/ servo - 2.45 kg w/o	3.0 kg w/ servo - 2.6kg w/o
Features	Detachable, auto-centering servo d	rive, Flange focal distance
	adjustment, Macro, LDS and i/Tech Data compatible*	
	*Metadata only available with drive fitted	

## PL Cabrio

# Cabrio

14 - 35 mm (ZK2.5x14) 25 - 300 mm (ZK12x25)



LENS (Focal Length)	14-35 mm (ZK2.5x14)	25-300 mm (ZK12x25)
Zoom Ratio	2.5x	12x
Focal Length T-No.	T2.9 14 - 35 mm	T3.5 25-273 mm T3.85 300 mm
Iris Range	T2.9 - T22	T3.5 - T22
Close Focus Limit	0.6 m 2.0'	1.2 m 3.94'
Application	35 mm Film and Digital Cinema Camera	35 mm Film and Digital Cinema Camera
Format Cover	\$35+ (31.5 ø)	S35+ (31.5 ø)
Mount	PL Mount	PL Mount
Angular Field of View	14 mm 88° 52' x 57° 45'	25mm 57° 32′ × 34°19′
16:9 Aspect Ratio	35 mm 42° 49′ x 24° 53′	300 mm 5° 14′ x 2° 57′
Object Dimensions at Close Focus	14 mm 701 × 394 mm	25 mm 937 × 527 mm
16:9 Aspect Ratio	35 mm 193 x 109 mm	300 mm 77 x 43 mm
Dia ø x Length	ø 114 x 231 mm	ø 136 x 401 mm
Weight	2.9 kg w/ servo - 2.4 kg w/o	8.9 kg
Features	Detachable, auto-centering servo di	rive*, Flange focal distance
	adjustment, Macro, LDS and i/Tech Data compatible**	
	*Detachable servo for PL 25-300 optional	
	*Metadata only available with driv	e fitted

# Cabrio

#### **20 - 120 mm** (XK6x20)



LENS (Focal Length)	20-120 mm (XK6x20)
Zoom Ratio	6x
Focal Length T-No.	T3.5 - 20-120 mm
Iris Range	T3.5 - T22
Close Focus Limit	1.1 m / 3′ 8″
Application	35mm Film and Digital Cinema Cameras
Format Cover	S35 (Super 35 Film Format 24.84x13.97)
Mount	PL Mount
Angular Field of View	20 mm 63° 41′ x 38° 30′
16:9 Aspect Ratio	120 mm 11° 49′ x 6° 40′
Object Dimensions at Close Focus	20 mm 1109 x 624 mm
16:9 Aspect Ratio	120 mm 182 x 102 mm
Dia ø x Length	ø 114 x 239 mm
Weight	2.9 kg w/ servo - 2.4 kg w/o
Features	Detachable, auto-centering servo drive, Flange focal distance
	adjustment, Macro, LDS and i/Tech Data compatible*
	*Metadata only available with drive fitted

The XT17sx4.5BRM and the XT20sx4.7BRM telephoto lens features minimized chromatic aberrations and improved corner resolution.

The HTs18x4.2BERM high performance lens feature superior resolution, high contrast and Fujinon's exclusive Digi Power servo with Quick Zoom, One Shot preset, Cruise Zoom, zoom limit and zoom speed adjust.

#### PREMIER Series

#### HTs18x4.2BERM

Zoom Ratio / Format	18X / 1/3"
Focal Length	4.2 to 76 mm
	(2X) 8.4 to 152 mm
Maximum Relative	1:1.4 (4.2 ~ 76 mm)
Aperture	(2X) 1:2.8 (152 mm)
Angular Field of View	4.2 mm 63° 49′ x 39° 35′
16:9 Aspect Ratio	76 mm 3° 56′ x 2° 13′
	(2X) 8.4 mm 34° 35′ x 19° 51′
	152 mm 1° 58′ x 1° 6′
M.O.D. from Image Plane	0.84 m
M.O.D. from Front of Lens	0.60 m
Object Dimensions	4.2 mm 697 x 392 mm
at M.O.D. 16:9 Aspect Ratio	76 mm 41 x 23 mm
	(2X) 8.2 mm 360 x 202 mm
	152 mm 21 x 12 mm
Filter Size	ø 82 mm P=0.75
Dia ø x Length (w/o Hood)	ø 85 x 214.1 mm
Weight (w/o Hood)	1.58 kg
Features	Inner Focus / Quick Zoom / Zoom Limit / 16-Bit Encoders









LENS	XT17sx4.5BRM	XT20sx4.7BRM
Zoom Ratio / Format	17X / 1/3"	20X / 1/3"
Focal Length	4.5 to 77 mm	4.7 to 94 mm
Maximum Relative	1:1.6 (4.5 ~ 77 mm)	1:1.4 (4.7 ~ 88 mm)
Aperture		1:1.5 (94 mm)
Angular Field of View	4.5 mm 60° 19′ x 36° 11′	4.7 mm 58° 11′ x 34° 44′
16:9 Aspect Ratio	77 mm 3° 53′ x 2° 11′	94 mm 3° 11′ x 1° 48′
M.O.D. from Image Plane	1.16 m	1.12 m
M.O.D. from Front of Lens	0.95 m	0.9 m
Object Dimensions	4.5 mm 999 x 562 mm	4.7 mm 901x506 mm
at M.O.D. 16:9 Aspect Ratio	77 mm 60 x 34 mm	94 mm 47x26 mm
Filter Size	ø 82 mm P=0.75	ø 82 mm P=0.75
Dia ø x Length (w/o Hood)	ø 85 x 175.6 mm	ø 85 x 189.8 mm
Weight (w/o Hood)	1.28 kg	1.48 kg
Features	Inner Focus / Quick Zoom	Inner Focus / Quick Zoom

Fujinon features the highest quality and most versatile line of 1/2" lenses. From the Select series XS13x3.3BRM that boasts an exceptional wide angle of 3.3mm and a 13x zoom range, to the ZS17x5.5BERM, featuring an integral 2x extender and both employing the latest digital drive unit with powerful features and functions. QuickZoom, CruiseZoom, One-shot Preset, as well as a multitude of Digi-Power control functions provide the operator with all the tools at hand to ensure a great shot! The 1/2" Select Exceed series XS20sx6.3BRM rounds out our offerings and provides the user with a very high quality yet economical lens with unrivaled performance for News and Production applications.

#### **SELECT** Series

#### XS13x3.3BRM



Zoom Ratio / Format	13X / 1/2"
Focal Length	3.3 to 43 mm
Maximum Relative	1:1.4 (3.3 ~ 32 mm)
Aperture	1:1.9 (43 mm)
Angular Field of View	3.3 mm 93° 07′ x 61° 25′
16:9 Aspect Ratio	43 mm 9° 16′ x 5° 13′
M.O.D. from Image Plane	0.58 m
M.O.D. from Front of Lens	0.30 m
Object Dimensions	3.3 mm 752 x 423 mm
at M.O.D. 16:9 Aspect Ratio	43 mm 54 x 30 mm
Filter Size	ø 127 mm P=0.75 (In Hood)
Dia ø x Length (w/o Hood)	ø 95 x 240.5 mm
Weight (w/o Hood)	1.93 kg
Features	Inner Focus / Quick Zoom

#### **SELECT** Series

#### ZS17x5.5BERM



Zoom Ratio / Format		17X / 1/2"
Focal Length		5.5 to 94 mm
	(2X)	11 to 188 mm
Maximum Relative		1:1.4 (5.5 ~ 77 mm)
Aperture		1:1.7 (94 mm)
Angular Field of View		5.5 mm 64° 43′ x 39° 14′
16:9 Aspect Ratio		94 mm 4° 15′ x 2° 23′
	(2X)	11 mm 35° 09′ x 20° 12′
		188 mm 2° 07′ x 1° 12′
M.O.D. from Image Plane		0.84 m
M.O.D. from Front of Lens		0.6 m
Object Dimensions		5.5 mm 692 x 389 mm
at M.O.D. 16:9		94 mm 42 x 24 mm
Filter Size		ø 82 mm P=0.75 (On Barrel)
Dia ø x Length (w/o Hood)		ø 85 x 206.6 mm
Weight (w/o Hood)		1.58 kg
Features		Inner Focus / Quick Zoom / Zoom Limit / 16 Bit Encoders



#### XS20sx6.3BRM



Zoom Ratio / Format	20X / 1/2"
Focal Length	6.3 to 126 mm
Maximum Relative	1:1.4 (6.3 ~ 88 mm)
Aperture	1:2.0 (126 mm)
Angular Field of View	6.3 mm 57° 54′ x 34° 34′
16:9 Aspect Ratio	126 mm 3° 10′ x 1° 47′
M.O.D. from Image Plane	1.11 m
M.O.D. from Front of Lens	0.9 m
Object Dimensions	904 x 508 mm
at M.O.D. 16:9 Aspect Ratio	47 x 26 mm
Filter Size	ø 82 mm P=0.75 (In Hood)
Dia ø x Length (w/o Hood)	ø 85 x 181.9 mm
Weight (w/o Hood)	1.4 kg
Features	Inner Focus / Quick Zoom / Zoom Limit

Fujinon's Premier Series lenses are designed to compliment and enhance the quality of the world's most advanced 2/3 inch HDTV cameras.

