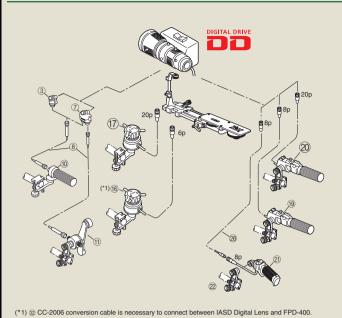
# **Control Accessories**



# **Applicable Kit Detail**

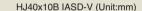
		Zoom		Focus					
	Kit Name	System	Component	System	Component				
for HJ40×10B IASD-V, HJ40×14B IASD-V									
Zoom Servo		ZR-1	19*						
Only		ZR-1D	<b>20</b>						
		ZR-2(A)	21*22 28						
Semi-Servo		ZR-1	19*	FR-2	3 8 10				
		ZR-1D	20	FR-2	3 8 10				
		ZR-2(A)	21* 22 28	FR-2	3 8 10				
Full Servo	SS-41-IAS	ZR-1	19*	FPS-4	16 32				
	SS-41-IASD	ZR-1D	<b>20</b>	FPS-4D	17				
	SS-42-IAS	ZR-2(A)	21*22 28	FPS-4	16 32				
Full Manual		FZC-1	7 8 11	FR-2(w/o3)	8 10				

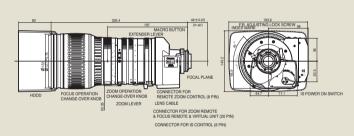
\* If a ZSD-300A Demand or ZSG-200A Grip will be used with a DD (Digital Drive) B3 mount lens,

Recommended Kit Configuration for the Digital lenses.

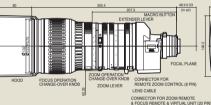
The controllers support the new DD functions.

# **DIMENSIONS**





# HJ40x14B IASD-V (Unit:mm)



CONNECTOR FOR IS CONTROL (8 PIN)

# North & South America Canon U.S.A., Inc.

Broadcast & Communications Div.(Headquarters) 65 Challenger Road, Ridgefield Park, NJ07660 Tel:(201)807-3300/(800)321-4388 Fax:(201)807-3333 Email:bctv@cusa.canon.com http://www.canonbroadcast.com/

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# Canon (China) Co., Ltd.

15F South Tower, Beijing Kerry Center, 1 Guang Hua Road, Chao Yang District, 100020, Beijing,

http://www.canon.com.cn

# Canon Inc. (Broadcast Equipment Group) 23-10, Kiyohara-Kogyo-Danchi, Utsunomiya-shi,

Tochigi-ken, 321-3298, Japan Tel:+81(0)28-667-8669 Fax:+81(0)28-667-8672 Tel:(010)8529-8488 ex 133 Fax:(010)8529-6606 http://www.canon.com/bctv

# Specifications subject to change without notice.





PUB. 0051W636 PRINTED IN JAPAN

# Canon

# HJ40x10B HJ40x14B







Canon proudly offers our HD portable lens series; the HJ40x10B IASD-V & HJ40x14B IASD-V.

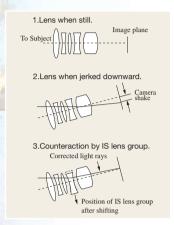
The compact HJ40x11B/HJ40x14B achieves superior optical performance and high specifications at the same time, featuring a superior built-in Image Stabilizer which adds a perfect stability to your video production.

The HJ40x10B/14B series is designed to meet the high demands of all field production applications. The lens will surely lead you to a higher standard of production.

# Canon's Technology

# **Optical Shift Image Stabilizer (Shift-IS)**

When the lens moves, the light rays from the subject are bent relative to the optical axis, resulting in an unsteady image because the light rays are deflected. By shifting the IS lens group on a plane perpendicular to the optical axis to counter the degree of image shake, the light rays reaching the image plane can be steadied. Since image shake occurs in both horizontal and vertical directions, two shake detecting sensors for yaw and pitch, detect the angle and speed of movement and send this information to a high-speed 32-bit microcomputer, which converts the information into drive signals for the IS lens group. Then the actuator moves the IS lens group horizontally and vertically thus counteracting the image shake and maintaining the stable picture. The Shift-IS component is located within the lens group and is most effective for lower frequency movements caused by platform vibration or wind effect without increasing the overall size and weight of the master lens.



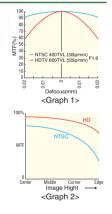
# **Enhanced Optical Technology**

# **Special Optical Elements**

Canon has always made an effort to research special optical elements since our beginnings in this industry with the goal of minimizing chromatic aberration. These efforts have included an artificial element, "Fluorite", with extraordinary dispersion characteristics and the newly developed "Hi-UD" (high index ultra low dispersion) glass. Canon has succeeded in the practical use of special elements along with advanced design techniques like "separate achromatism". Canon TV zoom lenses carry a "Green Ring" on the focus barrel, a symbol of our high quality. Canon has developed a break through in optical design technology known as the "Power Optical System" whose heart is the "X-Element". By using the "X-Element" to its maximum power in the specially designed optical layout, higher specifications and quality can be achieved in smaller and lighter lenses. The lenses designed using the "Power Optical System" are known as the "XS-series".

