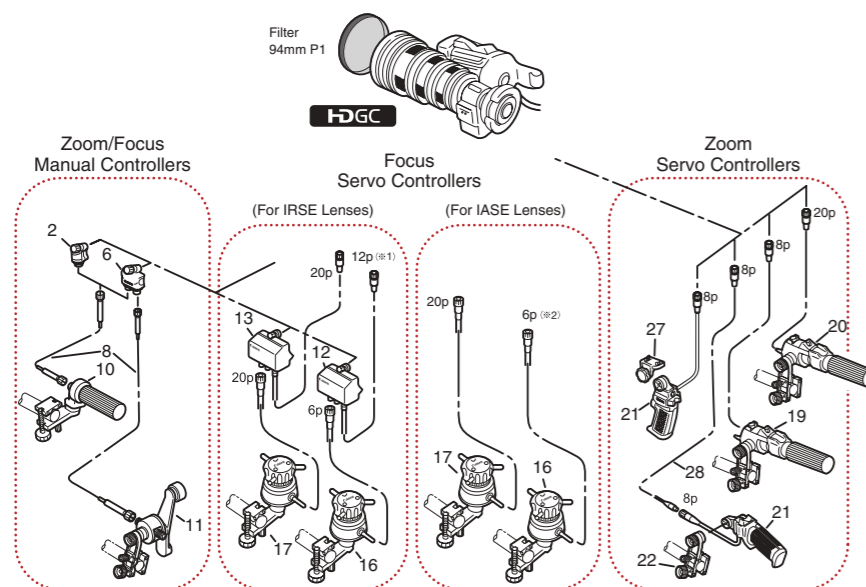


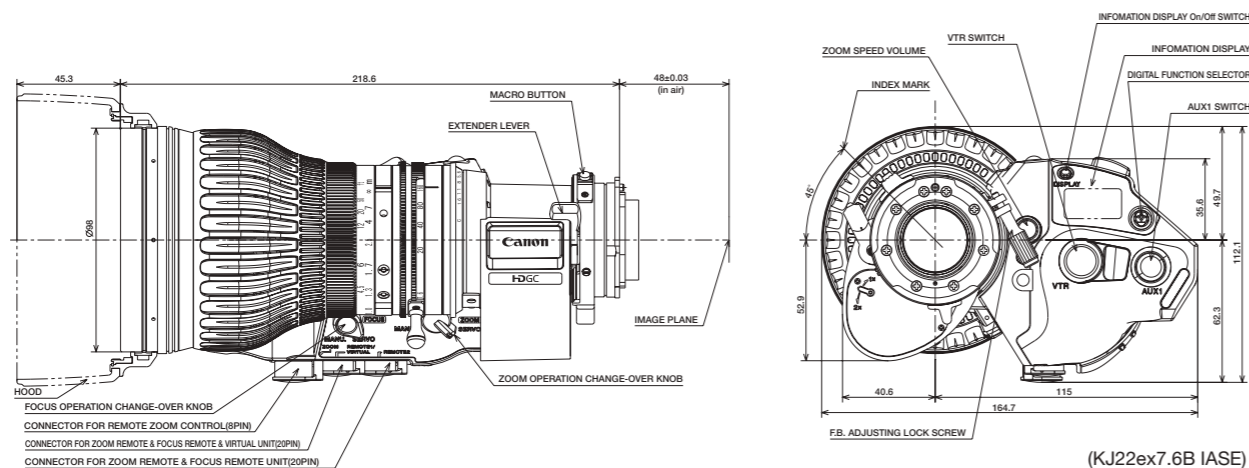
## ACCESSORIES



- (※1) CC-2012 conversion cable is necessary to connect between IRSE Digital Drive Lens and FPM-420.  
 (※2) CC-2006 conversion cable is necessary to connect between IASE Digital Drive Lens and FPD-400.  
 (※3) For the optical accessories, the 94mm P1 filters are applicable. The filters are to be attached to the lens barrel. (UV/ Sky Light/ Cross/ Snow Cross/ Sunny Cross/ Polarized Light/ Softon/ ND).  
 Also, the 105mm P1 filters are applicable to be attached to the Hood Unit.  
 (※4) FPD-400 and ZSD-300M are not available from Canon stock.

