

## Operating Instructions/Mode d'emploi/ Instrucciones de funcionamiento

Base Station/Station de base/Estación Base

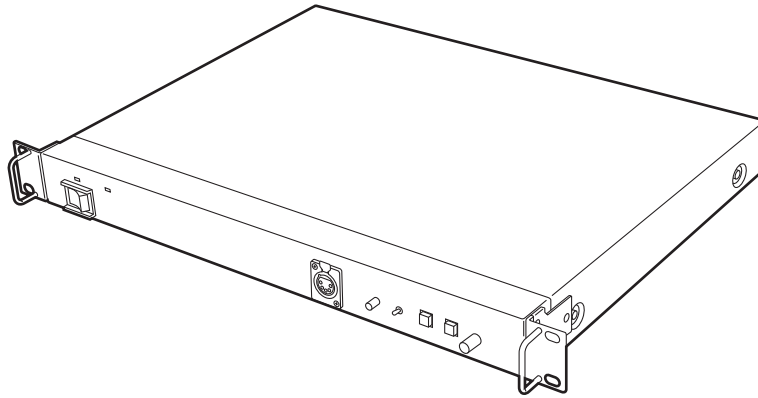
Model No. **AG-BS300P**

Model No. **AG-BS300E**

ENGLISH

FRANÇAIS

ESPAÑOL





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

Avant de vous servir de ce produit, veuillez lire attentivement les instructions et enregistrer ce manuel pour une utilisation ultérieure.

Antes de poner este producto en funcionamiento, lea atentamente las instrucciones y conserve este manual para uso futuro.

# Read this first !

## For AG-BS300P

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



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 (servicing) instructions in the literature accompanying the appliance.

### WARNING:

- TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.
- TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, 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:

**THIS EQUIPMENT MUST BE GROUNDED.**  
To ensure safe operation, the three-pin plug must be inserted only into a standard three-pin power outlet which is effectively grounded through normal household wiring. Extension cords used with the equipment must have three cores and be correctly wired to provide connection to the ground. Wrongly wired extension cords are a major cause of fatalities.  
The fact that the equipment operates satisfactorily does not imply that the power outlet is grounded or that the installation is completely safe. For your safety, if you are in any doubt about the effective grounding of the power outlet, please consult a qualified electrician.

### CAUTION:

The mains plug of the power supply cord shall remain readily operable.  
The AC receptacle (mains socket outlet) shall be installed near the equipment and shall be easily accessible. To completely disconnect this equipment from the AC mains, disconnect the mains plug from the AC receptacle.

### 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:

- KEEP THE TEMPERATURE INSIDE THE RACK TO BETWEEN 5 °C TO 40 °C (41 °F TO 104 °F).
- BOLT THE RACK SECURELY TO THE FLOOR SO THAT IT WILL NOT TOPPLE OVER WHEN VTR IS DRAWN OUT.

### CAUTION:

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

### CAUTION:

Excessive sound pressure from earphones and headphones cause hearing loss.

### CAUTION:

This apparatus can be operated at a voltage in the range of 100 - 240 V AC. Voltages other than 120 V are not intended for U.S.A. and Canada.

### CAUTION:

Operation at a voltage other than 120 V AC may require the use of a different AC plug. Please contact either a local or foreign Panasonic authorized service center for assistance in selecting an alternate AC plug.

 indicates safety information.

## Read this first ! (continued)

### For AG-BS300P

# 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 the 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.



#### FCC 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 instruction manual, 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.
- The user may find the booklet "Something About Interference" available from FCC local regional offices helpful.

#### 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 peripheral devices. Also any unauthorized changes or modifications to this equipment could Void the user's authority to operate this device.

For AG-BS300E

# Caution for AC Mains Lead

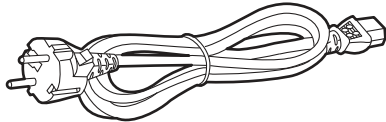
**FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY.**

**This product is equipped with 2 types of AC mains cable, Type C and Type BF.**

Appropriate mains cable must be used in each local area, since the other type of mains cable is not suitable.

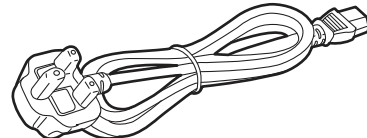
**TYPE C**

For continental Europe, Russia, etc.  
Not to be used in the U.K.



**TYPE BF**

For U.K., etc.



**TYPE BF**

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 13 amp fuse is fitted in this plug.



Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 13 amps.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

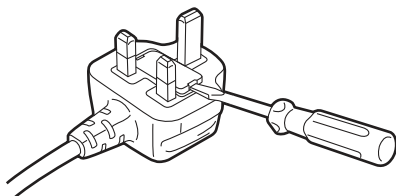
A replacement fuse cover can be purchased from your local Panasonic Dealer.