The highest optical, mechanical, and electrical specifications are incorporated into every Premier lens, along with powerful features & functions. QuickZoom, CruiseZoom, One-shot Preset, as well as a multitude of Digi-Power control functions provide the operator with all the tools at hand to ensure a great shot! And now all of this is in an ergonomically redesigned and performance enhanced New Digital Drive Grip.

#### PREMIER Series



#### HA14x4.5BE RM/RD\*/ZD\*\*

Zoom Ratio / Format	14X / 2/3"
Focal Length	4.5 to 63 mm
	(2.2X) 9.9 to 138 mm
Maximum Relative	1:1.8 (4.5 ~ 41 mm)
Aperture	(2.2X) 1:2.8 (63 mm)
Maximum Photometric	T2.0 (4.5 ~ 41 mm)
Aperture T-No.	T2.9 (63 mm)
Angular Field of View	4.5 mm 93° 38′ x 61° 50′
16:9 Aspect Ratio	63 mm 8° 42′ x 4° 54′
	(2.2X) 9.9 mm 51° 41′ x 30° 27′
	138 mm 3° 57′ x 2° 13′
M.O.D. from Image Plane	0.59 m
M.O.D. from Front of Lens	0.3 m
Object Dimensions	4.5 mm 743 x 418 mm
at M.O.D.	63 mm 59 x 63 mm
16:9 Aspect Ratio	(2.2X) 9.9 mm 329 x 185 mm
	138 mm 24 x 13 mm
Filter Size	ø 127 mm P=0.75 (In Hood)
Dia ø x Length (w/o Hood)	ø 95 mm x 238.5 mm
Weight (w/o Hood)	2.08 kg (RM) / 2.14 kg (RD)* / 2.2 kg (ZD)**
Options	16 Bit Encoders (ZD only) / Quick Frame
Features	Inner Focus / Zoom Limit / Quick Zoom
	16 Bit Encoders (RM / RD only)

# PREMIER Series HA18x5.5BE RM/RD\*/ZD\*\*



Zoom Ratio / Format	18X / 2/3"
Focal Length	5.5 to 100 mm
-	(2X) 11 to 200 mm
Maximum Relative	1:1.8 (5.5 ~ 62 mm)
Aperture	1:2.9 (100 mm)
Maximum Photometric	T1.9 (5.5 ~ 62 mm)
Aperture T-No.	T3.1 (100 mm)
Angular Field of View	5.5 mm 82° 10′ x 52° 13′
16:9 Aspect Ratio	100 mm 5° 29′ x 3° 05′
	(2X) 11 mm 47° 06′ x 27° 32′
	200 mm 2° 45′ x 1° 33′
M.O.D. from Image Plane	0.69 m
M.O.D. from Front of Lens	0.4 m
Object Dimensions	5.5 mm 800 x 450 mm
at M.O.D.	100 mm 44 x 25 mm
16:9 Aspect Ratio	(2X) 11 mm 395 x 222 mm
	200 mm 22 x 12 mm
Filter Size	ø 127 mm x 0.75 mm (In Hood Mounting Only)
Dia ø x Length (w/o Hood)	ø 95 mm x 240.5. mm
Weight (w/o Hood)	1.97 kg / 2.04 kg* / 2.10 kg**
Options	16 Bit Encoders (ZD only) / Quick Frame
Features	Inner Focus / Zoom Limit / Quick Zoom / Virtual
	Serial Com / PC / Macro / 16 Bit Encoders (RM / RD only)

<sup>\*</sup>RD contain Servos for Zoom and Focus.

<sup>\*\*</sup>ZD contains Quick Frame / Precision Zoom Focus System.

# PREMIER Series HA18x7.6BE RM/RD\*/ZD\*\*



Zoom Ratio / Format		18X / 2/3"
Focal Length		7.6 to 137 mm
	(2X)	15.2 to 274 mm
Maximum Relative		1:1.8 (7.6 ~ 103 mm)
Aperture		1:2.4 (137 mm)
Maximum Photometric		1:1.9 (7.6 ~ 105 mm)
Aperture T-No.		1:2.6 (137 mm)
Angular Field of View		7.6 mm 64° 30′ x 39° 03′
16:9 Aspect Ratio		137 mm 4° 01′ x 2° 15′
	(2X)	15.2 mm 35° 01′ x 20° 07′
		274 mm 2° 00′ x 1° 08′
M.O.D. from Image Plane		0.84 m
M.O.D. from Front of Lens		0.6 m
Object Dimensions		7.6 mm 696 x 392 mm
at M.O.D.		137 mm 41 x 23 mm
16:9 Aspect Ratio	(2X)	15.2 mm 362 x 204 mm
		274 mm 21 x 12 mm
Filter Size		82 mm P=0.75 (On Barrel)
Dia ø x Length (w/o Hood)		85 x 204 mm
Weight (w/o Hood)		1.58 kg RM / 1.65 kg RD* /
		1.7 kg ZD**
Options		16 Bit Encoders (ZD only) / Quick Frame
Features		Inner Focus / Zoom Limit / Quick Zoom /
		16 Bit Encoders (RM / RD only)

#### PREMIER Series



#### HA19x7.4BE RM/RD\*/ZD\*\*

Zoom Ratio / Format	19X / 2/3"
Focal Length	7.4-141 mm
	(2.2X) 16.3-310 mm
Maximum Relative	1:1.8 (7.4 ~ 98 mm)
Aperture	1:2.6 (141 mm)
Maximum Photometric	T1.9 (7.4 ~ 98 mm)
Aperture T-No.	T2.7 (141 mm)
Angular Field of View	7.4 mm 65°53′ × 40°01′
16:9 Aspect Ratio	141 mm 3°54′ × 2°11′
	(2.2X) 16.3 mm 32°49′ × 18°48′
	310 mm 1°46′ × 1°00′
M.O.D. from Image Plane	0.85 m
M.O.D. from Front of Lens	0.55 m
Object Dimensions	7.4 mm 773 x 434 mm
at M.O.D. 16:9 Aspect Ratio	42 mm 42 x 24 mm
	(2.2X) 16.3 mm 359 x 202 mm
	310 mm 20 x 11 mm
Filter Size	ø 95 mm P=1 mm / ø 107 mm P= 1 mm (In Hood)
Dia ø x Length (w/o Hood)	ø 100 mm × 239.5 mm
Weight (w/o Hood)	2.21 kg (RM) / 2.28 kg (RD)* / 2.28 kg (ZD)**
Options	16 Bit Encoders (ZD only) / Quick Frame
Features	16 Bit Encoders (RM / RD only) / Inner Focus /
	Zoom Limit / Quick Zoom / 2.2 Ext. /

<sup>\*</sup>RD contain Servos for Zoom and Focus.

<sup>\*\*</sup>ZD contains Quick Frame / Precision Zoom Focus System.

