Canon

BCTV Zoom Lens

UHD−DIGISUPER

UJ122x8.2B AF
UJ122x8.2B
UJ111x8.3B
UJ90x9B
UJ86x9.3B
UJ66x9B
UJ27x6.5B

DIGISUPER

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

OPERATION MANUAL "Lens"

Read this operation manual before using the product.

ENG

memo

PREFACE

Thank you for purchasing the Canon BCTV zoom lens. This operation manual explains the functions and operating instructions for the Canon BCTV zoom lens. It also describes precautions for handling the lens. Read this operation manual carefully before using the product.

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	●		BB SB SH
UJ122x8.2B	●		
UJ111x8.3B	●		
UJ90x9B	●	●	BB* HH IH PH SB* SH*
UJ86x9.3B	●		
UJ66x9B	●	●	
UJ27x6.5B	●	●	

*Supports IESDA

DIGISUPER

| Model name	Operation system		Interface
	IESD	IESDA	
XJ95x12.4B	●	●	BB* HH IH PH SB* SH*
XJ95x8.6B	●	●	
XJ80x8.8B	●	●	

*Supports IESDA

PRODUCT LIST

Make sure that the following items are included in a package.
(If you find any item missing, please contact the dealer from whom you purchased this product.)

① Lens body
② Hood Cap (attached to the lens)
③ Dust Cap (attached to the lens)
④ Connector Cap (attached to the lens)
⑤ Operation Manual "Before Using The Product"
⑥ Operation Manual "Regulations"
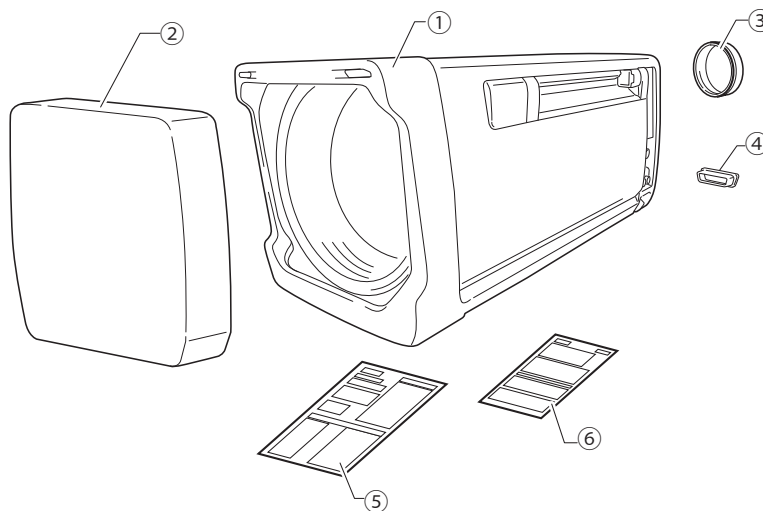
- Accessories other than those mentioned above may be required depending on the specifications of your unit. For more details, contact our sales representative.
- The illustrations shown on this page and subsequence pages are those of standard UJ90x9B. Shapes of lens may be slightly different between models.
- The illustrations of accessories shown in this booklet are those of standard specifications. Shapes may be slightly different between specifications.
- Options are not available for some specifications.

GENERAL SAFETY INFORMATION

The safety warnings and cautions provided on the product or in this operation manual must be observed.

Failure to observe these warnings and cautions may result in injury or accident.

Read this operation manual carefully to familiarize yourself with its contents and ensure that you can operate the product properly.

Also, store this manual in a safe place where it can easily be referenced whenever necessary.

This operation manual uses the following symbols and terms to identify hazards in order to prevent accidents.

⚠ WARNING	This indicates a potentially hazardous situation which, if not heeded, may result in death or serious injury to you or others. Be sure to heed all warning notices to ensure safe operation at all times.
⚠ CAUTION	This indicates a potentially hazardous situation which, if not heeded, may result in a minor injury to you or others, or damage to property.
NOTE	This indicates cautions and recommendations for operation. It contains information which, if not heeded, may result in this product failing to function properly. These notices also contain useful information for operation.

HANDLING THE PRODUCT

⚠ WARNING

1. Do not get this product wet or allow liquid inside. If water gets inside, stop using the product immediately. Continuing to use the product under this condition may cause a fire or electric shocks.

2. Do not stare at the sun or other bright objects through the lens. It may injure your eyes.

3. Be sure to hold the connector when disconnecting the cable. Pulling on the cable may sever or damage it and pose a risk of a fire or electric shocks from a short circuit.

⚠ CAUTION

1. Be careful not to drop the product when carrying it. Dropping the product may cause injury.

2. Ensure that all mountings are securely tightened. If a mounting becomes loose, parts may fall off and cause injury.

3. Inspect mountings regularly (about every six months to one year) to ensure they are securely tightened. If a mounting becomes loose, parts may fall off and cause injury.

4. When this product is used under a blazing sun, the inside of the unit may be heated to high temperature. When it is expected that the unit is exposed to elevated temperature, take measures against heat as appropriate on the customer's side.

NOTE

1. Striking or dropping the lens may cause the malfunction of the product.

2. This product is not waterproof. Take measures to avoid direct contact with rain, snow, or moisture. Otherwise it may cause the malfuction of the product.

3. In dusty environments, cover the lens mount when using, attaching or removing the lens. If dust enters inside, it may cause the malfunction of the product.

4. Take measures to avoid sudden changes in temperature where the lens is used, which may prevent operation temporarily if condensation forms in the lens.

5. Before use in particular environments, such as places where chemical products are used, contact your Canon sales representative or dealer.

6. Many glass components and precision parts are to be found inside of the product. Be sure to heed the following cautions to avoid the damage by the vibration or the shock.

   • Be sure to keep the horizontal position (sideways-facing) as same as it is used when tranporting the product. Exposing the product in the vertical (upright) position to the strong impact may cause the damage by the shock or the vibration. Also ask the capable forwarder for transportation. And inform the forwarder in advance that the product is the precision device.

   • Before use the product with the carrying case arranged separately, contact your Canon sales representative or dealer.

DEALING WITH ABNORMALITIES

⚠ WARNING

Should any of the abnormalities described below occur, immediately dismount the lens from the camera and contact your Canon sales representative or dealer.

   • Smoke, fumes, or unusual noises

   • Entry of foreign objects (such as liquid or metal objects) inside the product

MAINTENANCE AND INSPECTION

⚠ WARNING

Be sure to disconnect the cable and remove the lens from the camera before cleaning outside of the lens. Do not use benzene, thinner, or other flammable substances to clean the product. Otherwise it may cause a fire or electric shocks.

NOTE

1. Clean off any dust on the lens surface using a lens blower or a soft lens brush. In case of getting fingerprints or stains on the lens, use a clean cotton cloth moistened with commercial lens cleaning fluid, or use lens cleaning paper. Gently wipe in a spiral pattern from the center of the lens. Be careful not to rub dust across the lens, which may scratch the lens surface

2. Routine inspection about once a year is recommended, depending on the conditions and environment of use. Request overhaul, if needed.

STORAGE

⚠ CAUTION

Always attach the lens cap, hood cap, dust cap or covers before storage. Storing the lens without the caps or covers attached poses a risk of fire if the lens concentrate light in direct sunlight.

NOTE

Immediately wipe off any moisture on the lens from misty or foggy environments, using a dry cloth. Seal the lens in a plastic bag with a desiccant (preferably new) to prevent moisture inside. Otherwise it may cause the mold or the malfunction of the product.

TO THE CUSTOMER

1. Canon shall bear no responsibility for damage resulting from improper operation of this product by the customer.

2. Canon shall make no guarantees about the product quality, functions, or operation manual and its marketability and suitability for the customer's purpose. Moreover, Canon shall bear no responsibility for any damage, direct or incidental, that results from usage for the customer's purpose.

3. The product specifications, configuration, and appearance are subject to change without prior notice.

4. For further information on repairs, maintenance, or adjustments not mentioned in this operation manual, contact your Canon sales representative or dealer.

5. Note that Canon may be unable to undertake servicing or repair of a product if it is modified without consulting Canon or your Canon sales representative.

1 HOW TO MOUNT

1-1 Mounting the Lens onto the Camera

Mounting the Lens onto the Large-sized Camera

1 Make sure that the panning and tilting mechanism of the cam head on the tripod/pedestal is securely locked.

2 Turn the mount lock knob of the camera 90 degrees counterclockwise as viewed from the lens. Also, remove the protection plate/cap from the camera.

3 Remove the connector cap(s) on the rear surface of the lens and the dust cap.

4 Carefully holding the lens with both hands, mount it by hanging the V-wedge of the lens over that of the camera, with aligning the lens locating pin of the lens with U-shaped groove of the V-wedge of the camera.
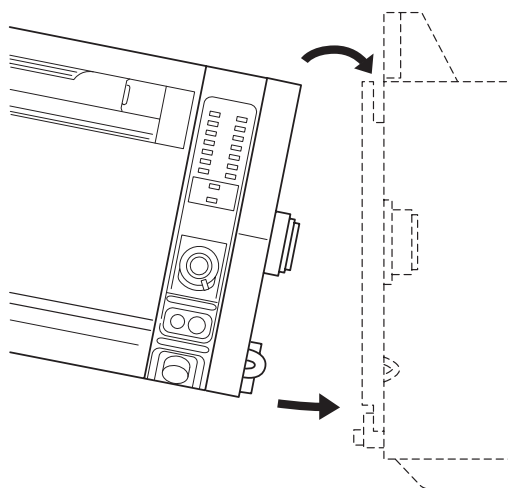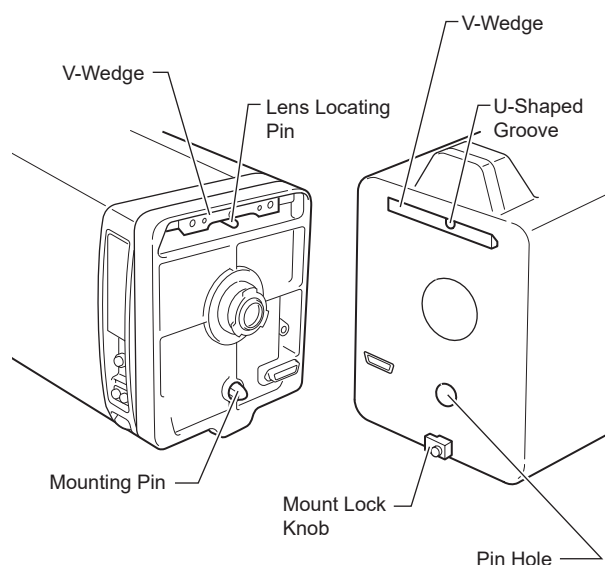
⚠ CAUTION

The lens is quite heavy. When lifting the lens, use both hands to hold two recessed handles on both side of the lens shroud, and assure the correct lifting posture.
Failure to do so may cause the lens to drop, resulting in damage to the lens and/or injury.

5 After lining up the lens correctly, press the lens toward the camera, and at same time make sure that the mounting pin at the bottom of the lens mount is fitted securely into the corresponding pin hole on the camera. Then, turn the mount lock knob of the camera clockwise (to the direction indicated by the arrow/see the figure below) to secure the lens to the camera.
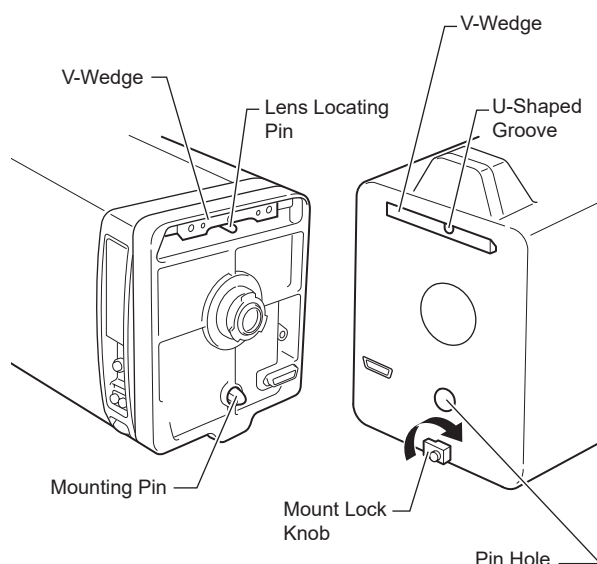
NOTE

• The connector(s) on the lens and the camera are connected automatically by performing steps **4** and **5**. If an attempt is made to connect them forcibly without lining up the spring pin with the pin hole as described in step **5**, the lens and camera connectors may be damaged.

• After installing all units, including the operation's accessories, on tripod or pedestal, adjusting work for balance of the cam head is required.

Mounting the Lens onto the Portable Camera

When using the portable camera, the supporter to mount the lens is required.
Depending on the camera models, the supporters which can be used with a camera differ. For details, contact your Canon dealer or your Canon sales representative.

