

Panasonic®

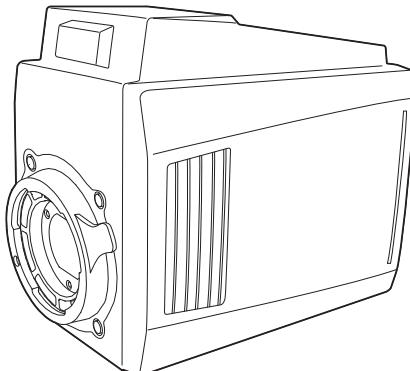
Operating Instructions Excerpted Version

Installation Instructions provided

Multi-Purpose Camera

Model No. AK-UB300G

4K
PROFESSIONAL



Installation Instructions
Pages 4 to 19

Operating Instructions
Pages 20 to 51

ENGLISH
Excerpted Version

Before using this product, be sure to read "Read this first!" (page 4, pages 20 to 23). This manual is an excerpted version of the full Operating Instructions. For more information, please visit the Panasonic website (<http://pro-av.panasonic.net/en/manual/index.html>), and refer to the Operating Instruction (HTML).

DEUTSCH

Bitte lesen Sie sorgfältig die „Bitte lesen Sie zuerst diesen Hinweis!“ vor der Nutzung dieses Produkts. (Seite 5, Seiten 24 bis 25).

Weitere Informationen finden Sie auf der Panasonic-Webseite (<http://pro-av.panasonic.net/en/manual/index.html>) und in der Bedienungsanleitung (HTML).

FRANÇAIS

Avant d'utiliser cet appareil, assurez-vous de lire la section « Lire ces informations en premier ! » (page 6, pages 26 à 28).

Pour de plus amples informations, visiter le site Web de Panasonic (<http://pro-av.panasonic.net/en/manual/index.html>) et consulter le mode d'emploi (HTML).

ITALIANO

Prima di utilizzare il prodotto, assicurarsi di leggere "Leggere prima quanto segue!" (pagina 7, pagine 29 a 30).

Per maggiori informazioni, per favore visitare il sito web Panasonic (<http://pro-av.panasonic.net/en/manual/index.html>), e fare riferimento alle istruzioni per l'uso (HTML).

ESPAÑOL

Antes de usar este producto, asegúrese de leer "Lea esto primero" (página 8, páginas 31 a 33).

Si desea obtener más información, visite el sitio web de Panasonic (<http://pro-av.panasonic.net/en/manual/index.html>) y consulte las instrucciones de funcionamiento (HTML).

Before operating this product, please read the instructions carefully and save this manual for future use.

български	Посетете следния уебсайт относно информация за безопасността и важни уведомления за продукта.
Hrvatski	Za sigurnosne informacije i važne obavijesti o proizvodu posjetite sljedeću internetsku stranicu.
Čeština	Na následujícím webu najdete bezpečnostní informace a důležité poznámky k tomuto produktu.
Dansk	Besøg følgende webside for sikkerhedsinformation og vigtige bemærkninger vedrørende produktet.
Nederlands	Ga naar de volgende website voor veiligheidsinformatie en belangrijke meldingen over het product.
Eesti	Toodet puudutava ohutusteabe ja oluliste märkuste saamiseks külastage järgmist veebilehte.
Suomi	Käy seuraavalla verkkosivulla saadaksesi turvallisuustietoja ja tärkeitä tietoja liittyen laitteesiin.
Ελληνικά	Για πληροφορίες σχετικά με θέματα ασφάλειας και σημαντικές ειδοποιήσεις που αφορούν το προϊόν σας, επισκεφτείτε τον ιστότοπο που ακολουθεί.
Magyar	A termékkel kapcsolatos biztonsági információkért és fontos értesítésekért látogasson el az alábbi weboldalra.
Latviešu	Lai iegūtu informāciju par drošību un skatītu svarīgus paziņojumus par šo produktu, apmeklējiet tālāk norādīto tīmekļa vietni.
Lietuvių	Jei reikia saugos informacijos ir svarbių pranešimų apie gaminį, apsilankykite toliau nurodytoje svetainėje.
Polski	Informacje o bezpieczeństwie i ważne informacje o produkcie znajdują się w poniższej witrynie internetowej.
Português	Consulte o seguinte website para as informações de segurança e importantes notificações sobre o produto.
Română	Vizitați următoarea pagină web pentru informații de securitate și notificări importante cu privire la produs.
Slovensky	Pre bezpečnostné informácie a dôležité oznamenia súvisiace s produkтом navštívte túto webovú stránku.
Slovenščina	Za varnostne informacije in pomembna obvestila v zvezi z izdelkom obiščite naslednje spletno mesto.
Svenska	Besök följande webbplats för säkerhetsinformation och viktiga meddelanden om produkten.

<http://pro-av.panasonic.net/en/manual/index.html>

-
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 - All other names, company names, product names, etc., contained in this instruction manual are trademarks or registered trademarks of their respective owners.
 - Transferring, copying, disassembling, decompiling, reverse engineering, and exporting in violation of export laws of any software included with this product are strictly prohibited.

How to read this document

■ Illustrations

- Illustrations of the camera, menu screens, and other items, may vary from the actual products.
- Screenshots are used according to guidelines provided by Microsoft Corporation.

■ Conventions used in this manual

- Words and phrases in [] brackets indicate content displayed in the viewfinder or monitor.
- Words and phrases in < > brackets indicate design text used on this camera, such as button names.

■ Reference pages

- Reference pages in this document are indicated by (page 00).

■ Terminology

- Microsoft® Windows® 7 Professional SP1 32/64-bit is referred to as Windows 7.
- Microsoft® Windows® 8 Professional 32/64-bit is referred to as Windows 8.
- Microsoft® Windows® 8.1 Professional 32/64-bit is referred to as Windows 8.1.
- Microsoft® Windows® 10 Professional 32/64-bit is referred to as Windows 10.
- Windows® Internet Explorer® 8.0, Windows® Internet Explorer® 9.0, Windows® Internet Explorer® 10.0, and Windows® Internet Explorer® 11.0 are referred to as Internet Explorer.
- The format displayed in the 2160/** is referred to as the UHD mode.
- The format displayed in the ***/** CROP is referred to as the UHD CROP mode.
- The format displayed in the 1080/**, 720/** is referred to as the HD mode.

Read this first!



indicates safety information.

WARNING:

To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

WARNING:

Installation should only be performed by qualified installation personnel. Improper installation may result in the entire apparatus falling down and causing injury.

Bitte lesen Sie zuerst diesen Hinweis!

[REDACTED] ist die Sicherheitsinformation.

WARNUNG:

Um Verletzungen zu verhüten, muss dieser Apparat gemäß der Installationsanleitung sicher am Boden bzw. an der Wand befestigt werden.

WARNUNG:

Die Installation darf nur durch qualifiziertes Personal ausgeführt werden. Fehlerhafte Installation kann zum Herunterfallen des Gerätes und zu Verletzungen führen.

Lire ces informations en premier !

Informations concernant la sécurité.

AVERTISSEMENT:

Pour éviter tout risque de blessures,
l'appareil doit être solidement fixé
au plancher/mur conformément aux
instructions d'installation.

AVERTISSEMENT:

L'installation ne doit être effectuée que par
du personnel d'installation qualifié.
Une mauvaise installation peut avoir pour
conséquence la chute de l'appareil et
provoquer des blessures.

Leggere prima quanto segue!

[] sono le informazioni sulla sicurezza.

AVVISO:

Per prevenire ferite, questo apparecchio deve essere montato saldamente al pavimento/muro in conformità alle istruzioni di installazione.

AVVISO:

L'installazione deve essere realizzata unicamente da tecnici qualificati. Un'installazione incorretta può risultare nella caduta dell'apparecchio con conseguenti danni alle persone.

Lea esto primero



indica información de seguridad.

ADVERTENCIA:

Para evitar heridas, este aparato debe estar firmemente instalado al piso/pared de acuerdo con las instrucciones de instalación.

ADVERTENCIA:

La instalación solamente debe llevarla a cabo personal cualificado. Una instalación incorrecta podría provocar la caída del dispositivo y causar lesiones.

Installation Instructions Contents

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Before installing

Drop prevention measure

Take the drop prevention measure by attaching the drop prevention wire to the mounting screw hole.

Mounting the camera to the pan/tilt head

Prepare a commercially available drop prevention wire when mounting this unit to the pan/tilt head.

Mounting the camera to anything other than the pan/tilt head

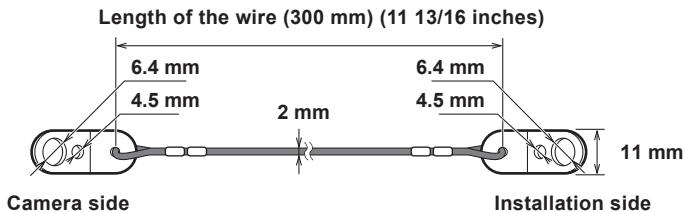
Prepare the drop prevention wire and camera mounting fixture when attaching to anything other than the pan/tilt head.

1 Drop prevention wire (optional): 1

Always use the drop prevention wire.

A drop prevention wire is available as an optional accessory. Use with as small slack as allowed by the installation location or the installation method.

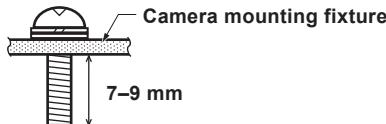
Secure wire diameter of 2 mm or more, length of 300 mm (11 13/16 inches) or less, and strength of the mounting section of 2000 N or more when using a commercially available drop prevention wire. Also, separately prepare the mounting screw matching the mounting specification.



• Wire length 300 mm (11 13/16 inches): Parts number (DVDW1001ZA)

2 Camera mounting screws (procured locally): 2

Size: 1/4-20 UNC or 3/8-16 UNC



Consider the thickness of the camera mounting fixture for the length.

3 Installation side wire mounting screw (M6 or M4) (procured locally): 1

Use an anchor bolt at the installation location and secure the strength of ten times of the entire weight.

