

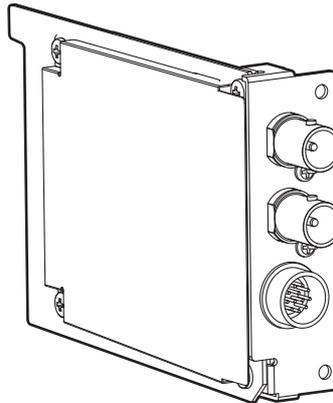
# Panasonic<sup>®</sup>

## Operating Instructions

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SDI Card

Model No. **AW-HHD870N**



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

# Safety precautions

|   |   |   |
|---|---|---|
|    | <b>CAUTION</b><br>RISK OF ELECTRIC SHOCK<br>DO NOT OPEN |  |
| CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,<br>DO NOT REMOVE COVER (OR BACK).<br>NO USER SERVICEABLE PARTS INSIDE.<br>REFER TO SERVICING TO QUALIFIED SERVICE PERSONNEL. |   |   |



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (service) instructions in the literature accompanying the appliance.

## **WARNING:**

- TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.
- THE APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.

## **CAUTION:**

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

## **CAUTION:**

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, REFER CHANGES OF SWITCH SETTINGS INSIDE THE UNIT TO QUALIFIED SERVICE PERSONNEL.

 indicates safety information.

**FCC Note:**

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.

**Warning:**

To assure continued FCC emission limit compliance, the user must use only shielded interface cables when connecting to external units. Also, any unauthorized changes or modifications to this equipment could void the user's authority to operate it.

— For CANADA —

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la class A est conforme à la norme NMB-003 du Canada.

 indicates safety information.

# IMPORTANT SAFETY INSTRUCTIONS

Read these operating instructions carefully before using the unit. Follow the safety instructions on the unit and the applicable safety instructions listed below. Keep these operating instructions handy for future reference.

- 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. 
- 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.

# Contents

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## Preface

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- This product is an option card which can be installed in the option slot of the AW-HE870 HD convertible camera.
- It is made for HD-SDI/SD-SDI signal output and is equipped with two BNC output jacks (dual channel).
- AW-HE870 settings can be used to switch between HD-SDI and SD-SDI output.
- Zoom focus control of lenses equipped with a remote control function possible from a AW-CB400 (or similar) remote operation panel.

### Caution

- The AW-HHD870 can be installed only to the AW-HE870.

## Standard accessories

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Screw (6 mm long) ..... 2 pcs  
Screw (Black, 8 mm long) ..... 4 pcs

# Warning/Caution for safety

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## **WARNING**

- **Refer all servicing to qualified personnel**  
To reduce the risk of electric shock, don't remove cover or back, unless you are a qualified personnel. Refer all mountings, connections, servicing to qualified service personnel.
- **No water or moisture inside**  
Do not let water or moisture into the product, or expose it to moisture, to prevent a fire and electric shock.
- If you see smoke or smell an odor from the product, if water or other foreign matter gets inside, if it is damaged by dropping, or if you find anything wrong with it, immediately stop using it.
- **Do not disassemble or modify the product to prevent a fire and electric shock.**

## **CAUTION**

- Do not drop the product, do not expose it to strong shock, or do not step on it, to prevent a fire and injuries.
- Do not install the product at a place full of moisture and dust, which may cause a fire and electric shock.

# Precautions

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- **Power off before connecting or disconnecting cables**  
Before plugging or unplugging the cables, be sure to switch power off.
- **Handle carefully.**  
Do not drop the product, or subject it to strong shock or vibration. This is important to prevent trouble.
- **Avoid humidity and dust.**  
Avoid using the product at a humid, dusty place because much humidity and dust will cause damage to the parts inside.