#### **HA23x7.6BE RM/RD\*/ZD\*\***

IIAZJAT.ODE KIII/	ND / ZD
Zoom Ratio / Format	23X / 2/3"
Focal Length	7.6 to 175 mm
	(2X) 15.2 to 350 mm
Maximum Relative	1:1.8 (7.6 ~ 122 mm)
Aperture	1:2.65 (175 mm)
Maximum Photometric	T1.9 (7.6 ~ 122 mm)
Aperture T-No.	T2.8 (175 mm)
Angular Field of View	7.6 mm 64° 30′ x 39° 03′
16:9 Aspect Ratio	175 mm 3° 08′ x 1° 46′
	(2X) 15.2 mm 35° 01′ x 20° 07′
	350 mm 1° 34′ x 0° 53′
M.O.D. from Image Plane	1.07m
M.O.D. from Front of Lens	0.8m
Object Dimensions	7.6 mm 915 x 514 mm
at M.O.D. 16:9 Aspect Ratio	175 mm 41 x 23 mm
	(2X) 15.2 mm 473 x 266 mm
	350 mm 21 x 12 mm
Filter Size	$\emptyset$ 95m P=1 (On Barrel) / $\emptyset$ 107m P=1 (In Hood)
Dia ø x Length (w/o Hood)	ø 100 x 223.6 mm
Weight (w/o Hood)	1.88 kg (RM) / 1.95 kg (RD) / 2.01 kg (ZD)**
Options	16 Bit Encoders (ZD only) / Quick Frame
Features	Inner Focus / Zoom Limit / Quick Zoom
	16 Bit Encoders (RM / RD only)

#### HA25x11.5BERD\*

Zoom Ratio / Format		25X / 2/3"
Focal Length		11.5 to 288 mm
	(2X)	23 to 576 mm
Maximum Relative		1:2.0 (11.5 ~ 206 mm)
Aperture		1:2.8 (288 mm)
Maximum Photometric		T2.1 (11.5 ~ 206 mm)
Aperture T-No.		T2.9 (288 mm)
Angular Field of View		11.5 mm 45° 16′ x 26° 23′
16:9 Aspect Ratio		288 mm 1° 54′ x 1° 04′
	(2X)	23 mm 23° 33′ x 13° 22′
		576 mm 0° 57′ x 0° 32′
M.O.D. from Image Plane		2.51 m
M.O.D. from Front of Lens		2.2 m
Object Dimensions		11.5 mm 1740 x 978 mm
at M.O.D.		288 mm 70 x 39 mm
	(2X)	23 mm 870 x 489 mm
		576 mm 35 x 20 mm
Filter Size		ø 107 mm P=1 (On Barrel)
		ø 127 m P=0.75 (In Hood)
Dia ø x Length (w/o Hood)		ø 110 x 265 mm
Weight (w/o Hood)		2.8 kg
Features		Inner Focus/Quick Zoom / Inner Focus

#### **HA25x16.5BERD\***

Zoom Ratio / Format	25X / 2/3"
Focal Length	16.5 to 413 mm
	(2X) 33 to 826 mm
Maximum Relative	1:2.8 (16.5 ~ 289mm)
Aperture	1:4.0 (413 mm)
Maximum Photometric	T2.9 (16.5 ~ 289 mm)
Aperture T-No.	T4.2 (413 mm)
Angular Field of View	16.5 mm 32° 25′ x 18° 33′
16:9 Aspect Ratio	413 mm 1° 20′ x 0° 45′
	(2X) 33 mm 16° 32′ x 9° 20′
	826 mm 0° 40′ x 0° 22′
M.O.D. from Image Plane	2.52 m
M.O.D. from Front of Lens	2.2 m
Object Dimensions	16.5 mm 1213 x 682 mm
at M.O.D.	413 mm 49 x 27 mm
	(2X) 33 mm 606 x 341 mm
	826 mm 24 x 14 mm
Filter Size	ø 107 mm P=1 (On Barrel)
	ø 127m P=0.75 (In Hood)
Dia ø x Length (w/o Hood)	ø 110 x 278 mm
Weight (w/o Hood)	2.9 kg
Features	Inner Focus/Quick Zoom / Inner Focus
	•

<sup>\*</sup>RD contain Servos for Zoom and Focus. \*\*ZD contains Quick Frame / Precision Zoom Focus System.



#### HA42x9.7BERD

#### **OS-TECH**

Zaam Datia / Farmat	43V / 3/3//
Zoom Ratio / Format	42X / 2/3" 9.7 ~ 410 mm
Focal Length	7 1=4
	(2X) 19.4 ~ 820 mm
Maximum Relative	1:2.0 (9.7 ~ 225 mm)
Aperture	1:3.7 (410 mm)
Maximum Photometric	T2.2 (9.7 ~ 225 mm)
Aperture T-No.	T4.0 (410 mm)
Angular Field of View	9.7 mm 52° 37′ x 31° 03′
16:9 Aspect Ratio	410 mm 1° 20′ x 0° 45′
	(2X) 19.4 mm 27° 46′ x 15° 49′
	820 mm 0° 40′ x 0° 23′
M.O.D. from Image Plane	3.18 m
M.O.D. from Front of Lens	2.8 m
Object Dimensions	9.7 mm 2619 x 1472 mm
at M.O.D.	410 mm 64 x 36 mm
	(2X) 19.4 mm 1339 x 753 mm
	820 mm 33 x 19 mm
Filter Size	ø 127 mm P=0.75 (On Barrel)
Dia ø x Length (w/o Hood)	ø130 x 338.5 mm
Weight (w/o Hood)	5.3 kg
Options	Built In OS-TECH
Features	Inner Focus / Zoom Limit / Quick Zoom



#### HA42x13.5BERD

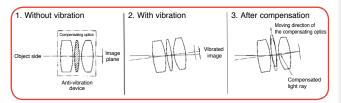
#### **OS-TECH**

Zoom Ratio / Format	42X / 2/3"
Focal Length	13.5 ~ 570 mm
	(2X) 27 ~ 1140 mm
Maximum Relative	1:2.8 (13.5 ~ 307 mm)
Aperture	1:5.2 (570 mm)
Maximum Photometric	T3.0 (13.5 ~ 307 mm)
Aperture T-No.	T5.6 (570 mm)
Angular Field of View	13.5 mm 39° 07′ x 22° 35′
16:9 Aspect Ratio	570 mm 0° 58′ x 0° 33′
	(2X) 27 mm 20° 08′ x 11° 24′
	1140 mm 0° 29′ x 0° 16′
M.O.D. from Image Plane	3.2 m
M.O.D. from Front of Lens	2.8 m
Object Dimensions	13.5 mm 1888 x 1061 mm
at M.O.D.	570 mm 45 x 25 mm
	(2X) 27 mm 944 x 530 mm
	1140 mm 22 x 13 mm
Filter Size	ø 127 mm P=0.75 (On Barrel)
Dia ø x Length (w/o Hood)	ø130 x 358.5 mm
Weight (w/o Hood)	5.4 kg
Options	Built In OS-TECH
Features	Inner Focus / Zoom Limit / Quick Zoom

<sup>\*</sup>RD contain servos for zoom and focus.

#### **OS-TECH**

The HA42x9.7 and HA42x13.5 are optionally equipped with Fujinon's built-in optical stabilization technology (OS-TECH). This feature optically compensates for image vibration as shown below.



Fujinon's Select Series is designed to meet the performance needs of todays mid-range HD cameras. Fujinon worked closely with all major camera manufacturers to engineer true HD lenses that are designed specifically to enhance the performance quality of these cameras.

#### **SELECT** Series



#### **ZA12x4.5B RM/RD\***

Zoom Ratio / Format	12X / 2/3"
Focal Length	4.5 to 54 mm
Maximum Relative	1:1.8 (4.5 ~ 41 mm)
Aperture	1:2.4 (54 mm)
Maximum Photometric	T1.9 (4.5 ~ 41 mm)
Aperture T-No.	T2.6 (54 mm)
Angular Field of View	4.5 mm 93° 38′ x 61° 50′
16:9 Aspect Ratio	54 mm 10° 09′ x 5° 43′
M.O.D. from Image Plane	0.59 m
M.O.D. from Front of Lens	0.3 m
Object Dimensions	4.5 mm 757 x 425 mm
at M.O.D. 16:9 Aspect Ratio	54 mm 59 x 33 mm
Filter Size	ø 127 mm P=0.75 (In Hood)
Dia ø x Length (w/o Hood)	ø 95 x 237.5 mm
Weight (w/o Hood)	1.83 kg (RM) / 1.9 kg (RD/ZD)
Features	16 Bit Encoders (RM / RD only) / Inner Focus / Zoom Limit /
	Quick Zoom

#### SELECT Series



#### ZA12x4.5BE RM/RD\*

	12X / 2/3"
	4.5 to 54 mm
(2X)	9 to 108 mm
	1:1.8 (4.5 ~ 41 mm)
	1:2.4 (54 mm)
	T1.9 (4.5 ~ 41 mm)
	T2.6 (54 mm)
	4.5 mm 93° 38′ x 61° 50′
	54 mm 10° 09′ x 5° 43′
(2X)	9 mm 56° 06′ x 33° 20′
	108 mm 5° 05′ x 2° 52′
	0.59 m
	0.3 m
	4.5 mm 757 x 425 mm
	54 mm 59 x 33 mm
(2X)	9 mm 373 x 210 mm
	108 mm 31 x 17 mm
	ø 127 mm P=0.75 (In Hood)
	ø 95 x 237.5 mm
	2.0 kg (RM) / 2.07 kg (RD)
	16 Bit Encoders (RM / RD only) Inner Focus / Zoom
	Limit / Quick Zoom
	(2X)

<sup>\*</sup>RD contain Servos for Zoom and Focus.