4 Flat washers (procured locally): 2 (for mounting the camera)

For 1/4 inch screw or 3/8 inch screw

5 Spring washers (procured locally): 2 (for mounting the camera)

For 1/4 inch screw or 3/8 inch screw

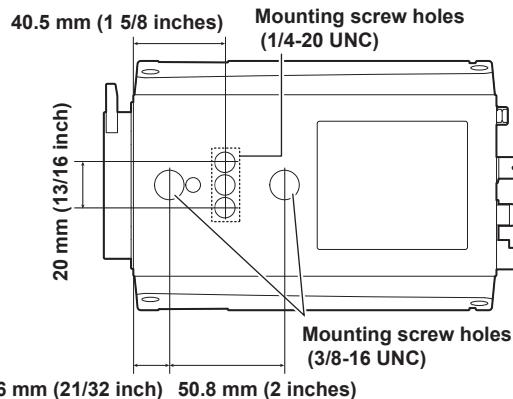
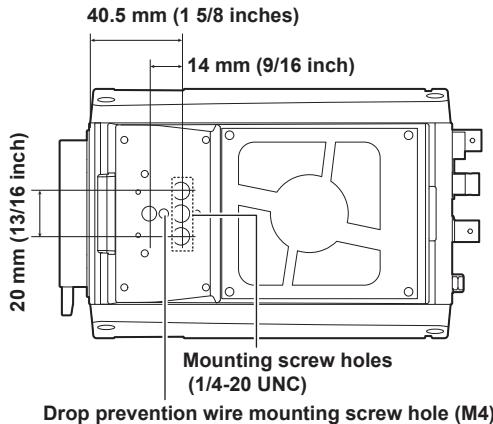
6 Camera mounting fixture (procured locally): 1

Prepare the fixture with material and shape that can withstand the entire weight of the camera and the lens.

Installation

Securely fix to the camera housing, the pan/tilt head, or the tripod using the mounting screw holes at the top and bottom.

Always use tools when installing and confirm that there is no danger of drop.



NOTE

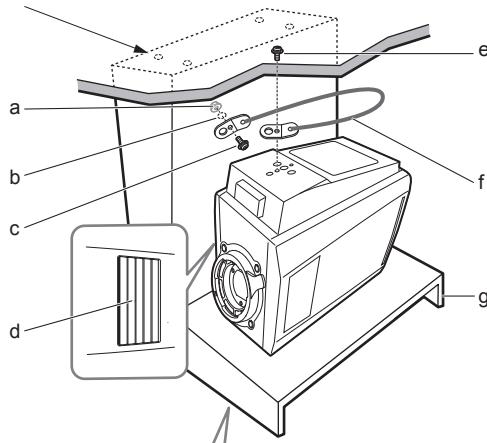
- Always use an anchor bolt when installing the mounting fixture into the ceiling or the wall. Secure drawing strength of ten times or larger against the entire weight including the mounting fixture, camera, lens, and cables.
- Always take the drop prevention measure using the screws on the tripod when mounted on a tripod.
- The weight including the camera body, lens, and cables should be 4 kg or less.
- Attach the drop prevention wire so the distance of drop will be 300 mm (11 13/16 inches) or less.
- Tighten the mounting screws with the following torques, and confirm that there is no rattling.
 - 1/4 inch screw: 2.0 N·m (20 kgf·cm)
 - 3/8 inch screw: 12 N·m (120 kgf·cm)
 - M4 screw: 1.0 N·m (10 kgf·cm)
- Do not use impact driver. Doing so may damage the screws.

Installation

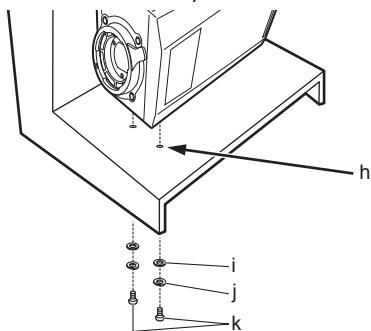
- Securely install the safety wire, etc., separately following the operating instructions of the manufacturer when installing the commercially available mounting fixture.
- Do not reuse the wire that was used (dropped) once. Always use a new wire when reinstalling.
- Take caution to install so the rating plate is visible.

Example where the camera is mounted on a ceiling

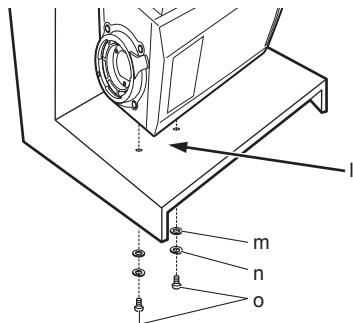
Always attach with an anchor bolt.



When using the inch screws (1/4-20 UNC)



When using the inch screws (3/8-16 UNC)



a: Flange nut (supplied)

b: Screw

Drill a hole of 5 mm diameter.

c: Wire mounting screw (supplied) (screw: M4)

Purchase a commercially available M4 screw separately when the length of the screw is not enough.

d: Air intake hole

Take caution not to block the air intake hole when installing the fixture.

e: Wire mounting screw (supplied) (screw: M4)

f: Drop prevention wire (optional)

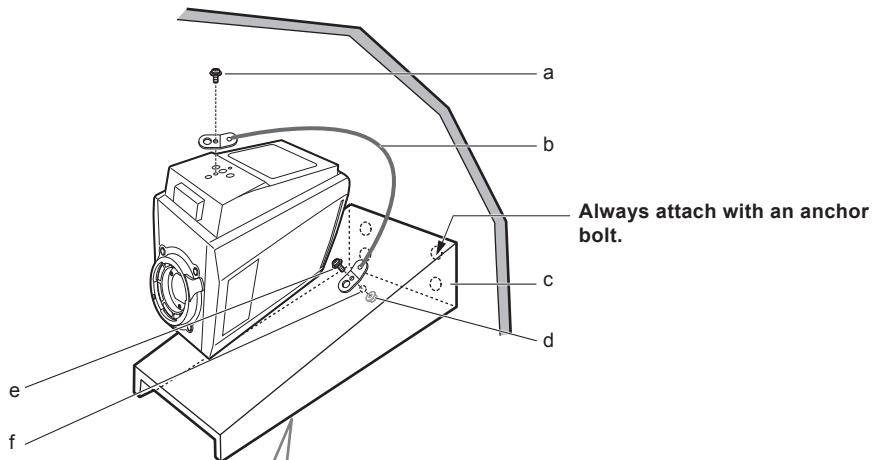
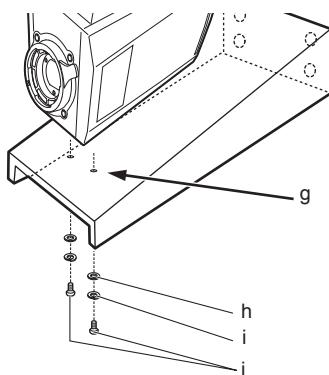
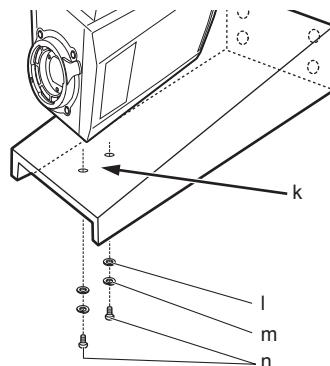
g: Camera mounting fixture (procured locally)

h: Screw hole

Drill a hole of 7 mm diameter.

i: Flat washer (procured locally)**j: Spring washer (procured locally)****k: Mounting screws (procured locally) (inch screw: 1/4-20 UNC)****l: Screw hole**

Drill a hole of 10 mm diameter.

m: Flat washer (procured locally)**n: Spring washer (procured locally)****o: Mounting screws (procured locally) (inch screw: 3/8-16 UNC)****Example where the camera is mounted on a wall****When using the inch screws (1/4-20 UNC)****When using the inch screws (3/8-16 UNC)**

a: Wire mounting screw (supplied) (screw: M4)

b: Drop prevention wire (optional)

Installation

c: Camera mounting fixture (procured locally)

d: Flange nut (supplied)

e: Wire mounting screw (supplied) (screw: M4)

Purchase a commercially available M4 screw separately when the length of the screw is not enough.

f: Screw hole

Drill a hole of 5 mm diameter.

g: Screw hole

Drill a hole of 7 mm diameter.

h: Flat washer (procured locally)

i: Spring washer (procured locally)

j: Mounting screws (procured locally) (inch screw: 1/4-20 UNC)

k: Screw hole

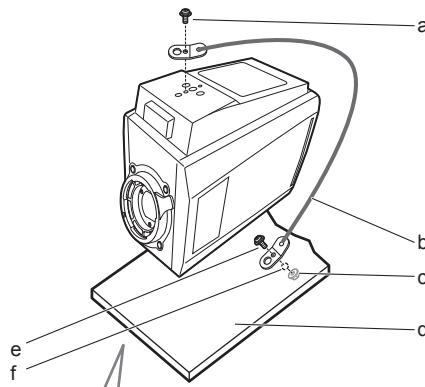
Drill a hole of 10 mm diameter.

l: Flat washer (procured locally)

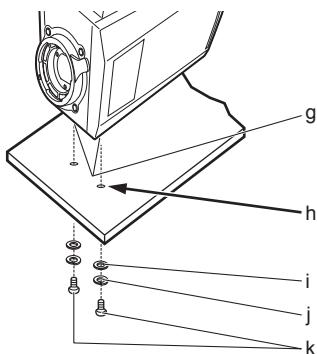
m: Spring washer (procured locally)

n: Mounting screws (procured locally) (inch screw: 3/8-16 UNC)

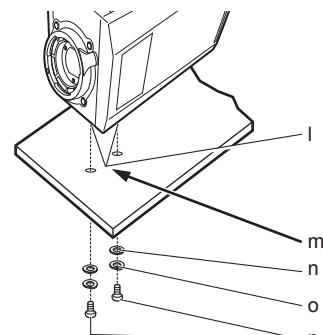
Example of mounting the camera onto a fixture or tripod made by another manufacturer



When using the inch screws (1/4-20 UNC)



When using the inch screws (3/8-16 UNC)



a: Wire mounting screw (supplied) (screw: M4)

b: Drop prevention wire (optional)

c: Flange nut (supplied)

d: Fixture by other manufacturer or tripod fixture (optional)

e: Wire mounting screw (supplied) (screw: M4)

Purchase a commercially available M4 screw separately when the length of the screw is not enough.

f: Screw hole

Drill a hole of 5 mm diameter.

g: Camera mounting screw holes

h: Screw hole

Drill a hole of 7 mm diameter.

i: Flat washer (procured locally)

j: Spring washer (procured locally)

k: Mounting screws (procured locally) (inch screw: 1/4-20 UNC)

Installation

I: Camera mounting screw holes

m: Screw hole

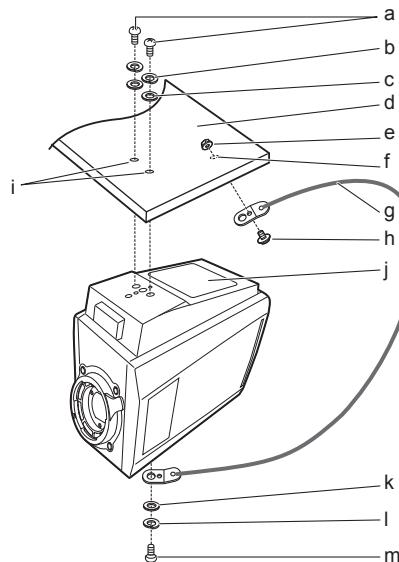
Drill a hole of 10 mm diameter.

n: Flat washer (procured locally)

o: Spring washer (procured locally)

p: Mounting screws (procured locally) (inch screw: 3/8-16 UNC)

Example where the camera is mounted from top



a: Mounting screws (procured locally) (inch screw: 1/4-20 UNC)

b: Spring washer (procured locally)

c: Flat washer (procured locally)

d: Camera mounting fixture (optional)

e: Flange nut (supplied)

f: Screw hole

Drill a hole of 5 mm diameter.

g: Drop prevention wire (optional)

h: Wire mounting screw (supplied) (screw: M4)

Purchase a commercially available M4 screw separately when the length of the screw is not enough.

i: Screw holes

Drill a hole of 7 mm diameter.

j: Cooling fan

Take caution not to block the exhaust hole when installing the fixture.

k: Flat washer (procured locally)

l: Spring washer (procured locally)

m: Mounting screw (procured locally) (inch screw: 1/4-20 UNC)

Mounting the lens

The lens with 2/3 type bayonet can be mounted.

