HDgc Series
ENG Lenses

■The HDgc is a lens series consists of a variety of HDTV ENG Lenses for 2/3" , 1/2" and 1/3" image size cameras. The HDgc series will support the emergence of an important new generation of cost-effective HD acquisition systems.

■Please reffer to Page 7 for the introduction of the HDgc Series.

For 2/3" Cameras

For 1/2" Cameras

For 1/3" Cameras

HDgc Series Lenses (With Extender)

HDTV/SDTV

KJ21ex7.6B IRSE

KJ16ex7.7B IRSE

KJ10ex4.5B IRSE

2/3"		KJ21ex7.6B IRSE		KJ16ex7.7B IRSE		KJ10ex4.5B IRSE	
Zoom Ratio		21x		16x		10x	
Image Size		2/3"		2/3"		2/3"	
Built-in Extender		2.0x		2.0x		2.0x	
Range of Focal Length (with Extender)		7.6~160mm 15.2~320mm	(2.0x)	7.7~124mm 15.4~248mm	(2.0x)	4.5~45mm 9~90mm	(2.0x)
Maximum Relative Aperture (with Extender)		1:1.8 at 7.6~112.9mm 1:2.55 at 160mm 1:3.6 at 15.2~225.9mm 1:5.1 at 320mm	(2.0x)	1:1.8 at 7.7~97mm 1:2.3 at 124mm 1:3.6 at 15.4~194mm 1:4.6 at 248mm	(2.0x)	1:1.8 at 4.5~34.5mm 1:2.35 at 45mm 1:3.6 at 9~68.9mm 1:4.7 at 90mm	(2.0x)
Angular Field of View (with Extender)	**4:3 Aspect Ratio (8.8x6.6mm)**	60.1°x46.9° at 7.6mm 3.2°x2.4° at 160mm 32.3°x24.5° at 15.2mm 1.6°x1.2° at 320mm	(2.0x)	59.5°x46.4° at 7.7mm 4.0°x3.0° at 124mm 31.9°x24.2° at 15.4mm 2.0°x1.5° at 248mm	(2.0x)	88.7°x72.5° at 4.5mm 11.2°x8.4° at 45mm 52.1°x40.3° at 9mm 5.6°x4.2° at 90mm	(2.0x)
	16:9 Aspect Ratio (9.6x5.4mm)	64.6°x39.1° at 7.6mm 3.4°x1.9° at 160mm 35.1°x20.1° at 15.2mm 1.7°x1.0° at 320mm	(2.0x)	63.9°x38.6° at 7.7mm 4.4°x2.5° at 124mm 34.6°x19.9° at 15.4mm 2.2°x1.2° at 248mm	(2.0x)	93.7°x61.9° at 4.5mm 12.2°x6.9° at 45mm 56.1°x33.4° at 9mm 6.1°x3.4° at 90mm	(2.0x)
M.O.D. from Lens Front		0.8m (10mm with Macro)		0.6m (10mm with Macro)		0.3m (10mm with Macro)	
Object Dimensions at M.O.D. (with Extender)	**4:3 Aspect Ratio (8.8x6.6mm)**	87.4x65.6cm at 7.6mm 4.0x3.0cm at 160mm 43.7x32.8cm at 15.2mm 2.0x1.5cm at 320mm	(2.0x)	63.1x47.3cm at 7.7mm 3.8x2.9cm at 124mm 31.6x23.7cm at 15.4mm 1.9x1.5cm at 248mm	(2.0x)	67.9x50.9cm at 4.5mm 5.9x4.4cm at 45mm 34.0x25.5cm at 9mm 3.0x2.2cm at 90mm	(2.0x)
	16:9 Aspect Ratio (9.6x5.4mm)	95.0x53.4cm at 7.6mm 4.4x2.5cm at 160mm 47.5x26.7cm at 15.2mm 2.2x1.2cm at 320mm	(2.0x)	68.5x38.5cm at 7.7mm 4.4x2.5cm at 124mm 34.3x19.3cm at 15.4mm 2.2x1.2cm at 248mm	(2.0x)	74.1x41.7cm at 4.5mm 6.4x3.6cm at 45mm 37.0x20.8cm at 9mm 3.2x1.8cm at 90mm	(2.0x)
Approx. Size (WxHxL)		169.4x111.9x218.6mm		163.9x106.3x197.4mm		168.2x110.6x237.7mm	
Approx. Mass		1.79kg (3.95lbs)		1.47kg (3.24lbs)		1.83kg (4.04lbs)	