- **Operating temperature range**

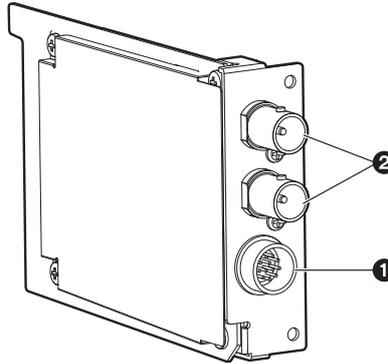
Avoid using the product at a cold place below 14 °F (−10 °C) or at a hot place above 113 °F (+45 °C) because extremely low or high temperature will adversely affect the parts inside.

**Caution**

- When the SDI card is to be discarded at the end of its service life, ask a specialized contractor to dispose of it properly in order to protect the environment.

# ***Major operating controls and their functions***

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## **① ZOOM/FOCUS connector**

This is the standard input connector for the lenses equipped with a remote control function for zoom focus. When using a Panasonic pan-tilt head (such as the AW-PH360, AW-PH400, AW-PH405 or AW-PH650), use the LENS I/F connector on the pan-tilt head instead of this connector.

## **② SDI output connector [SDI OUT1, 2]**

Serial digital component signal can be output.

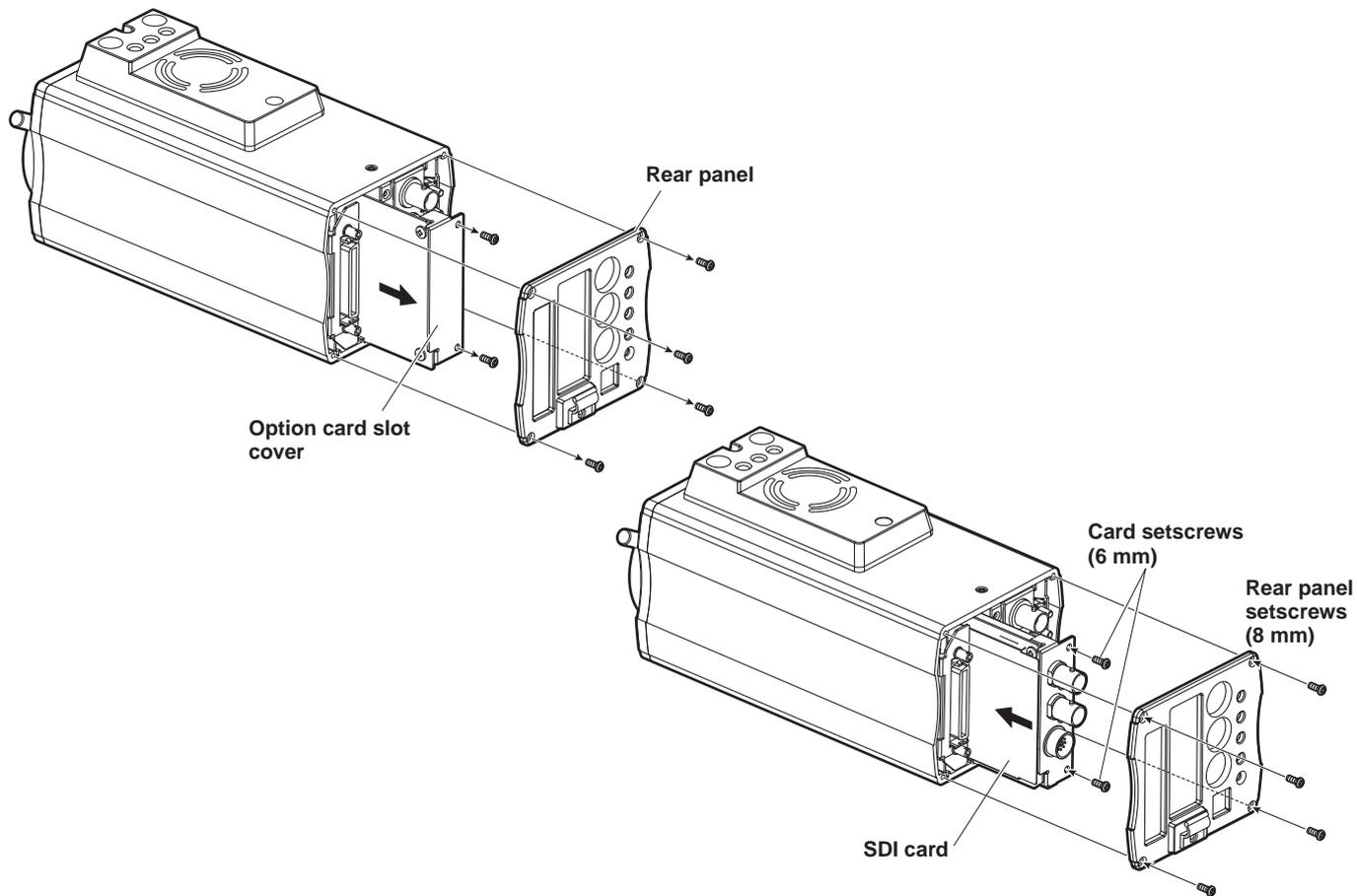
# Mounting

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## Caution

- Be sure to ask your store, where you purchased the product, for mounting.
