FUJIFILM

FUJINON

FUJINON TV LENS
富士能电视镜头

UA46×9.5 BERD-U1
UA46×9.5 BERD-G1

富士フイルム株式会社
FUJIFILM Corporation
富士胶片株式会社

BB00044787-300
LP770A-U1G1 3107

FCC REGULATIONS

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION : Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Canadian Radio Interference Regulation

CAN ICES-3(B) / NMB-3(B)

CAUTION : This Class B digital apparatus complies with Canadian ICES-003.

Disposal of Electrical and Electronic Equipment in Private Households

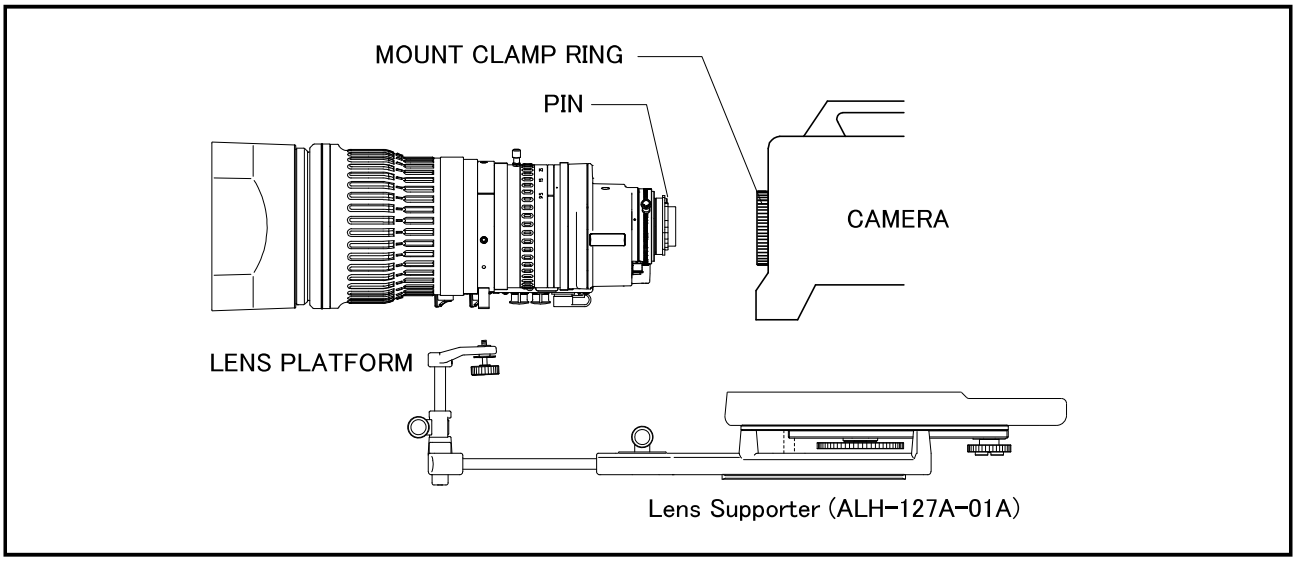
In the European Union, Norway, Iceland and Liechtenstein:
This symbol on the product, or in the manual, and/or on its packaging indicates that this product shall not be treated as household waste. Instead it should be taken to an applicable collection point for the recycling of electrical and electronic equipment.

consequences to the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

2. GENERAL DESCRIPTION

This lens is a bayonet mount type zoom lens developed for a color TV Camera.

3. INSTALLATION ONTO CAMERA



■ INSTALLATION ONTO CAMERA

To install this lens onto the camera, use the lens supporter (ALH-127A-01A).

Note. Prior to installation of the lens, turn off the power of the camera.

⚠WARNING Be sure to attach all the parts securely. Dropping any parts from a height may cause severe accidents.