#### **SELECT** Series

#### ZA17x7.6B RM/RD\*/ZD\*\* ZA17x7.6BE RM/RD\*/ZD#





LENS	ZA17x7.6B RM/RD*/ZD**	ZA17x7.6BE RM/RD*/ZD#
Zoom Ratio / Format	17X / 2/3"	17X / 2/3"
Focal Length	7.6 to 130 mm	7.6 to 130 mm
		(2X) 15.2 to 260 mm
Maximum Relative	1:1.8 (7.6 ~ 102 mm)	1:1.8 (7.6 ~ 102 mm)
Aperture	1:2.3 (130 mm)	1:2.3 (130 mm)
Maximum Photometric	T1.9 (7.6 ~ 102 mm)	T1.9 (7.6 ~ 102 mm)
Aperture T-No.	T2.5 (130 mm)	T2.5 (130 mm)
Angular Field of View	7.6 mm 64° 30′ x 39° 03′	7.6 mm 64° 30′ x 39° 03′
16:9 Aspect Ratio	130 mm 4° 13′ x 2° 23′	130 mm 4° 13′ x 2° 23′
		(2X) 15.2 mm 35° 01′ x 20° 07′
		260 mm 2° 07′ x 1° 11′
M.O.D. from Image Plane	0.84 m	0.84 m
M.O.D. from Front of Lens	0.6 m	0.6 m
Object Dimensions	7.6 mm 696 x 392 mm	7.6 mm 696 x 392 mm
at M.O.D. 16:9	130 mm 43 x 24 mm	130 mm 43 x 24 mm
Aspect Ratio		(2X) 15.2 mm 362 x 204 mm
/ ispect riadio		260 mm 21 x 12 mm
Filter Size	ø 82 mm P=0.75 (On Barrel)	ø 82 mm P=0.75 (On Barrel)
Dia ø x Length (w/o Hood)	ø 85 x 203 mm	ø 85 x 204 mm
Weight (w/o Hood)	1.43 kg (RM) / 1.5 kg (RD/ZD)	1.54 kg (RM) / 1.61 kg (RD/ZD)
Options	Quick Frame	Quick Frame
	16 Bit Encoders (ZD only)	16 Bit Encoders (ZD only)
Features	16 Bit Encoders (RM/RD only)	16 Bit Encoders (RM / RD only)
	Zoom Limit / Quick Zoom	Zoom Limit / Quick Zoom
	Inner Focus	Inner Focus

#### SELECT Series

#### **ZA22x7.6B RM/RD\*** ZA22x7.6BE RM/RD\*





LENS	ZA22x7.6B RM/RD*		ZA22x7.6BE RM/RD*
Zoom Ratio / Format	22X / 2/3"		22X / 2/3"
Focal Length	7.6 to 167 mm		7.6 to 167 mm
		(2X)	15.2 to 334 mm
Maximum Relative	1:1.8 (7.6 ~ 120 mm)		1:1.8 (7.6 ~ 120 mm)
Aperture	1:2.5 (167 mm)		1:2.5 (167 mm)
Maximum Photometric	T1.9 (7.6 ~ 120 mm)		T1.9 (7.6 ~ 120 mm)
Aperture T-No.	T2.6 (167 mm)		T2.6 (167 mm)
Angular Field of View	7.6 mm 64° 30′ x 39° 03′		7.6 mm 64° 30′ x 39° 03′
16:9 Aspect Ratio	167 mm 3° 17′ x 1° 51′		167 mm 3° 17′ x 1° 51′
		(2X)	15.2 mm 35° 01′ x 20° 07′
			334 mm 1° 39′ x 0° 55′
M.O.D. from Image Plane	1.07 m		1.07 m
M.O.D. from Front of Lens	0.8 m		0.8 m
Object Dimensions	7.6 mm 915 x 514 mm		7.6 mm 915 x 514 mm
at M.O.D. 16:9	167 mm 43 x 24 mm		167 mm 43 x 24 mm
Aspect Ratio		(2X)	15.2 mm 473 x 266 mm
			334 mm 22 x 12 mm
Filter Size	ø 95 mm P=1.0 (On Barrel)		ø 95 mm P=1.0 (On Barrel)
	ø 107 mm P=1.0 (In Hood)		ø 107 mm P=1.0 (In Hood)
Dia ø x Length (w/o Hood)	ø 100 x 222.6 mm		ø 100 x 222.6 mm
Weight (w/o Hood)	1.73 kg (RM) /		1.85 kg (RM)/
	1.8 kg (RD)		1.92 kg (RD)
Features	16 Bit Encoders (RM/RD only)		16 Bit Encoders (RM/RD
	Zoom Limit / Quick Zoom		only) Zoom Limit / Quick
	Inner Focus		Zoom / Inner Focus

<sup>\*</sup>RD contain Servos for Zoom and Focus.
\*\*ZD contains Quick Frame / Precision Zoom Focus System.

<sup>#</sup> ZD special order.

The XA20sx8.5BERM, with 170mm maximum focal length, offers economy minded users a long ENG lens with a 2x extender at an attractive price point.

Featuring QuickZoom, CruiseZoom, and a wide variety of controls and adapters, make any of the Exceed Series lenses a great choice. The features, quality, and price level make them a performance packed, smart addition to your camera.





Zoom Ratio / Format	20X / 2/3"
Focal Length	8.5 - 170 mm
Maximum Relative	1:1.8 (8.5 ~ 113 mm)
Aperture	1:2.7 (170 mm)
Angular Field of View	8.5 mm 58° 51′ x 35° 11′
16:9 Aspect Ratio	170 mm 3° 14′ x 1° 49′
M.O.D. from Image Plane	1.1 m
M.O.D. from Front of Lens	0.9 m
Object Dimensions	8.5 mm 910x511 mm
at M.O.D. 16:9 Aspect Ratio	170 mm 47x26 mm
Filter Size	ø 82 P= 0.75
Dia ø x Length (w/o Hood)	ø 85 x 180.8 mm
Weight (w/o Hood)	1.5 kg
Features	Inner Focus / Quick Zoom





Zoom Ratio / Format	20X / 2/3"
Focal Length	8.5 - 170 mm
	(2X) 17 - 340 mm
Maximum Relative	1:1.8 (8.5 ~ 113 mm)
Aperture	1:2.7 (170 mm)
Angular Field of View	8.5 mm 58° 51′ x 35° 11′
16:9 Aspect Ratio	170 mm 3° 14′ x 1° 49′
	(2X) 17 mm 31° 30′ x 18° 01′
	340 mm 1° 37′ x 0° 54′
M.O.D. from Image Plane	1.1 m 0.59 m
M.O.D. from Front of Lens	0.9 m
Object Dimensions	8.5 mm 910 x 511 mm
at M.O.D. 16:9 Aspect Ratio	170 mm 47 x 26 mm
	(2X) 17 mm 469 x 264 mm
	340 mm 24 x 13 mm
Filter Size	ø 82 P= 0.75
Dia ø x Length (w/o Hood)	ø 85 x 200.8 mm
Weight (w/o Hood)	1.58 kg
Features	Inner Focus / Quick Zoom



WCV-X85 - Wide Converter available see page 27.

#### **HDTV STUDIO LENSES**

Fujinon's Studio Lenses are essential for applications requiring the ultimate in Control and optical quality. Both the XA22x7BES & HA27x6.5 studio lenses feature sharp images, superb corner resolution and quiet precise servo zoom & focus. The Compact XA22x7BES is designed specifically for today's 2/3" ENG style cameras.



#### XA22x7BES

Zoom Ratio / Format		22X / 2/3"
Focal Length		7.0 ∼ 154 mm
	(2X)	14 ~ 308 mm
Maximum Relative		1:1.8 (7 ~ 116 mm)
Aperture		1:2.4 (154 mm)
Maximum Photometric		1:2.2 (7 ~ 116 mm)
Aperture T-No.		T2.9 (154 mm)
Angular Field of View		7.0 mm 68° 49′ x 42° 07′
(Hor. x Vert. in °)		154 mm 3° 34′ x 2° 00′
16:9 Aspect Ratio	(2X)	14 mm 37° 49′ x 21° 48′
		308 mm 1° 47′ x 1° 0′
M.O.D. from Image Plane		1.17 m
M.O.D. from Front of Lens		0.8 m
Object Dimensions		7.0 mm 1197 x 673 mm
at M.O.D.		154 mm 54 x 31 mm
(Hor. x Vert. in mm)	(2X)	14 mm 599 x 337 mm
16:9 Aspect Ratio		308 mm 27 x 15 mm
Size (HxWxL)		179 x 187 x 340 mm
Weight		6.6 kg
Features		16 Bit Encoders / FIND /
		Auto Compensation
		of Focus Breathing /
		Virtual Reality Output
		Dust Proof and Anti-Fog /
	I	2.2X Extender

<sup>\*</sup> Some features require optional control or software.



