

**BCTV Zoom Lens** 

# UHD-DIGISUPER

UJ122x8.2B AF UJ122x8.2B UJ111x8.3B UJ90x9B UJ66x9B UJ27x6.5B

# DIGISUPER

XJ95x12.4B XJ95x8.6B XJ80x8.8B

# **OPERATION MANUAL** "Information Display"

Read this operation manual before using the product.

#### Preface

Thank you for purchasing the Canon BCTV zoom lens. Refer to this Operation Manual "Information display" for operating instructions and procedures for the information display.

This product comes with the following documents for the models mentioned below:

- Operation Manual "Before Using The Product" Included with the product
- Operation Manual "Regulations" (Included with the product)
- Operation Manual "Lens" (Web)
- Operation Manual "Information display" (Web)

#### UHD-DIGISUPER

Model name	Operation system		Interface	
	IESD	IESDA		
UJ122x8.2B AF				
UJ122x8.2B				
UJ111x8.3B	•		BB SB	
UJ90x9B			SH	
UJ66x9B				
UJ27x6.5B				

#### DIGISUPER

Model name	Operation system		Interface	
	IESD	IESDA		
XJ95x12.4B				
XJ95x8.6B		٠	BB SB SH	
XJ80x8.8B			511	

### Contents

Basic operation	1
Resetting	1
Menu hierarchy	2
Top screen and sub-screens	4
•	

#### Status

#### Setting

Lens setting menus	6
1. Setting auto iris gain	6
2. Setting remote back focus (RBF models only)	7
3. Accessing the System screen	7
3.1 Setting the indicator on/off	7
3.2 Setting the tally function on/off	8
3.3 Setting the CAFS	8
3.4 Setting virtual output	8
3.5 Enabling/disabling camera serial communication	9
3.6 Setting tally brightness	9
3.7 Setting the lens code	9
4. Accessing the AF screen (AF models only)	10
4.1 Setting the number of steps for AF frame movement	
(AF models only)	10
4.2 Setting AF frame speed (AF models only)	10
4.3 Accessing the Size screen (AF models only)	11
4.3.1 Horizontal AF frame size setting (AF models only)	11
Vertical AF frame size setting (AF models only)	11
4.3.2 Restoring default AF frame settings (AF models only)	11
5. Accessing the Zoom screen	12
5.1 Setting zoom servo start characteristics	12
Setting zoom servo stop characteristics	12
Setting zoom mechanism end stop characteristics	12
5.2 Setting zoom start characteristics for preset operations	12
Setting zoom stop characteristics for preset operations	12
5.3 Setting analog demand curve characteristics	13
5.4 Cam mode setting	13
5.5 Setting the servo mode from the zoom demand	14
6. Accessing the Focus screen	14
6.1 Setting focus demand curve characteristics	14
7. Accessing the Iris screen	15
7.1 Setting auto iris gain	15
Setting remote iris gain	15
7.2 Setting iris compensation on/off	15
7.3 Setting iris closure detection on/off	16
8. Accessing the IS screen (IS models only)	16
8.1 IS mechanical lock setting (IS models only)	16
8.2 IS operation switch setting (IS models only)	17
8.3 IS mode setting (IS models only)	17
9. Resetting to defaults	17

#### Support

Lens support information display menu	. 18
1. Displaying camera interface information	18
2. Displaying the serial number	18
3. Displaying the lens name	19
4. Displaying firmware information	19
5. Displaying zoom servo module information	19
6. Displaying focus servo module information	20
7. Displaying information about connected demands	20
8. Support information for lateral chromatic aberration	
correction	21
Support information for peripheral illumination correction	21



#### Menu hierarchy



## Menu hierarchy



## Top screen and sub-screens

The Top screen is the first screen displayed after the Display switch is pressed. From this screen, you can set functions and view status.