1-2 Mounting the Accessories for Full-servo Operation

The servo demand is mounted and connected as shown in the figure below. When mounting the various demands, refer to the operation manual for the respective demand.
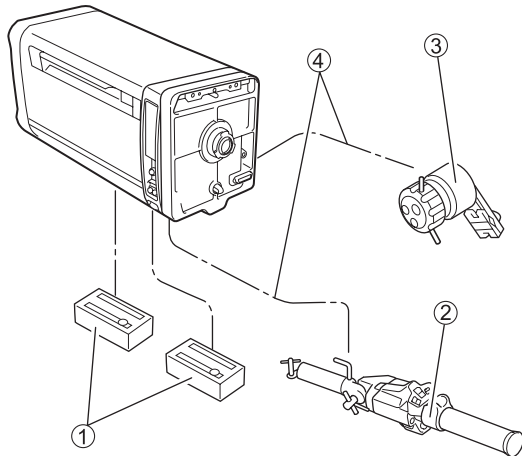
① Servo module
② Zoom servo demand
③ Focus servo demand
④ Demand cable

Mounting the Servo Module onto the Lens

It is necessary to mount the servo module to the zoom and focus couplings located in the bottom compartment of the lens.

NOTE

The same servo module is used for both zoom and focus couplings. So, it can be mounted on either the zoom or focus coupling.

1 Before mounting a module to the lens, turn the lock screw of the module counterclockwise until the lock axis comes out to its a half way of length.

2 Press the module in the direction of arrow "A", so that the key pins on the lens are inserted in the key grooves of the module.

Bottom compartment of the lens
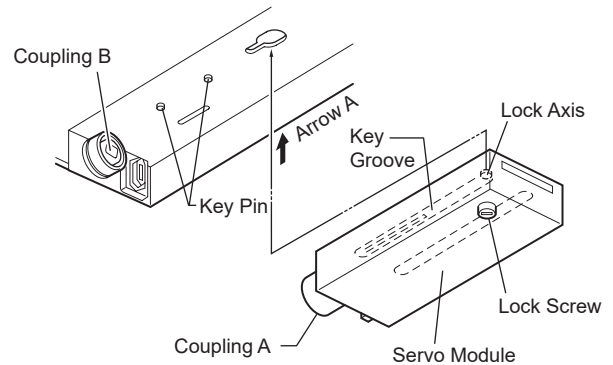
3 Mate the coupling A of the mudule with the coupling B of the lens. Then, fully push the mudule in the direction of arrow B until it stops.

4 Finally, turn the lock screw of the module clockwise to secure it. By using a coin, tighten firmly the lock knob.
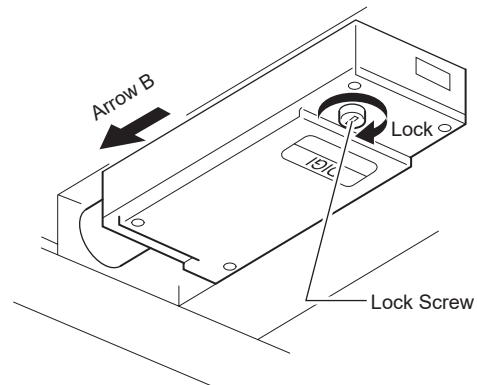
Next, as the same procedure, install the servo module on the other joint. It does not matter which is installed first, either the zoom or the focus.

NOTE

Some of the models have the index line (white line) on the circumference of coupling B. When mating couplings A and B, push the servo module in completely, so that the index line (white line) on the circumference of coupling B is entirely hidden. Be sure to mount the module completely before operation. If not, the servo module may not operate properely or it may generate abnormal noise.

Mounting the Switch Box (Option)

1 Mount the switch box to the panhandle of the tripod, using the attached clamp.

2 Connect the switch box to the lens, using the included cable.
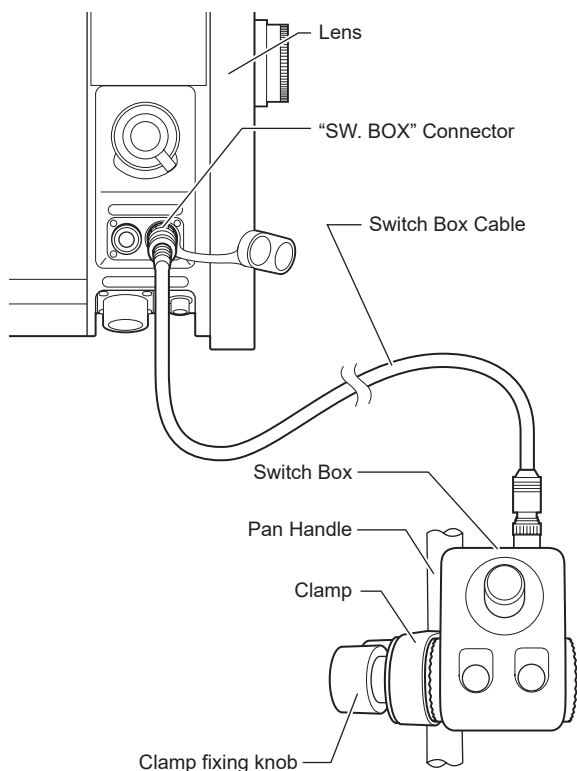
Mounting the Accessories for AF Operation (Only Models with AF Function)

The AF demand unit is mounted and connected as shown in the figure below. Follow the procedure in the operation manual for the demand to mount and connect the demand.

• This figure shows the case with the AF demand mounted on the right side as viewed from the camera.
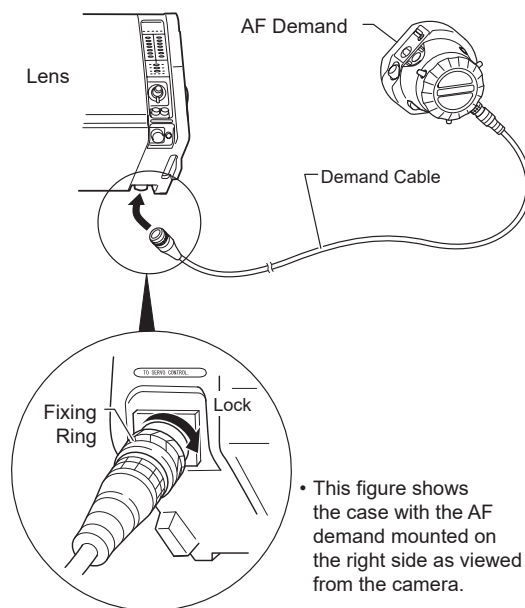
Mounting the Accessories for IS Operation (Only Models with IS Function)

Mounting the IS operation unit

1 Plug the connector of the IS operation unit into the receptacle labeled "AUX" on the left side of the lens (connector location may vary depending on models and specifications).

2 The IS Indicator unit on the other branch of the cable comes with an anchoring screw. Mount it to the location (such as on the edge of the viewfinder) where the ON/OFF status of the LEDs can be observed. The IS indicator unit is not necessary for the camera equipped with display function.

Lens

"AUX (IS Controller)" Connector

IS Operation Switch

Fixing Belts

IS Indicator Unit (or Viewfinder)
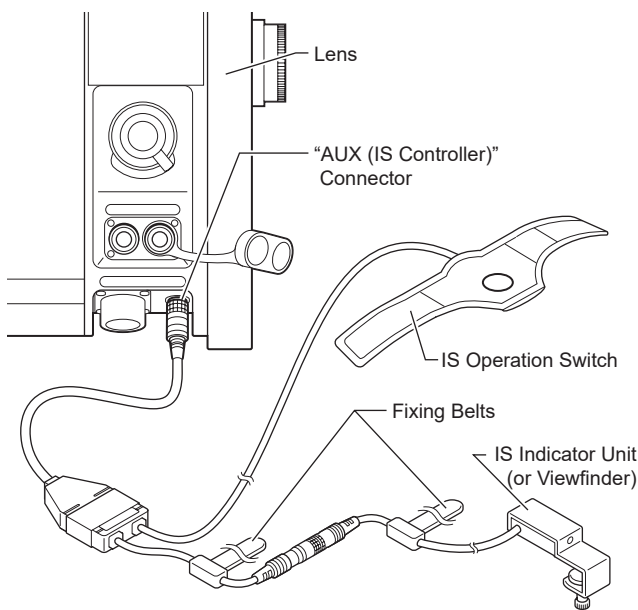
Seeing the IS operating statuses in the viewfinder

When using a camera provided with a function for receiving the signals indicating that the IS function is operating or stopped from the lens side and displaying this operating status on its viewfinder, it is possible to connect only the IS Operation Switch and operate it to perform these functions. Remove the IS indicator unit that is connected partway along the cable from the IS operation unit.

Mounting the Macro Controller (Option)

When using the lens with the macro function, using the optional macro controller enables macro operation. For details, refer to the macro controller operation manual.

1 Loosen the large and small lock knobs of the clamper, then mount the clamper to the left pan handle of the tripod.

2 After mounting the clamper to the pan handle of the tripod, tighten the large and small lock knobs of the clamper to secure the clamper.

3 Mate the rose joint of the macro controller with the rose joint of the clamper.

4 Tighten the mounting knob of the clamper to firmly secure the zoom demand.

Macro Controller

Large Lock Knob

Small Lock Knob

Mounting Knob

Clamper

Pan Handle
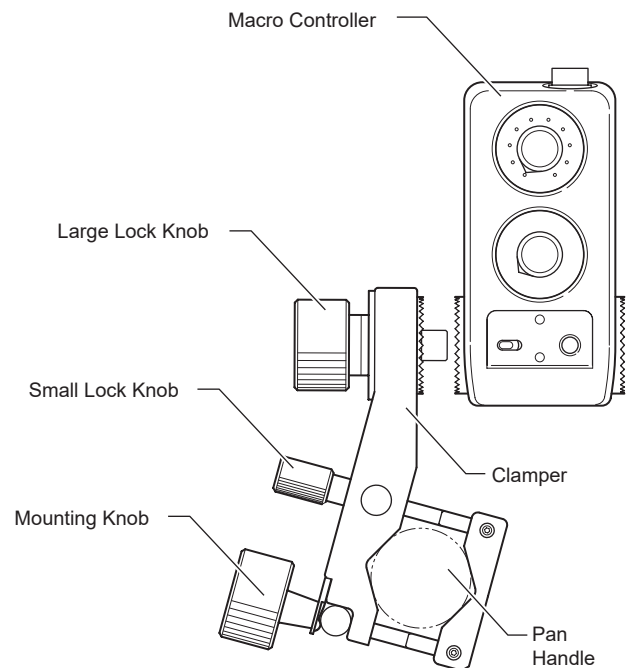
5 Connect the cable connector (female) of the macro controller to the connector of the macro controller. Then connect another side of the connector (male) of the cable to the "SW. BOX" connector on the rear side of the lens.

"SW. BOX" Connector

Cable of Macro Controller

Lens

Macro Controller
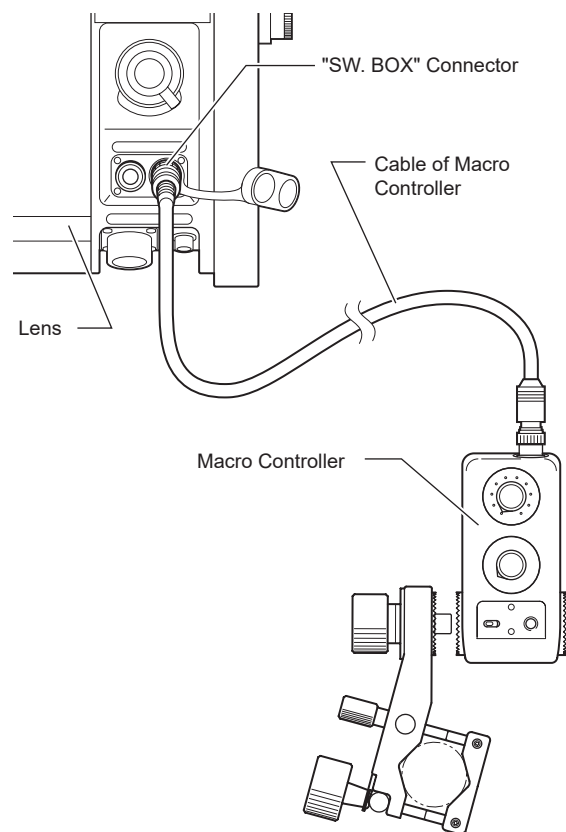
Connecting the "VIRTUAL" Cable (Only Models with "VIRTUAL" Connector)

The lens is equipped with the connector labeled "VIRTUAL" on its left side (as viewed from the camera). This connector can be used for connection with an interface to virtual systems. Zoom, focus and iris signals can be output in two types of communication data; encoder pulse train and RS-422.

NOTE

Connector location may vary by models.