#### HA27x6.5BESM

	27X / 2/3"
	6.5 ∼ 180 mm
(2X)	13 ~ 360 mm
	1:1.5 (6.5 ~ 123 mm)
	1:2.2 (180 mm)
	T1.6 (6.5 ~ 123 mm)
	T2.4 (180 mm)
	6.5 mm 72° 50′ x 45° 02′
	180 mm 3° 03′ x 1° 43′
(2X)	13 mm 40° 30′ x 23° 25′
	360 mm 1° 32′ x 0° 51′
	1.18 m
	0.6 m
	6.5 mm 1053 x 592 mm
	180 mm 39 x 22 mm
(2X)	13 mm 527 x 296 mm
	360 mm 20 x 11 mm
	233 x 231 x 539 mm
	19.7 kg
	Advanced Back Focus / Remote Macro / FIND /
Focus Fader / Auto Compensation of Focus Breathing	
	Dust Proof & Anti Fogging / Virtual Reality Output
	(2X)

<sup>\*</sup> Some features require optional control or software.

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#### **HDTV FIELD LENSES**



The very popular XA55X9.5BESM with built in camera supporter is now available for hard cameras and system expanders. All of Fujinon's Field lenses feature the exclusive desiccant system for removal of moisture caused by condensation.

#### **OS-TECH**

# XA55x9.5BESM (without support) XA55x9.5BESM-S5L



Zoom Ratio / Format		55X / 2/3"
Focal Length		9.5 to 525 mm
-	(2X)	19 to 1050 mm
Maximum Relative		1:1.7 (9.5 ~ 307 mm)
Aperture		1:2.9 (525 mm)
Maximum Photometric		T1.85 (9.5 ~ 307 mm)
Aperture T-No.		T3.61 (525 mm)
Angular Field of View		9.5 mm 53° 34 × 31° 41′
(Hor. x Vert. in °)		525 mm 1° 03 × 0° 35′
16:9 Aspect Ratio	(2X)	19 mm 28° 20 × 16° 09′
·		950 mm 0° 32 × 0° 18′
M.O.D. from Image Plane		3.9 m
M.O.D. from Front of Lens		3.0 m
Object Dimensions		9.5 mm 2782 × 1564 mm
at M.O.D.		525 mm 51 × 29 mm
(Hor. x Vert. in mm)	(2X)	19 mm 1406 × 790 mm
16:9 Aspect Ratio		950 mm 26 × 15 mm
Size (HxWxL)		253 x 253 x 876 mm
Weight		24.8 kg w/support 21.0 w/o support
Options		Transit Case / With or Without Support Bracket
Features		Built-in OS-TECH / Dust Proof & Anti Fogging/
		16 bit Virtual Reality Output

#### XA77x9.5BESM

#### OS-TECH



Zoom Ratio / Format	77X / 2/3"
Focal Length	9.5 ~ 732 mm
	(2X) 19.0 ~ 1464 mm
Maximum Relative	1:1.7 (9.5 ~ 335 mm)
Aperture	1:3.8 (732 mm)
Maximum Photometric	T1.9 (9.5 ~ 335 mm)
Aperture T-No.	T4.1 (732 mm)
Angular Field of View	9.5 mm 53° 34′ x 31° 41′
(Hor. x Vert. in °)	732 mm 0° 45′ x 0° 25′
16:9 Aspect Ratio	(2X) 18.6 mm 28° 20′ x 16° 09′
· · · · · · · · · · · · · · · · · · ·	1464 mm 0° 23′ x 0° 13′
M.O.D. from Image Plane	3.4 m
M.O.D. from Front of Lens	2.7 m
Object Dimensions	9.5 mm 2425 x 1363 mm
at M.O.D.	732 mm 32 x 18 mm
(Hor. x Vert. in mm)	(2X) 19.0 mm 1241 x 697 mm
16:9 Aspect Ratio	1464 mm 16 x 9 mm
Size (HxWxL)	253 x 253 x 656.4 mm
Weight	22.4 kg
Features	Advanced Back Focus / Remote Macro / Focus Fader /
	Built-In OS-TECH / Dust Proof & Anti Fogging / FIND /
	16 Bit Virtual Reality Output

<sup>\*</sup> Some features require optional control or software.

#### **HDTV FIELD LENSES**



#### **XA88x 12.5BESM**

#### OS-TECH

Zoom Ratio / Format		88X / 2/3"
Focal Length		12.5 ~ 1100 mm
	(2X)	25 ~ 2200 mm
Maximum Relative		1:2.3 (12.5 ~ 477 mm)
Aperture		1:5.3 (1100 mm)
Maximum Photometric		T2.4 (12.5 ~ 477 mm)
Aperture T-No.		T5.6 (1100 mm)
Angular Field of View		12.5 mm 41° 58′ x 24° 20′
(Hor. x Vert. in °)		1100 mm 0° 30′ x 0° 17′
16:9 Aspect Ratio	(2X)	25 mm 21° 43′ x 12° 18′
		2200 mm 0° 15′ x 0° 08′
M.O.D. from Image Plane		3.53 m
M.O.D. from Front of Lens		2.9 m (12.5 ~200 mm)
Object Dimensions		12.5 mm 2091 x 1175 mm
at M.O.D.		1100 mm 24 x 13 mm
(Hor. x Vert. in mm)	(2X)	25 mm 1046 x 588 mm
16:9 Aspect Ratio		2200 mm 12 x 7 mm
Size (HxWxL)		265 x 270 x 593 mm
Weight		24.5 kg
Features		Advanced Back Focus / Remote Macro / Focus Fader /
		Built-In OS-TECH / Dust Proof & Anti Fogging / FIND /
		Virtual Reality Output
		·

<sup>\*</sup> Some features require optional control or software.



#### XA99x8.4BESM

#### **OS-TECH**

Zoom Ratio / Format	99X / 2/3"
Focal Length	8.4 ~ 832 mm
	(2X) 16.8 ~ 1664 mm
Maximum Relative	1:1.7 (8.4~ 341 mm)
Aperture	1:4.15 (832 mm)
Maximum Photometric	T1.85 (8.4 ~ 341 mm)
Aperture T-No.	T4.52 (832 mm)
Angular Field of View	8.4 mm 59° 26′ x 35° 35′
(Hor. x Vert. in °)	832 mm 0° 40′ x 0° 22′
16:9 Aspect Ratio	(2X) 16.8 mm 31° 52′ x 18° 14′
	1664 mm 0° 20′ x 0° 11′
M.O.D. from Image Plane	2.9 m
M.O.D. from Front of Lens	3.55 m
Object Dimensions	8.4 mm 2950 x 1658 mm
at M.O.D.	832 mm 31 x 17 mm
(Hor. x Vert. in mm)	(2X) 16.8 mm 1538 x 864 mm
16:9 Aspect Ratio	1664 mm 16 x 9 mm
Size (HxWxL)	264 x 258 x 610 mm
Weight	23.5 kg
Features	16bit encoders / New Advanced Stabi - OS-TECH
	Dust proof and anti-fogging / Advanced back focus
	HT-EBC Coatings / Virtual Reality Output / Focus Fader

<sup>\*</sup> Some features require optional control or software.

#### HDTV VIDEOCONFERENCING LENSES

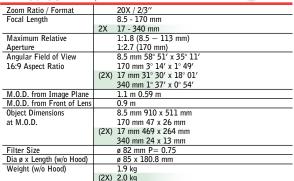
Fujinon's HD remote control lenses are ideal for videoconferencing, tower cam and other applications requiring remote control of zoom, focus, and iris functions.