1	Status Lens status display menus
	(cannot be configured)

Status	1/3 ◀▶ 2
AF:	ON
Cafs:	ON
IS:	ON

(2) Setting  $\bigcirc \Rightarrow \bigotimes$ Lens setting menus



③ Support () × 2 ⇒ (se) Lens support information display menu (cannot be configured)

#### Support screen



Status

## Status - <Status> 1/3 Lens status display menu 1/3

Shows the status of lens functions.

screen				
	AF:	ON -	-1	
	Cafs:	ON -	-2	
	IS:	ON -	-3	
	Camlf:	Parallel –	-4	
	IrisMode:	Auto –	5	

①AF:	Shows the AF status. (AF models only)		
Display item	ON	OFF	
Status	AF is on	AF is off	

②Cafs:	Shows the status of CAF changes in the angle of view	S (a function that suppresses v due to focusing).
Display item	ON	OFF
Status	CAFS is on	CAFS is off

3IS:	Shows the IS status. (IS models only)		
Display item	ON	OFF	
Status	IS is on	IS is off	

④Camlf:	Shows the status of camera serial communication.		
Display item	Parallel	Serial	
Status	Not connected via camera serial interface	Connected via camera serial interface	

⑤ IrisMode:	Shows the current iris mode	).
Display item	Auto	Remote
Status	Auto iris mode	Remote iris mode

## Status - <Status> 2/3 Lens status display menu 2/3

Shows the source of iris, zoom, and focus operations.

Status screen	Status	<u>&gt; 2/3 <b>↓ </b>}</u>	
	I-Ctl:	Camera-1	
	Z-Ctl:	D-dem +2	
	F-Ctl:	A-dem +3	

①I-Ctl:	Shows the source of iris operations.			
Display item	Camera	SwBox	PC	
Status	Camera	Switch box	PC	*

2Z-Ctl:	Shows the source of zoom operations.			
Display item	Camera	Demand	PushPull	
Status	Camera	Servo demand	Push pull	*

③F-Ctl:	Shows the source of focus operations.			
Display item	Camera	Demand	PushPull	
Status	Camera	Servo demand (including during AF) Analog demand	Push pull	*

Note

\*---: Displayed when electronic operation is not available, when there is no source of control, when the servo is off, or during manual operation. Note that due to demand specifications, zoom operation is indicated as [Demand] even without a demand connected.

#### Status - <Status> 3/3 Lens status display menu 3/3

Shows the status of lens functions.

Status s

creen	Status> 3/3	34 2	)
	Indicator:	on —	-1
	Tally:	ON —	-2
	VR-Out:	ON —	-3
	F-Hold:	ON -	4
	Mech.Lock:	OFF -	<u> </u> _5

①Indicator:	Shows the indicator status.		
Display item	ON	OFF	
Status	Lighted	Extinguished	

②Tally:	Shows the status of lens tally functions.		
Display item	ON	OFF	
Status	Tally function is on	Tally function is off	

③VR-Out:	Shows the virtual output status.		
Display item	ON OFF		
Status	Virtual output is on	Virtual output is off	

④F-Hold:	Shows the F-Hold* status.	
Display item	ON	OFF
Status	Zoom range is limited by setting F-Hold to on	Zoom range is not limited by setting F-Hold to on

Note

\*F-Hold: When remote (manual) iris is used, this function limits the zoom range at the telephoto end to prevent images from being darker than the f-number specified from the CCU. Switching on or off is only possible with a demand.

্র Mech. Lock:	Shows the mechanical lock status. (IS models only)			
Display item	ON OFF			
Status	IS mechanical lock is on	IS mechanical lock is off		

#### Setting - <Setting> Lens setting menus

A variety of lens settings are available.

Setting screen	◆ <setting>       2         I-Gain:       50         RBF:       000         System       -3         AF       -4         Zoom       -5         Focus       -6</setting>
	Iris - 7 IS - 8 Reset All - 9
1. I-Gain:	Setting auto iris gain
2. RBF:	Setting remote back focus (RBF models only)
3. System	Accessing the System screen
	<ul> <li>3.1 Indicator: Setting the indicator on/off</li> <li>3.2 Tally: Setting the tally function on/off</li> <li>3.3 Cafs: Setting the CAFS</li> <li>3.4 VR-Out: Setting virtual output</li> <li>3.5 CamSeri: Enabling/disabling camera serial communication</li> <li>3.6 TalBrtness: Setting tally brightness</li> <li>3.7 LensCode: Setting the lens code</li> </ul>
4. AF	Accessing the AF screen (AF models only)
	<ul> <li>4.1 Steps: Setting the number of steps for AF frame movement</li> <li>4.2 MoveSpeed: Setting AF frame speed</li> <li>4.3 Accessing the Size screen <ul> <li>4.3.1 Horz: Horizontal AF frame size setting</li> <li>Vert: Vertical AF frame size setting</li> <li>4.3.2 ResetSize: Restoring default AF frame settings</li> </ul> </li> </ul>
5. Zoom	Accessing the Zoom screen
	<ul> <li>5.1 Movement: Setting zoom servo start characteristics Setting zoom servo stop characteristics Setting zoom mechanism end stop characteristics</li> <li>5.2 PreMovement: Setting zoom start characteristics for preset operations Setting zoom stop characteristics</li> </ul>