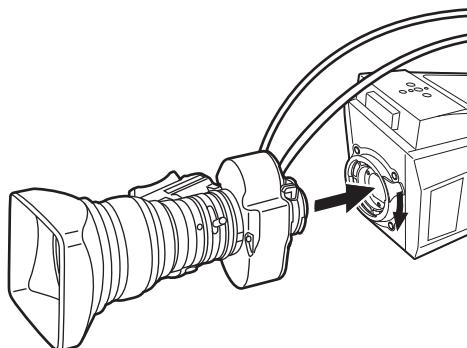


Fig. 1

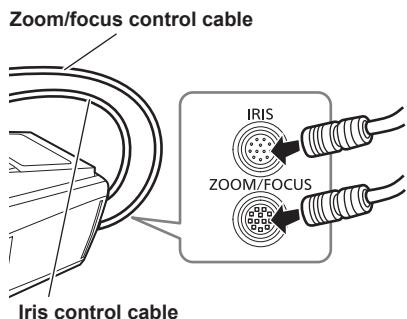


Fig. 2

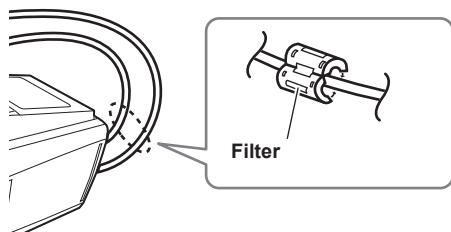


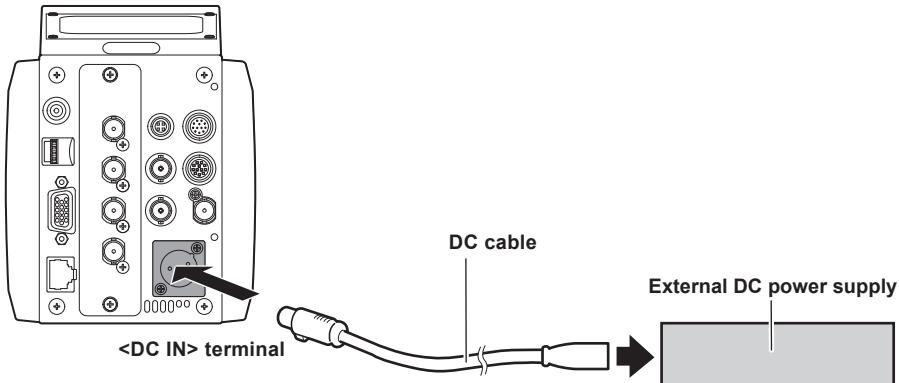
Fig. 3

- 1** Raise the lens fixing lever and remove the mount cap.
- 2** Mount the lens, lower the lens fixing lever, and securely fix the lens. (Fig. 1)
- 3** Connect the iris control cable to the <IRIS> terminal. (Fig. 2)
- 4** Connect the zoom/focus control cable to the <ZOOM/FOCUS> terminal. (Fig. 2)
Connect to the pan/tilt head when using the pan/tilt head.
- 5** Attach the filters supplied with the cables to the iris control cable and the zoom/focus control cable. (Fig. 3)

NOTE

- Securely fix the lens with the lens fixing lever, and confirm that there is no rattling.
- Also confirm that there is no rattling of the hood.
- The zoom and focus functions may not be controlled depending on the lens.
- The iris control cable may not reach the connector depending on the lens. In such case, use an extension cable.
- The filter for cable may not be supplied depending on the lens.

Using external DC power supply



- 1** Connect the external DC power supply to the <DC IN> terminal on the camera.
- 2** Turn on the <POWER> switch of the external DC power supply (if the external DC power supply has a <POWER> switch).
- 3** Confirm that the <DC IN> lamp of the camera turns on.

■ External DC power supply

Connect after making sure that the output voltage of the external DC power supply is compatible with the rated voltage of the camera.

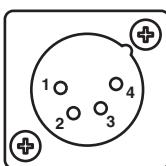
Select an output amperage for the external DC power supply with a margin above the total amperage of the connected devices.

The total amperage of connected devices can be calculated with the following formula.

Total power consumption ÷ voltage

When the power of the camera is turned on, inrush current is generated. An insufficient power supply when turning on the power may lead to failure. It is recommended to use an external DC power supply that can assure double the capacity of the total power consumption of the camera and connected devices (such as lens) that are turned on simultaneously when the power of the camera is turned on. Use AWG18 (nominal cross section of 0.824 mm²) or larger double-core shielded cable for the DC cable.

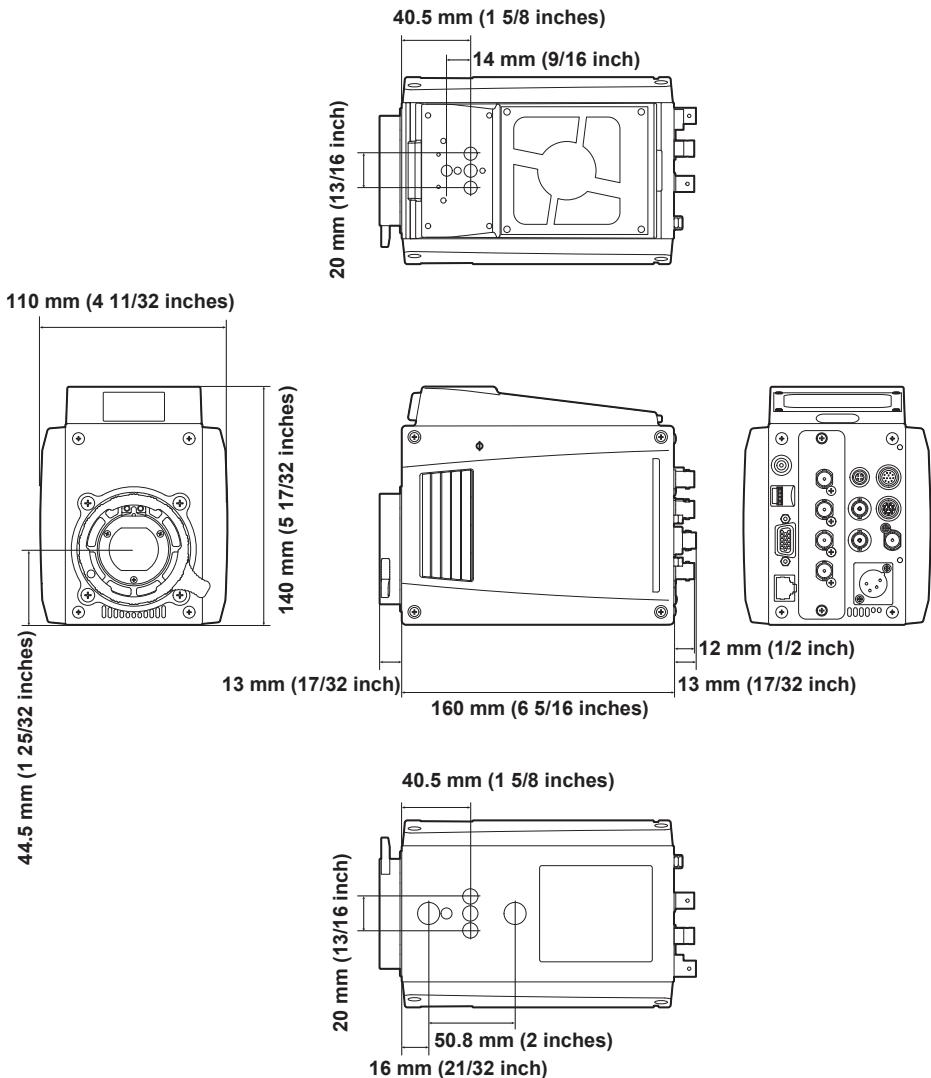
- Check the pin alignment of the DC output terminal of the external DC power supply and the <DC IN> terminal on the camera, and make sure to correctly connect the polarity.
- Mistakenly connecting the +12 V power supply to the GND terminal may result in a fire or failure.



DC IN

1	UNREG GND
2	Not used
3	Not used
4	+12 V
HA16RA-4P(77) (Hirose Electric Co.)	

External dimensions



Read this first!



indicates safety information.

WARNING:

- To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture.
- To reduce the risk of fire or electric shock, keep this equipment away from all liquids. Use and store only in locations which are not exposed to the risk of dripping or splashing liquids, and do not place any liquid containers on top of the equipment.

WARNING:

Always keep the drop-prevention wire (optional accessory) or accessories (flange nut, mounting screw for wire) out of the reach of babies and small children.

WARNING:

This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

CAUTION:

To reduce the risk of fire or electric shock and annoying interference, use the recommended accessories only.

CAUTION:

Do not remove panel covers by unscrewing. To reduce the risk of electric shock, do not remove the covers. No user serviceable parts inside. Refer servicing to qualified service personnel.

CAUTION:

In order to maintain adequate ventilation, do not install or place this unit in a bookcase, built-in cabinet or any other confined space. To prevent risk of electric shock or fire hazard due to overheating, ensure that curtains and any other materials do not obstruct the ventilation.