XIII JA 1. JUNID	
Zoom Ratio / Format	17X / 1/3"
Focal Length	4.5 to 77 mm
Maximum Relative	1:1.6 (4.5 ~ 77 mm)
Aperture	
Angular Field of View	4.5 mm 60° 19′ x 36° 11′
16:9 Aspect Ratio	77 mm 3° 53′ x 2° 11′
M.O.D. from Image Plane	1.16 m
M.O.D. from Front of Lens	0.95 m
Object Dimensions	4.5 mm 999 x 562 mm
at M.O.D.	77 mm 60 x 34 mm
Filter Size	ø 82 mm P=0.75
Dia ø x Length (w/o Hood)	ø 85 x 175.6 mm
Weight (w/o Hood)	1.38 kg
	•

# Series

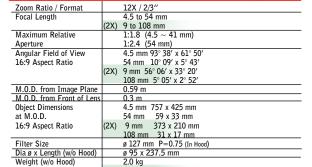
#### 20sx8.5 B MD/EMD\*

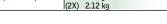


#### SELECT

Weight (w/o Hood)

#### Series ZA12x4.5B MD/EMD\*





\*EMD version with manual extender



#### **HDTV VIDEOCONFERENCING LENSES**

#### SELECT Series ZA17x7.6B MD/EMD\*



17X / 2/3"
7.6 to 130 mm
(2X) 15.2 to 260 mm
1:1.8 (7.6~ 102 mm)
1:2.3 (130 mm)
7.6 mm 64° 30′ x 39° 03′
130 mm 4° 13′ x 2° 23′
(2X) 15.2 mm 35° 01′ x 20° 07′
260 mm 2° 07′ x 1° 11′
0.84 m
0.6 m
7.6 mm 696 x 392 mm
130 mm 43 x 24 mm
(2X) 15.2 mm 362 x 204 mm
260 mm 22x 12 mm
ø 85 mm P=0.75
ø 85 x 204 mm
1.9 kg
(2X) 2.0 kg

♦ For remote application of extender, the ECU motorized extender unit is required.

#### **SELECT** Series

#### ZA22x7.6B MD/EMD\*



Zoom Ratio / Format	22X / 2/3"
Focal Length	7.6 to 167 mm
	(2X) 15.2 to 334 mm
Maximum Relative	1:1.8 (7.6 ~ 120 mm)
Aperture	1:2.5 (167 mm)
Angular Field of View	7.6 mm 64° 30′ x 39° 03′
16:9 Aspect Ratio	167 mm 3° 17′ x 1° 51′
•	(2X) 15.2 mm 35° 01′ x 20° 07′
	334 mm 1° 39′ x 0° 55′
M.O.D. from Image Plane	1.07 m
M.O.D. from Front of Lens	0.8 mm
Object Dimensions	7.6 mm 915 x 514 mm
at M.O.D.	167 mm 43 x 24 mm
	(2X) 15.2 mm 473 x 266 mm
	334 mm 22 x 12 mm
Filter Size	ø 95 mm P=1.0 (On Barrel)
Weight (w/o Hood)	1.72 kg
	(2X) 2 0 kg

<sup>\*</sup>EMD version with manual extender

#### PREMIER Series

#### HAs18x7.6BMD#



LENS	HAs18x7.6BMD			
Zoom Ratio / Format	18X / 2/3"			
Focal Length	7.6 mm ~ 137 mm			
Maximum Relative	1:1.8 (7.6 mm ~ 103 mm)			
Aperture	1:2.4 (137 mm)			
Angular Field of View	7.6 mm 64° 30′ x 39° 03′			
(Hor. x Vert. in °)	137 mm 4° 01′ x 2° 15′			
M.O.D. from Image Plane	0.84 m			
M.O.D. from Front of Lens	0.6 m			
Object Area (at Wide)	7.6 mm 696 x 392 mm			
at M.O.D. (at Tele)	137 mm 41 x 23 mm			
Filter Size	ø 82mm P=0.75			
Weight w/o hood	1.55 kg			

<sup>\*</sup>Optional Accessory Configuration SS-33A for model HAs18x7.6B MD only. Refer to pg. 33 for Standard Videoconferencing Accessories.

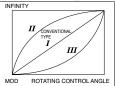
<sup>#</sup> Special order.

## THREE-MODE FINE FOCUS

By shifting the sensitivity from the wide side to the telephoto side of the focus range, this control provides more precise focusing

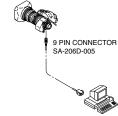
for studio or sports productions.



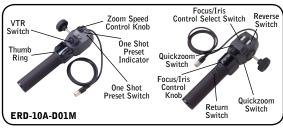


# SERIAL DIGITAL REMOTE CONTROL BY PC

Remote control of zoom, focus and iris for Digi-Power lenses is possible via serial digital link, providing accurate positioning for virtual studio and other applications requiring digital precision.



#### **DIGI ZOOM DEMAND\***

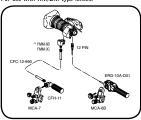


- \*New Digital features only available on ERM/ERD-M/S.
- A. CFC-990 Flex Cable
- B. FMM-3C/6B Manual Module
- Manual Module C. ZMM-6
- Manual Module
  D. EBF-1 Focus Cable
- E. MCA-36
- F. ERD-20A-A02 Zoom Demand
- G. FSP-13G Focus Positional
- Module H. EPD-31A-D02
- I. CZH-14 Focus Handle
- J. CFH-11 Focus Handle
- K. MCA-7 Mounting Clamp
- L. EPD-21A-A02 Focus Demand
- M. ERD-10A-D01M Zoom Demand
- N. ALH-117C-01A Support for HA36x/A36x HA42x

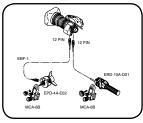


#### **DIGI POWER REAR CONTROL KITS**

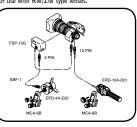
MS-11D Manual Focus/Servo Zoom For use with RM/ZM type lenses.



SS-13D Servo Focus/Servo Zoom For use with RD/ZD type lenses.

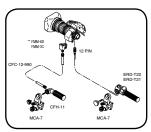


SS-11D Servo Focus/Servo Zoom For use with RM/ZM type lenses.

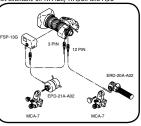


#### STANDARD REAR CONTROL KITS

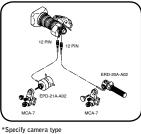
MS-11 Manual Focus/Servo Zoom



SS-11 Servo Focus/Servo Zoom Not available on HA42x, HA36x and A36

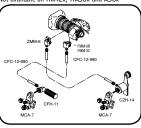


SS-13A Servo Focus/Servo Zoom For use with ERD type lenses.



<sup>\*\*</sup>FMM-3C for use on HA42x and HA25x

MM-11 Manual Focus/Manual Zoom Not available on HA42x, HA36x and A36x



#### **MOUNTING SYSTEM**

Fujinon has replaced the "cone" shaped mounting system with the "tooth" system. The cone type may still be ordered as a special order.



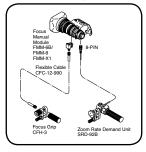
New Style MCA-7



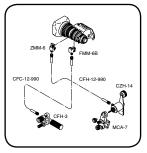
le Old Style MCA-1A (Discontinued)

#### PROFESSIONAL REAR CONTROL KITS

MS-01 Manual Focus/Servo Zoom
MS-X1 for XA16sx8BRAM, XA16x and XS16x only

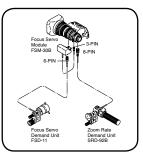


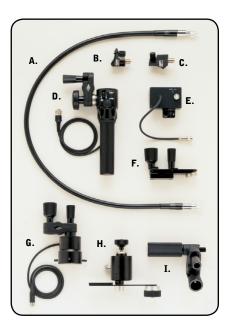
MM-01 Manual Focus/Manual Zoom Not available on S16x7.3



\*Specify camera type.

SS-01 Servo Focus/Servo Zoom Not available on S16x7.3





- A. CFC-990 Flex Cable
- B. FMM-6B/FMM-8\* FMM-X1 Focus Manual Module
- C. ZMM-6 Zoom Manual Module
- D. SRD-92B Zoom Demand
- E. FSM-30B Focus Servo Module
- F. MCA-7 Mounting Clamp
- G. FSD-11 Focus Demand
- H. CZH-14 Zoom Handle
- I. CFH-3 Focus Handle

#### **LENS CONVERTERS**



Wide Converter (WCV-X85) XT17sx4.5 XT20sx4.7 XA16sx8 XA20sx8.5







Tele Converter (TCV)