## **Aberration Correction for HDTV Lenses**

The pixel size is about half in the HDTV system and therefore the spread of a point image caused by a spherical aberration, coma, etc. should be diminished to about half. Even if the image is slightly out of focus, MTF is greatly influenced. The graph 1 shows how MTF varies when the focus changes. Canon HDxs series lenses employ the HD version of the Power Optical System, which incorporates the X-Element, HDxs greatly contributes to correcting and minimizing these aberrations at the same time, maintaining high MTF throughout the edge of the picture (graph 2).



# **Digital Drive Unit**

The HJ40x is equipped with a Digital Drive Unit which offers divers unique digital functions. The followings are the basic three preset functions that have become possible with the digital technology. The concept of the Digital Drive is based on "Ease of Operation" which enables you to use the diverse digital functions, precisely, easily and fully.

# **Main Features**

# **Shuttle Shot**

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





# Framing Preset

An angle of view can be preset in either of two memories and the lens will zoom to that position by pushing a simple button. During a performance, framing preset will reproduce the zoom position decided upon at the rehearsal. It's easy to repeat the same zoom as often as you like at the highest speed or in a preset zoom speed.











# 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.





# [Digital Drive Unit]

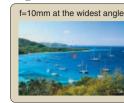


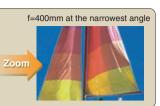
Framing Preset Switch Speed Mode Change Over Lever

# Memory Switch

**Zoom Operation Switch** 

## [High Zoom Ratio]





Long Focal Length of 10-400mm/14-560mm (20-8000mm/28-1120mm With 2x Ext.) With Reduced Distortion

Built-in 2x Extende



Realization of high contrast in all areas of the picture (Center~Corner)

[Enhanced Image Stabilizing System (Shift-IS)]



# **Ecological Design**

It is Canon's policy not to pollute the earth and the HJ40x series have avoided using any materials or substances that could pollute the environment

# **SPECIFICATIONS**

DI L'OHIT	0110						
HJ40×10B IASD-V	16:	:9	SWITCHABLE 4:3				
Built-in extender	1.0×	2.0×	1.2×	2.4×			
Zoom Arrio	40×						
Range of Focal Length	10~400mm	20~800mm	10~400mm	20~800mm			
Maximum Relative Aperture	1:2.0 at 10~220mm 1:3.65 at 400mm	1:4.0 at 20~440mm 1:7.3 at 800mm	1:2.0 at 10~220mm 1:3.65 at 400mm	1:4.0 at 20~440mm 1:7.3 at 800mm			
Angular Field of View	$51.3^{\circ} \times 30.2^{\circ}$ at 10mm $1.4^{\circ} \times 0.8^{\circ}$ at 400mm	$27.0^{\circ} \times 15.4^{\circ}$ at $20$ mm $0.7^{\circ} \times 0.4^{\circ}$ at $800$ mm	39.6°× 30.2° at 10mm 1.0°× 0.8° at 400mm	20.4°× 15.4° at 20mm 0.5°× 0.4° at 800mm			
Minimum object Distance (M.O.D)	2.8m (10mm with Macro)						
Object Demensions at M.O.D	248.4×139.7cm at 10mm 6.2×3.5cm at 400mm	124.2×69.9cm at 20mm 3.1×1.8cm at 800mm	186.3×139.7cm at 10mm 4.7×3.5cm at 400mm	93.2×69.9cm at 20mm 2.4×1.8cm at 800mm			
Approx. Size	W×H×L = 174.1×133.0×335.4 mm						
Approx. Mass (IRSE/IASE)	5.40Kg (11.90lbs)						

HJ40×14B IASD-V	16:9		SWITCHABLE 4:3				
Built-in extender	1.0×	2.0×	1.2×	2.4×			
Zoom Arrio	40×						
Range of Focal Length	14~560mm	28~1120mm	14~560mm	28~1120mm			
Maximum Relative Aperture	1:2.8 at 14~307mm 1:5.1 at 560mm	1:5.6 at 28~614mm 1:10.2 at 1120mm	1:2.8 at 14~307mm 1:5.1 at 560mm	1:5.6 at 28~614mm 1:10.2 at 1120mm			
Angular Field of View	$37.8^{\circ} \times 21.8^{\circ}$ at 14mm $1.0^{\circ} \times 0.6^{\circ}$ at 560mm	19.4°× 11.0° at 28mm 0.5°× 0.3° at 1120mm	28.8°× 21.8° at 14mm 0.7°× 0.6° at 560mm	14.7°× 11.0° at 28mm 0.4°× 0.3° at 1120mm			
Minimum object Distance (M.O.D)	2.8m (10mm with Macro)						
Object Demensions at M.O.D	177.1×99.5cm at 14mm 4.5×2.5cm at 560mm	88.6×49.8cm at 28mm 2.3×1.3cm at 1120mm	132.8×99.5cm at 14mm 3.4×2.5cm at 560mm	66.4×49.8cm at 28mm 1.7×1.3cm at 1120mm			
Approx. Size	W×H×L = 174.1×133.0×355.5 mm						
Approx. Mass (IRSE/IASE)	5.45Kg (12.02lbs)						