"VIRTUAL" Connector

To Virtual System
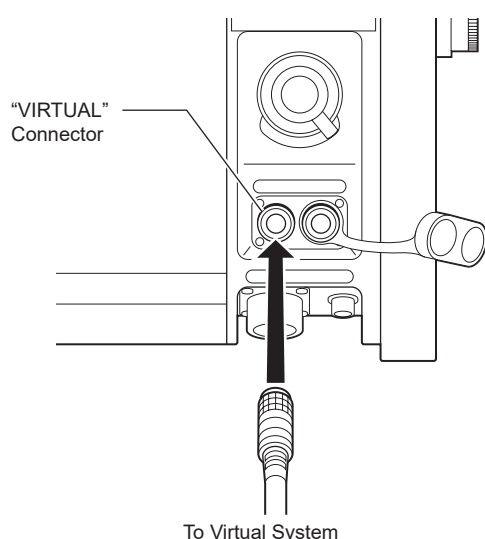
1-3 Mounting the Accessories for Semi-servo Operation

The zoom servo demand and the flexible focus control unit are mounted and connected as shown in the figure below. When mounting the various demands, refer to the operation manual for the respective demand.
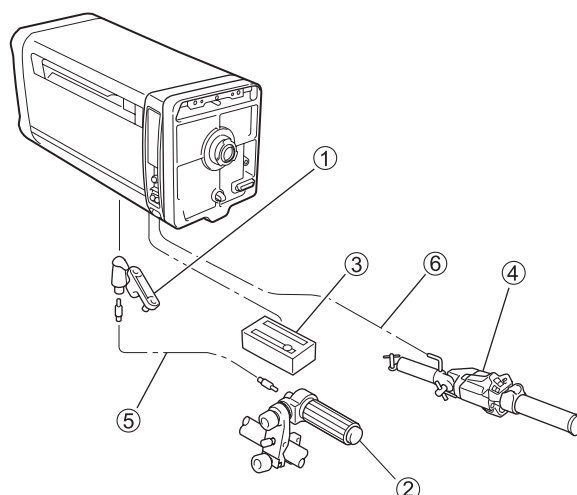
① Flexible module
② Flexible focus control unit
③ Servo module
④ Zoom servo demand
⑤ Flexible cable
⑥ Demand cable

1-4 Mounting the Accessories for Manual Control System

Mount and connect the flexible zoom and focus control units as shown in the figure.
When mounting the various demands, refer to the operation manual for the respective demand.
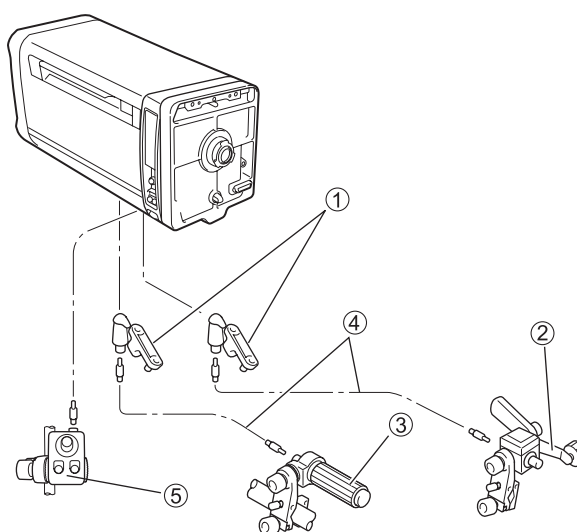
① Flexible module
② Flexible zoom control unit
③ Flexible focus control unit
④ Flexible cable
⑤ Switch box unit

Mounting the flexible module

It is necessary to mount the flexible module to the zoom and focus couplings located in the bottom compartment of the lens.

NOTE

The same flexible module is used for both zoom and focus couplings. So, it can be mounted on either the zoom or focus coupling.

1 Before mounting the module to the lens, turn the lock screw of the module counterclockwise until the lock axis comes out to its a half way of length.

2 Press the module in the direction of arrow "A", so that the key pins on the lens are inserted in the key grooves of the module.

3 Mate the coupling A of the module with the coupling B of the lens. And then, fully push the module in the direction of arrow "B" until it stops.

4 Finally, turn the lock screw of the module clockwise to secure it. By using a coin, tighten firmly the lock knob.

Next, as the same procedure, install the flexible module on the other joint. It does not matter which is installed first, either the zoom or the focus.

Bottom compartment of the lens

Arrow A

Key Pin

Coupling B

Lock Axis

Lock Screw

Key Groove

Coupling A

Arrow B

Lock
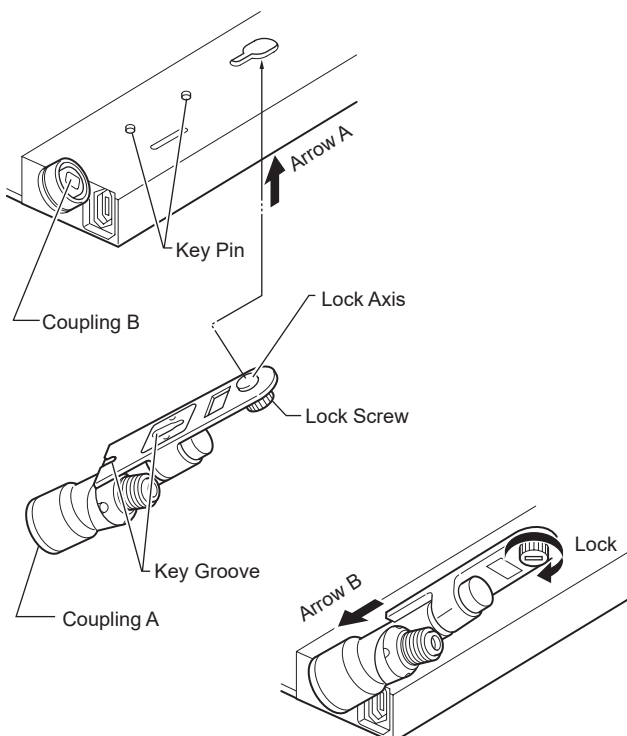
2 PREPARATION

2-1 Initialize Operation

The following models require no initialization.

- **• UJ122x8.2B AF, UJ122x8.2B, UJ111x8.3B**
- **• Models with the IESDA operation system**

This lens has a built-in encoder for a position sensor of zoom, iris and focus, and enables high-accuracy control and advanced for virtual interface. The correct position must be detected for these functions to operate correctly.

The ON [Auto]/OFF [Manual] setting of initialization can be set from the information display.

| ON [Auto] | The lens is automatically initialized on power-up. (When in servo mode) |
| OFF [Manual] | After the power is turned on, position detection is performed when the lens passes the specific position (normally near the center) in the course of lens operation. |

* Default setting at factory: OFF

For the detailed setting method, refer to the "**Display Operation Manual**" .

How to detect the position of ZOOM

Initialize operation	How to detect the position
ON (Auto)	When the power is turned on, the lens automatically detects the position. Then, it returns to the position where it used to be when the power was turned on.
OFF (Manual)	Immediately after the power is turned on, the lens operates at a temporary position, and the position is corrected when the lens passes the specific position and the position is detected.

How to detect the position of FOCUS

Initialize operation	Demand	How to detect the position
ON (Auto)	Connected	When the power is turned on, the lens automatically detects the position. Then, it returns to the position instructed by command from the demand.
	Not connected	When the power is turned on, the lens automatically detects the position. Then, it returns to the position where it used to be when the power was turned on.
OFF (Manual)	Connected	When the power is turned on, the lens automatically detects the position. Then, it returns to the position instructed by command from the demand.
	Not connected	The lens does not automatically detect the position when the demand is not connected. When the demand is connected, the lens automatically detects the position. Then, it returns to the position instructed by command from the demand.

When position detection is failed:

- The position signal sent from the lens to the camera and its indication on the information display will be incorrect.

Notes

- Iris is always initialized when powered on regardless of auto mode or manual mode.

- During initialization, lens operation is disabled. After initialization is completed, the lens returns to the position where it used to be before initialization. However, if the lens is operated in the position servo mode, the lens moves to the currently controlled position.
- The initialization operation can be enabled/disabled on the information display. When any initialization operation is changed, turn off then on the power for the changes to take effect.

The "Initialize Error!" message appears **when the servo module is not mounted correctly**, the lens is forcibly locked, or some other reason.
In such case, check the lens condition, clear the problem, and then turn off and on the power again.

Initialize Error! message

```
Initialize
Error!
```
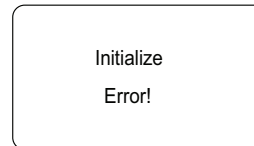
2-2 Back Focus Adjustment

If the relationship between the image plane of the zoom lens and that of the television camera is incorrect, the object goes out of focus when the lens is zoomed. Follow the steps below to adjust the back focus of the lens.

1 Select an object at an appropriate distance (UJ122x8.2BAF, UJ122x8.2B, UJ111x, UJ90x, UJ86x, UJ66x: 10 to 15 m, UJ27x: 3 to 5 m, XJ95x, XJ80x: 10 to 15 m, recommended). Use any object with sharp contrast to facilitate the adjustment work.

2 Set the lens to 1x [status without using an extender].

3 Set the iris fully open.

4 Set the lens to the telephoto end.

5 Bring the object into focus by focus operation.

6 Set the lens to the widest angle.

7 Loosen the F.B. lock knob, and then turn the F.B. adjusting knob to bring the object into focus.

F.B. Adjusting Knob

F B
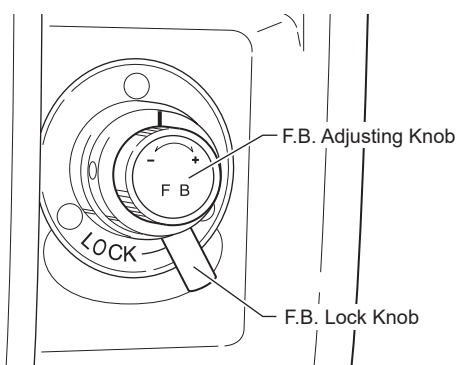
LOCK

F.B. Lock Knob

8 Repeat steps **4** to **7** several times, until the object is brought into focus at both the widest angle and telephoto ends.

9 After making sure that the object is in sharp focus, tighten the F.B. lock knob.

NOTE

If your camera and lens support Remote Back Focus (RBF), Back focus can be adjusted from the camera side. For details, please contact the dealer where you purchased your camera.

2-3 Removing and Installing the Lens Shroud

When any electrical setting or adjustment is required, remove and install the lens shroud following the steps below.

NOTE

The lens shroud of UJ122x8.2B AF cannot be removed.

1 Release the fasteners on both sides of the lens shroud, then pull the shroud forward to remove from the lens body.

2 When installing the lens shroud back in place, align the shroud to the guide rails of the lens body, and then push the shroud until it stops at the end of the mount. Press the shroud fasteners near to the end of the mount side to lock the shroud.

Recessed Handle
(Both sides of the lens)

Fastener
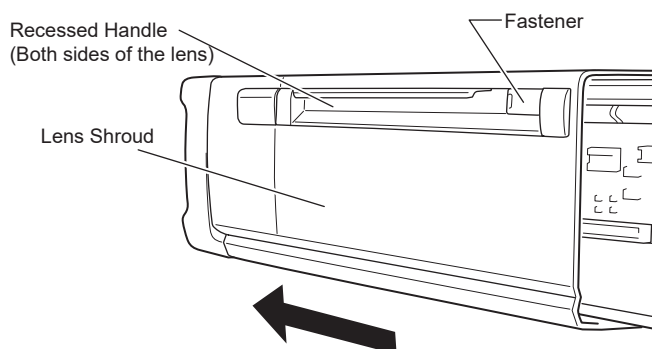
Lens Shroud

NOTE

Make sure that the fasteners of the lens shroud are always locked when it is mounted on the lens.

2-4 Iris Gain Adjustment

The iris gain is set to the middle of the adjusting range at the factory. However, if the iris gain needs to be changed for some reason, follow the steps below. These steps can be taken by the trimmer adjustment or on the information display. (The setting implemented last takes precedence)

NOTE

For other iris adjustment such as iris ends adjustment or video level adjustment when the extender is used, contact Canon dealer or your Canon sales representative.

Trimmer Adjustment
(Excluding UJ122x8.2B AF)

1   Remove the lens shroud from the lens body.

2   Check that DIP switch (iris control select switch) SW2 No. 4 is set to the "OFF" position (I.CAMERA). Depending on the command signals from the camera, the iris would not be set to auto iris mode although the switch was set to the "OFF" position. For details, refer to the "Iris mode" table in 2-5 "Iris Mode Setting (Option)".

3   Turn the iris gain adjusting trimmer for the gain adjustment. To increase the gain, turn the trimmer clockwise. To decrease the gain, turn the trimmer counterclockwise.

Iris Gain Adjusting Trimmer

IG

VR2100
IG

DIP1   DIP2

SW2   SW1

DIP Switch

• UJ122x8.2B, UJ111x8.3B
• Models with the IESDA
  operation system

Other models
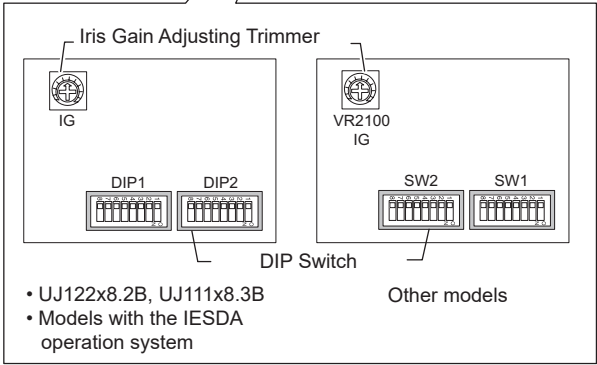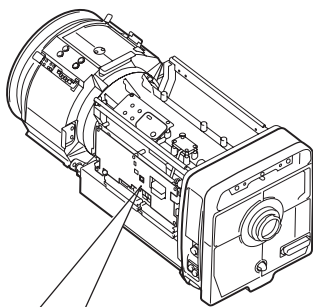
Making Adjustments on the Information Display

Information display operation procedure:

a. Push the DISPLAY switch to bring up the display.

  Push the ⊙ to place the cursor over "Setting".

  Push the (Set) .