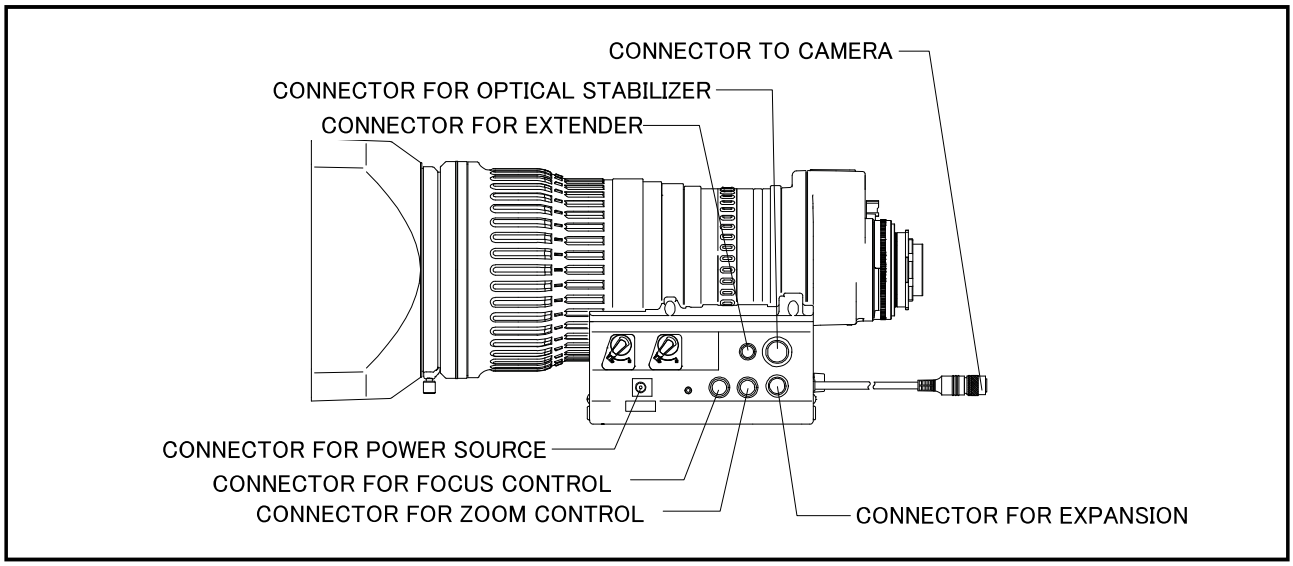
a. Mount the lens supporter on a tripod.
b. Mount the camera on the lens supporter.
c. While holding the lens with your hand, align the camera mount with the lens mount and fix them with the mount clamping ring.
   In this step, lightly tighten the mount clamping ring (do not tighten it firmly yet).
d. While continuing to hold the lens with your hand, adjust the position of the lens platform of the lens supporter.
   Make sure to adjust the position of the lens platform without applying excessive force on the mount clamping ring.
e. After firmly fixing the lens platform, tighten the mount clamping ring.
f. Connect the cable of the lens to the connector, provided for the lens, on the camera.

For details about the attachment method, refer to the operation manual of your lens supporter.

Note. Make sure to adjust the flange focal length when installing the lens on a camera for the first time or installing it on another camera (refer to the next page for details).

15. PIN ASSIGNMENT OF CONNECTORS

The pin assignment and functions of the connectors of this product are as follows.



■ CONNECTOR FOR FOCUS CONTROL
HR10G-10R-12S (HIROSE)

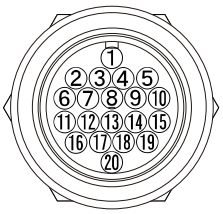
	SIGNAL
①	+V (+12VDC)
②	GND
③	COM+V(7.5V DC)
④	COM(5.0V DC)
⑤	COM-V(2.5V DC)
⑥	FOCUS DEMAND DETECT
⑦	FOCUS CONTROL
⑧	FOCUS POSITION
⑨	ECU CONTROL SIGNAL
⑩	N.C.
⑪	N.C.
⑫	N.C.

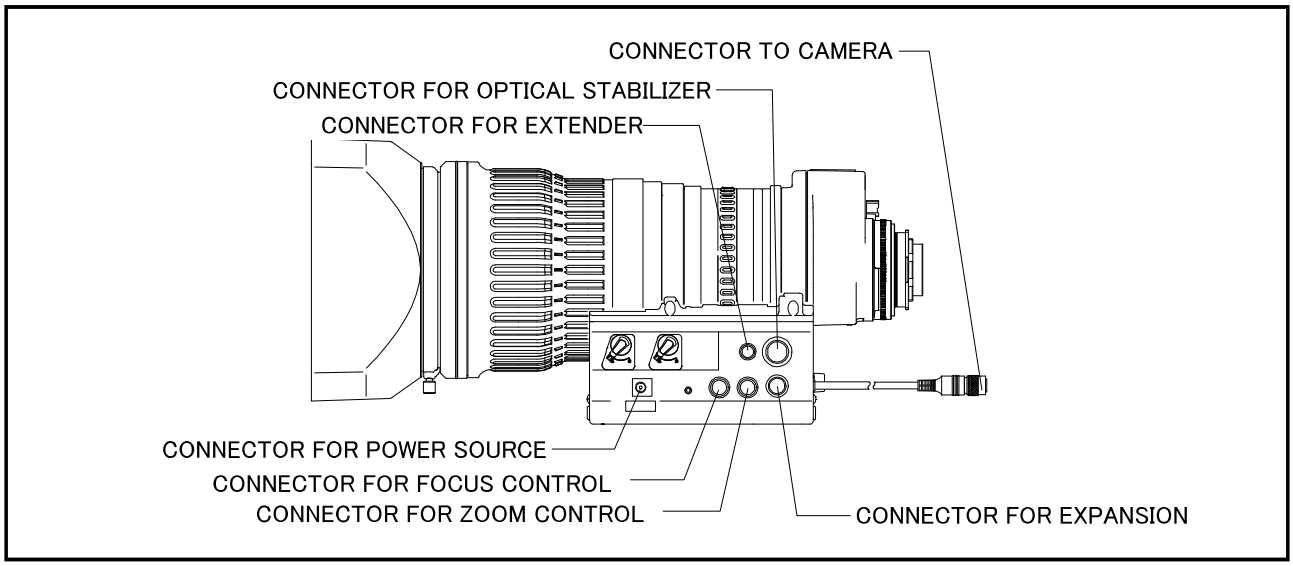
■ CONNECTOR FOR ZOOM CONTROL
HR10G-10R-12S (HIROSE)