- All the IRSE lenses are equipped with Canon's Enhanced Digital Drive. Please see page 31-32 for the detail information.
- "IRSD PS12" model for KJ21ex/KJ16ex/KJ10ex and "KRSD PS12" (without extender) model for KJ16ex is available as an exclusive model for Panasonic AJ-HDX500.
- For control accessories, please refer to page 33 and 34.
- Please refer to page 33 for explanation about IRSE.
- M.O.D. = Minimum Object Distance.
- IRSE Digital Drive Unit come equipped with Zoom and Iris Encoders only. A Focus Encoder is available as an option in these units.

HDgc Series Lenses (With Extender)

HDTV/SDTV

1/2"

		KH21ex5.7 IRSE		KH16ex5.7 IRSE		KH10ex3.6 IRSE	
Zoom Ratio		21x		16x		10x	
Image Size		1/2"		1/2"		1/2"	
Built-in Extender		2.0x		2.0x		2.0x	
Range of Focal Length (with Extender)		5.7~120mm 11.4~240mm	(2.0x)	5.7~92mm 11.4~184mm	(2.0x)	3.6~36mm 7.2~72mm	(2.0x)
Maximum Relative Aperture (with Extender)		1:1.4 at 5.7~86mm 1:1.95 at 120mm 1:2.8 at 11.4~172mm 1:3.9 at 240mm	(2.0x)	1:1.4 at 5.7~71.6mm 1:1.8 at 92mm 1:2.8 at 11.4~143.1mm 1:3.6 at 184mm	(2.0x)	1:1.45 at 3.6~27mm 1:1.90 at 36mm 1:2.9 at 7.2~55mm 1:3.8 at 72mm	(2.0x)
Angular Field of View (with Extender)	**4:3 Aspect Ratio (8.8x6.6mm)**	58.6°x45.7° at 5.7mm 3.0°x2.3° at 120mm 31.4°x23.8° at 11.4mm 1.5°x1.1° at 240mm	(2.0x)	58.6°x45.7° at 5.7mm 4.0°x3.0° at 92mm 31.4°x23.8° at 11.4mm 2.0°x1.5° at 184mm	(2.0x)	83.3°x67.4° at 3.6mm 10.2°x7.6° at 36mm 47.9°x36.9° at 7.2mm 5.0°x3.8° at 72mm	(2.0x)
	16:9 Aspect Ratio (9.6x5.4mm)	62.9°x38.0° at 5.7mm 3.3°x1.9° at 120mm 34.0°x19.5° at 11.4mm 1.7°x0.9° at 240mm	(2.0x)	62.9°x38.0° at 5.7mm 4.3°x2.4° at 92mm 34.0°x19.5° at 11.4mm 2.1°x1.2° at 184mm	(2.0x)	88.1°x57.1° at 3.6mm 11.1°x6.2° at 36mm 51.7°x30.5° at 7.2mm 5.5°x3.1° at 72mm	(2.0x)
M.O.D. from Lens Front		0.8m (10mm with Macro)		0.6m (10mm with Macro)		0.3m (10mm with Macro)	
Object Dimensions at M.O.D. (with Extender)	**4:3 Aspect Ratio (8.8x6.6mm)**	84.9x63.7cm at 5.7mm 3.9x2.9cm at 120mm 42.5x31.9cm at 11.4mm 2.0x1.5cm at 240mm	(2.0x)	61.9x46.4cm at 5.7mm 3.8x2.9cm at 92mm 31.0x23.2cm at 11.4mm 1.9x1.5cm at 184mm	(2.0x)	61.3x46.0cm at 3.6mm 5.4x4.1cm at 36mm 30.7x23.0cm at 7.2mm 2.7x2.0cm at 72mm	(2.0x)
	16:9 Aspect Ratio (9.6x5.4mm)	92.2x51.9cm at 5.7mm 4.3x2.4cm at 120mm 46.1x26.0cm at 11.4mm 2.2x1.2cm at 240mm	(2.0x)	67.2x37.8cm at 5.7mm 4.1x2.3cm at 92mm 33.6x18.9cm at 11.4mm 2.1x1.2cm at 184mm	(2.0x)	67.4x37.9cm at 3.6mm 5.9x3.3cm at 36mm 33.7x19.0cm at 7.2mm 3.0x1.7cm at 72mm	(2.0x)
Approx. Size (WxHxL)		169.4x111.9x217.5mm		163.9x106.3x196.7mm		168.2x110.6x240.8mm	
Approx. Mass		1.79kg (3.95lbs)		1.47kg (3.24lbs)		1.83kg (4.04lbs)	