(a)

```
<Top>
  Status
♦ Setting
  Support
```
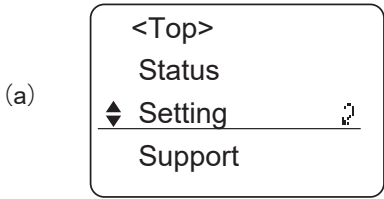
b. Push the ⊙ to place the cursor over "I-Gain".

(b)

```
<Setting>
♦ I-Gain:   ◄ 50 ►
  RBF:      000
  System
```
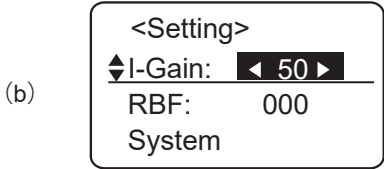
c. Move the ◀ (left) or ▶ (right) cursor button until the value to be set appears on the screen.

Selection item	01	–	99
Function	Minimum gain		Maximum gain

Default value: 50

NOTE

• To perform the gain adjustment while checking the iris operation, set the iris mode of the camera to the [AUTO] position.
• To determine the maximum gain, set the trimmer at a level where no hunting occurs.

For the detailed setting method, refer to the "**Display Operation Manual**".

Information Display

Information Display

DISPLAY switch

DISPLAY

Cursor button
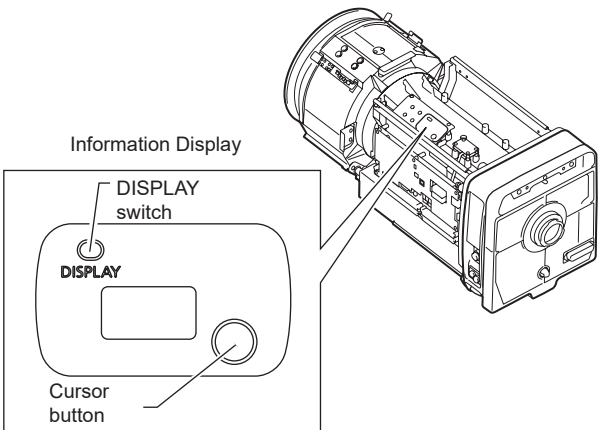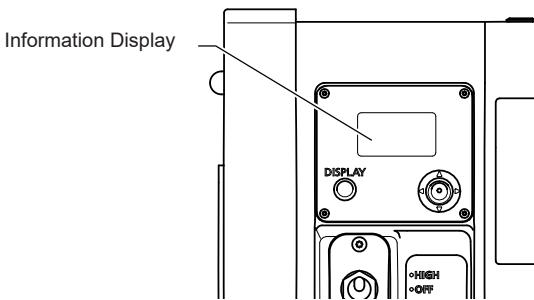
2-5 Iris Mode Setting (Excluding UJ122x8.2B AF)

DIP switch (iris control select switch) SW2 No. 4 was set to the "OFF" position at the factory.
See the table below to find the relationship between the position of the switch and signals.

▌ Iris mode

Iris control and operation depend on the following three signals

1 Enforced auto iris command signal from the camera system (IRIS ENF)
(Some camera models are not capable to provide this signal.)

2 AUTO/REMOTE iris command signal from the camera system (IRIS A/R)

3 Setting position of DIP switch (SW2) No. 4 inside the lens body
("ON" position: I.LOCAL/"OFF" position: I.CAMERA However, I.LOCAL may not be usable depending on the specifications.)

The table below lists the relationship between these three signals and iris mode.

Position of the DIP switch	Command signal from camera		Iris Control signal from	Iris mode
	IRIS ENF	IRIS A/R		
OFF	ON	Auto	Camera	Auto iris
OFF	ON	Remote	Camera	Remote iris
OFF	OFF	Auto	Camera	Auto iris
OFF	OFF	Remote	Camera	Remote iris
ON	ON	Auto	Camera	Auto iris
ON	ON	Remote	Camera	Remote iris
ON	OFF	Auto	Switch box	Remote iris
ON	OFF	Remote	Switch box	Remote iris

Iris Gain Adjusting Trimmer

IG

VR2100
IG

DIP1   DIP2

SW2   SW1

DIP switch

• UJ122x8.2B, UJ111x8.3B
• Models with the IESDA
  operation system

Other models

E11
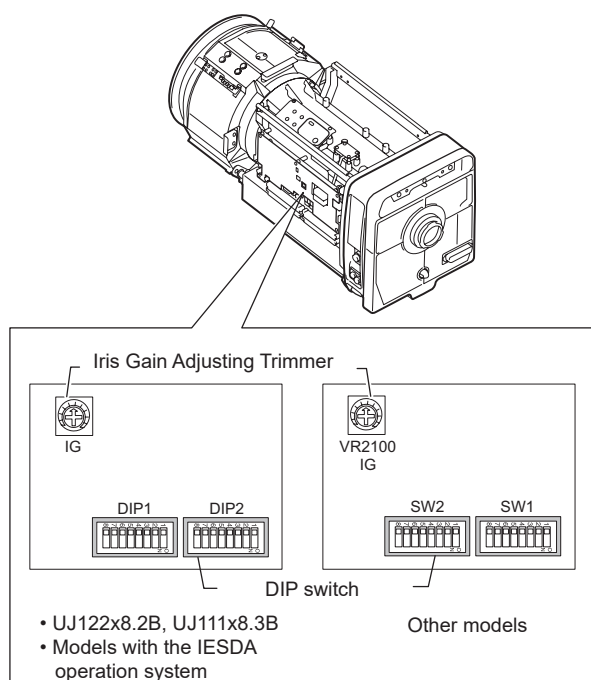
2-6 Setting on the Information Display

The table below shows the functions that can be set from the information display. For the detailed setting method, refer to the "**Display Operation Manual**".

Functions that can be set from the information display			Reference page in Display Operation Manual
RBF	Setting remote back focus		7
Lens name	Lens code setting		9
Iris control	Iris gain	Setting the auto iris gain	6、15
		Setting the remote iris gain	15
	Setting the iris correction to ON/OFF		15
	Setting the iris close detection to ON/OFF		16
AF control*¹	Setting the number of steps for AF frame movement		10
	Setting AF frame speed		10
	Horizontal AF frame size setting / Vertical AF frame size setting		11
	Restoring default AF frame settings		11
Zoom control	Setting zoom servo start characteristics		12
	Setting zoom servo stop characteristics		12
	Setting zoom mechanism end stop characteristics		12
	Preset	Setting the zoom servo start characteristics	12
		Setting the zoom servo stop characteristics	12
	Setting analog demand curve characteristics		13
	Cam mode setting		13
	Setting the servo mode from the zoom demand		14
Focus control	Setting focus demand curve characteristics		14
Tally	Setting the tally function on/off		8
	Setting tally brightness		9
Indicator	Setting the indicator on/off		7
CAFS	Setting the CAFS		8
Virtual output	Setting virtual output		8
IS*²	IS mechanical lock setting		16
	IS operation switch setting		17
	IS mode setting		17
Other	Enabling/disabling camera serial communication		9
Reset operation	Reset to default values		1、17

*1   Only Models with AF Function

*2   Only Models with IS Function

2-7 Incorporable Focus Servo Demand (Option*)

*Option only for DIGISUPER series.

The optional incorporable focus servo demands are offered for some types of camera.

1 Remove the lens shroud from the lens.

2 Set the focus demand selection switch to the "CAM" position.

NOTE

This switch is usually set to the "LENS" position by default.

Focus Demand Selection Switch

Information display
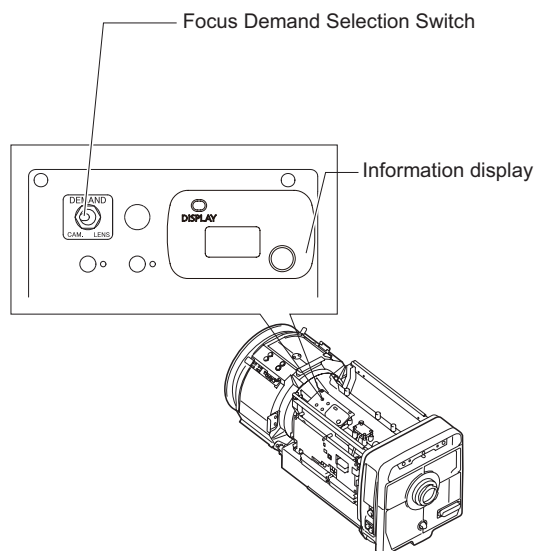
3 Set the focus demand characteristics curve mode on the informaiton display. One mode can be selected among the following three curves. For the detailed setting method, refer to the "**Display Operation Manual**".
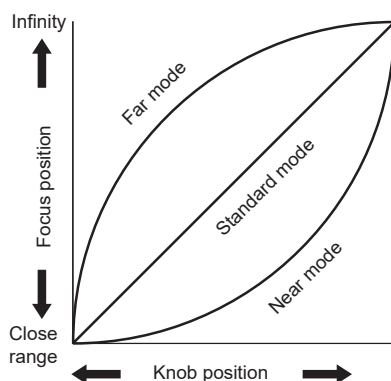
STD (Standard mode):	The Standard mode has the characteristics where the relationship between the rotation amount of the control knob and the moving amount of the focus lens group is almost in linear.
FAR (Far mode):	The Far mode facilitates focusing on an object in the far end, by making the far end curve characteristics gentle to increase the far end resolution. This mode is useful when shooting an object in comparatively far distance in sports events, for example.
NEAR (Near mode):	Contrary to the Far mode, the Near mode facilitates focusing on an object in the near end, by making the near end curve characteristics gentle to increase the near end resolution. This mode is useful when shooting an object in a limited space such as a studio.

3 OPERATION

3-1 Zoom and Focus Operation

Full-servo System Operation

Zoom and Focus operations are performed based on a configuration as shown in the figure below.
For the operating procedure, refer to the operation manual for the respective unit.
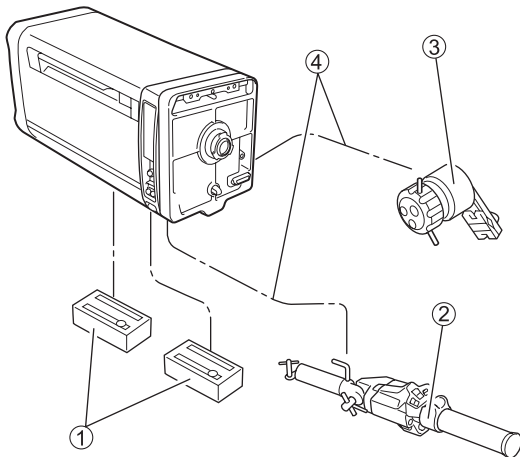
① Servo module
② Zoom servo demand
③ Focus servo demand
④ Demand cable

Manual System Operation

Zoom and Focus operations are performed based on a configuration like that shown in the figure below. For the operating procedures, refer to the operation manual for the respective unit.
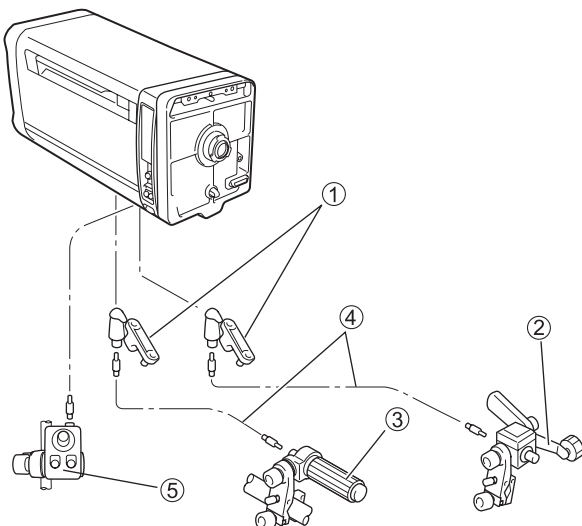
① Flexible module
② Flexible zoom control unit
③ Flexible focus control unit
④ Flexible cable
⑤ Switch box unit

Semi-servo System Operation

Zoom and Focus operations are performed based on a configuration like that shown in the figure below.
For the operating procedures, refer to the operation manual for the respective unit.

① Flexible module
② Flexible focus control unit
③ Servo module
④ Zoom servo demand
⑤ Flexible cable
⑥ Demand cable

E14
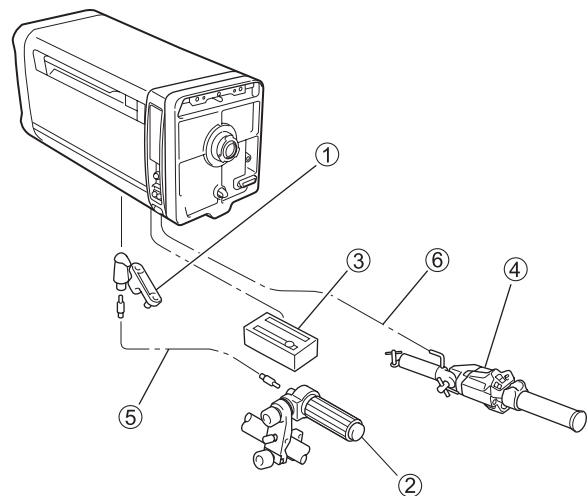
3-2 Iris Operation

Normally, lens iris operation is performed by the position servo control method using commands from the camera CCU. Control can be switched between auto iris control and remote iris control.

The camera operator can also perform remote iris control using a switch box (special version) as a special specification.