	SIGNAL
①	+V (+12VDC)
②	GND
③	COM+V(7.5V DC)
④	COM(5.0V DC)
⑤	COM-V(2.5V DC)
⑥	ZOOM DEMAND DETECT
⑦	ZOOM CONTROL
⑧	ZOOM POSITION
⑨	VTR SW
⑩	VTR SW COM
⑪	RET SW
⑫	RET SW COM

■ CONNECTOR FOR EXPANSION
HR25-9R-20S (HIROSE)

	SIGNAL
①	N.C.
②	GND
③	TxD
④	+5V
⑤	DTR
⑥	DSR
⑦	RxD
⑧	N.C.
⑨	N.C.
⑩	N.C.
⑪	N.C.
⑫	N.C.
⑬	N.C.
⑭	EXTENDER ANSWER
⑮	N.C.
⑯	ZOOM(A).
⑰	ZOOM(B)
⑱	FOCUS(A)
⑲	FOCUS(B)
⑳	N.C.





■ CONNECTOR TO CAMERA
HR10A-10P-12P (HIROSE)

	SIGNAL
①	RET SW
②	VTR SW
③	GND (0V)
④	IRIS ENF AUTO
⑤	IRIS CONT SIG
⑥	+V (+12VDC)
⑦	IRIS POSITION
⑧	IRIS A/R
⑨	EXT SIG
⑩	ZOOM POSITION
⑪	TxD
⑫	RxD

■ CONNECTOR FOR EXTENDER (for UA46**-G1)
HR10A-7R-5S (HIROSE)

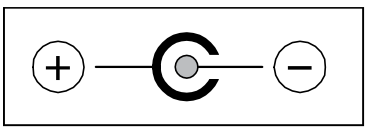
	SIGNAL
①	+V (+12VDC)
②	GND
③	EXTENDER CONTROL *
④	N.C.
⑤	N.C.

* ON(×2)=+2.5V~+V / OFF(×1)=0V or Open

■ CONNECTOR FOR OPTICAL STABILIZER
R03-R8F3 (TAJIMI)

	SIGNAL
A	CONTROLLER CHECK
B	MODE SELECT
C	N.C.
D	V+H/V
E	ON/OFF
F	GND
G	INDICATOR (ON)
H	+V (+12VDC)

■ CONNECTOR FOR POWER SOURCE
01J0126 (WAKA)



16. OPTIONAL ACCESSORIES

Use FUJINON original accessories, otherwise inherent performance of the lens may not be derived.

Note1. The accessories shown in the following tables are of standard type. The ones with special specifications are not included.