CAUTION:

Check the installation at least once a year. An improper installation could cause the unit to fall off resulting in personal injury.

CAUTION:

Do not pick up and move the unit while the tripod is attached. The fitting may break under the weight of the tripod, which may result in injury.

CAUTION:

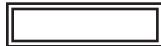
Do not leave the unit in direct contact with the skin for long periods of time when in use.

Low temperature burn injuries may be suffered if the high temperature parts of this unit are in direct contact with the skin for long periods of time.

When using the equipment for long periods of time, make use of the tripod.

CAUTION:

Naked flame sources, such as lighted candles, should not be placed on the apparatus.



indicates safety information.

FCC NOTICE (USA)

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.

CAUTION:

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Warning:

To assure continued FCC emission limit compliance, follow the attached installation instructions and the user must use only shielded interface cables when connecting to host computer or peripheral devices. Also, any unauthorized changes or modifications to this equipment could void the user's authority to operate this device.

NOTIFICATION (Canada)

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

IMPORTANT SAFETY INSTRUCTIONS

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

S3125A
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

The rating plate is on the underside of the unit.

For Turkey

AEEE Yönetmeliğine Uygundur.

AEEE Complies with Directive of Turkey.

Декларація про Відповідність

Вимогам Технічного Регламенту Обмеження Використання деяких Небезпечних Речовин в електричному та електронному обладнанні
(затвердженого Постановою №1057 Кабінету Міністрів України)

Виріб відповідає вимогам Технічного Регламенту Обмеження Використання деяких Небезпечних Речовин в електричному та електронному обладнанні (ТР ОВНР).

Вміст небезпечних речовин у випадках, не обумовлених в Додатку №2 ТР ОВНР, :

1. свинець(Pb) – не перевищує 0,1 % ваги речовини або в концентрації до 1000 частин на мільйон;
2. кадмій (Cd) – не перевищує 0,01 % ваги речовини або в концентрації до 100 частин на мільйон;
3. ртуть(Hg) – не перевищує 0,1 % ваги речовини або в концентрації до 1000 частин на мільйон;
4. шестивалентний хром (Cr^{6+}) – не перевищує 0,1 % ваги речовини або в концентрації до 1000 частин на мільйон;
5. полібромбіфеноли (PBB) – не перевишує 0,1 % ваги речовини або в концентрації до 1000 частин на мільйон;
6. полібромдефенілові ефіри (PBDE) – не перевишує 0,1 % ваги речовини або в концентрації до 1000 частин на мільйон.

Manufactured by: Panasonic Corporation, Osaka, Japan

Importer's name and address of pursuant to EU rules:

Panasonic Marketing Europe GmbH

Panasonic Testing Centre

Winsbergring 15, 22525 Hamburg, Germany



Disposal of Old Equipment

Only for European Union and countries with recycling systems

This symbol on the products, packaging, and/or accompanying documents means that used electrical and electronic products must not be mixed with general household waste.

For proper treatment, recovery and recycling of old products, please take them to applicable collection points in accordance with your national legislation.

By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment.

For more information about collection and recycling, please contact your local municipality, dealer or supplier.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

Bitte lesen Sie zuerst diesen Hinweis!

[REDACTED] ist die Sicherheitsinformation.

WARNUNG:

- Zur Reduzierung der Gefahr von Brand und elektrischem Schlag dieses Gerät weder Nässe noch Feuchtigkeit aussetzen.
- Um Brand- oder Stromschlaggefahr zu reduzieren, muss dieses Gerät von allen Flüssigkeiten ferngehalten werden. Vermeiden sie Gebrauch und Lagerung des Gerätes an Orten, an denen die Gefahr besteht, dass es mit Flüssigkeiten betropft oder bespritzt wird, und stellen sie keine Flüssigkeitsbehälter auf das Gerät.

WARNUNG:

Bewahren Sie den Fallschutzwire (optionales Zusatzteil) oder Zusatzteile (Flanschmutter, Befestigungsschraube für den Draht) stets außer Reichweite von Säuglingen und Kleinkindern auf.

WARNUNG:

Dieses Gerät entspricht Klasse A der CISPR 32. In einem Wohnbereich kann dieses Gerät Funkstörungen verursachen.

VORSICHT:

Nur das empfohlene Zubehör verwenden, um die Gefahr von Feuer und elektrischem Schlag sowie Störungen auszuschalten.

VORSICHT:

Öffnen Sie nicht das Gerät durch Abschrauben von Gehäuseteilen. Zur Vermeidung von elektrischem Schlag darf das Gehäuse nicht geöffnet werden. Im Geräteinneren befinden sich keine Teile, die vom Benutzer gewartet werden können. Wartungs- und Reparaturarbeiten grundsätzlich autorisiertem Kundendienstpersonal überlassen.

VORSICHT:

Um eine ausreichende Belüftung zu gewährleisten, dieses Gerät nicht in einem Bücherregal, Einbauschrank oder an einem anderen engen Platz aufstellen. Sicherstellen, dass die Ventilationsöffnungen im Gehäuse nicht durch Vorhänge oder andere Materialien blockiert werden; anderenfalls besteht die Gefahr von elektrischem Schlag oder Feuer aufgrund von Überhitzung.

VORSICHT:

Die Installation ist mindestens einmal jährlich zu überprüfen. Bei fehlerhafter Installation besteht Verletzungsgefahr durch Herunterfallen des Gerätes.

VORSICHT:

Unterlassen Sie das Aufheben und Transportieren des Gerätes bei angebrachtem Stativ.

Die Fassung kann unter dem Gewicht des Stavls brechen, was zu einer Verletzung führen kann.

VORSICHT:

Die Einheit bei längerem Gebrauch nicht direkt mit der Haut berühren. Verbrennungen durch niedrige Temperaturen sind möglich, wenn die heißen Komponenten dieser Einheit für lange Zeit in direktem Hautkontakt stehen. Bei längerer Verwendung der Ausrüstung das Stativ einsetzen.

VORSICHT:

Offene Flammen, wie brennende Kerzen, sollten nicht auf das Gerät gestellt werden.

Das Typenschild befindet sich an der Unterseite des Gerates.

Hergestellt von: Panasonic Corporation, Osaka, Japan
Name und Adresse des Importeurs gemäß EU-Bestimmungen:
Panasonic Marketing Europe GmbH
Panasonic Testing Centre
Winsbergring 15, 22525 Hamburg, Deutschland



Entsorgung von Altgeräten **Nur für die Europäische Union und Länder mit Recyclingsystemen**

Dieses Symbol, auf den Produkten, der Verpackung und/oder den Begleitdokumenten, bedeutet, dass gebrauchte elektrische und elektronische Produkte nicht in den allgemeinen Hausmüll gegeben werden dürfen.
Bitte führen Sie alte Produkte zur Behandlung, Aufarbeitung bzw. zum Recycling gemäß den gesetzlichen Bestimmungen den zuständigen Sammelpunkten zu. Indem Sie diese Produkte ordnungsgemäß entsorgen, helfen Sie dabei, wertvolle Ressourcen zu schützen und eventuelle negative Auswirkungen auf die menschliche Gesundheit und die Umwelt zu vermeiden.
Für mehr Informationen zu Sammlung und Recycling, wenden Sie sich bitte an Ihren örtlichen Abfallentsorgungsdienstleister, Händler oder Zulieferer.
Gemäß Landesvorschriften können wegen nicht ordnungsgemäßer Entsorgung dieses Abfalls Strafgelder verhängt werden.

Lire ces informations en premier !

Informations concernant la sécurité.

AVERTISSEMENT:

- Pour réduire les risques d'incendie ou de choc électrique, évitez d'exposer cet appareil à la pluie ou à l'humidité.
- Pour réduire tout risque de feu ou de choc électrique, éloigner l'appareil des liquides — utiliser et ranger uniquement dans un endroit risquant pas de recevoir des gouttes ou d'être aspergé de liquides, et ne pas mettre de récipient renfermant des liquides sur le dessus de l'appareil.

AVERTISSEMENT:

Toujours tenir le câble anti-chute (accessoire en option) ou les accessoires (écrou à embase, vis de montage pour câble) hors de portée des bébés et jeunes enfants.

AVERTISSEMENT:

Cet équipement est conforme à la Classe A de la norme CISPR 32. Dans un environnement résidentiel, cet équipement peut produire des interférences radio.

ATTENTION:

Pour éviter tout risque d'incendie, de chocs électriques ou d'interférences, n'utiliser que les accessoires recommandés.

ATTENTION:

Ne pas dévisser le couvercle. Pour réduire tout risque d'électrocution, ne pas retirer le couvercle. Il ne se trouve à l'intérieur aucune pièce qui puisse être réparée par l'utilisateur. Confier toute réparation à un personnel qualifié.

ATTENTION:

Pour maintenir une bonne ventilation, ne pas installer ni placer l'appareil dans une étagère, un meuble encastré ni aucun endroit confiné.

Pour éviter tout risque de choc électrique ou de feu dû à une surchauffe, vérifier qu'aucun rideau ni aucun autre matériau ne fait obstacle à la ventilation.

ATTENTION:

Vérifiez l'installation au moins une fois par an. Une mauvaise installation peut provoquer la chute de l'appareil et engendrer des blessures.

ATTENTION:

Ne pas soulever et déplacer l'appareil quand le trépied est en place.

L'attache risque de se casser sous le poids du trépied, ce qui peut entraîner des blessures.

ATTENTION:

Ne laissez pas l'appareil au contact direct de la peau de façon prolongée lors de l'utilisation. Des brûlures dues aux basses températures pourraient résulter si les parties de cet appareil sont en contact direct avec la peau de façon prolongée.

Quand vous utilisez l'appareil de façon prolongée, utilisez le trépied.

ATTENTION:

Ne pas placer de sources de flammes nues, telles que des bougies allumées, sur l'appareil.