Control from the Camera

Both automatic and remote iris control are usually operated from the CCU. (Refer to the camera operation manual on how to operate.)

During the shooting, an approximate F number (iris value) can be checked with the indicator panel on the left side of the lens, as viewed from the camera.

F Number Indicator
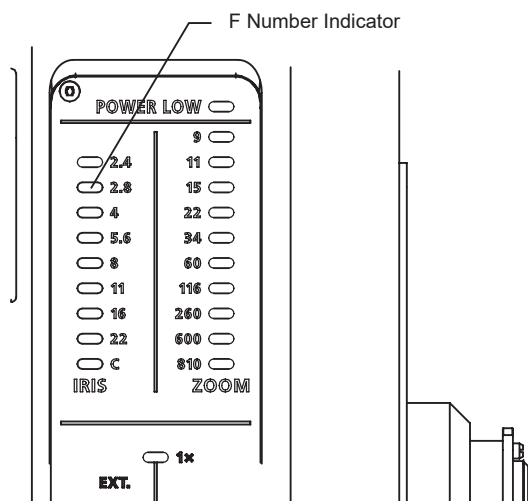
The value indicated by the indicator varies depending on the model.

Setting the iris control select switch
(Excluding UJ122x8.2B AF)

The DIP switch (SW2) No. 4 was set to the "OFF" position (I.CAMERA) at the factory prior to shipment so that the iris can be operated from the camera. If the iris operation is disabled, follow the steps below to check the setting position of DIP switch (SW2) No. 4.

"OFF" position: Iris operation is enabled from the camera.
"ON" position: Iris operation is enabled from such as switch box.

1   Remove the lens shroud.

2   Check that DIP switch is set to the "OFF" position. If the switch is set to "ON" position, change the setting to the "OFF" position.

Control from the Switch Box

When a switch box which is capable to control the iris function of the lens is mounted, the iris function of the lens is controlled by it.

NOTE

Changing settings for models that support Remote Back Focus require a service technician and cannot be performed with the following method. Please contact your dealer or Canon.

Setting the iris control select switch

Settings must be performed at the lens side in order for the iris to be controlled from the switch box. Follow the setting steps below.

1   Remove the lens shroud.

2   Change the DIP switch setting to the "ON" position (I.LOCAL).

Controlling

Control the iris by turning the iris control knob as set forth below.

Turning the knob clockwise:
        The iris moves in the opening direction.
Turning the knob counterclockwise:
        The iris moves in the closing direction.

Iris Control Knob
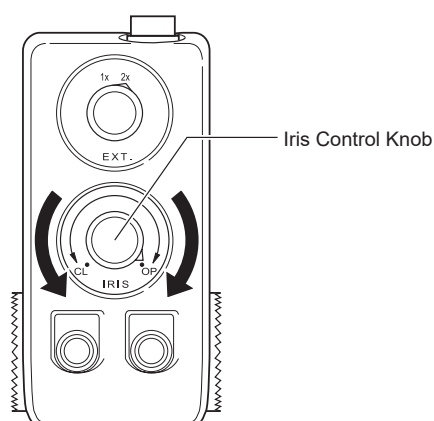
As when the iris is to be controlled from the camera, the approximate F number can be monitored on the indicator panel.

NOTE

• See the section "Mounting the Switch Box" (p. E4) for details of how to mount and connect the switch box.
• Refer to the table "Iris mode" in the section 2-5 "Iris Mode Setting" to understand the relationship among the command signals from camera, iris control device, and the position of the iris control select switch.

3-3 Extender Operation

Remote Operation

Remote controlling from the zoom servo demand and switch box

Remote extender control can be performed from the zoom servo demand, switch box, and other accessories.

Remote controlling from the camera

On the camera equipped with the extender control function, remote extender control can be performed from the extender control device mounted on the CCU or the camera head. Refer to the operation manual for the respective TV camera.

NOTE

- When the zoom servo demand or the switch box is used together, the extender is controlled by the command from the last operated device.
- The extender(s) can be selected by the extender manual control knob even during remote control.

Manual Operation

In case of emergency such as when the remote extender control is failed, or when any of above three extender control devices is unavailable, the extender(s) can be controlled manually.

Controlling

Manually turn the extender manual control knob to operate the extender(s).
The current extender position is shown by the LED on the indicator. (All the extender LEDs on the indicator panel remain off while operations are being performed.)

Extender Manual Control Knob
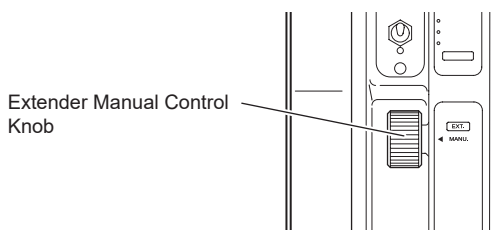
3-4 Operating the AF (Auto Focus) Function
(Only Models with AF Function)

An AF demand is necessary to operate the AF function. For more information about AF operation and AF function settings, please refer to the AF demand operation manual.

AF function notes

- Focusing using the AF may not be possible when shooting the following types of subjects.

  Examples of objects difficult to focus using the AF
  - Subjects with low contrast: Blue sky or a single-colored, flat surface
  - Subjects having particularly fast movement
  - Subjects at night or dark locations

- The back focus of the lens may change slightly due to variations in the ambient temperature. To obtain the best auto focus performance, it is advisable to confirm that the back focus is appropriate.

3-5 Operating the IS Function (Only Models with IS Function)

Knowing the Basic Operation

If the image shakes noticeably, turn on the IS function to stabilize the image.
Some IS characteristics may cause the image to move in an unnatural manner and not as intended when panned or tilted quickly. This is because the panning or tilting motion is mis-detected as a vibration, and the IS function is activated to correct it. Select the operating characteristics (STD) so that unnatural movements from panning and tilting are minimized. In addition, note that image stabilizing performance may not be fully delivered during the warming up time.

Setting the IS Preferences

During shooting, the IS function can be turned ON/OFF using the IS operation switch or other accessory.

Using the IS operation switch

Press, release, or hold down the center button to control the IS function.
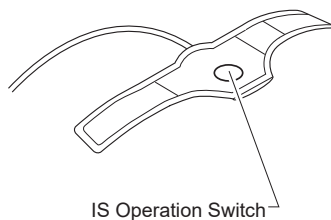
IS Operation Switch

Using the accessories with IS operation switch function

When using an accessory with IS operation function, refer to the operating instructions of the accessory.

NOTE

The IS function activated by pressing, releasing or holding down the button varies according to the lens setting.

Setting the IS operation switch

Alt	The IS function state alternates between "IS SW-ON" and "IS SW-OFF" each time the IS operation switch is pressed.
Mom	The IS function state is momentarily set to "IS SW-ON" while the IS operation switch is held down.

"Alt" is set by default.

Change the setting on the information display.
For details on the information display, refer to the "**Display Operation Manual**".

Information Display
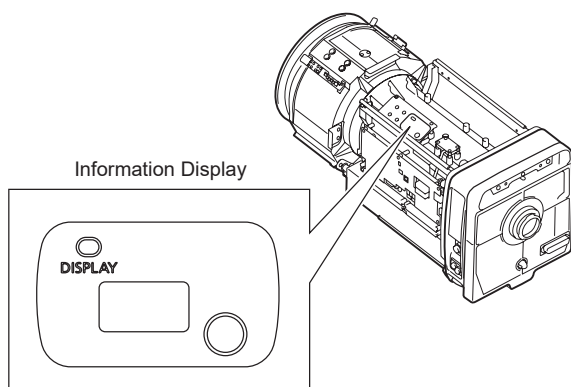
DISPLAY

Information Display
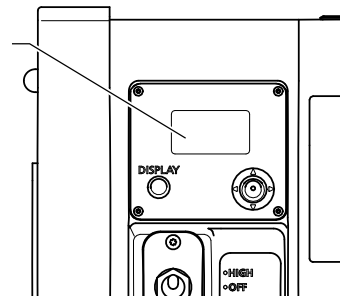
Setting the Image Stabilizing Direction and Characteristics

IS Horizontal Direction Selector Switch

IS Vertical Direction Selector Switch

HIGH
OFF
STD.
IS H

HIGH
OFF
STD.
IS V
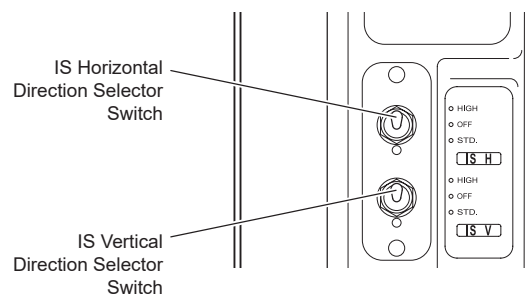
To select one of the following modes, operate the IS horizontal (or vertical) direction selector switch.

Standard characteristics (STD.)	This mode minimizes unnatural movements by implementing special processing for the low-frequency shaking caused by slow camera work and allows smooth operation during regular camera operation.
Maximum characteristics (HIGH)	This item is set to ensure that the shaking in all the frequency bands is stabilized at the maximum characteristics. If low-frequency shaking is a concern with stationary shots, the anti-vibration effect is enhanced by selecting the maximum characteristics.
Stop (OFF)	This stops the IS function.

Advanced settings of IS function

Change the setting on the information display.
For details on the information display, refer to the "**Display Operation Manual**".
Examples of typical combinations including the IS indicator unit are shown below.

Shaded sections [   ] indicate that the IS indicator unit LED is lighted.

IS mode setting	IS SW-ON (Switch is pressed when set to Mom) → Selector switch status is applied		IS SW-OFF (Switch is not pressed when set to Mom)
	H	V	
OFF (Default setting)	Hi	Hi	OFF
	STD	Hi	OFF
	OFF	Hi	OFF
	STD	STD	OFF
	OFF	STD	OFF
	OFF	OFF	OFF
STD	Hi	Hi	STD
	STD	Hi	STD
	OFF	Hi	STD
	STD	STD	STD
	STD	OFF	STD
	Hi	OFF	STD

*   When the power is turned on, the IS function is in IS SW-ON state if the IS operation switch mode is set to "Alt", and in IS SW-OFF state if set to "Mom".

IS Indicator Unit

LED
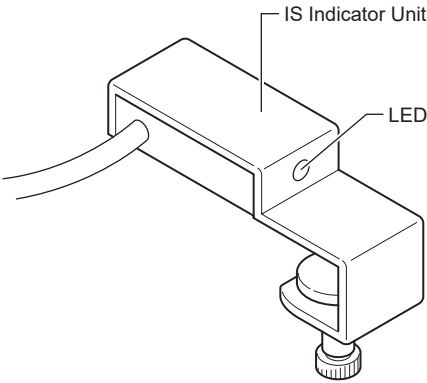
Checking with the viewfinder

The IS function activation state can also be checked with the viewfinder, if the camera is equipped with the viewfinder capable of indicating it.

For details, refer to the operation manual for the camera.

4 Other Functions and Options

4-1 Checking for Low Power

The power low LED, used to indicate low power supply warning, is provided on the indicator panel at the left side of the lens, as viewed from the camera.
According to the supplied voltage, LED indicates:

Lit red: 10V or less
Off: Supplies sufficient voltage

So, when the LED is lit red, countermeasures to raise the supply voltage to 10.5V or above is necessary. Otherwise, the lens may malfunction.

POWER LOW LED
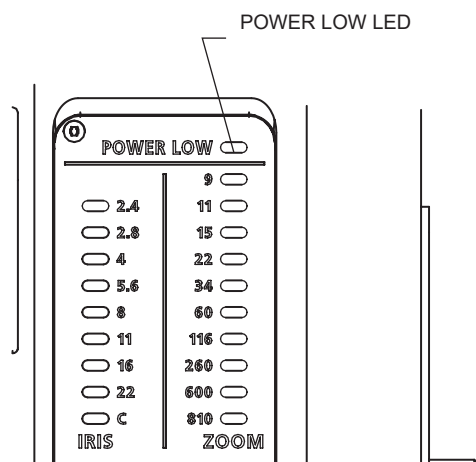
The value indicated by the indicator varies depending on the model.

4-2 Using an External Power Source

An external power input jack is provided at the right side of the lens, as viewed from the camera. In case the combination of portable camera and the lens with semi or full servo operation, 12V DC (10-17V DC) should be supplied to the lens through this jack since portable camera does not have enough power consumption to drive semi or full servo operation.

External Power Input Jack
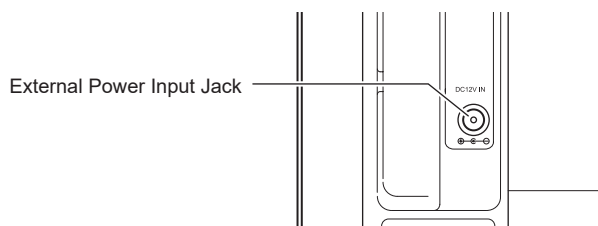
NOTE

If a battery or adapter is used, the output voltage may be higher than the rated voltage depending on the manufacturers and therefore the following voltages must be observed strictly. If a voltage outside the normal operation range is used, the product may be damaged.
  Rated voltage: 12 VDC
  Normal operation range: 10 to 17 VDC
And the lens power input has the positive and negative polarities. Make sure to connect the power cable to the correct polarity when connecting the batteries or the adaptors. Connecting the cable to the incorrect polarity may cause the damage to the product.