#	Unit	Description
2	FFM-100	Flex Focus Module
6	FFM-200	Flex Dual Module
8	FC-40	Flex Cable
10	FFC-200	Flex Focus Controller
11	FZC-100	Flex Zoom Controller
12	FPM-420	Focus Positional Servo Module
13	FPM-420D	Focus Positional Servo Module
16	FPD-400 <sup>※4</sup>	Focus Positional Demand
17	FPD-400D	Focus Positional Demand
19	ZSD-300M <sup>※4</sup>	Zoom Servo Demand
20	ZSD-300D	Zoom Servo Demand
21	ZSG-200M	Zoom Servo Grip
22	CR-10	Clamper
27	ZGA-500	Grip Adapter
28	EC-80	Zoom Extension Cable (8P)
32	CC-2006	Conv. Cable (20pM-6pF)
33	CC-2012	Conv. Cable (20pM-12pF)

## DIMENSIONS



(KJ22ex7.6B IASE)

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 http://www.canon.com/bctv

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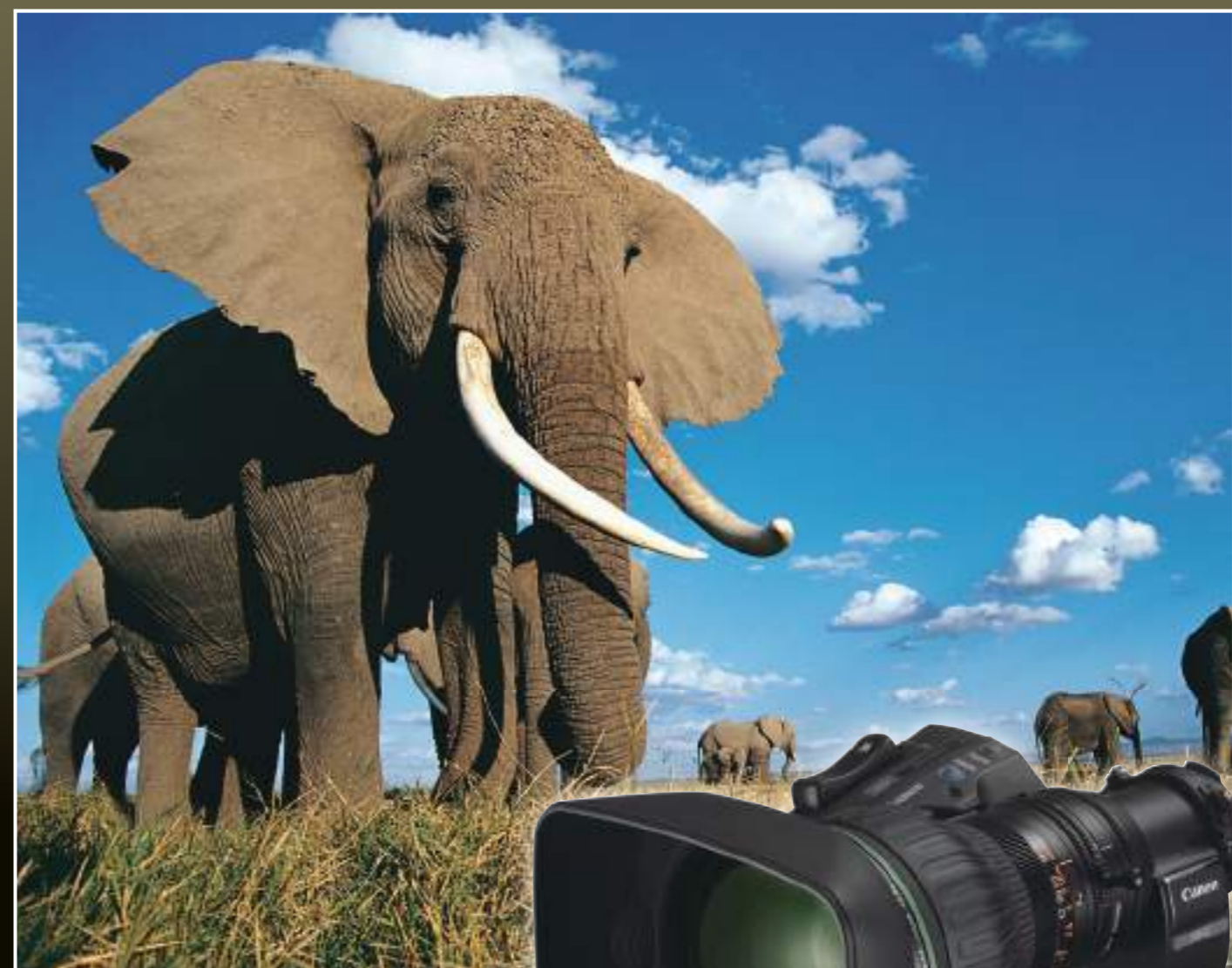
**Canon** <http://www.canon.com/bctv>

Specifications subject to change without notice.