#### **HD/ENG LENS CONVERTERS**

Model	Туре	ø Size	Converter*	Mag.	Converted Focal Length (mm)	M.O.D. (m)	Weight (kg)
HS16x4.6	TELE	95 mm	TCV-H95	1.5x	74.0 →111.0	0.90	1.00
	WIDE	95 mm	WCV-H95	0.8x	4.6 → 3.9	0.29	1.00
HS18x5.5/	TELE	85 mm	TCV-H85	1.5x	100.0 → 150.0	1.35	1.10
HSs18x5.5	WIDE	85 mm	WCV-H85	0.8x	5.5 → 4.4	0.38	1.05
	WIDE	85 mm	WAT-H85	0.7x	5.5 → 3.9	0.29	0.36
	FISHEYE	85 mm	F-ATH85	0.57x	5.5 → 3.1	0.19	0.36
HA16x6.3	TELE	95 mm	TCV-H955	1.5x	101.0 → 152.0	0.90	1.00
	WIDE	95 mm	WCV-H95	0.8x	6.3 → 5.4	0.29	1.00
HA18x7.6E/	TELE	85 mm	TCV-H85	1.5x	137.0 → 205.5	1.35	1.10
HAs18x7.6	WIDE	85 mm	WCV-H85	0.8x	7.6 → 6.1	0.38	1.05
	WIDE	85 mm	WAT-H85	0.7x	7.6 → 5.3	-	0.36
	FISHEYE	85 mm	F-ATH85	0.57x	-	-	0.36
HA19x7.4BE	TELE	100 mm	TCV-H100	1.5x	$141.0 \rightarrow 211.5$	1.24	1.00
	WIDE	100 mm	WCV-H100	0.8x	7.4 → 5.9	0.35	1.05
	WIDE	100 mm	WAT-H100	0.7x	7.4 → 5.2	0.27	0.53
HA22x7.3E	TELE	110 mm	TCV-H110	1.5x	161.0 → 242.0	1.90	1.10
HA23x7.6E	TELE	100 mm	TCV-H100	1.5x	175.0 → 262.5	1.80	1.00
	WIDE	100 mm	WCV-H100	0.8x	7.6 → 6.1	0.51	1.05
	WIDE	100 mm	WAT-H100	0.7x	7.6 → 5.3	0.39	0.53
XT17sx4.5	WIDE	85 mm	WCV-X85	0.8x	4.5 → 3.6	0.61	0.75
XT20sx4.7	WIDE	85 mm	WCV-X85	0.8x	4.7 → 3.76	0.58	0.75
XA16sx8	WIDE	85 mm	WCV-X85	0.8x	8 → 6.4	0.51	0.75
XA20sx8.5	WIDE	85 mm	WCV-X85	0.8x	8.5 → 6.8	0.58	0.75
XS17x5.5/	TELE	85 mm	TCV-H85	1.5x	94.0 → 141.0	1.35	1.10
ZS17x5.5	WIDE	85 mm	WCV-H85	0.8x	5.5 → 4.4	0.38	1.05
	WIDE	85 mm	WAT-H85	0.7x	5.5→3.8	0.29	0.36
	<b>FISHEYE</b>	85 mm	F-ATH85	0.57x	5.5 → 3.1	0.19	0.36
ZA17x7.6	TELE	85 mm	TCV-H85	1.5x	130.0 → 195.0	1.35	1.10
	WIDE	85 mm	WCV-H85	0.8x	$7.6 \rightarrow 6.1$	0.38	1.05
	WIDE	85 mm	WAT-H85	0.7x	7.6 → 5.3	0.29	0.36
	FISHEYE	85 mm	F-ATH85	0.57x	7.6 → 4.3	0.19	0.36
ZA22x7.6	TELE	100 mm	TCV-H100	1.5x	167.0 → 250.5	1.80	1.00
	WIDE	100 mm	WCV-H100	0.8x	7.6 → 6.1	0.51	1.05
	WIDE	100 mm	WAT-H100	0.7x	7.6 → 5.3	0.39	0.53

\*TCV/WCV are zoom thru type \*\*ø 95mm P-1 screw on type
Wide attachment and fisheye attachment can be used at WIDE END.
Number of M.O.D. is at wide end.

TELE CONVERTER

WIDE CONVERTER

WIDE ATTACHMENT

FISH-EYE ATTACHMENT

FILTER

ZOOM LENS

2X EXTENDER

#### **MOUNT ADAPTERS**



ACM-21

	Original Format	Camera Format	Focal Length Shift
-	2/3"	1/2"	1.38x
-	2/3"	1/3"	1.83x
C	1/2"	1/3"	1.33x

Model	Description
ACM-7B	2/3" lens to adapt to standard 1/2" camera mount
ACM-8	2/3" lens to adapt to Sony 1/2" hot shoe camera mount -
	power cable from lens connects to camera
ACM-8B	2/3" lens to adapt to Sony 1/2" hot shoe camera mount -
	power cable from lens connects to ACM
ACM-12	1/2" standard mount lens to adapt to 1/3" standard
	mount camera ie: JVC HD100/200, Sony HVR-Z7/S270
ACM-17	2/3" lens to adapt to 1/3" standard mount camera ie:
	JVC, Panasonic and Sony
ACM-19	1/2" Sony hot shoe mount lens to adapt to 1/3" Sony
	Mount Ie: Sony HVR-Z7/S270
ACM-21	2/3" lens to adapt to 1/2" Sony Sp mount camera
	Ie: Sony PMW-EX3

# FUJIFILM Value from Innovation

# CABRIO ACCESSORIES & CONFIGURATIONS

#### HS-304A-114 LENS HOOD\* HS-304B-114 LENS HOOD\*\*

Fits on front of lens barrel. Accepts 127mm filters.

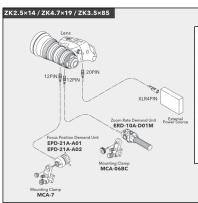
- \* PL 19-90 and PL 85-300 and PL 20-120
- \*\* PL 14-35

#### **CABLES**

Model	20 PIN CABRIO LENS to	
SA-206M-1R2-US	12P CAMERA	
SA-206K-R70-US	4P XLR POWER	
SA-206K-R70P-US	P-Tap	
SA-206D-005	9P D Sub SERIAL	
SA-206R-R16-US	Y Cable **  20P PRESTON FIZ CABLE  and 4P XLR PWR	
SA-206R-R16P-US	Y Cable **  20P PRESTON FIZ CABLE and P-TAP PWR	
** Required: Preston su	ipplied "Fujinon Interface Cable"	
	•	

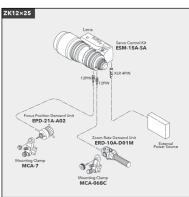


#### TYPICAL WIRED CONFIGURATIONS





PL 19-90 (ZK4.7x19) shown with Rear Controls





PL 25-300 (ZK12x25) shown with ERD-10A-D01M Zoom Demand and optional ESM-15A-SA Servo.

#### **ACCESSORIES: STUDIO FIELD**

Fujinon's anti-vibration system optically compensates for image vibration resulting in stable images even at extreme focal lengths. Two types of OS-TECH systems are available: an external anti-vibration adapter, the TS-P for barrel-type lenses, and an internal unit for box-type lenses.

#### Image After-Shaking Reduced to a Minimum

The after-shaking phenomenon of images moving after the pan/tilt operation is stopped is characteristic of an anti-vibration device. Fujinon's exclusive algorithm system has reduced the phenomenon to a minimum for a natural-feeling operation.

# Type TS-P Adapt to many Existing ENG Lenses

OS-TECH adapter can be quickly attached between most Fujinon ENG lenses and the camera to provide the anti-vibration function. A single adapter provides stabilization for any adaptable lens. In addition to stabilization, the adapter increases the lens magnification by 1.25 times making extreme close-up shots possible with shorter focal length lenses.



TS-P58A

#### **Amount of Compensation**

At Telephoto End with 2X Extender



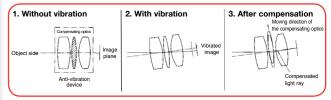
Approx. 20% of Image Height Vertical and Horizontal or Vertical Only

The EA-12A-05BA stabilizer controller provides for H or V and H+V plus on/off in a compact controller. This new control includes an LED to indicate on/off in the view finder.



EA-12A-05BD Stabilizer Control with viewfinder indication

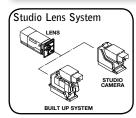
#### The Principal of Anti-vibration Device "Optical Stabilized Technology"

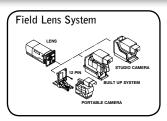


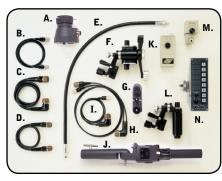
#### OS-TECH Model TS-P58A Stabilization System Optical Shift Magnification of Focal Length 1.25 Bayonet Mount (2/3 in. B-type) Mount Direction of Compensation Vertical/Horizontal or Vertical Only Approx. 1 to 10 Hz Frequency of Compensation Approx. 20% of Vertical at Screen Anti-vibration Range Power Consumption DC12V, 4.2W (from camera) Dimensions (L x W x H) 58 x 120 x 150 mm Mass 0.84ka Available for most model lenses. Note

Please contact your sales representative for more information.