4-3 Heater System (Option)

The heater system for warming up the lens to prevent clouding inside the lens can be mounted on the lens. The heater system is operated as follows.

1 Set the heater ON/OFF switch, which is located on the right side of the lens as seen from the camera, to the ON position.

2 To shut down the heater, set the heater ON/OFF switch to the OFF position.

Heater ON/OFF Switch
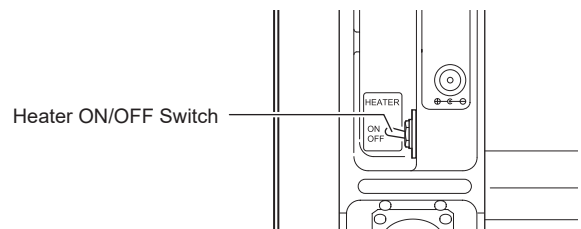
NOTE

A great deal of power is consumed when the heater switch is ON. For this reason, the circuitry is designed to disable servo zoom operations and servo focus operations.
To perform servo operations, stop using the heater.

4-4 Dry Air Filling (Option)

To prevent fog or condensation on the internal surface of the lens, you can fill the lens barrel with dry air.
Dry air should be refilled at the periodic overhaul, and before the critical event.

NOTE

To refill dry air, gas canister and filling tool are required. Contact your Canon dealer or your Canon sales representative.

5 SPECIFICATIONS

UHD-DIGISUPER
■ IESD

		UJ122x8.2B AF	UJ122x8.2B
Focal Length	1×	8.2–1000mm	
	2×	16.4–2000mm	
Zoom Ratio		122 ×	
Maximum Relative Aperture	1×	1:1.7 （at 8.2–340mm） 1:5.0 （at 1000mm）	
	2×	1:3.4 （at 16.4-680mm） 1:10.0 （at 2000mm）	
Image Format		9.6 × 5.4 mm (Diagonal 11 mm)	
Angular Field of View	Wide 1×	60.7º × 36.5º （at 8.2mm）	
	Wide 2×	32.6º × 18.7º （at 16.4mm）	
	Tele 1×	0.55º × 0.31º （at 1000mm）	
	Tele 2×	0.28º × 0.15º （at 2000mm）	
Minimum Object Distance (M.O.D.) **(From the lens vertex)**		3.0 m (Macro : 0.1m)*	
Object Dimensions at M.O.D.	Wide 1×	314.6 × 177.0cm （at 8.2mm）	314.8 × 177.1cm （at 8.2mm）
	Wide 2×	157.3 × 88.5cm （at 16.4mm）	157.4 × 88.6cm （at 16.4mm）
	Tele 1×	2.7 × 1.5cm （at 1000mm）	2.7 × 1.5cm （at 1000mm）
	Tele 2×	1.4 × 0.8cm （at 2000mm）	1.4 × 0.8cm （at 2000mm）
Zoom Speed		Max. speed in all range: 0.6 ± 0.1s	
Focus Speed		Max. speed in all range: 0.8 ± 0.1s.	
Iris Speed		0.8 ± 0.15s	
Mount		B4	
Input Voltage		DC12V (DC10 to 17V)	
Power Consumption		24W Max.	
Operating Temperature		-20°C to +45°C	
Dimensions		See external view	
Flange back		See external view	

*Operation requires the optional macro controller.

■IESD

		UJ111x8.3B
Focal Length	1×	8.3–925mm
	2×	16.6–1850mm
Zoom Ratio		111 ×
Maximum Relative Aperture	1×	1:1.7 （at 8.3–340mm） 1:4.65 （at 925mm）
	2×	1:3.4 （at 16.6–680mm） 1:9.3 （at 1850mm）
Image Format		9.6 × 5.4 mm (Diagonal 11 mm)
Angular Field of View	Wide 1×	60.1º × 36.0º （at 8.3mm）
	Wide 2×	32.3º × 18.5º （at 16.6mm）
	Tele 1×	0.59º × 0.33º （at 925mm）
	Tele 2×	0.30º × 0.17º （at 1850mm）
Minimum Object Distance (M.O.D.) (From the lens vertex)		3.0 m (Macro : 0.1m)*
Object Dimensions at M.O.D.	Wide 1×	311.6 × 175.3cm （at 8.3mm）
	Wide 2×	155.8 × 87.7cm （at 16.6mm）
	Tele 1×	2.9 × 1.6cm （at 925mm）
	Tele 2×	1.5 × 0.8cm （at 1850mm）
Zoom Speed		Max. speed in all range: 0.6 ± 0.1s
Focus Speed		Max. speed in all range: 0.8 ± 0.1s.
Iris Speed		0.8 ± 0.15s
Mount		B4
Input Voltage		DC12V (DC10 to 17V)
Power Consumption		24W Max.
Operating Temperature		-20°C to +45°C
Dimensions		See external view
Flange back		See external view

*Operation requires the optional macro controller.

5 SPECIFICATIONS

■ IESD

		UJ86x9.3B
Focal Length	1×	9.3–800 mm
	2×	18.6–1600 mm
Zoom Ratio		86×
Maximum Relative Aperture	1×	1:1.7 (at 9.3–340 mm) 1:4.0 (at 800 mm)
	2×	1:3.4 (at 18.6–680 mm) 1:8.0 (at 1600 mm)
Image Format		9.6 × 5.4 mm (Diagonal 11 mm)
Angular Field of View	Wide 1×	54.6º × 32.4º (at 9.3 mm)
	Wide 2×	28.9º × 16.5º (at 18.6 mm)
	Tele 1×	0.69º × 0.39º (at 800 mm)
	Tele 2×	0.34º × 0.19º (at 1600 mm)
Minimum Object Distance (M.O.D.) (From the lens vertex)		3.0 m
Object Dimensions at M.O.D.	Wide 1×	271.9 × 152.9 cm (at 9.3 mm)
	Wide 2×	136.0 × 76.5 cm (at 18.6 mm)
	Tele 1×	3.3 × 1.9 cm (at 800 mm)
	Tele 2×	1.7 × 1.0 cm (at 1600 mm)
Zoom Speed		Max. speed in all range: 0.6 ± 0.1s
Focus Speed		Max. speed in all range: 0.8 ± 0.1s.
Iris Speed		0.8 ± 0.15s
Mount		B4
Input Voltage		DC12V (DC10 to 17V)
Power Consumption		24W Max.
Operating Temperature		-20°C to +45°C
Dimensions		See external view
Flange back		See external view

■ IESD/IESDA

		UJ90x9B	UJ27x6.5B
Focal Length	1×	9–810 mm	6.5–180mm
	2×	18–1620 mm	13–360mm
Zoom Ratio		90×	27 ×
Maximum Relative Aperture	1×	1:2.4 (at 9–486 mm) 1:4.0 (at 810 mm)	1:1.5 （at 6.5–123mm) 1:2.2 （at 180mm）
	2×	1:4.8 (at 18–972 mm) 1:8.0 (at 1620 mm)	1:3.0 （at 13–246mm） 1:4.4 （at 360mm）
Image Format		9.6 × 5.4 mm (Diagonal 11 mm)	9.6 × 5.4mm （Diagonal 11 mm）
Angular Field of View	Wide 1×	56.1º × 33.4º (at 9 mm)	72.9º × 45.1º （at 6.5mm）
	Wide 2×	29.9º × 17.1º (at 18 mm)	40.5º × 23.5º （at 13mm）
	Tele 1×	0.68º × 0.38º (at 810 mm)	3.1º × 1.7º (at 180mm)
	Tele 2×	0.34º × 0.19º (at 1620 mm)	1.5º × 0.9º (at 360mm）
Minimum Object Distance (M.O.D.) (From the lens vertex)		3.0 m (Only IESDA macro : 0.1m)*	0.6m
Object Dimensions at M.O.D.	Wide 1×	287.9 × 161.9 cm (at 9 mm)	106.1 × 59.7cm （at 6.5mm）
	Wide 2×	144.0 × 81.0 cm (at 18 mm)	53.1 × 29.9cm （at 13mm）
	Tele 1×	3.3 × 1.9 cm (at 810 mm)	3.8 × 2.1cm （at 180mm）
	Tele 2×	1.7 × 1.0 cm (at 1620 mm)	1.9 × 1.1cm （at 360mm）
Zoom Speed		Max. speed in all range: 0.6 ± 0.1s	Max. speed in all range: 0.5 ± 0.1s
Focus Speed		Max. speed in all range: 0.8 ± 0.1s	
Iris Speed		0.8 ± 0.15s	
Mount		B4	
Input Voltage		DC12V （DC10V to 17V)	
Power Consumption		24W Max.	
Operating Temperature		-20°C to +45°C	
Dimensions		See external view	
Flange back		See external view	

*Operation requires the optional macro controller.

5 SPECIFICATIONS

■ IESD/IESDA

		UJ66x9B
Focal Length	1×	9–600mm
	2×	18–1200mm
Zoom Ratio		66 ×
Maximum Relative Aperture	1×	1:1.7（at 9-340mm） 1:3.0（at 600mm）
	2×	1:3.4（at 18-680mm） 1:6.0（at 1200mm）
Image Format		9.6 × 5.4mm （Diagonal 11 mm）
Angular Field of View	Wide 1×	56.1º × 33.4º（at 9mm）
	Wide 2×	29.9º × 17.1º（at 18mm）
	Tele 1×	0.92º × 0.52º（at 600mm）
	Tele 2×	0.46º × 0.26º（at 1200mm）
Minimum Object Distance (M.O.D.) (From the lens vertex)		3.0m
Object Dimensions at M.O.D.	Wide 1×	287.9 × 161.9cm（at 9mm）
	Wide 2×	144.0 × 81.0cm（at 18mm）
	Tele 1×	4.4 × 2.5cm（at 600mm）
	Tele 2×	2.2 × 1.3cm（at 1200mm）
Zoom Speed		Max. speed in all range: 0.6 ± 0.1s
Focus Speed		Max. speed in all range: 0.8 ± 0.1s
Iris Speed		0.8 ± 0.15s
Mount		B4
Input Voltage		DC12V（DC10V to 17V）
Power Consumption		24W Max.
Operating Temperature		-20°C to +45°C
Dimensions		See external view
Flange back		See external view

DIGISUPER
■IESD/IESDA

			XJ95x12.4B		XJ95x8.6B	
			4:3 mode (Only IESD)	16:9 mode	4:3 mode (Only IESD)	16:9 mode
Focal Length		1×	12.4–1178 mm		8.6–820 mm	
		2×	24.8–2356 mm		17.2–1640 mm	
Zoom Ratio			95×			
Maximum Relative Aperture		1×	1:2.5 (at 12.4–491 mm) 1:6.0 (at 1178 mm)		1:1.7 (at 8.6–340 mm) 1:4.1 (at 820 mm)	
		2×	1:5.0 (at 24.8–982 mm) 1:12.0 (at 2356 mm)		1:3.4 (at 17.2–680 mm) 1:8.2 (at 1640 mm)	
Image Format			8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)	8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)
Angular Field of View	Wide	1×	39.1º × 29.8º (at 12.4 mm)	42.3º × 24.6º (at 12.4 mm)	54.2º × 42.0º (at 8.6 mm)	58.3º × 34.9º (at 8.6 mm)
		2×	20.1º × 15.2º (at 24.8 mm)	21.9º × 12.4º (at 24.8 mm)	28.7º × 21.7º (at 17.2 mm)	31.2º × 17.8º (at 17.2 mm)
	Tele	1×	0.43º × 0.32º (at 1178 mm)	0.47º × 0.26º (at 1178 mm)	0.61º × 0.46º (at 820 mm)	0.67º × 0.38º (at 820 mm)
		2×	0.21º × 0.16º (at 2356 mm)	0.23º × 0.13º (at 2356 mm)	0.31º × 0.23º (at 1640 mm)	0.34º × 0.19º (at 1640 mm)
Minimum Object Distance (M.O.D.) (From the lens vertex)			3.0 m			
Object Dimensions at M.O.D.	Wide	1×	191.9 × 143.9 cm (at 12.4 mm)	209.5 × 117.8 cm (at 12.4 mm)	274.1 × 205.6 cm (at 8.6 mm)	298.1 × 167.7 cm (at 8.6 mm)
		2×	96.0 × 72.0 cm (at 24.8 mm)	104.8 × 58.9 cm (at 24.8 mm)	137.1 × 102.8 cm (at 17.2 mm)	149.1 × 83.9 cm (at 17.2 mm)
	Tele	1×	2.1 × 1.6 cm (at 1178 mm)	2.3 × 1.3 cm (at 1178 mm)	3.0 × 2.3 cm (at 820 mm)	3.2 × 1.8 cm (at 820 mm)
		2×	1.1 × 0.8 cm (at 2356 mm)	1.2 × 0.7 cm (at 2356 mm)	1.5 × 1.2 cm (at 1640 mm)	1.6 × 0.9 cm (at 1640 mm)
Zoom Speed			Max. speed in all range: 0.6 ± 0.1s			
Focus Speed			Max. speed in all range: 0.8 ± 0.1s			
Iris Speed			0.8 ± 0.15s			
Mount			B4			
Input Voltage			DC12V (DC10 to 17V)			
Power Consumption			24W Max.			
Operating Temperature			-20°C to +45°C			
Dimensions			See external view			
Flange back			See external view			

