

Fujinon's synchronous control system. For use with 3D rigs.



In order to shoot 3D images, the left and right camera lens must be the same focal length (zoom angle). When using zoom lenses, the zoom and focus position of the left and right lens must match and the servo drives must not exhibit back-

lash. Most 3D rigs employ special servos and controllers. Fujinon's synchronous system uses lenses which have precision servos that may be used in conjunction with 3D rigs or in normal 2D productions with familiar video controllers.

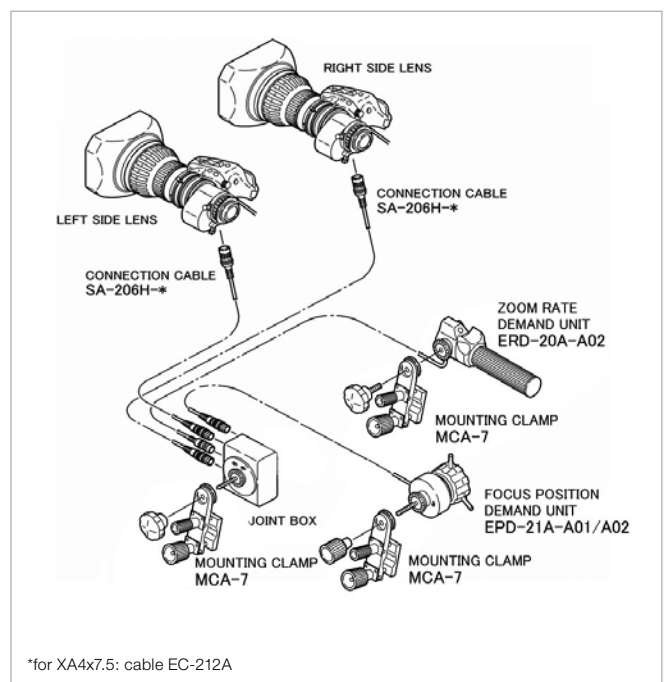


The Fujinon 3D synchronous system consists of the joint box which acts as the interface to Fujinon's precision servo lenses and is connected to analogue or digital standard zoom and focus controls.

The joint box is also equipped with an RS-232C interface which allows the system to be operated via computer. It is also possible to read out the encoder signals from one of the lenses to get information on the actual zoom and focus position.



Fujinon's joint box HJ-303A-08A synchronises two lenses so that the zoom and focus move in unison.





Lenses that are to be used for 3D must be perfectly synchronised throughout their zoom and focus ranges. This requires very high optical quality and mechanical stability and accuracy. Fujinon's new zoom lenses with precision servo controllers meet these requirements by incorporating the highest quality HD optics and close-tolerance mechanical design with precise zoom and focus control servos.

High Definition lenses for 3D application.



Specifications/Lens		HA16X6.3BEZD-T5DD	HA23x7.6BEZD-T5DD
Application		2/3"	2/3"
Zoom ratio		16x	23x
Extender		2x	2x
Focal length	w/o extender	6.3–101 mm	7.6–175 mm
	w/ extender	12.6–202 mm	15.2–350 mm
Maximum relative aperture		F1.8 (6.3~63 mm), F2.9 (101 mm)	F1.8 (7.6~119 mm), F2.65 (175 mm)
Angular field of view 16:9 Aspect ratio	w/o extender	6.3 mm: 74° 33' x 46° 19' 101 mm: 05° 26' x 03° 03'	7.6 mm: 64°30' x 39°03' 175 mm: 03°08' x 01°46'
	w/ extender	12.6 mm: 41° 40' x 24° 09' 202 mm: 02° 43' x 01° 32'	15.2 mm: 35°01' x 20°07' 350 mm: 01°34' x 00°53'
M.O.D.	from front lens	0.4 m	0.8 m
	from image plane	0.69 m	1.07 m
Object dimensions at M.O.D.	w/o extender	6.3 mm: 712 x 400 mm 101 mm: 45 x 25 mm	7.6 mm: 915 x 514 mm 175 mm: 41 x 23 mm
	w/ extender	12.6 mm: 356 x 200 mm 202 mm: 22 x 13 mm	15.2 mm: 473 x 266 mm 350 mm: 21 x 12 mm
Size ϕ x length		ϕ 95 x 238.5 mm	ϕ 100 x 221.4 mm
Filter thread		M107 x 1 in hood	M95 x 1
Weight (w/o lens hood)		2.11 kg	2.01 kg
Features		16-bit encoder, Inner Focus, Zoom Limit, QuickZoom	

Specifications/Lens		HAs18x7.6BZD-T5DD	HA18x7.6BEZD-T5DD
Application		2/3"	2/3"
Zoom ratio		18x	18x
Extender		-	2x
Focal length	w/o extender	7.6–137 mm	7.6–137 mm
	w/ extender		15.2–274 mm
Maximum relative aperture		F1.8 (7.6~103 mm), F2.4 (137 mm)	F1.8 (7.6~103 mm), F2.4 (137 mm)
Angular field of view 16:9 Aspect ratio	w/o extender	7.6 mm: 64° 30' x 39° 03' 137 mm: 04° 01' x 02° 15'	7.6 mm: 64° 30' x 39° 03' 137 mm: 04° 01' x 02° 15'
	w/ extender		15.2 mm: 35° 01' x 20° 07' 274 mm: 02° 00' x 01° 08'
M.O.D.	from front lens	0.6 m	0.6 m
	from image plane	0.84 m	0.84 m
Object dimensions at M.O.D.	w/o extender	7.6 mm: 696 x 392 mm 137 mm: 41 x 23 mm	7.6 mm: 696 x 392 mm 137 mm: 41 x 23 mm
	w/ extender		15.2 mm: 362 x 204 mm 274 mm: 21 x 12 mm
Size ϕ x length		ϕ 85 x 204 mm	ϕ 85 x 204 mm
Filter thread		M82 x 0.75	M82 x 0.75
Weight (w/o lens hood)		1.39 kg	1.71 kg
Features		16-bit encoder, Inner Focus, Zoom Limit, QuickZoom	



Specifications/Lens		XA4x7.5BMD-D3 L/R*
Application		2/3"
Zoom ratio		4x
Focal length		7.5–30 mm
Maximum relative aperture		F2.8 (7.5~30 mm)
Angular field of view 16:9 Aspect ratio		7.5 mm: 65° 11' x 39° 32' 30 mm: 18° 10' x 10° 16'
M.O.D.	from front lens	0.45 m
	from image plane	0.62 m
Object dimensions at M.O.D.		7.5 mm: 629 x 354 mm 30 mm: 156 x 88 mm
Size ϕ x length		ϕ 52 x 119 (∞) 121.4 (MOD) mm
Filter thread		M52 x 0.75
Weight (w/o lens hood)		0.8 kg

The lenses HA16X6.3BEZD-T5DD, HA23x7.6BEZD-T5DD, HAs18x7.6BZD-T5DD and HA18x7.6BEZD-T5DD provide Macro.

* L/R: L (left), R (right)