NOTIFICATION (Canada)

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

IMPORTANTES MISES EN GARDE

- 1) Lire ces instructions.
- 2) Conserver ces instructions.
- 3) Respecter ces instructions.
- 4) Suivre toutes les instructions.
- 5) Ne pas utiliser cet appareil près de l'eau.
- 6) Nettoyer avec un chiffon sec seulement.
- 7) Ne pas bloquer les ouvertures pour ventilation. Installer selon les directives du fabricant.
- 8) Éloigner l'appareil de toute source de chaleur telle que radiateurs et autres éléments de chauffage (incluant les amplificateurs).
- 9) Ne pas tenter de contourner les mesures de sécurité des fiches polarisées ou de mise à la terre. Une fiche polarisée possède une lame plus large que l'autre. Une fiche avec mise à la terre possède une troisième broche pour la mise à la terre. Si la fiche ne peut pas être branchée, communiquer avec un électricien pour faire changer la prise de courant.
- 10) Protéger le cordon secteur de manière qu'il ne soit pas piétiné ou écrasé par des objets. Faire particulièrement attention à ses extrémités de branchement, y compris sa fiche.
- 11) N'utiliser que les accessoires recommandés par le fabricant.
- 12) Ne placer l'appareil que dans une baie ou un support recommandé par le fabricant. Déplacer la baie ou le support avec le plus grand soin afin d'en éviter le renversement.
- 13) Débrancher durant un orage ou lors de non-utilisation prolongée.
- 14) Confier toute réparation à un technicien qualifié. Faire réparer l'appareil si le cordon ou la fiche a été endommagé, si l'appareil a été mouillé, si un objet est tombé sur l'appareil, s'il a été exposé à la pluie ou à de l'humidité, s'il ne fonctionne pas normalement ou s'il a été échappé.



S3125A

La plaque signalétique se trouve sur le fond de l'appareil.

Fabriqué par : Panasonic Corporation, Osaka, Japon

Nom et adresse de l'importateur en accord avec les règlements de l'Union Européenne :

Panasonic Marketing Europe GmbH

Panasonic Testing Centre

Winsbergring 15, 22525 Hamburg, Allemagne



L'élimination des équipements usagés

Applicable uniquement dans les pays membres de l'Union européenne et les pays disposant de systèmes de recyclage.

Apposé sur le produit lui-même, sur son emballage, ou figurant dans la documentation qui l'accompagne, ce pictogramme indique que appareils électriques et électroniques usagés, doivent être séparées des ordures ménagères.

Afin de permettre le traitement, la valorisation et le recyclage adéquats des appareils usagés, veuillez les porter à l'un des points de collecte prévus, conformément à la législation nationale en vigueur.

En les éliminant conformément à la réglementation en vigueur, vous contribuez à éviter le gaspillage de ressources précieuses ainsi qu'à protéger la santé humaine et l'environnement. Pour de plus amples renseignements sur la collecte et le recyclage, veuillez vous renseigner auprès des collectivités locales, votre revendeur ou fournisseur.

Le non-respect de la réglementation relative à l'élimination des déchets est passible d'une peine d'amende.

Leggere prima quanto segue!

 sono le informazioni sulla sicurezza.

AVVISO:

- Per ridurre il rischio d'incendio o di scosse, non esporre questo prodotto alla pioggia o all'umidità.
- Per ridurre il rischio d'incendio o di scosse elettriche, tenere questo prodotto lontano da tutti i liquidi. Usarlo e conservarlo soltanto in luoghi che non siano esposti a gocciolamenti o spruzzi di liquidi, e non mettervi sopra recipienti di liquidi.

AVVISO:

Conservare sempre il cavo anticaduta (accessorio opzionale) o altri accessori (dato a colletto, vite di montaggio per il calvo) fuori dalla portata dei bambini.

AVVISO:

Questa apparecchiatura è conforme alla Classe A della CISPR 32. In un ambiente di tipo residenziale questa apparecchiatura potrebbe provocare interferenze radio.

PRECAUZIONE:

Per ridurre i pericoli d'incendio o di scosse elettriche e di fastidiose interferenze, usare soltanto gli accessori raccomandati.

PRECAUZIONE:

Non togliere il coperchio svitandolo. Per ridurre i pericoli di scosse elettriche, non togliere il coperchio. All'interno non ci sono parti riparabili dall'utente. Per le riparazioni, rivolgersi a personale tecnico qualificato.

PRECAUZIONE:

Per assicurare una buona ventilazione, non installare o sistemare questo apparecchio in uno scaffale, mobile incorporato od altro spazio chiuso. Per evitare i pericoli di scosse elettriche o d'incendio a causa di un surriscaldamento, accertarsi che tende od altro materiale non ostacolino la ventilazione.

PRECAUZIONE:

Controllare l'installazione almeno una volta all'anno.
Un'installazione incorretta può risultare nella caduta dell'apparecchio con conseguenti danni alle persone.

PRECAUZIONE:

Non sollevare o spostare l'unità quando è montata sul treppiede.
Il supporto potrebbe rompersi a causa del peso del treppiede e causare infortuni.

PRECAUZIONE:

Non lasciare l'unità a diretto contatto con la pelle per un periodo di tempo prolungato durante l'uso.
In caso di un prolungato contatto diretto fra le parti di questa unità con elevate temperature e la pelle potrebbero verificarsi ustioni da bassa temperatura.
Quando si utilizza questo dispositivo per un periodo di tempo prolungato, fare uso del treppiede.

PRECAUZIONE:

Non posizionare sull'apparecchio sorgenti di fiamme libere, quali candele accese.

La piastrina di taratura si trova sulla parte inferiore dell'unità.

Fabbricato da: Panasonic Corporation, Osaka, Giappone

Nome e indirizzo dell'importatore in conformità con le normative UE:

Panasonic Marketing Europe GmbH

Panasonic Testing Centre

Winsbergring 15, 22525 Hamburg, Germania



Smaltimento di vecchie apparecchiature

Solo per Unione Europea e Nazioni con sistemi di raccolta e smaltimento

Questo simbolo sui prodotti, sull'imballaggio e/o sulle documentazioni o manuali accompagnanti i prodotti indica che i prodotti elettrici, elettronici non devono essere buttati nei rifiuti domestici generici.

Per un trattamento adeguato, recupero e riciclaggio di vecchi prodotti vi invitiamo a portarli negli appositi punti di raccolta secondo la legislazione vigente nel vostro paese.

Con uno smaltimento corretto, contribuirete a salvare importanti risorse e ad evitare i potenziali effetti negativi sulla salute umana e sull'ambiente.

Per ulteriori informazioni su raccolta e riciclaggio, vi invitiamo a contattare il vostro comune, rivenditore o fornitore.

Lo smaltimento non corretto di questi rifiuti potrebbe comportare sanzioni in accordo con la legislazione nazionale.

Lea esto primero

 indica información de seguridad.
ADVERTENCIA:

- Para reducir el riesgo de producir un incendio o recibir una descarga eléctrica, no exponga este equipo a la lluvia ni a la humedad.
- Para reducir el riesgo de incendio o sacudida eléctrica, mantenga este equipo alejado de todos los líquidos. Utilícelo y guárdelo solamente en lugares donde no corra el riesgo de que le caigan gotas o le salpiquen líquidos, y no coloque ningún recipiente de líquidos encima del equipo.

ADVERTENCIA:

Mantenga siempre el cable anticaídas (accesorio opcional) o los accesorios (tuerca con resalto y tornillo de montaje del cable) fuera del alcance de los niños.

ADVERTENCIA:

Este equipo se ajusta a los requisitos de la Clase A de CISPR 32. Este equipo puede causar interferencias por radio en un entorno residencial.

PRECAUCIÓN:

Para reducir el riesgo de incendios, sacudidas eléctricas e interferencias molestas, utilice solamente los accesorios recomendados.

PRECAUCIÓN:

No quite la cubierta desatornillándola. No quite la tapa para evitar el riesgo de sacudidas eléctricas. Las piezas del interior no requieren mantenimiento por parte del usuario. Solicite las reparaciones al personal de servicio calificado.

PRECAUCIÓN:

Para mantener unas buenas condiciones de ventilación, no instale ni ponga este aparato en una librería, mueble empotrado u otro espacio reducido. Para evitar el riesgo de que se produzcan sacudidas eléctricas o peligros de incendio debidos al recalentamiento, asegúrese de que las cortinas y otros materiales no obstruyan la ventilación.

PRECAUCIÓN:

Compruebe la instalación al menos una vez al año.

Una instalación incorrecta podría provocar la caída de la unidad, lo cual podría causar lesiones al usuario.

PRECAUCIÓN:

No agarre ni mueva la unidad estando ésta colocada en el trípode.

El adaptador podría romperse debido al peso del trípode, lo que podría causarle lesiones.

PRECAUCIÓN:

No mantenga la unidad en contacto directo con la piel durante largos períodos de tiempo cuando está en uso.

Es posible que se produzcan quemaduras de baja temperatura si la piel entra en contacto con las piezas de la unidad que se encuentran a temperaturas altas durante períodos de tiempo prolongados. Si va a utilizar el equipo durante largos períodos de tiempo, emplee el trípode.

PRECAUCIÓN:

No coloque encima del equipo llamas desnudas, como velas encendidas.

INSTRUCCIONES DE SEGURIDAD IMPORTANTES

- 1) Lea estas instrucciones.
- 2) Guarde estas instrucciones.
- 3) Preste atención a todas las advertencias.
- 4) Siga todas las instrucciones.
- 5) No utilice este aparato cerca del agua.
- 6) Limpie únicamente con un paño seco.
- 7) No bloquee ninguna abertura de ventilación. Instale el aparato según las instrucciones del fabricante.
- 8) No instale el aparato cerca de fuentes de calor como, por ejemplo, radiadores, registros de calor, estufas y otros aparatos (incluyendo amplificadores) que produzcan calor.
- 9) No anule la función de seguridad de la clavija polarizada o del tipo con conexión a tierra. Una clavija polarizada tiene dos patillas, una más ancha que la otra. Una clavija del tipo con conexión a tierra tiene dos patillas y un tercer contacto de conexión a tierra. La patilla ancha o el tercer contacto se incluyen para su seguridad. Si la clavija suministrada no se puede conectar en su toma de corriente, consulte a un electricista para que le sustituya la toma de corriente obsoleta.
- 10) Proteja el cable de alimentación para que nadie lo pise ni quede pellizcado, particularmente en la clavija, receptáculo de conveniencia y en el punto por donde sale del aparato.
- 11) Utilice solamente los aditamentos/accesorios especificados por el fabricante.
- 12) Utilice el aparato sólo con el carrito, soporte, trípode, ménsula o mesa especificado por el fabricante, o vendido con el aparato. Cuando utilice un carrito, tenga cuidado al mover la combinación del carrito/aparato para evitar lesiones debidas a vuelcos.
- 13) Desenchufe este aparato de la toma de corriente durante las tormentas eléctricas o cuando no vaya a utilizarlo durante períodos largos de tiempo.
- 14) Solicite todos los trabajos de reparación al personal de servicio cualificado. La reparación es necesaria cuando el aparato ha sido dañado de cualquier forma como, por ejemplo cuando está dañado el cable o la clavija de alimentación, se ha derramado líquido sobre el aparato o han entrado objetos en su interior, el aparato ha estado expuesto a la lluvia o a la humedad, no funciona normalmente o se ha caído al suelo.