■IESD/IESDA

		XJ80x8.8B	
		4:3 mode (Only IESD)	**16:9 mode**
Focal Length	1×	8.8–710 mm	
	2×	17.6–1420 mm	
Zoom Ratio		80×	
Maximum Relative Aperture	1×	1:1.7 (at 8.8–340 mm) 1:3.55 (at 710 mm)	
	2×	1:3.4 (at 17.6–680 mm) 1:7.1 (at 1420 mm)	
Image Format		8.8 × 6.6 mm (Diagonal 11 mm)	9.6 × 5.4 mm (Diagonal 11 mm)
Angular Field of View	Wide 1×	53.1º × 41.1º (at 8.8 mm)	57.2º × 34.1º (at 8.8 mm)
	Wide 2×	28.1º × 21.2º (at 17.6 mm)	30.5º × 17.4º (at 17.6 mm)
	Tele 1×	0.71º × 0.53º (at 710 mm)	0.77º × 0.44º (at 710 mm)
	Tele 2×	0.36º × 0.27º (at 1420 mm)	0.39º × 0.22º (at 1420 mm)
Minimum Object Distance (M.O.D.) (From the lens vertex)		3.0 m	
Object Dimensions at M.O.D.	Wide 1×	266.8 × 200.1 cm (at 8.8 mm)	290.0 × 163.1 cm (at 8.8 mm)
	Wide 2×	133.4 × 100.1 cm (at 17.6 mm)	145.0 × 81.6 cm (at 17.6 mm)
	Tele 1×	3.4 × 2.6 cm (at 710 mm)	3.7 × 2.1 cm (at 710 mm)
	Tele 2×	1.7 × 1.3 cm (at 1420 mm)	1.9 × 1.1 cm (at 1420 mm)
Zoom Speed		Max. speed in all range: 0.6 ± 0.1s	
Focus Speed		Max. speed in all range: 0.8 ± 0.1s	
Iris Speed		0.8 ± 0.15s	
Mount		B4	
Input Voltage		DC12V (DC10 to 17V)	
Power Consumption		24W Max.	
Operating Temperature		-20°C to +45°C	
Dimensions		See external view	
Flange back		See external view	

UJ122x8.2B AF

(Unit: mm)

コネクター（カメラへ）
Connector to Camera
撮像机连接器

レンズ位置決めピン
Lens Locating Pin
摄像机连接器

スプリングピン
Mounting Pin
紧固销

125.3
120.5

95

80

52
60

135.5
123.5

150

127.3
125.3

127.3
125.3

120

122

137.5
125.3

150

F.B.=69
in air

F.B.=48
in air

φ65

24

コネクター（スイッチボックスへ）
Connector for Switch Box
开关盒连接器

コネクター（ISコネクターへ）
Connector for Switch Box
IS连接器

F.B.調整ノブ
F.B. Adjusting Knob
后焦调节环

F.B.ロックノブ
F.B. Lock Knob
后焦锁定螺钉

アイリスブザーム/エクステンダー用インディケーター
Indicator for Iris/Zoom/EXT
光圈/变焦/增距镜指示器

UHD DIGISUPER 122AF
UJ122x8.2B AF 8.2-1000mm 1:1.7

IMAGE STABILIZER

4K

タリーライト
Tally Lights
播放指示灯

662

コネクター（バーチャル出力）
Connector for Virtual Output
虚拟输出连接器

コネクター（サーボコントローラーへ）
Connector for Servo Controller
伺服控制器连接器

カーソルボタン
Cursor button
光标操纵钮

ディスプレイ
Display
显示屏

DISPLAY スイッチ
DISPLAY switch
显示屏开关

IS水平方向特性選択スイッチ
IS Horizontal Direction
Selector Switch
图像稳定（IS）
水平方向选择开关

IS垂直方向特性選択スイッチ
IS Vertical Direction
Selector Switch
图像稳定（IS）
垂直方向选择开关

エクステンダー切替えスイッチ
Extender Manual
Control Knob
增距镜手动控制钮

UHD DIGISUPER 122AF
UJ122x8.2B AF 8.2-1000mm 1:1.7

IMAGE STABILIZER

4K

外部電源入力ジャック（DC12V）
External Power Input Jack for DC 12V In
DC12V外部电源输入口

コネクター（サーボコントローラーへ）
Connector for Servo Controller
伺服控制器连接器

Canon

*機種・仕様により形状は若干異なる場合があります。
*Shpaes of lens may be slightly different between models.
*镜头形状会因机型规格不同而稍有差异。

UJ122x8.2B

(Unit: mm)

コネクター（カメラへ）
Connector to Camera
摄像机连接器

95

125.7
120.5

80

52
60

レンズ位置決めピン
Lens Locating Pin
摄像机连接器

スプリングピン
Mounting Pin
紧固销

125.7
120.5

123.5
135.5
150

127.3
125.3

127.3
125.3

135.5
120
122
137.5
150

*機種、仕様により形状は若干異なる場合があります。
*Shpaes of lens may be slightly different between models.
镜头形状会因机型规格不同而稍有差异。

F.B.=69
in air

F.B.=48
in air

φ65

24

F.B.調整ノブ
F.B. Adjusting Knob
后焦调节环

F.B.ロックノブ
F.B. Lock Knob
后焦锁定螺钉

コネクター
（スイッチボックス用）
Connector for Switch Box
开关盒连接器

補助コネクター（ISコントローラ用）
AUX. Connector (For IS Connector)
AUX.连接器（用于IS连接器）

アイリスズーム／エクステンダー インジケーター
Indicator for Iris/Zoom/EXT
光圈/变焦/增距镜指示器

ファスナー
Fastener Lever
紧固钮

637.4（ロングフード/Long Hood/长形遮光罩 637.4)

タリーライト
Tally Lights
播放指示灯

UHD DIGISUPER 122
UJ122x8.2B 8.2-1000mm 1:1.7

IMAGE STABILIZER

4K

コネクター（バーチャル出力）
Connector for Virtual Output
虚拟输出连接器

コネクター（サーボコントローラへ）
Connector for Servo Controller
同服控制器连接器

UHD DIGISUPER 122
UJ122x8.2B 8.2-1000mm 1:1.7

IMAGE STABILIZER

4K

外部電源入力ジャック（DC12V）
External Power Input Jack for DC 12V In
DC12V外部电源输入口

コネクター（サーボコントローラへ）
Connector for Servo Controller
同服控制器连接器

IS水平方向特性選択スイッチ
IS Horizontal Direction Selector Switch
图像稳定（IS）水平方向选择开关

IS垂直方向特性選択スイッチ
IS Vertical Direction Selector Switch
图像稳定（IS）垂直方向选择开关

エクステンダー切替えノブ
Extender Manual
Control Knob
增距镜手动控制钮

UJ111x8.3B

Connector to Camera
コネクター（カメラへ）
摄像机连接器

Lens Locating Pin
レンズ（位置決めピン）
摄像机连接器

Mounting Pin
スプリングピン
緊固销

F.B. Adjusting Knob
F.B. 調整ノブ
后焦调节环

F.B. Lock Knob
F.B. ロックノブ
后焦锁定螺钉

Connector for Switch Box
コネクター（スイッチボックスへ）
开关盒连接器

AUX. Connector (For IS Connector)
補助コネクター（ISコントローラ用）
AUX.连接器（用于IS连接器）

F.B.=69 in air
F.B.=48 in air
φ65
24

Indicator for Iris/Zoom/EXT
アイリスズームエクステンダーインジケーター
光圈/变焦/增距镜指示器

Fastener Lever
ファスナー
紧固钮

637.4 (ロングフード/Long Hood/长形遮光罩 667.4)

Tally Lights
タリーライト
播放指示灯

Connector for Virtual Output
コネクター（バーチャル出力）
虚拟输出连接器

Connector for Servo Controller
コネクター（サーボコントローラーへ）
伺服控制器连接器

UHD DIGISUPER 111
UJ111x8.3B 8.3-925mm 1:1.7

IMAGE STABILIZER
4K

Canon

External Power Input Jack for DC 12V In
外部電源入力ジャック(DC12V)
DC12V外部电源输入口

Connector for Servo Controller
コネクター（サーボコントローラーへ）
伺服控制器连接器

IS Horizontal Direction Selector Switch
IS水平方向特性選択スイッチ
图像稳定 (IS) 水平方向选择开关

IS Vertical Direction Selector Switch
IS垂直方向特性選択スイッチ
图像稳定 (IS) 垂直方向选择开关

Extender Manual Control Knob
エクステンダー切替えノブ
增距镜手动控制钮

*機種、仕様により形状は若干異なる場合があります。
*Shpaes of lens may be slightly different between models.
*镜头形状会因机型规格不同而稍有差异。

(Unit: mm)

95
125.7
120.5
80
125.7
120.5
52
60
135.5
123.5
150

127.3
125.3
127.3
125.3
120
122
135.5
150

UJ90x9B

(Unit: mm)

コネクター（カメラへ）
Connector to Camera
摄像机连接器

レンズ位置決めピン
Lens Locating Pin
摄像机连接器

スプリングピン
Mounting Pin
緊固销

95
125.7
120.5
125.7
120.5
135.5
123.5
150

80
52
60
127.3
125.3
127.3
125.3

135.5
137.5
120
122
150

F.B.=69 in air
F.B.=48 in air
φ65
24

F.B.調整ノブ
F.B. Adjusting Knob
后焦调节环

F.B.ロックノブ
F.B. Lock Knob
后焦锁定螺钉

コネクター（スイッチボックスへ）
Connector for Switch Box
开关盒连接器

補助コネクター（ISコントローラ用）
AUX Connector (For IS Connector)
AUX.连接器（用于IS连接器）

アイリス/ズーム/エクステンダーインジケーター
Indicator for Iris/Zoom/EXT
光圈/变焦/增距镜指示器

ファスナー
Fastener Lever
紧固钮

610（ロングフード/长形遮光罩 640）

タリーライト
Tally Lights
播放指示灯

フード
Hood
遮光罩

IMAGE STABILIZER
4K
UHD DIGISUPER 90
UJ90x9B 9-810mm 1:2.4

コネクター（バーチャル出力）
Connector for Virtual Output
虚拟输出连接器

コネクター（サーボコントローラーへ）
Connector for Servo Controller
伺服控制器连接器

Canon

IS水平方向特性選択スイッチ
IS Horizontal Direction Selector Switch
图像稳定（IS）水平方向选择开关

IS垂直方向特性選択スイッチ
IS Vertical Direction Selector Switch
图像稳定（IS）垂直方向选择开关

エクステンダー切替えノブ
Extender Manual Control Knob
增距镜手动控制钮

IMAGE STABILIZER
4K
UHD DIGISUPER 90
UJ90x9B 9-810mm 1:2.4

外部電源入力ジャック（DC12V）
External Power Input Jack for DC 12V In
DC12V外部电源输入口

コネクター（サーボコントローラーへ）
Connector for Servo Controller
伺服控制器连接器

*機種、仕様により形状は若干異なる場合があります。
*Shpaes of lens may be slightly different between models.
*镜头形状会因机型型号不同而稍有差异。

UJ86x9.3B

(Unit: mm)

Dimensions (top view): 95, 125.7, 120.5, 125.7, 120.5, 80, 52, 60, 135.5, 123.5, 150

Dimensions (side/front view): 127.3, 125.3, 127.3, 125.3, 135.5, 137.5, 120, 122, 150

F.B. values: F.B.=69 in air, F.B.=48 in air, φ65, 24

コネクター (カメラへ)
Connector to Camera
摄像机连接器

スプリングピン
Mounting Pin
紧固销

レンズ位置決めピン
Lens Locating Pin
摄像机连接器

F.B.調整ノブ
F.B. Adjusting Knob
后焦调书环

F.B.ロックノブ
F.B. Lock Knob
后焦锁定螺钉

コネクター (スイッチボックス用)
Connector for Switch Box
开关盒连接器

補助コネクター (ISコントローラ用)
AUX. Connector (For IS Connector)
AUX.连接器 (用于IS连接器)

アイリス/ズーム/エクステンダー インジケーター
Indicator for Iris/Zoom/EXT
光圈/变焦/增距镜指示器

ファスナー
Fastener Lever
紧固钮

637.4 (ロングフード/Long Hood/长形遮光罩 667.4)

タリーライト
Tally Lights
播放指示灯

コネクター (バーチャル出力)
Connector for Virtual Output
虚拟输出连接器

コネクター (サーボコントローラーへ)
Connector for Servo Controller
伺服控制器连接器

IMAGE STABILIZER

4K

UHD DIGISUPER 86
UJ86x9.3B 9.3-800mm 1:1.7

外部電源入力ジャック (DC12V)
External Power Input Jack for DC 12V In
DC12V外部电源输入口

コネクター (サーボコントローラーへ)
Connector for Servo Controller
伺服控制器连接器

IS水平方向特性選択スイッチ
IS Horizontal Direction Selector Switch
图像稳定 (IS) 水平方向选择开关

IS垂直方向特性選択スイッチ
IS Vertical Direction Selector Switch
图像稳定 (IS) 垂直方向选择开关

エクステンダー切替えノブ
Extender Manual Control Knob
增距镜手动控制钮

*機種、仕様により形状は若干異なる場合があります。
*Shpaes of lens may be slightly different between models.
*镜头形状会因机型规格不同而稍有差异。

UJ66x9B

(Unit : mm)