for preset operations

5.5 Control: Setting the servo mode from the zoom demand

5.3 CurveMode: Setting analog demand curve characteristics

5.4 CamMode: Cam mode setting

6. Focus	Accessing the Focus screen
	6.1 Curve: Setting focus demand curve characteristics
7. Iris	Accessing the Iris screen
	<ul> <li>7.1 [I-Gain]: Setting auto iris gain Setting remote iris gain</li> <li>7.2 Comp: Setting iris compensation on/off</li> <li>7.3 Close: Setting iris closure detection on/off</li> </ul>
8. IS	Accessing the IS screen (IS models only)
	<ul><li>8.1 Mech.Lock: IS mechanical lock setting</li><li>8.2 SwSetting: IS operation switch setting</li><li>8.3 OffState: IS mode setting</li></ul>
9. Reset All	Resetting to defaults

#### Setting - <Setting> - I-Gain **1. Setting auto iris gain**

 Setting screen

 I-Gain:
 50

 RBF:
 000

 System

 Image: Setting >

 <Setting >

 I-Gain:
 50 ►

 RBF:
 000

 System

( to adjust

Note

When adjusting gain while checking iris operation, set the camera iris mode to [AUTO].
Set so that maximum gain is obtained within the range where focus hunting does not occur.

• The iris gain setting is not reset if settings are reset as described on page 1.

Selection item	01	_	99
Function	Minimum gain	Maximum gain	
			Default value: 50



2

ON

ON

ON

ON

ON

OFF

Extinguished

(D): Default value

## Setting

## Setting - <Setting> - <System> - Tally 3.2 Setting the tally function on/off



Selection item	<sup>(D)</sup> ON	OFF	
Function	Enable the tally function	Disable the tally function	
		(D): Default value	

## Setting - <Setting> - <System> - Cafs 3.3 Setting the CAFS



#### () () to select

-	Selection item	<sup>(D)</sup> <b>ON</b>	OFF
-	Function	Enabled	Disabled
			(D): Default value

#### Setting - <Setting> - <System> - VR-Out 3.4 Setting virtual output

System

screen		2	
	Indicator:	ON	
	Tally:	ON	
	Cafs:	ON	
	<u> </u>		
		4	
		+	
	<system></system>		l
	Cafs:	ON	
	♦VR-Out:	OFF ►	
	CamSeri:	ON	
	U to s	select	

Selection item	ON	OFF <sup>(D)</sup>
Function	Enabled	Disabled
		(D): Default value

#### Setting - <Setting> - <System> - CamSeri 3.5 Enabling/disabling camera serial communication

Auto recognition of the camera-lens interface can be enabled or disabled (analog control).



OFF Disabled (D): Default value





Selection item	01	_	99
Function	Dimmest		Brightest
			Default value: 62

#### Setting - <Setting> - <System> - LensCode 3.7 Setting the lens code

After you assign a number (code) to the lens, it can be sent to the camera. Choose from 16 different codes in binary format, 0000–1111.

Depending on camera functions, these codes may be used to enable cameras to identify lenses.

Set if instructed to do so by the camera manufacturer.





Note

16 different codes in binary format are shown as you cycle through the setting option.
The lens code remains the same if settings are reset.

Selection item 0000 – 1111 Default value: Set at the factory before shipment.



#### Setting - <Setting> - <AF Frame> - Steps 4.1 Setting the number of steps for **AF frame movement** (AF models only)

Sets the number of steps the AF frame is moved at one time. Actual number of steps of AF frame movement per movement operation is adjustable.