- All the IRSE lenses are equipped with Canon's Enhanced Digital Drive. Please see page 31-32 for the detail information.
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HDgc Series Lenses (Without Extender)

HDTV/SDTV (For 2/3" 1/2" 1/3")

KJ20x8.5B KRS

KJ13x6B KRS

KH20x6.4 KRS

	KJ20x8.5B KRS	KJ13x6B KRS	KH20x6.4 KRS
Zoom Ratio	20x	13x	20x
Image Size	2/3"	2/3"	1/2"
Range of Focal Length	8.5~170mm	6~78mm	6.4~128mm
Maximum Relative Aperture	1:1.8 at 8.5~113.3mm 1:2.7 at 170mm	1:2.0 at 6~58mm 1:2.7 at 78mm	1:1.4 at 6.4~89.6mm 1:2.0 at 128mm
Angular Field of View **16.9 Aspect Ratio (9.6x5.4mm)**	58.9°x35.2° at 8.5mm 3.2°x1.8° at 170mm	77.3°x48.5° at 6mm 7.0°x4.0° at 78mm	57.1°x34.1° at 6.4mm 3.1°x1.8° at 128mm
M.O.D. from Lens Front	0.9m (10mm with Macro)	0.4m (10mm with Macro)	0.9m (10mm with Macro)
Object Demensions at M.O.D. **16.9 Aspect Ratio (9.6x5.4mm)**	92.5x52.0cm at 8.5mm 4.8x2.7cm at 170mm	74.3x41.8cm at 6mm 5.4x3.0cm at 78mm	89.8x50.5cm at 6.4mm 4.6x2.6cm at 128mm
Approx. Size (WxHxL)	163.3x103x170.4mm	165.4x105.1x211.7mm	163.3x103x182.5mm
Approx. Mass	1.27kg (2.8lbs)	1.59kg (3.51lbs)	1.27kg (2.8lbs)

•For control accessories, please refer to page 41.
•M.O.D. = Minimum Object Distance.

KH19x6.7 KAS*1

KH13x4.5 KRS

KT20x5B KRS

	KH19x6.7 KAS*1	KH13x4.5 KRS	KT20x5B KRS
Zoom Ratio	19x	13x	20x
Image Size	1/2"	1/2"	1/3"
Range of Focal Length	6.7~127mm	4.5~59mm	5~100mm
Maximum Relative Aperture	1:1.6 at 6.7~96.8mm 1:2.1 at 127mm	1:1.5 at 4.5~44mm 1:2.0 at 59mm	1:1.4 at 5.0~90.3mm 1:1.55 at 100mm
Angular Field of View **16.9 Aspect Ratio (9.6x5.4mm)**	55.0°x32.6° at 6.7mm 3.1°x1.8° at 127mm	75.7°x46.9° at 4.5mm 6.8°x3.8° at 59mm	51.9°x30.6° at 5mm 2.8°x1.6° at 100mm
M.O.D. from Lens Front	0.9m (50mm with Macro)	0.4m (10mm with Macro)	0.9m (10mm with Macro)
Object Demensions at M.O.D. **16.9 Aspect Ratio (9.6x5.4mm)**	98.1x55.2cm at 6.7mm 8.1x4.6cm at 127mm	73.4x41.3cm at 4.5mm 5.4x3.0cm at 59mm	82.1x46.2cm at 5.0mm 4.2x2.4cm at 100mm
Approx. Size (WxHxL)	112x88x171.8mm	165.4x105.1x215.3mm	163.3x103x171.2mm
Approx. Mass	1.26kg (2.78lbs)	1.59kg (3.51lbs)	1.19kg (2.62lbs)

*1 Specifically designed for SONY HDC-X300/X310 and the HD XDCAM.
•For control accessories, please refer to page 41.
•M.O.D. = Minimum Object Distance.