#### **ACCESSORIES: STUDIO/FIELD**







- A. EPD-31A-D02 Focus Demand
- B. ESZ-12 Zoom Demand Cable
- C. ESL-1C Shot Box Cable
- D. ESF-1C Focus Shot Box Cable
- E. BFC-36 Flex Cable
- F. BZH-2A Zoom Handle
- G. MCA-36 Mounting Clamp
- H. EFZ-11E Focus/Zoom Cable
- I. ELZ-11D Zoom Demand Cable
- J. ERD-30A-D01 Zoom Rate Demand
- K. ESM-D51B/D52B Servo Module
- L. BFH-1A Focus Grip
- M.EMM-51B Manual Module
- N. ESB-6A-E12 Shot Box

EPA-22 Not shown - see below

#### **DIGI ZOOM DEMAND**



#### **SERVOS**

Digital servos provide precise control of zoom and focus for the most demanding productions.

# THREE-MODE FINE FOCUS

By shifting the sensitivity from the wide side to the telephoto side of the focus range, this control provides more precise focusing for studio or sports productions.

#### ELH\*

Fujinon's convenient ELH bracket allows studio/field lenses to be used with hand-held type cameras.

\*Additional power may be required for servos.

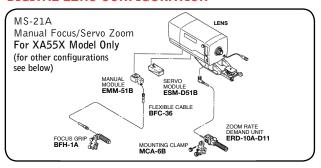
#### **EPA-22**

A unique servo focus demand with the look and feel of a manual control.



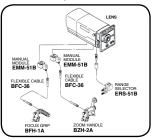
#### **ACCESSORIES: STUDIO/FIELD**

#### DIGITAL LENS CONFIGURATION

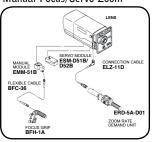


#### **DIGITAL LENS CONFIGURATION**

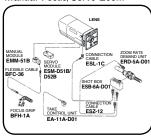
MM-21 Manual Focus/Manual Zoom



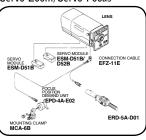
MS-21D Manual Focus/Servo Zoom



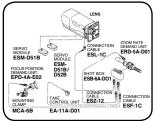
MS-22D (w/Shot Box) Manual Focus/Servo Zoom



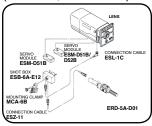
SS-21D Servo Zoom/Servo Focus



SS-22D (w/Shot Box) Servo Focus/Servo Zoom

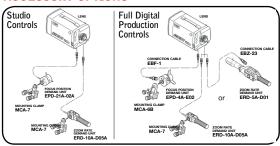


SS-23D (Shot Box w/Focus Demand)



#### **ACCESSORIES: XA22x7BES**

#### **ACCESSORY OPTIONS**



#### DIGI ZOOM/ANALOG FOCUS Studio Controls

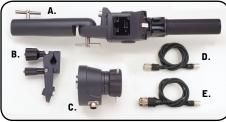


- A. MCA-7 Mounting Clamp
- B. EPD-21A-02A Focus Demand
- C. ERD-10A-D05A Zoom Demand

# DIGI ZOOM/DIGI FOCUS Full Digital Production Controls



- A. EPD-31A-D02 Digi Focus Demand
- B. MCA-36 Mounting Clamp
- C. EBF-1 Focus Cable
  - D. ERD-10A-D05A Digi Zoom Demand
- E. MCA-7 Mounting Clamp



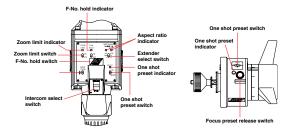
- A. ERD-30A-D01 Digi Zoom Demand
- B. MCA-36 Mounting Clamp
- C. EPD-31A-D02 Digi Focus Demand
- D. EBZ-23 Zoom Cable
- E. ERP-30A-D01 Focus Cable



#### STUDIO/FIELD FEATURES

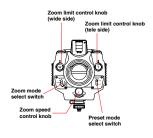
#### ONE SHOT PRESET

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.



#### **ZOOM MODE SELECT**

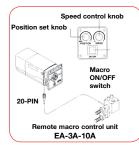
A zoom mode switch provides the option to change the zoom response from "normal" to more sensitive on the wide or telephoto side.



#### ADVANCED BACK FOCUS: REMOTE MACRO AND FOCUS FADER

This system allows macro shooting as close as 0.05m (lens dependant) from the object. Focus fades are also possible at the wide side of the zoom range with the use of a simple remote control unit, adding to the production value.

Standard on some field and studio lenses (controller optional)



#### 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, thus reducing image size change when focusing.

#### VIRTUAL CONNECTOR

An interface connector which provides an output of lens positional data is conveniently

located on Fujinon's newest EFP and Studio lenses for interface with virtual advertising and statistical display systems.



#### PREMIER & SELECT ENG FEATURES



#### DIGITAL GRIP

FUJINON has designed a new unique Digital Grip for DIGI POWER ENG Lenses.

The new Grip is enabled to enhance further lens operation performance.



The beauty of our New Drive Grip is that it is focused on usability and comfort. We have implemented design input from the top camera users. It has a comfortable feel and the controls are naturally placed, a seamless interface.



New Drive Grip achieves 50% drop in current draw compared to it's predecessor as well as a significant reduction in operation noise.

#### Super Slow Zoom

Smooth and natural zooming is possible at an extremely slow speed.

#### **IIIII POWER**

In order to enhance the newest optical design technology, Fujinon has developed the digital servo control system DIGI POWER offering advanced performance of its zoom lenses. In addition to improved specification and performance the utilization of digital circuitry in our DIGI POWER product line has made many new features available that were virtually impossible in the past. DIGI POWER lenses provide for vastly improved accuracy and repeatability over previous designs and enable custom control parameters to be memorized for individual camera operator's preferences. An optional 16 bit processor for zoom, focus and iris is available for applications requiring a high degree of accuracy.

#### uick**Z**oom

QUICKZOOM speed is 0.6 sec. / 0.7 sec.\* from end to end. QUICKZOOM provides a rapid zoom movement to the telephoto position to check focus by the simple push of a button. Releasing the button returns the lens to the previously selected zoom position. Furthermore, by setting the switch, QUICKZ00M can be performed remotely from zoom rate demand units.

0.6 sec. : Studio and Field lens 0.7 sec. : ENG/EFP lens



Frame your shot.

Press Q-Z button.

zooms in. Check focus and release Q-Z button.

Lens zooms back to original frame in full focus.

#### PREMIER & SELECT ENG FEATURES

QUICKZOOM solves the problem of having to reframe a shot after checking focus. This exclusive feature is a standard component on all of DIGI POWER lenses.

Utilizing the QUICKZOOM function can be an extremely time saving and productive production tool, by allowing a quick check of focus after a framed shot has been established. Simply press the Q-Z button and the lens zooms in tight at maximum speed, check focus and release the Q-Z button. The lens zooms out to the pre-selected shot automatically. No more guess work as to what the framed shot was prior to checking focus.

#### ZOOM MODE SELECT

A zoom mode switch provides the option to change the zoom response from "normal" to more sensitive on the wide or telephoto side. With the 3-zoom mode (10-zoom mode on ENG/EFP) the user can select the most suitable fine touch. These zoom mode settings are ideal when switching between productions such as drama and sports. The zoom torque adjust is available only on Quick Frame lenses.



#### **ZOOM LIMIT**

The zoom limit function can be used in the servo operational mode. By using this function, the zoom movement toward both the wide side and the telephoto side can be limited. An override switch quickly returns the lens to normal mode.





#### **AUTO-CRUISING ZOOM**

Pressing the C-Z button while zooming will fix the zoom speed at the existing rate. Pressing the seesaw switch a second time slightly will return the zoom speed to normal.

Standard on: DIGI POWER Studio and Field lens, DIGIPOWER ENG / EFP lens



# ZOOM MAXIMUM SPEED ADJUSTMENT

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

#### PREMIER & SELECT ENG FEATURES

#### PRECISION SERVO/QUICK FRAME

The Precision Servo system provides precise control of zoom and focus by incorporating anti-backlash gearing. This is ideal for robotics and 3D applications. Sixteen bit encoders are available as an option. Quick Frame provides fast manual zooms without disengaging the manual zoom lock as in standard designs.

# VIRTUAL CONNECTOR WITH 16 BIT ENCODERS

FUJIFILM has developed the small and light encoder device in the RM/RD drive units. The high resolution 16 bit encoders in the DIGI POWER lens is now standard for more accurate positioning for virtual studio, robotic, and other applications.



16 Bit Encoders Now Standard

Serial Digital Remote Control/PC Control Remote control of zoom, focus and iris for DIGI POWER is possible via serial digital link.

NOTES

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# NOTES

NOTES

## NOTES



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