For U.K. only

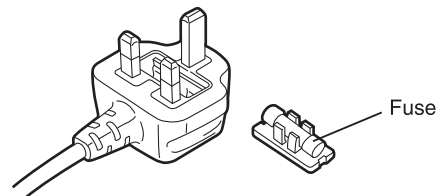
The replacement fuse must be approved by ASTA or BSI to BS1362. Check for the ASTA mark  or the BSI mark  on the body of the fuse.

**How to replace the fuse**

1. Open the fuse compartment with a screwdriver.



2. Replace the fuse.



 indicates safety information.

**For AG-BS300E**

**WARNING:**

**THIS EQUIPMENT MUST BE EARTHED.**  
To ensure safe operation, the three-pin plug must be inserted only into a standard three-pin power point which is effectively earthed through normal household wiring. Extension cords used with the equipment must have three cores and be correctly wired to provide connection to the earth. Wrongly wired extension cords are a major cause of fatalities.

The fact that the equipment operates satisfactorily does not imply that the power point is earthed or that the installation is completely safe. For your safety, if you are in any doubt about the effective earthing of the power point, please consult a qualified electrician.

**WARNING:**

- TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.
- TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, 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.

**CAUTION:**

The mains plug of the power supply cord shall remain readily operable. The AC receptacle (mains socket outlet) shall be installed near the equipment and shall be easily accessible. To completely disconnect this equipment from the AC mains, disconnect the mains plug from the AC receptacle.

**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:**

- KEEP THE TEMPERATURE INSIDE THE RACK TO BETWEEN 5 °C TO 40 °C.
- BOLT THE RACK SECURELY TO THE FLOOR SO THAT IT WILL NOT TOPPLE OVER WHEN VTR IS DRAWN OUT.

**CAUTION:**

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

**CAUTION:**

Excessive sound pressure from earphones and headphones cause hearing loss.

**CAUTION:**

DO NOT REMOVE PANEL COVERS BY UNSCREWING THEM.  
To reduce the risk of electric shock, do not remove the covers. No user serviceable parts inside.  
Refer servicing to qualified service personnel.

 indicates safety information.

**For AG-BS300E**

**EMC NOTICE FOR THE PURCHASER/USER OF THE APPARATUS**

**1. Applicable standards and operating environment (AG-BS300E)**

The apparatus is compliant with:

- standards EN55103-1 and EN550103-2 1996.11, and
- electromagnetic environments E1, E2, E3, and E4.

**2. Pre-requisite conditions to achieving compliance with the above standards**

**<1> Peripheral equipment to be connected to the apparatus and special connecting cables**

- The purchaser/user is urged to use only equipment which has been recommended by us as peripheral equipment to be connected to the apparatus.
- The purchaser/user is urged to use only the connecting cables described below.

**<2> For the connecting cables, use shielded cables which suit the intended purpose of the apparatus.**

- Video signal connecting cables  
Use double shielded coaxial cables, which are designed for 75-ohm type high-frequency applications, for SDI (Serial Digital Interface).  
Coaxial cables, which are designed for 75-ohm type high-frequency applications, are recommended for analog video signals.
- Audio signal connecting cables  
If your apparatus supports AES/EBU serial digital audio signals, use cables designed for AES/EBU.  
Use shielded cables, which provide quality performance for high-frequency transmission applications, for analog audio signals.
- Other connecting cables (IEEE1394, USB)  
Use shielded cables, which provide quality performance for high-frequency applications, as connecting cables.
- When connecting to the DVI signal terminal, use a cable with a ferrite core.
- If your apparatus is supplied with ferrite core(s), they must be attached on cable(s) following instructions in this manual.

**3. Performance level**

The performance level of the apparatus is equivalent to or better than the performance level required by these standards.

However, the apparatus may be adversely affected by interference if it is being used in an EMC environment, such as an area where strong electromagnetic fields are generated (by the presence of signal transmission towers, cellular phones, etc.). In order to minimize the adverse effects of the interference on the apparatus in cases like this, it is recommended that the following steps be taken with the apparatus being affected and with its operating environment:

1. Place the apparatus at a distance from the source of the interference.
2. Change the direction of the apparatus.
3. Change the connection method used for the apparatus.
4. Connect the apparatus to another power outlet where the power is not shared by any other appliances.

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## Supplied Accessories

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AC cable (AG-BS300P).....	1
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## Features

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This unit has the following features:

- By connecting this unit with the camera adapter (AG-CA300) via a recommended power supply cable (refer to page 13) and two BNC cables, it will supply power to the camcorder and transmit the video and audio signals recorded by the camcorder.
- The transmission between this unit and the camera adapter (AG-CA300) uses a non-compressed digital signal, so transmission without any degradation of the video and audio signals is possible.
- It is possible to extend the length of the cable between this unit and the camera adapter (AG-CA300) up to 100 m. (When using BNC cable: 5C-FW)
- It is possible to transfer one line of the return video (RET).
- It is possible to transfer one line of the intercom (INCOM).
- It is possible to transfer the remote control signal.
- DC operation is possible. (However, power supply to the camera adapter is not possible.)