S3125A

La placa indicadora esta en la parte inferior de la unidad.

Fabricado por: Panasonic Corporation, Osaka, Japón
Nombre y dirección del importador conforme a las normas de la UE:
Panasonic Marketing Europe GmbH
Panasonic Testing Centre
Winsbergring 15, 22525 Hamburg, Alemania



Eliminación de Aparatos Viejos

Solamente para la Unión Europea y países con sistemas de reciclado.

Este símbolo en los productos, su embalaje o en los documentos que los acompañen significa que los productos eléctricos y electrónicos usadas no deben mezclarse con los residuos domésticos.

Para el adecuado tratamiento, recuperación y reciclaje de los productos viejos llévelos a los puntos de recogida de acuerdo con su legislación nacional.

Si los elimina correctamente ayudará a preservar valiosos recursos y evitará potenciales efectos negativos sobre la salud de las personas y sobre el medio ambiente.

Para más información sobre la recogida o reciclaje, por favor contacte con su ayuntamiento, su distribuidor o su proveedor.

Puede haber sanciones por una incorrecta eliminación de este residuo, de acuerdo con la legislación nacional.

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Before using the camera

■ Use appropriate lighting when shooting to capture images with clear color

- To make the color of images clear, use appropriate lighting for shooting.
- Colors may not be reproduced correctly under fluorescent lighting. Select appropriate lighting as necessary.
- Use the ND filter in excessively bright locations.

■ Turn off the power before connecting or disconnecting the cables

- Turn off the power of the devices before connecting or disconnecting the cables.

■ Handling of the camera

- Do not drop or add strong impact or vibration to the camera. Doing so may lead to failure.

■ Do not touch optical system parts

- The optical system parts are the “life” of the camera. Do not touch the optical systems on occasions such as when the lens is removed. In the event that dust has adhered, use a blower for cameras or lens cleaning paper to gently remove the dust.

■ Do not shoot images toward sunlight or a laser beam

- Shooting toward sunlight or a laser beam for a long period of time may result in damage of the MOS.

■ When using the camera in rain or snow, or on a beach or shore

- Prevent water from splashing on or entering the camera.

■ Humidity and dust

- The internal parts of the camera are more easily damaged in humid and dusty locations. Avoid such locations.

■ Temperature range for use

- Using the camera under the following conditions may have negative effects on the image quality or internal parts of the camera.

Cold places where the temperature is –10 °C (14 °F) or below

Hot places where the temperature is 45 °C (113 °F) or above

- Preheating is required in a low-temperature environment. Confirm  display is not lit before using the camera.

■ Cleaning

- Turn off the power and clean the camera with a dry cloth. If the dust cannot be removed with a dry cloth, try soaking the cloth with kitchen detergent to gently wipe off the dust.
- Use lens cleaning paper (for use with glasses or cameras) when cleaning the lens.

■ Cooling fan

- The camera has an internal cooling fan.
- The cooling fan is a consumable supply. Replace it after approximately 60,000 hours of use. Be sure to contact your dealer for the replacement.

■ Peripheral devices and software

- The software of the peripheral device that is connected to the camera may require updating.
- For details, contact your dealer.

Notes

■ Information on software used with this product

- This product includes GNU General Public License (GPL) and GNU Lesser General Public License (LGPL) licensed software, and the customer is entitled to obtain, modify, or redistribute the source code for the software.

This product includes MIT Licensed software.

This product includes BSD Licensed software.

For details on obtaining the source codes, visit the following website.

<http://pro-av.panasonic.net/>

However, do not contact Panasonic for questions regarding obtained source codes.

Notes

Required environment for computer

Use a host computer that satisfies the following requirements.

■ CPU

Intel® Core™ 2 DUO 2.4 GHz or above recommended

■ Memory

- Windows

1 GB or above

However, 2 GB or larger for Microsoft® Windows® 10/Microsoft® Windows® 8.1/Microsoft® Windows® 8/
Microsoft® Windows® 7 64-bit

- Mac

2 GB or above

■ Network function

10BASE-T or 100BASE-TX

1 port

■ Image display function

Resolution: 1024×768 pixels or above

Color: True Color 24-bit or above

■ Supported OS and web browsers

- Windows

Microsoft® Windows® 10 Professional 64-bit/32-bit^{*1}

Microsoft® Windows® 8.1 Professional 64-bit/32-bit^{*1}

Windows® Internet Explorer® 11.0^{*1*3}

Microsoft® Windows® 8 Professional 64-bit/32-bit^{*1}

Windows® Internet Explorer® 10.0^{*1*3}

Microsoft® Windows® 7 Professional SP1 64-bit/32-bit^{*2}

Windows® Internet Explorer® 11.0/10.0/9.0/8.0^{*3}

^{*1} Use Internet Explorer for desktop. (Internet Explorer for Windows UI is not supported.)

^{*2} The Windows® XP compatibility mode cannot be used.

^{*3} Internet Explorer® 64-bit cannot be used.

- Mac

OS X 10.11 Safari 9.0

OS X 10.10 Safari 8.0.4

OS X 10.9 Safari 7.0.2

OS X 10.8 Safari 6.1.2

Disclaimer

In any case, Panasonic will not liable for any of the following:

- Incidental, special, or consequential damage or harm caused directly or indirectly in regard to the camera
- Trouble or malfunctions caused by the misuse or careless use of a user
- Disassembly, repair, or modification of the camera performed by a user
- Inconvenience, damage, or harm arising from the inability to display images as a result of any reason or cause including failure or malfunction of the camera
- Malfunctions arising from a system that has been combined with a third party device or any inconvenience, damage, or harm caused as a result thereof
- Inconvenience, damage, or harm caused by such as improper installation or any reason other than a defect of the camera
- Any loss of stored information due to any reason
- Any damage or claim regarding loss or leakage of image data or setting data saved in the camera, memory card, or computer

Notes regarding network

This camera is provided with functions which are used upon connecting to a network.

When the camera is used while connected to a network, there are the following potential risks.

- Leakage or disclosure of information via the camera
- Manipulation of the camera by a malicious third party
- Interference or interruption of the camera caused by a malicious third party

To prevent such risks, users are responsible for implementing sufficient network security measures inclusive of the following.

- Use the camera over a network where safety is ensured with the installation of a firewall, etc.
- When the camera is used in a system to which a computer is connected, be sure to perform regular checks or detections for computer viruses and malware.

In addition, be sure to observe the following precaution.

- Do not install the camera or cables in a place where they may easily be damaged.

Using the camera in a system

An example of a standard system configured with the Multi-Purpose Camera (AK-UB300G) and peripheral devices is as follows.

For details on the connected devices, refer to the Operating Instructions of each device.

Refer to the following website for the latest information other than the information described in the Operating Instructions.

<http://pro-av.panasonic.net/>

Basic configuration devices

The following are the basic configuration devices of this camera, such as lens.

Part name	Part No.	Remark
Lens	FUJINON/CANON	—
Remote camera controller	AW-RP50N/AW-RP50E/ AW-RP120G	This is the controller to control this camera and the pan/tilt head.
Remote operation panel	AK-HRP200G	This is the controller to control this camera.
	AK-HRP1000G/AK-HRP1005G	

Expanded configuration devices

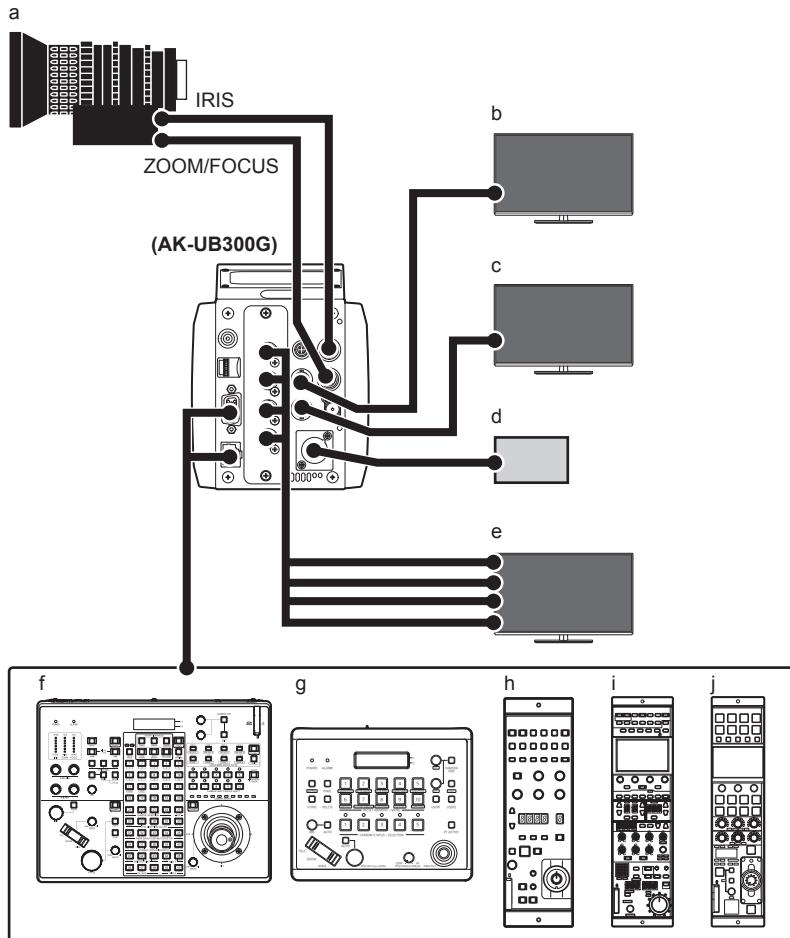
In addition to the basic configuration devices, following devices can be connected.

Part name	Part No.	Remark
Indoor pan/tilt head	AW-PH400P/AW-PH400E	—
Protocol converter	AW-IF400G	This is the converter to control the indoor pan/tilt head from the remote camera controller.
12G output board	AK-UHD12G	The 12G SDI signal or the 3G SDI signal can be output by installing to the camera.

System block diagram

One-to-one configuration

This is the configuration to connect one AK-UB300G and one remote camera controller or the remote operation panel.