Selection item	1	-	9
Function	Fewest steps		Most steps
			Default value: 3

#### Setting - <Setting> - <AF Frame> - MoveSpeed 4.2 Setting AF frame speed (AF models only)







Selection item

Function

	Zoom screen	♦ <zoom>     2       Movement     PreMovement       CurveMode</zoom>	
		▼ × 2	
	, i i i i i i i i i i i i i i i i i i i	<zoom> Movement <u>♦PreMovement</u> 2 CurveMode</zoom>	
		(Set)	
o set start naracteristics o set stop naracteristics	PreMovement screen	<zoom> PreMovement 2 Start: 00 mmm</zoom>	To set start characteristics
o set the echanism end stop naracteristics		Stop : 91	characteristics
t the start cteristics)		<zoom> PreMovement \$ Start : D99 2 Stop : 91</zoom>	(To set the start characteristics)
		() () to adjust	
		Set to confirm	
	Selection item	00	- 99
	Function	Slow start	Quick start
99		Sta	art characteristics default value: 99
Quick start		St	op characteristics default value: 91

preset operations

preset operations Stop

Setting zoom stop characteristics for

Slow start Servo start characteristics default value: 50

\_

00

Servo stop characteristics default value: 50

Mechanism end stop characteristics default value: 99





#### Setting - <Setting> - <Focus> - Curve 6.1 Setting focus demand curve characteristics

When focus is controlled from the camera, normally the focus demand curve characteristics can be set. (Does not apply to serial data control.)

Focus screen	♦ <focus>     2       Curve:     STD</focus>
	$\bigcirc$
	<focus> <u> Curve:</u> STD</focus>
	() () to select
	Standard mode has characteristics that provide a nearly linear relationship between the amount of control knob rotation and the amount of movement of the focus lens group.
<b>◆FAR</b> ► (Far mode)	Far mode makes it easier to focus on distant subjects, with curve characteristics at infinity relaxed to increase long-distance resolution.
<b>∢NEAR▶</b> (Near mode)	As the opposite of Far mode, Near mode makes it easier to focus on nearby subjects, with curve characteristics at close range relaxed to increase close-range resolution.
Selection item	
	Infinity UD: Default value UD: Default value UD: Default value UD: Default value

# Setting



Activates or deactivates a function that compensates by opening the iris an equivalent of 2 F-stops when an extender is used. 2 [I-Gain] ON OFF × 2 [I-Gain] ON ► OFF ( to select (D) ON OFF Applies iris compensation No iris compensation (D): Default value

#### Setting - <Setting> - <Iris> - Close 7.3 Setting iris closure detection on/off This iris cannot be closed when an extender (2.0×) is inserted with iris compensation set to on. As a recourse, you can set this function, which does close the iris when iris closure is detected. \* Iris closure detection takes effect and this menu item <lris> Iris screen 2 is shown when [Comp] (iris compensation) is set to on. [I-Gain] Comp: ON OFF \* Close: × 3 <lris> [I-Gain] ON Comp: ▲ Close: OFF ► ( to select Note

Depending on the camera, correct iris operation may not be possible due to interaction between lens iris compensation and camera iris control. In this case, set iris closure detection to off.

Selection item	ON	OFF
Function	Iris closure detection	No iris closure detection

Default value: Set at the factory before shipment to suit the camera interface.

#### Setting - <Setting> - <IS> Setting - <Setting> - <IS> - Mech.Lock 8. Accessing the IS screen (IS models only) 8.1 IS mechanical lock setting (IS models only) Moves to a screen for configuring a variety of IS settings. IS can be forcibly locked during shooting. Setting screen Setting> 2 **\$**<|S> 2. **IS** screen I-Gain: 50 Mech.Lock : OFF RBF: 000 SwSetting: Alt System OffState: OFF 🔿 × 8 $\bigcirc$ <Setting> <IS> Iris **♦**IS ♦Mech.Lock : Reset All SwSetting: Alt OffState: OFF Set ( to select **\$**<|S> 2 IS screen Mech.Lock : OFF <sup>(D)</sup>OFF Selection item SwSetting: Alt **Disables IS mechanical** OffState: OFF Function lock

ON

Enables IS mechanical

lock (D): Default value



#### Support - <Support> Lens support information display menu Shows lens support information. Support screen Support> 2 -S\* Interface: SerialNo. LensModelNo. Firmware SMJ-Z: SMJ-F: Demand Func - 8 Adjust 9 1. Interface: Shows camera interface information. 2. SerialNo Goes to serial number screen 3. LensModelNo. Goes to lens model number screen Goes to firmware information screen 4. Firmware 5. SMJ-Z Shows zoom servo module information. 6. SMJ-F Shows focus servo module information. 7. Demand Goes to the screen with details on connected demands Goes to the screen with support details for lateral 8. Func chromatic aberration correction and peripheral illumination correction 9. Adjust Goes to the Adjust screen (for service technicians only)