- Disconnect the camera power connector before mounting.
- Before handling the card, touch a metal part of the camera to discharge the static from the human body. An anti-static wrist strap is recommended for added safety.  
If you touch the card while you are still charged with static, it may cause trouble.
- Keep the metal parts of the card free of contact with other metal parts.

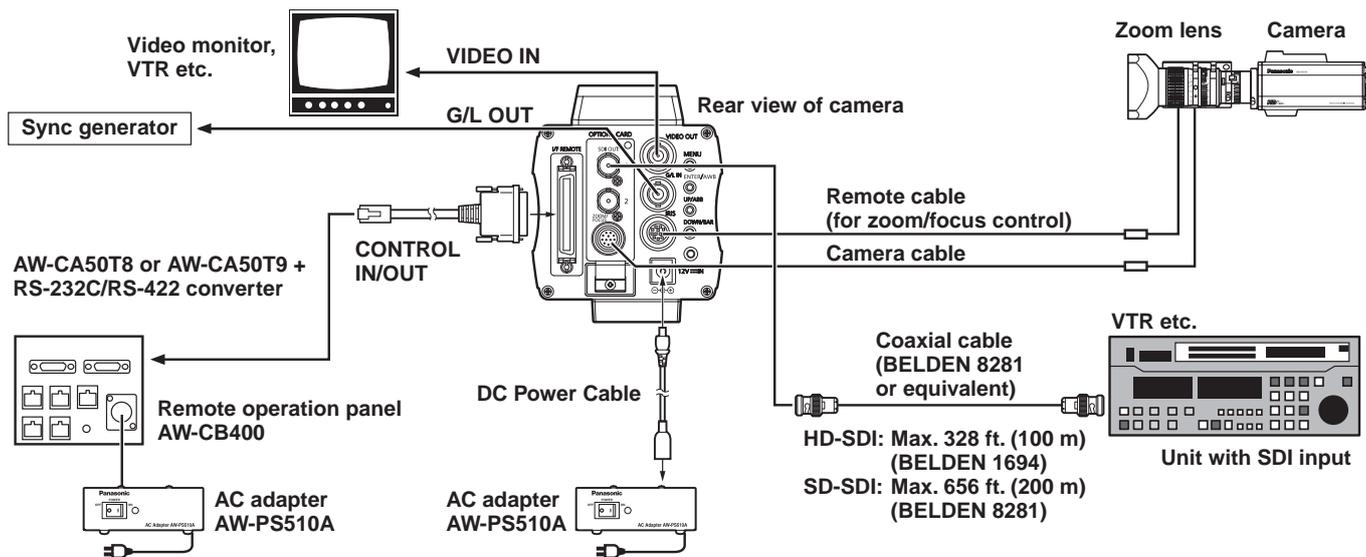
- ① Switch the camera off, and disconnect the power connector and other cables from the camera.
- ② Loosen the four screws on the rear of the camera and remove the rear panel.
- ③ Loosen the two screws for the option card slot and remove the cover.
- ④ Insert the SDI card along the guide rail at the bottom of the camera and the tab above. Insert it securely all the way.
- ⑤ Tighten the two card setscrews securely.  
If you have lost the screws, use the screws (6 mm long) supplied as accessories.
- ⑥ Fasten the rear panel with the four screws.  
If you have lost the screws, use the screws (Black, 8 mm long) supplied as accessories.
- ⑦ Plug the cables back as necessary, connect the power connector, then switch power on.