- a: Remote control lens
- b: HD monitor (for HD main line)
- c: HD monitor (for HD monitor)
- d: External DC power supply
- e: UHD/HD monitor (for UHD/HD main line)
- f: AW-RP120G
- g: AW-RP50N/AW-RP50E
- h: AK-HRP200G

i: AK-HRP1000G

j: AK-HRP1005G

- Video output

For UHD mode

- For UHD main line: Use the output from the <UHD/HD SDI OUT 1> to <UHD/HD SDI OUT 4> terminals.
- For HD main line: Use the output from the <HD SDI OUT 1> terminal.
- For HD monitor: Use the output from the <HD SDI OUT 2> terminal.

For UHD CROP mode/HD mode

- For HD main line: Use the output from the <HD SDI OUT 1> terminal, or the output from the <UHD/HD SDI OUT 1>/<UHD/HD SDI OUT 2> terminal.
- For HD monitor: Use the output from the <HD SDI OUT 2> terminal.

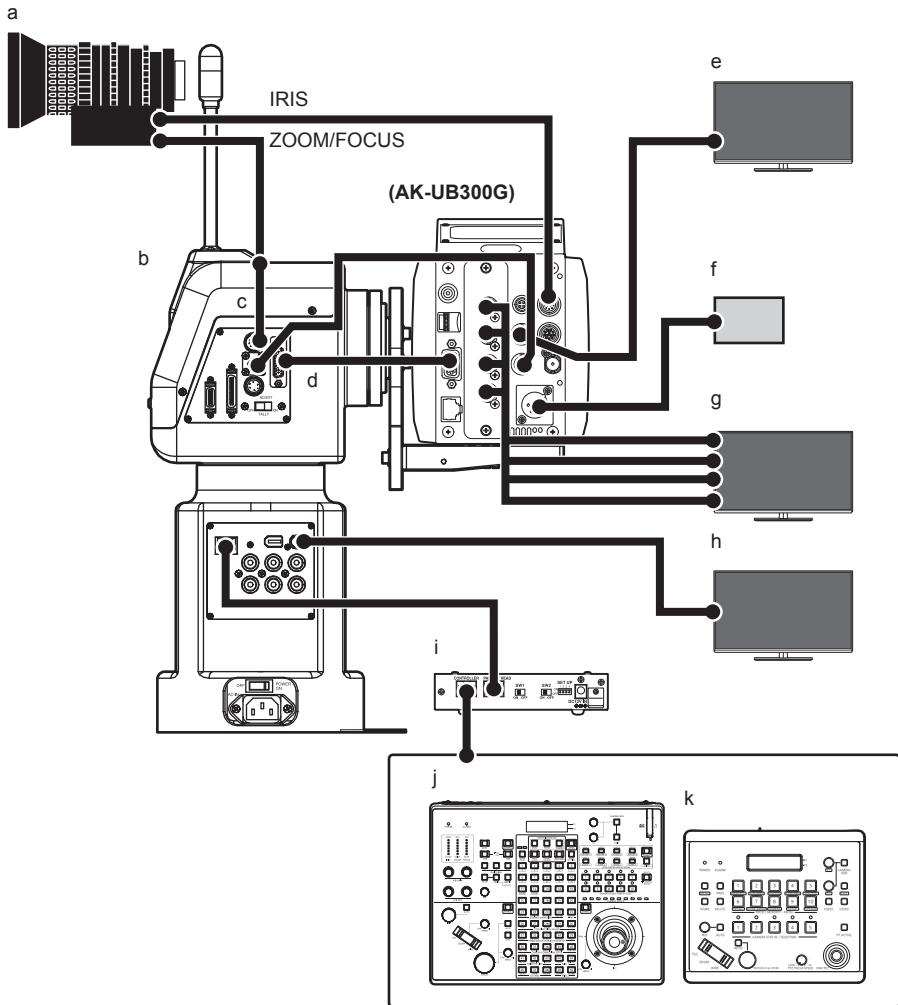
NOTE

- Pressing the <MENU> button will display the menu in the output from the <HD SDI OUT 2> terminal.
- Remote camera controller
Connect AW-RP50N/AW-RP50E or AW-RP120G to the <I/F> terminal or the <LAN> terminal.
- Remote operation panel
Connect AK-HRP200G, AK-HRP1000G, or AK-HRP1005G to the <I/F> terminal or the <LAN> terminal.

Configuration using the indoor pan/tilt head

This is the configuration to connect one AK-UB300G, indoor pan/tilt head, and one remote camera controller.

■ AW-PH400P/AW-PH400E



a: Remote control lens

b: AW-PH400P/AW-PH400E

c: Relay cable

Use the relay cable when connecting the zoom/focus control cable of the remote control lens to AW-PH400P/AW-PH400E. The device may be damaged when connected directly.

d: AW-CA15H29G

e: HD monitor (for HD main line)

- f: External DC power supply
- g: UHD/HD monitor (for UHD/HD main line)
- h: HD monitor (for HD main line/monitor)
- i: AW-IF400G
- j: AW-RP120G
- k: AW-RP50N/AW-RP50E

- Video output

For UHD mode

- For UHD main line: Use the output from the <UHD/HD SDI OUT 1> to <UHD/HD SDI OUT 4> terminals.
- For HD main line: Use the output from the <HD SDI OUT 1> terminal.
- For HD main line/monitor: Use the output from the <SDI> terminal of AW-PH400P/AW-PH400E.

For UHD CROP mode/HD mode

- For HD main line: Use the output from the <HD SDI OUT 1> terminal, or the output from the <UHD/HD SDI OUT 1>/<UHD/HD SDI OUT 2> terminal.
- For HD main line/monitor: Use the output from the <SDI> terminal of AW-PH400P/AW-PH400E.

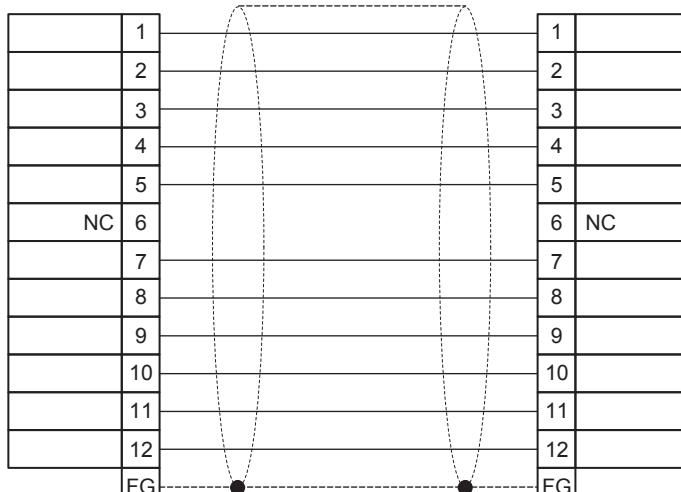
NOTE

- Pressing the <MENU> button will display the menu in the output from the <HD SDI OUT 2> terminal.
- Remote camera controller

Connect AW-RP50N/AW-RP50E or AW-RP120G to the <IP/RP> terminal of AW-PH400P/AW-PH400E.

■ Relay cable specification

Do not connect the pin number 6.

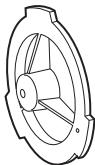


HR10A-10P-12S(73)
(Hirose Electric Co.)

HR10A-10J-12P(73)
(Hirose Electric Co.)

Accessories

Mount cap (already attached to the product)



Flange nut (x 1)



Wire mounting screws (x 2)



 **NOTE**

- Properly dispose of the packaging materials after unboxing the product.

Frame frequency setting

When the camera is shipped, the frame frequency is not set. Before using the camera for the first time, follow the steps below to set the frame frequency.

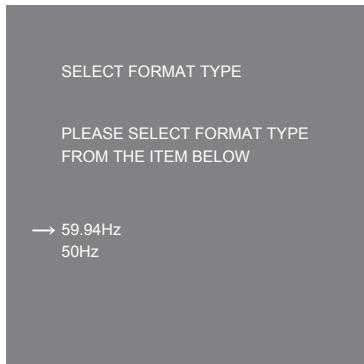


Fig. 1

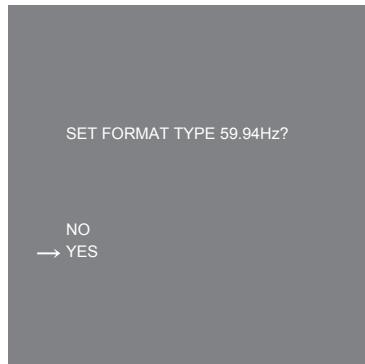


Fig. 2

1 Connect a monitor to the <HD SDI OUT 2> terminal (page 47).

2 Connect the DC power supply.

The [SELECT FORMAT TYPE] screen is displayed.

3 Turn the jog dial button to move the cursor (arrow) to the frequency to set. (Fig. 1)

4 Press the jog dial button.

The confirmation screen is displayed.

5 Move the cursor (arrow) to [YES] and press the jog dial button. (Fig. 2)

The menu screen is displayed, and the setting is completed.

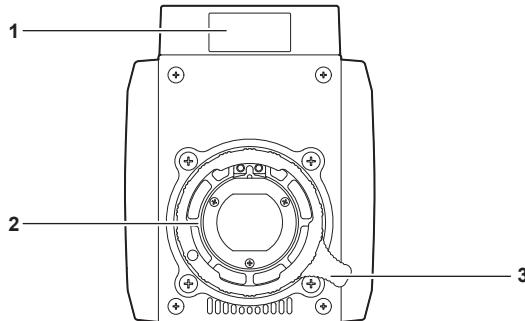
This screen is not displayed again when the power is turned on next and subsequently once this is set.

6 Disconnect the DC power supply.

7 Turn on the DC power supply.

Description of parts

Front side



1 Front tally lamp

Lights up when the tally signal is supplied.

Blinks in red while displaying warning, and blinks in green during the firmware update.

NOTE

- The brightness can be set with [MAIN MENU] → [SWITCH MODE] → [TALLY] → [FRONT TALLY].
Blinks in green [LOW] regardless of setting during the firmware update.

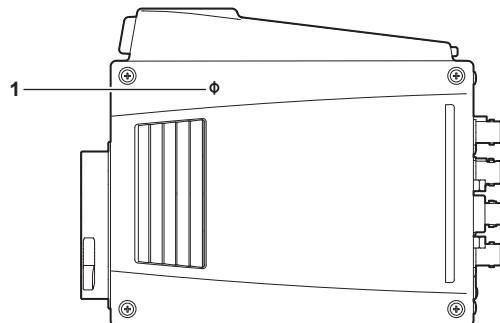
2 Lens mount (2/3 type bayonet)

This is where the lens is mounted.

3 Lens fixing lever

Fix the lens by turning the lever clockwise after mounting the lens to the lens mount.