**Canon**

# KJ22ex7.6B

Second Generation HDgc Telephoto Lens



**INNOVATION**  
 In TV Optics Since 1958



# KJ22ex7.6B **HDGC**

## Canon's Philosophy :

Canon has always developed new technology with four basic philosophies, "High Quality of Picture", "Ease of Operation", "High Specification" and "Minimize Environmental Impact". Canon's HDTV lenses are, so to speak, a compilation of our basic philosophies. Now, Canon reassembles these philosophies in the launching of a second generation HDgc lens series.

## Canon's 2nd Generation HDgc Series

The emergence of a new generation of cost-effective HDTV acquisition systems spurred Canon to create a new category of portable lenses to better match the price performance ratio of these cameras. This led to the introduction in 2006 of the new HDgc lens series. Specifically targeted for HD ENG, these lenses retained the optomechanical robustness and ergonomics of the high-end HDxs lens series as well as the same digital drive units. Canon mobilized contemporary design tools and optical materials that facilitated a significant cost reduction while still maintaining an impressive overall HD imaging performance. In recognition of the continuing introduction of new improved 2/3-inch HD acquisition systems and supported by a global end-user experiences, Canon is now introducing a second generation HDgc that reflects further design optimizations. Adding to the Standard KJ17ex7.7B, meet the new Telephoto KJ22ex7.6B.

## Main Features

### Multi-purpose Telephoto Lens for Cost Effective HD Productions

The new KJ22ex7.6B is a telephoto lens covering a generous range of focal lengths while also providing a modest wide-angle of almost 65 degrees in the 16:9 HD image format. This provides a very flexible image framing range especially for outdoor applications. The central design criteria for this new lens sought an excellent balance between size, weight, and HD optical performance intended for HD News and many HD production applications. Customer recommendations based upon experiences with our first generation HDgc telephoto lens combined with the harnessing of new optical design strategies and new advanced optical materials to produce an excellent overall price performance ratio for the new KJ22ex7.6B.

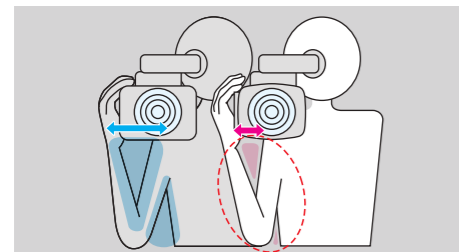
### Improved Optical Performance

The optical performance of the KJ22ex7.6B has been improved on a number of fronts compared to its predecessor KJ21ex7.6B. The new lens deploys Large Diameter Aspherical lens elements that contribute to a better control of comatic aberration, geometric distortion, and corner resolution. Curvature of field and chromatic aberrations have been reduced by use of special optical materials that include Fluorite and Hi-UD glasses. Computer optimization of both the optical and optomechanical designs contributed to achieving a high-performing telephoto lens within a compact and lightweight body.

### Improved Operability and Reduced Operator Fatigue

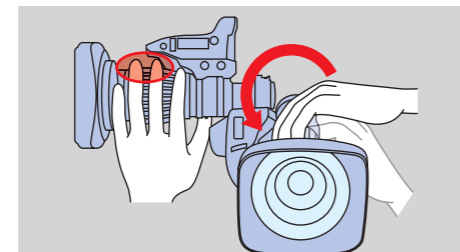
Coupled with innovations in optical performance, is a totally new design of the digital drive unit. Refined by long-term market research and worldwide experience, Canon utilized the latest in 3D CAD-CAM design to significantly improve the human tactile interface to the control of zoom, iris, and focus. Canon's research produced the following physical enhancements:

#### Reduced Physical Stress



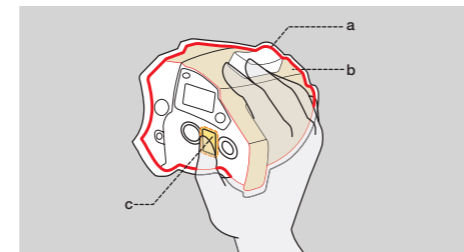
By reducing the width of the drive unit, the palm of the camera operator's hand is positioned closer to the optical axis, thus reducing the degree of arm bend which in turn lessens physical stress during prolonged shooting.

#### Improved Ease of Operation



The spacing between the focus ring and drive unit has been opened to avoid accidental interference with the drive unit while manipulating the focus control.

#### Ergonomic Design



The size and curvature size have been optimized to more comfortably fit in the palm of the operator's hand (a). Newly developed coatings improve the tactile interface between the user and the drive unit (b) together with the new Rubber Grip Support (c).