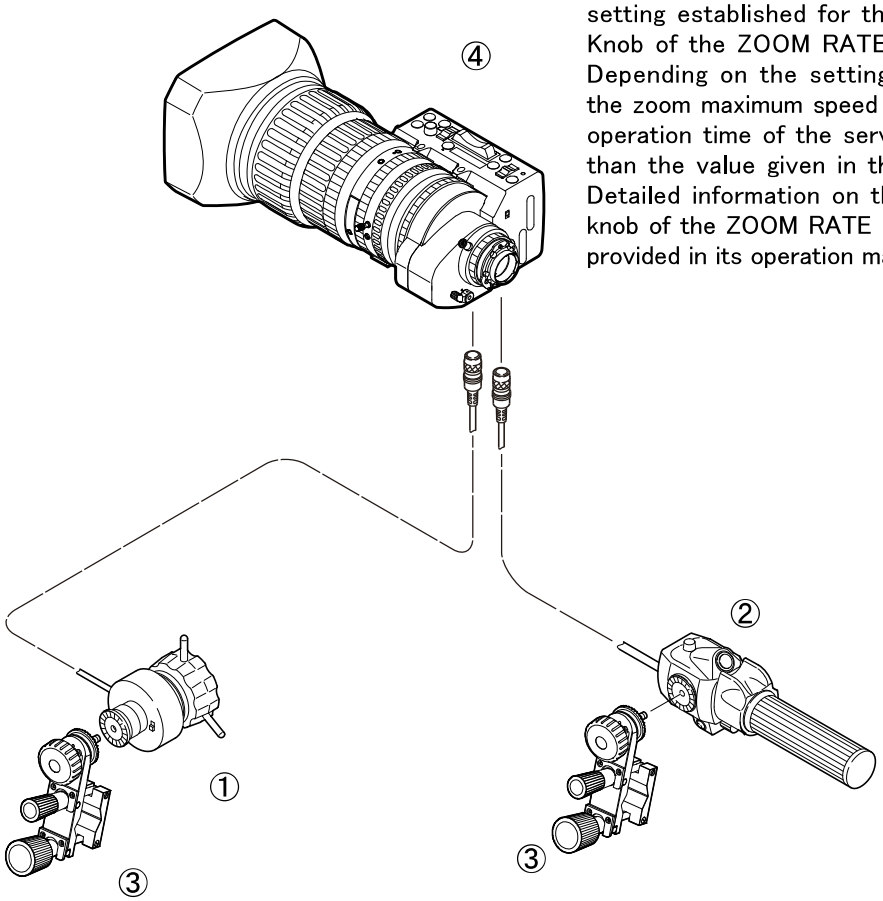
Note2. The lens shown in the illustrations in this manual may differ from their actual shapes.

16.2 All Servo System – 1

	ACCESSORY NAME	MODEL	REMARKS	
①	Focus Position Demand Unit	EPD-41A-D02	Control unit for focus operation.	Operation angle of the knob is two turns.
		(EPD-41A-D01)		(Operation angle of the knob is one turn.)
②	Zoom Rate Demand Unit	ERD-40A-D01	Control unit for zoom operation and preset operation.	
③	Mounting Clamp	MCA-37	Used with EPD and ERD for their installation.	
④	Lens			

Configuration — All Servo System – 1

Note. The speed of the zoom achieved by operating the ZOOM RATE DEMAND UNIT is the speed that reflects both the setting established for the zoom maximum speed control knob of the drive unit and the setting established for the Speed Control Knob of the ZOOM RATE DEMAND UNIT. Depending on the setting established for the zoom maximum speed control knob, the operation time of the servo may be longer than the value given in the specifications. Detailed information on the speed control knob of the ZOOM RATE DEMAND UNIT is provided in its operation manual.



17. SPECIFICATIONS

ITEM \ LENS		UA46x9.5BERD-U1	UA46x9.5BERD-G1
Application		2/3" Format Color Camera (Prism Optical System)	
Focal Length		9.5 ～ 437 mm [19 ～ 874 mm] *1	
Zoom Ratio		46 ×	
Extender Magnification		2 ×	
Extender Magnification		F2 (9.5 ～ 224 mm) ～ F3.9 (437 mm) [F4 (19 ～ 448 mm) ～ F7.8 (874 mm)] *1	
Iris Range		F2 ～ F16, closed	
Image Format (H × V)		9.59 × 5.39 mm (ϕ 11.0 mm) Aspect ratio 16 : 9	
Flange Focal Length (in Air)		48 mm (Adjustable Range : ± 0.4 mm)	
Back Focal Length (in Air)		40.66 mm	
Minimum Object Distance (from Front of Lens)		2.8 m (0.06 m in Macro Operation)	
Field Angle (H × V)	Tele	53.6° × 31.7° [28.3° × 16.1°] *1	
	Wide	1.3° × 0.7° [0.6° × 0.4°] *1	
Object Area at M.O.D. (H × V)	Tele	2653 mm × 1491 mm [1331 mm × 748 mm] *1	
	Wide	59 mm × 33 mm [30 mm × 17 mm] *1	
Clear Aperture of Lens	Front	116.0 mm	
	Rear	25.5 mm	
Front Diameter		ϕ 95 mm	
Full Length		240.5 mm	
Filter Screw		M127 × 0.75 (Attached to the Lens Hood)	
Iris Control		AutoIris or Manual (Operation Angle : 76°)	
Zoom Control		Servo (Operation time : Approx. 1.0 ～ 32 sec) or Manual (Operation Angle : 100°)	
Focus Control		Manual (Operation Angle : 180°) (Including Motor for Servo Control)	
Extender Control		Manual	Servo (Remote Control)
Mount		Bayonet Mount	
Current Consumption (at 12V DC, Approx.)	Quiescent	350 mA	
	Maximum	1100 mA	1200 mA
Mass (No Lens Hood, Approx.)		5.7 kg	5.8 kg

*1. The values in the brackets are given when the extender 2x is used.