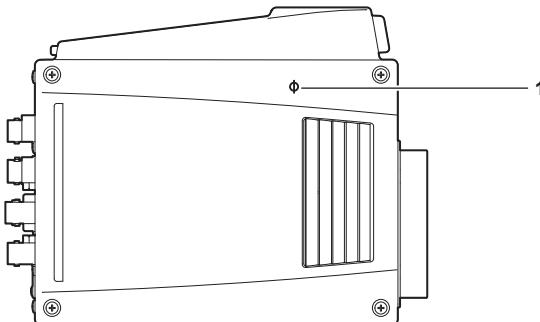
Left side



1 <Φ> mark

Indicates the imaging plane inside the camera.

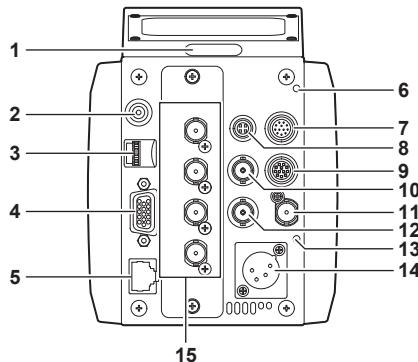
Right side



1 <Φ> mark

Indicates the imaging plane inside the camera.

Rear side



1 Back tally lamp

Lights up when the tally signal is supplied.

Blinks in red while displaying warning, and blinks in green during the firmware update.

NOTE

- The brightness can be set with [MAIN MENU] → [SWITCH MODE] → [TALLY] → [BACK TALLY].
Blinks in green [LOW] regardless of setting during the firmware update.

2 <MENU> button

Press this button to display the camera's [MAIN MENU] screen.

Press the button again to return to the original image.

3 Jog dial button

This will perform the navigation of setting menu pages, and selection or setting of the item when the setting menu is displayed.

The cursor will move down when the jog dial button is turned downward. The cursor will move up when turned upward.

Press the jog dial button to fix the settings.

4 <I/F> terminal

Connect the cable for the external synchronization signal and the control signal to the camera.

5 <LAN> terminal

Used to connect the LAN cable.

**NOTE**

- Use a shielded cable when connecting a cable to the <LAN> terminal.

6 <WARNING> lamp

This will illuminate in red when a problem occurs.

7 <IRIS> terminal

Used to connect the lens iris control cable.

8 <TALLY OUT> terminal

Outputs R tally and G tally.

9 <ZOOM/FOCUS> terminal

Used to connect the lens zoom/focus control cable.

10 <HD SDI OUT 1> terminal

This is the main line output terminal dedicated for HD SDI.

**NOTE**

- Use a cable that is 5C-FB or above.

11 <G/L IN> terminal

This is the reference signal input terminal when applying external synchronization to the camera.

**NOTE**

- Supply a composite signal (black burst) or a tri-level SYNC as the input signal.

12 <HD SDI OUT 2> terminal

This is the monitor output terminal dedicated for HD SDI.

**NOTE**

- Use a cable that is 5C-FB or above.

13 <DC IN> lamp

This will illuminate in green when power is supplied to the camera.

14 <DC IN> terminal

This is an input terminal for the external DC power supply. Connects to the external DC power supply.
(DC 11 V to 17 V)

For details, refer to “Using external DC power supply” (page 18).

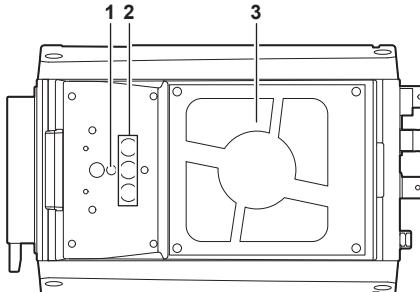
15 <UHD/HD SDI OUT 1>/<UHD/HD SDI OUT 2>/<UHD/HD SDI OUT 3>/<UHD/HD SDI OUT 4> terminal

These are the UHD and HD SDI main line output terminals.

**NOTE**

- Use a cable that is 5C-FB or above.

Upper side



1 Drop prevention wire mounting screw hole

- Mounting hole size
 - M4

2 Mounting screw holes

This is used when installing in a camera housing, etc.

- Mounting hole size
 - 1/4-20 UNC (x 3)



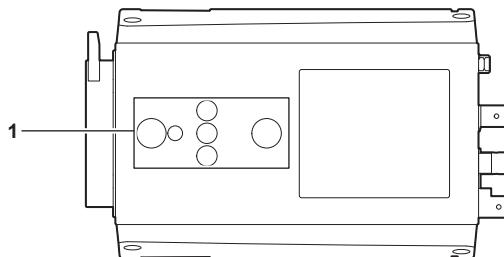
- Depth of the screw hole is 10 mm. Use mounting screws 10 mm or shorter.

3 Cooling fan

This is the fan for cooling the unit.

- Do not block or disturb the ventilation while operation. Doing so may cause fire due to overheating.
- Expected life of this fan is approximately 60,000 hours. (When used at room temperature of 25 °C)
Replace when it reaches the expected life.
- Be sure to contact your dealer for the replacement.

Bottom side



1 Mounting screw holes

This is used when installing in the camera housing, or attaching the pan/tilt head or the tripod.

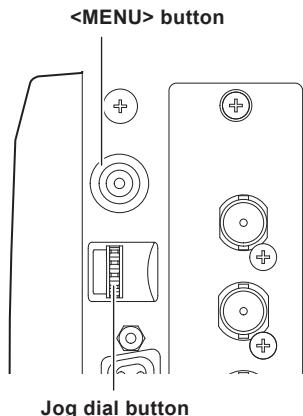
- Mounting hole size
 - 1/4-20 UNC (x 3)
 - 3/8-16 UNC (x 2)



- Depth of the screw hole is 10 mm. Use mounting screws 10 mm or shorter.

Menu operations

Basic operations



Jog dial button

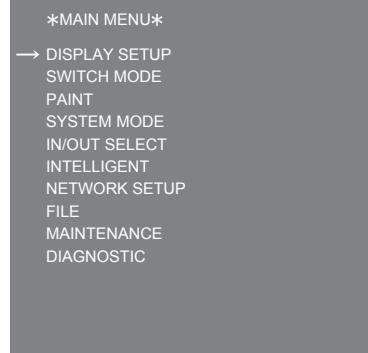


Fig. 1



Fig. 2

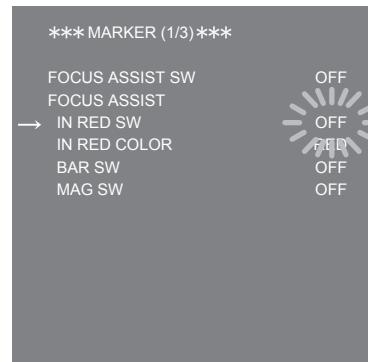


Fig. 3

1 Press the <MENU> button.

The [MAIN MENU] of the camera is displayed in the image output from the <HD SDI OUT 2> terminal. (Fig. 1)

2 Turn the jog dial button to select an item.

3 Press the jog dial button.

The menu of the selected item is accessed. (Fig. 2)

4 Turn the jog dial button to select an item.

5 Press the jog dial button.

The menu of the selected item is accessed. (Fig. 3)

Warning displays

6 Turn the jog dial button to select a menu item to configure.

7 Press the jog dial button.

The setting of the item indicated by the arrow flashes. (Fig. 3)

8 Turn the jog dial button to change the setting.

9 Press the jog dial button.

The setting is confirmed.

Pressing the <MENU> button to exit the menu screen also reflects the setting.



NOTE

- This can be changed quickly by pressing and turning the jog dial button.

Warning displays

Content of the warning is displayed in the output from the <HD SDI OUT 2> terminal when an error is detected while operating.

Camera warning displays

■ When AWB (automatic white balance) is executed

[AWB HIGH LIGHT NG]	Automatic white balance cannot be executed because the light amount is excessive. Set the light amount to an appropriate level.
[AWB LOW LIGHT NG]	Automatic white balance cannot be executed because the light amount is insufficient. Set the light amount to an appropriate level.
[AWB RCH OUT RANGE]	The white balance convergence for red cannot be achieved. Shoot a uniformly white object on the screen, and execute AWB.
[AWB BCH OUT RANGE]	The white balance convergence for blue cannot be achieved. Shoot a uniformly white object on the screen, and execute AWB.

■ When ABB (automatic black balance) is executed

[ABB RCH OUT RANGE]	The black balance convergence for red cannot be achieved. Check if there are any errors in the image.
[ABB BCH OUT RANGE]	The black balance convergence for blue cannot be achieved. Check if there are any errors in the image.
[ABB GCH OUT RANGE]	The black balance convergence for green cannot be achieved. Check if there are any errors in the image.
[ABB NG]	The lens iris may not be closed.

■ Executing black shading

[BSHD NG]	An error has occurred with the black shading. Check if the lens is correctly closed.
-----------	---

Other warning displays

Together with the displaying the content of the warning, the <WARNING> lamp will illuminate in red, and the front tally lamp and the back tally lamp will blink in red.

[FAN NG]	There is a problem in the fan.
[HIGH TEMPERATURE]	The internal temperature is high.
[LOW VOLTAGE]	The voltage of the external DC power supply is low.
[SHUTDOWN SOON]	The internal temperature is rising more than expected. Or, the voltage of the external DC power supply has lowered beyond the operation guarantee. The power is turned off forcefully in 30 seconds.

Updating the camera firmware

Refer to the following website for new updates of the firmware and for operating instructions.

<http://pro-av.panasonic.net/>

Specifications

For details on specifications, visit the Panasonic website (<http://pro-av.panasonic.net/en/manual/index.html>) and refer to the Operating Instructions (HTML version).

General

Power	DC == 12 V (DC 11 V–17 V)
Power consumption	40 W (body only, when 3G SDI×4 is output)
	60 W (maximum power when all accessories are connected and each output terminal is outputting at maximum)

 indicates safety information.

Ambient operating temperature	–10 °C – 45 °C (14 °F – 113 °F) (Preheating required under a temperature 0 °C (32 °F) or below)
Storage temperature	–20 °C – 60 °C (–4 °F – 140 °F)
Ambient operating humidity	85% or less (relative humidity)
Weight	Approx. 1.6 kg (3.53 lbs.) (body only)
Dimensions (W×H×D)	Body only 110 mm×140 mm×160 mm (4-11/32 inches×5-17/32 inches×6-5/16 inches) (excluding protrusions)

Panasonic Corporation

Web Site: <http://www.panasonic.com>

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