#### 

#### Support - <Support> - <SerialNo.> 2. Displaying the serial number

	<pre><support> Interface: -S* \$serialNo. 2</support></pre>
	LensModelNo.
SerialNo. screen	<serialno.> 2</serialno.>
Display item	Lens serial no.
Details shown	Serial no. (Not displayed unless set)



lines listed also varies, depending on the products used.

line

2

----

---

Zoom servo module

Model name

× 5

## Support - <Support> - <SMJ-F>

#### 6. Displaying focus servo module information

Support screen	<support></support>	2
	Interface:	
	SerialNo.	
	LensModelNo.	
	<support></support>	
	SMJ-Z:	
	♦SMJ-F:	

Display item	Focus servo module
Details shown	Model name

## Support - <Support> - <Demand> 7. Displaying information about connected demands



	Shows the input value of the AF response adjusting knob				
Display item	MIN	002-	-999	MAX	
Status	When turned fully counterclockwise	Varies I posi	oy knob ition	When turned fully clockwise	
2VF <sup>.</sup>	Shows the status of	of the VF c	lisnlav sel	ection switch	
	Shows the status of the VF display selection switch				
Display item	ALL Showe the AF	STA	TUS	OFF Deep not above the	
Status	frame and the focus status	Shows t sta	he focus tus	AF frame or focus status	
③FrameSize:	Shows the input va	lue of the	AF frame	size adjusting knob	
Display item	S	Ν	Л	L	
Status	Small AF frame size	Medium siz	AF frame ze	Large AF frame size	
④Direction:	Shows the status of	of the reve	rse switch	1	
Display item	NORM			REV	
	Status when set to focus         Status           on farther subjects if turned         on farther           clockwise as viewed from         the operation knob side		when set to focus er subjects if turned lockwise as viewed operation knob side		
Status	clockwise as view the operation know	ved from ob side	from the o	lockwise as viewed operation knob side	
Status ⑤F-Curve:	clockwise as view the operation knows Shows the status selector switch	ed from ob side	focus cha	lockwise as viewec operation knob side aracteristics curve	
Status (5) F-Curve: Display item	clockwise as view the operation knows Shows the status selector switch	ved from ob side of the FA	focus cha	lockwise as viewec operation knob side aracteristics curve NEAR	
Status SF-Curve: Display item Status	clockwise as view the operation knows Shows the status selector switch STD See "6.1 Focu	ed from ob side of the FA us demand	focus cha	lockwise as viewed operation knob side aracteristics curve NEAR naracteristics"	
Status (5) F-Curve: Display item Status (6) Mode:	clockwise as view the operation knows selector switch STD See "6.1 Foct Shows the status of	ed from ob side of the FA us demand	focus cha	lockwise as viewed operation knob side aracteristics curve NEAR naracteristics" ction switch	
Status (************************************	clockwise as view the operation knows selector switch STD See "6.1 Focu Shows the status of Full-time	red from ob side of the us demand of the AF r Part	focus change countercl from the of focus change counterchange countercha	lockwise as viewed operation knob side aracteristics curve NEAR haracteristics" ction switch OFF	
Status (a) F-Curve: Display item Status (b) Mode: Display item Status	clockwise as view the operation know selector switch STD See "6.1 Focu Shows the status of Full-time Full-time AF mode	ed from ob side of the us demand of the AF r Part: AF mode AF Acti switch is	focus cha focus cha AR d curve ch node sele time while the ve/Hold pressed	lockwise as viewed opperation knob side aracteristics curve NEAR aaracteristics" ction switch OFF AF is off	
Status (************************************	clockwise as view the operation knows selector switch STD See "6.1 Foct Shows the status of Full-time Full-time AF mode Goes to the Firmw	red from ob side a of the s of the s demand of the AF r Part- AF mode AF Acti s witch is are screet	focus cha focus cha a curve ch node sele time while the ve/Hold pressed	lockwise as viewed opperation knob side aracteristics curve NEAR aracteristics" ction switch OFF AF is off	

\*Items in the table at right are shown when connected to compatible demands.

Support - <Support> - <Func> 8. Support information for lateral chromatic aberration correction Support information for peripheral illumination correction



Status Supports communication of compensation data with the camera	Does not support communication of compensation data with the camera
--	--