# Connection

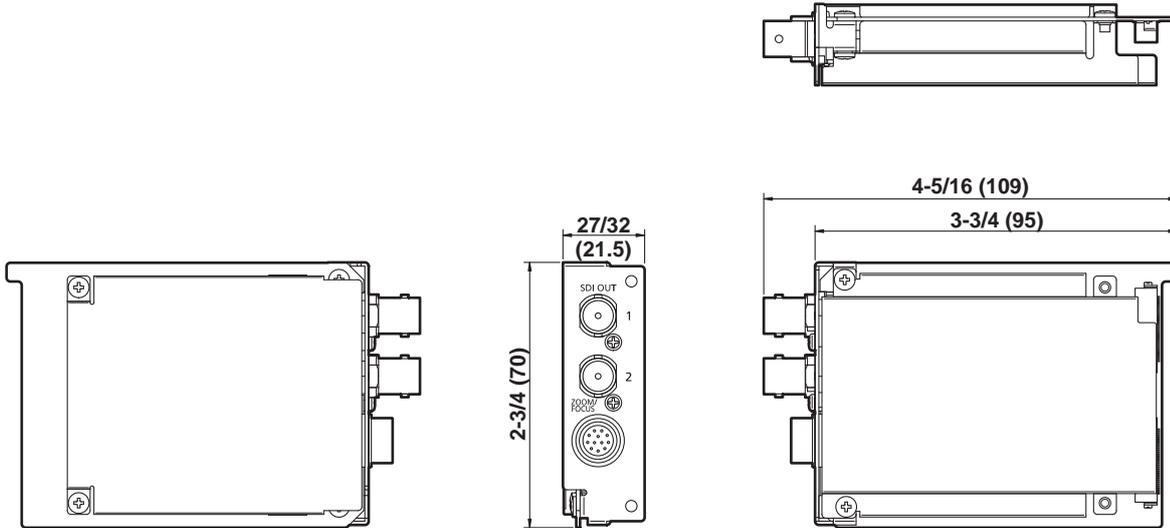
- Before cable connection, switch power off.
- Use the AC adapter AW-PS510A for power supply. Use the power cable supplied with AW-HE870.
- For details on connecting individual devices, refer to the respective operating instructions.
- For details on operating individual devices, refer to the respective operating instructions.

## ■ In case of using a remote operation panel AW-CB400



# Appearance

Unit: inch (mm)



# Specifications

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**Power requirements:** 12 V DC (supplied from camera)

**Power consumption:** Approx. 2.2 W

 indicates safety information.

|                                      |  |
|--------------------------------------|--|
| <b>Allowable temperature ranges:</b> | For storage: -4 °F to 140 °F (-20 °C to +60 °C)<br>For guaranteeing operation: 14 °F to +113 °F (-10 °C to +45 °C)                               |
| <b>Operating humidity:</b>           | 30 % to 90 % (without condensation)  |
| <b>Dimensions:</b>                   | 27/32" × 2-3/4" × 4-5/16" [21.5 (W) × 70 (H) × 109 (D) mm]   |
| <b>Weight:</b>                       | Approx. 0.22 lbs. (0.1 kg)   |
| <b>I/O connectors:</b>               | SDI OUT1, SDI OUT2 connector (BNC)<br>HD: Compliant with the SMPTE292M<br>SD: Compliant with the SMPTE259M<br>ZOOM/FOCUS connector 12-pin; round |

Weight and dimensions indicated are approximate.  
Specifications are subject to change without notice.



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