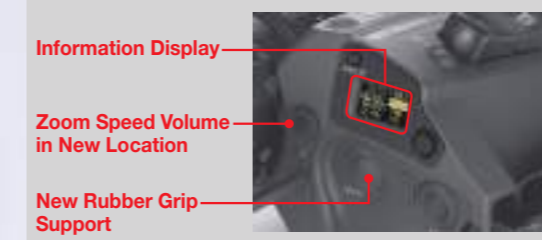
Broad Range of Focal Length 7.6mm-168mm (15.2mm-336mm with 2.0x extender)



Specially designed optical lens elements



## Enhanced Digital Drive Unit



With the introduction of miniature 16-bit high resolution Rotary Encoder Devices into the enhanced digital drive unit, the lens features;

- Superior precision lens control.
- Precise repeatability in zoom, focus and iris control which supports the creative digital operational functions
- Simple integration into virtual digital studio systems without any options
- Dynamic zoom speed range of 0.5 sec. to over a 5 min. super slow zoom.

Moreover, Canon's original Information Display is able to customize the enhanced digital functions much more easily and precisely.

## Enhanced Digital Functions

### Shuttle Shot

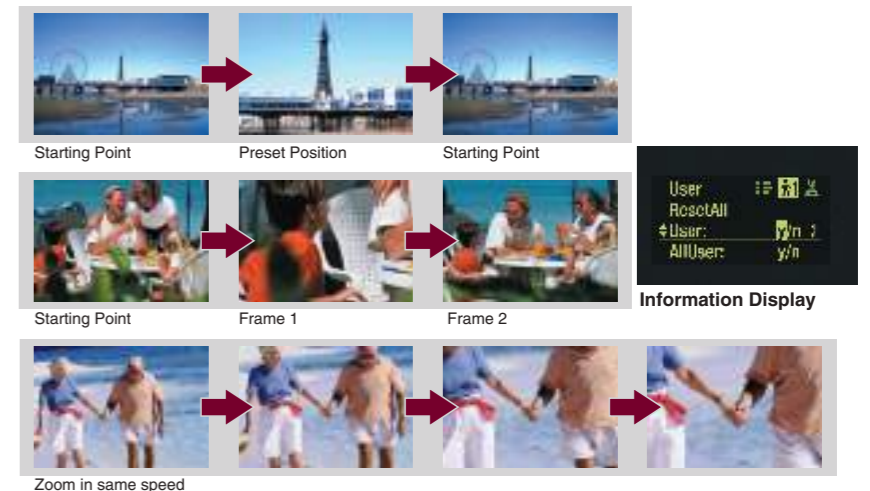
By memorizing any two focal lengths, the Digital Drive can automatically "shuttle" between the two points, moving in either direction.

### Frame Preset

An angle of view can be preset in either of two memories and the lens will zoom at the highest speed or in a preset zoom speed to the preset position by pushing a simple button.

### Speed Preset

A specific zoom speed can be preset in memory and it is possible to repeat the zoom speed as often as you like by pushing a simple button.



## Cost Effective HDTV Telephoto Lens



## SPECIFICATIONS KJ22ex7.6B

	16:9		4:3	
	1.0x	2.0x	1.0x	2.0x
Built-in extender	1.0x	2.0x	1.0x	2.0x
Zoom Ratio	22x			
Range of Focal Length	7.6-168mm	15.2-336mm	7.6-168mm	15.2-336mm
Maximum Relative Aperture	1:1.8 at 7.6-116.3mm 1:2.6 at 168mm	1:3.6 at 15.2-232.6mm 1:5.2 at 336mm	1:1.8 at 7.6-116.3mm 1:2.6 at 168mm	1:3.6 at 15.2-232.6mm 1:5.2 at 336mm
Angular Field of View	64.6°×39.1° at 7.6mm 3.3°×1.8° at 168mm	35.1°×20.1° at 15.2mm 1.6°×0.9° at 336mm	60.1°×46.9° at 7.6mm 3.0°×2.3° at 168mm	32.3°×24.5° at 15.2mm 1.5°×1.1° at 336mm
Minimum object Distance (M.O.D)	0.80m			
Object Dimensions at M.O.D	95.0×53.4cm at 7.6mm 4.4×2.5cm at 168mm	47.5×26.7cm at 15.2mm 2.2×1.3cm at 336mm	87.4×65.6cm at 7.6mm 4.0×3.0cm at 168mm	43.7×32.8cm at 15.2mm 2.0×1.5cm at 336mm
Approx. Size	W×H×L=164.7×112.1×218.6mm			
Approx. Mass (IRSE/IASE)	1.82kg(4.0lbs)/1.90kg(4.19lbs)			

KJ22ex7.6B IRSE.....Zoom: Servo / Manual Focus: Manual  
KJ22ex7.6B IASE.....Zoom: Servo / Manual Focus: Servo / Manual