コネクター（カメラへ）
Connector to Camera
摄像机连接器

レンズ位置決めピン
Lens Locating Pin
摄像机连接器

スプリングピン
Mounting Pin
紧固销

95
125.7
120.5
125.7
120.5
80
52
60
135.5
123.5
150

127.3
125.3
127.3
125.3
122
120
135.5
127.5
150

F.B.=69 in air
F.B.=48 in air
65φ
24

F.B.調整ノブ
F.B. Adjusting Knob
后焦调节环

F.B.ロックノブ
F.B. Lock Knob
后焦锁定螺钉

コネクター（スイッチボックスへ）
Connector for Switch Box
开关盒连接器

補助コネクター（ISコントローラ用）
AUX. Connector (For IS Connector)
AUX.连接器（用于IS连接器）

アイリスズーム/エクステンダー用インディケーター
Indicator for Iris/Zoom/EXT
光圈/受焦/增距镜指示灯

ファスナー
Fastener Lever
紧固钮

タリーライト
Tally Lights
播放指示灯

フード
Hood
遮光罩

610（ロングフード/Long Hood/长形遮光罩 640）

IMAGE STABILIZER
4K
UHD DIGISUPER 66
UJ66x9B 9-600mm 1:1.7

コネクター（バーチャル出力）
Connector for Virtual Output
虚拟输出连接器

コネクター（サーボコントローラへ）
Connector for Servo Controller
伺服控制器连接器

IMAGE STABILIZER
4K
UHD DIGISUPER 66
UJ66x9B 9-600mm 1:1.7

外部電源入力ジャック（DC12V）
External Power Input Jack for DC 12V In
DC12V外部电源输入口

コネクター（サーボコントローラへ）
Connector for Servo Controller
伺服控制器连接器

IS水平方向特性選択スイッチ
IS Horizontal Direction Selector Switch
图像稳定（IS）水平方向选择开关

IS垂直方向特性選択スイッチ
IS Vertical Direction Selector Switch
图像稳定（IS）垂直方向选择开关

エクステンダー切替えノブ
Extender Manual Control Knob
增距镜手动控制钮

*機種、仕様により形状は若干異なる場合があります。
*Shpaes of lens may be slightly different between models.
*镜头形状会因机型规格不同而精差异。

UJ27x6.5B

(Unit: mm)

Dimensions and callouts (top view):

- コネクター（カメラへ） / Connector to Camera 撮像機連接器
- レンズ位置決めピン / Lens Locating Pin 撮像机连接器
- スプリングピン / Mounting Pin 緊固销

Dimensions: 95, 125.7, 120.5, 80, 52, 60, 125.7, 120.5, 135.5, 150, 123.5
Right view: 127.3, 125.3, 127.3, 125.3, 135.5, 120, 122, 137.5, 150

Side view callouts:

- F.B.=69 in air
- F.B.=48 in air
- φ65
- 24
- F.B.調整ノブ / F.B. Adjusting Knob 后焦调节环
- F.B.ロックノブ / F.B. Lock Knob 后焦锁定螺钉
- コネクター（スイッチボックスへ） / Connector for Switch Box 开关盒连接器
- アイリス/ズーム/エクステンダーインジケーター / Indicator for Iris/Zoom/EXT 光圈/变焦/增距镜指示器
- ファスナー / Fastener Lever 紧固钮
- 550（ロングフード）/Long Hood/长形遮光罩 567)
- タリーライト / Tally Lights 播放指示灯
- コネクター（バーチャル出力） / Connector for Virtual Output 虚拟输出连接器
- コネクター（サーボコントローラーへ） / Connector for Servo Controller 伺服控制器连接器
- 4K
- UHD DIGISUPER 27
- UJ27x6.5B 6.5-180mm 1:1.5
- Canon

- 外部電源入力ジャック(DC12V) / External Power Input Jack for DC 12V In DC12V外部电源输入口
- コネクター（サーボコントローラーへ） / Connector for Servo Controller 伺服控制器连接器
- エクステンダー切替えノブ / Extender Manual Control Knob 增距镜手动控制钮

*機種、仕様により形状は若干異なる場合があります。
*Shpaes of lens may be slightly different between models.
*镜头形状会因机型规格不同而稍有差异。

XJ95x12.4B

95

レンズ位置決めピン
Lens Locating Pin
摄像机连接器

コネクター (カメラへ)
Connector to Camera
摄像机连接器

125.7
120.5
80
52
60

125.7
120.5

135.5
123.5
150

スプリングピン
Mounting Pin
紧固销

(Unit: mm)

127.3
125.3

127.3
125.3

135.5
137.5
120
122
150

Canon

*機種、仕様により形状は若干異なる場合があります。
*Shpaes of lens may be slightly different between models.
*镜头形状会因机型规格不同而稍有差异。

F.B.=69
in air

F.B.=48
in air

φ65

24

F.B.調整ノブ
F.B. Adjusting Knob
后焦调节环

F.B.ロックノブ
F.B. Lock Knob
后焦锁定螺钉

コネクター (スイッチボックスへ)
Connector for Switch Box
开关盒连接器

補助コネクター (ISコントローラー用)
AUX. Connector (For IS Connector)
AUX.连接器 (用于IS连接器)

アイリス/ズーム/エクステンダーインジケーター
Indicator for Iris/Zoom/EXT
光圈/变焦/增距镜指示器

POWER ZOOM
IMAGE STABILIZER HD

DIGISUPER 95 TELE
XJ95x12.4B 12.4-1178mm 1:2.5

PUSH

ファスナー
Fastener Lever
紧固钮

610 (ロングフード/Long Hood/长形遮光罩 640)

タリーライト
Tally Lights
播放指示灯

Canon

コネクター (バーチャル出力)
Connector for Virtual Output
虚拟输出连接器

コネクター (サーボコントローラーへ)
Connector for Servo Controller
同服控制器连接器

フード
Hood
遮光罩

Canon

HD IMAGE STABILIZER

DIGISUPER 95 TELE
XJ95x12.4B 12.4-1178mm 1:2.5

PUSH

外部電源入力ジャック(DC12V)
External Power Input Jack for DC 12V In
DC12V外部电源输入口

コネクター (サーボコントローラーへ)
Connector for Servo Controller
同服控制器连接器

IS水平方向特性選択スイッチ
IS Horizontal Direction Selector Switch
图像稳定 (IS) 水平方向选择开关

IS垂直方向特性選択スイッチ
IS Vertical Direction Selector Switch
图像稳定 (IS) 垂直方向选择开关

エクステンダー切替えノブ
Extender Manual Control Knob
增距镜手动控制钮

XJ95x8.6B

(Unit: mm)

レンズ位置決めピン
Lens Locating Pin
摄像机连接器

コネクター（カメラへ）
Connector to Camera
摄像机连接器

95

125.7
120.5

125.7
120.5

80

52
60

135.5
123.5
150

スプリングピン
Mounting Pin
紧固销

127.3
125.3

127.3
125.3

135.5
137.5
120
122
150

F.B.=69
in air

F.B.=48
in air

φ65

24

F.B.調整ノブ
F.B. Adjusting Knob
后焦调节环

F.B.ロックノブ
F.B. Lock Knob
后焦锁定螺钉

コネクター（スイッチボックスへ）
Connector for Switch Box
开关盒连接器

補助コネクター（ISコントローラ用）
AUX. Connector (For IS Connector)
AUX.连接器（用于IS连接器）

アイリス/ズーム/エクステンダーインジケーター
Indicator for Iris/Zoom/EXT
光圈/变焦,增距镜指示器

ファスナーレバー
Fastener Lever
紧固钮

610（ロングフード/Long Hood/长形遮光罩·640）

DIGISUPER 95
XJ95x8.6B 8.6-820mm 1:1.7

HD IMAGE STABILIZER

Canon

コネクター（バーチャル出力）
Connector for Virtual Output
虚拟输出连接器

コネクター（サーボコントローラー連接器）
Connector for Servo Controller
伺服控制器连接器

タリーライト
Tally Lights
播放指示灯

フード
Hood
遮光罩

DIGISUPER 95
XJ95x8.6B 8.6-820mm 1:1.7

HD IMAGE STABILIZER

Canon

外部電源入力ジャック（DC12V）
External Power Input Jack for DC 12V In
DC12V外部电源输入口

コネクター（サーボコントローラーへ）
Connector for Servo Controller
伺服控制器连接器

IS水平方向特性選択スイッチ
IS Horizontal Direction Selector Switch
图像稳定（IS）水平方向选择开关

IS垂直方向特性選択スイッチ
IS Vertical Direction Selector Switch
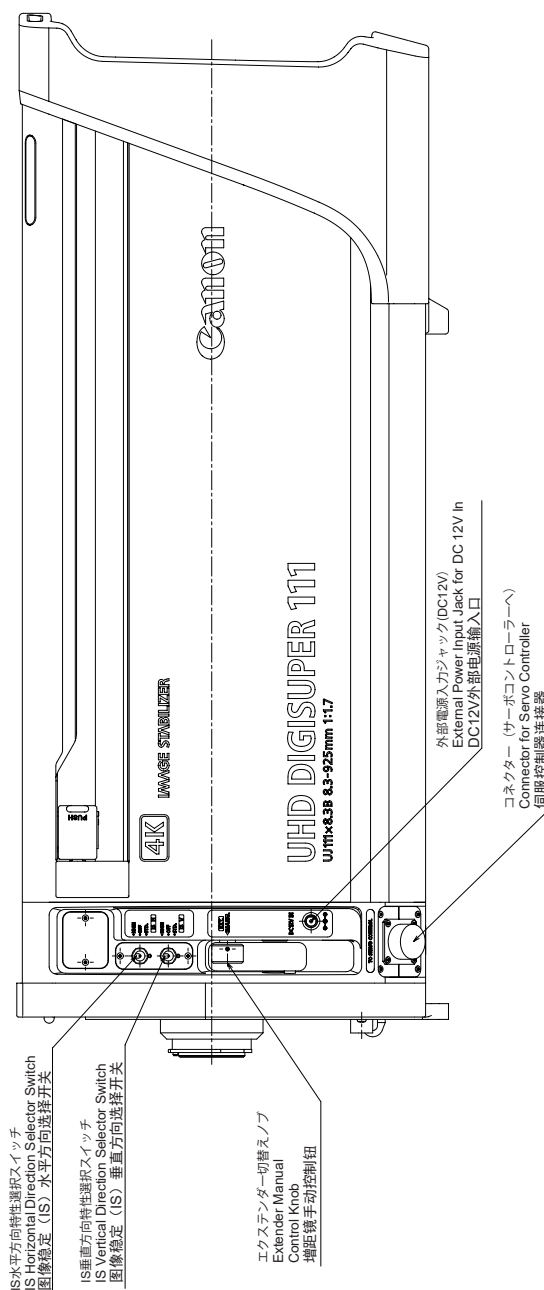图像稳定（IS）垂直方向选择开关

エクステンダー切替えノブ
Extender Manual Control Knob
增距镜手动控制钮

*機種,仕様により形状は若干異なる場合があります。
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*镜头形状会因机型规格不同而稍有差异。

XJ80x8.8B

(Unit: mm)

レンズ位置決めピン
Lens Locating Pin
摄像机连接器

コネクター（カメラへ）
Connector to Camera
摄像机连接器

スプリングピン
Mounting Pin
紧固销

95

125.7
120.5

125.7
120.5

80

52
60

135.5
123.5
150

127.3
125.3

127.3
125.3

135.5

120
122

150

*機種、仕様により形状は若干異なる場合があります。
*Shpaes of lens may be slightly different between models.
*镜头形状会因机型规格不同而精精差异。

F.B.=69
in air

F.B.=48
in air

φ65

24

F.B.調整ノブ
F.B. Adjusting Knob
后焦调节环

F.B.ロックノブ
F.B. Lock Knob
后焦锁定螺钉

コネクター（スイッチボックスへ）
Connector for Switch Box
开关盒连接器

補助コネクター（ISコントローラ用）
AUX. Connector (For IS Connector)
AUX.连接器（用于IS连接器）

アイリス/ズーム/エクステンダーインジケーター
Indicator for Iris/Zoom/EXT
光圈/变焦/增距镜指示器

ファスナー
Fastener Lever
紧固钮

610（ロングフード）（Long Hood/长形遮光罩 640）

タリーライト
Tally Lights
播放指示灯

フード
Hood
遮光罩

DIGISUPER 80
XJ80x8.8B 8.8-710mm 1:1.7
IMAGE STABILIZER HD

Canon

コネクター（バーチャル出力）
Connector for Virtual Output
虚拟输出连接器

コネクター（サーボコントローラへ）
Connector for Servo Controller
伺服控制器连接器

IS水平方向特性選択スイッチ
IS Horizontal Direction Selector Switch
图像稳定（IS）水平方向选择开关

IS垂直方向特性選択スイッチ
IS Vertical Direction Selector Switch
图像稳定（IS）垂直方向选择开关

エクステンダー切替えノブ
Extender Manual Control Knob
增距镜手动控制钮

外部電源入力ジャック（DC12V）
External Power Input Jack for DC 12V In
DC12V外部电源输入口

コネクター（サーボコントローラへ）
Connector for Servo Controller
伺服控制器连接器

DIGISUPER 80
XJ80x8.8B 8.8-710mm 1:1.7
HD IMAGE STABILIZER

Canon

memo

Canon

CANON INC.

30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo, 146-8501, Japan