# Precautions When Connecting the System

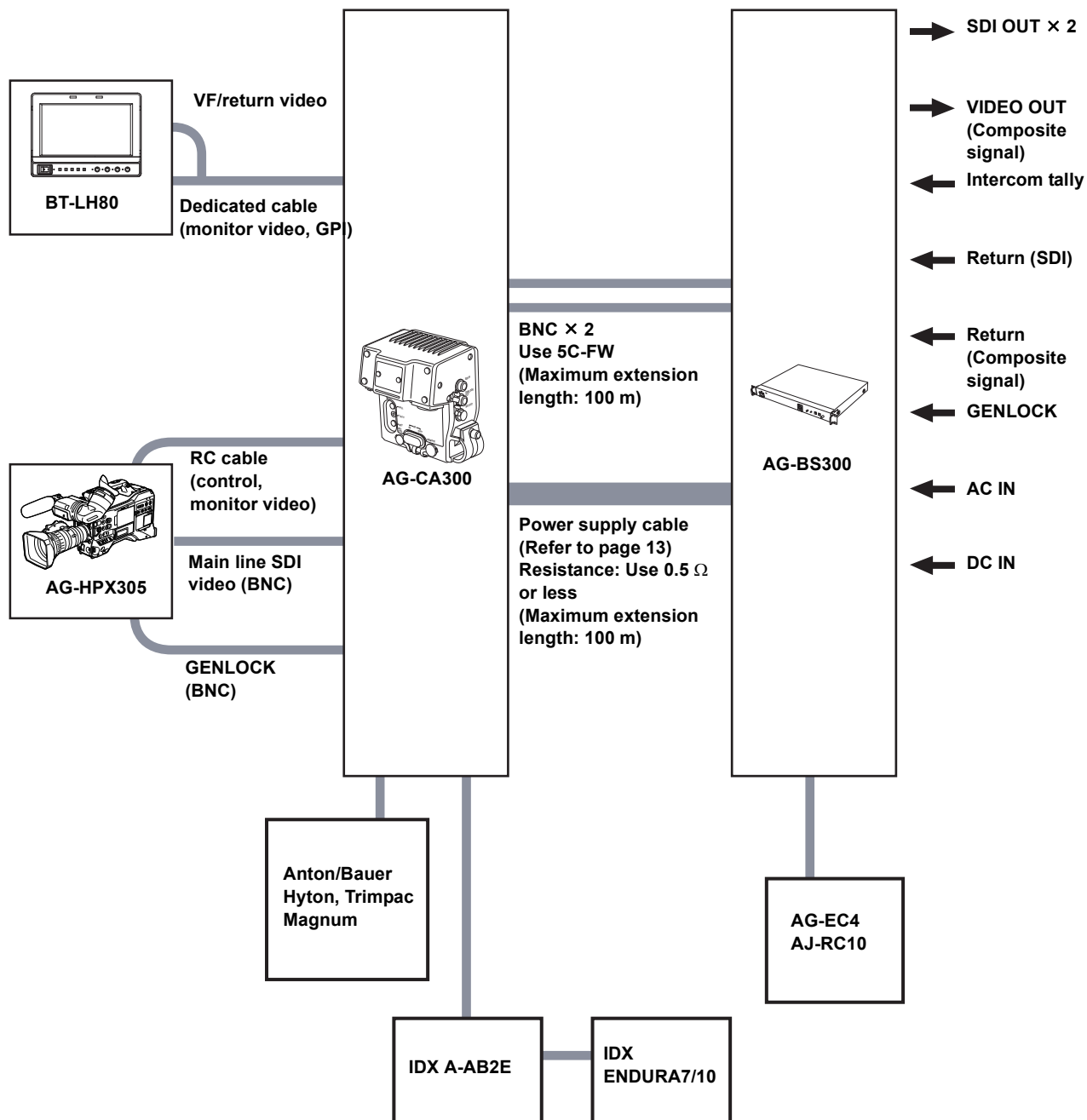
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Take caution with the following when connecting the camcorder and this unit.

- Use the recommended power cable. (Refer to page 13)
- Use the 5C-FW for the BNC cable. Maximum extension distance of 100 m cannot be achieved if any other cable is used.
- When confirming the RET signal on the camera adapter by inputting the RET signal into this unit, the image on the viewfinder (LCD monitor) may be interrupted for an instant at the moment the RET\_SW on the camera adapter is pressed.
- Only a dynamic microphone can be used as the microphone for INCOM.
- Control of the camcorder will be mostly performed from the remote control unit when the remote control unit (AG-EC4 or AJ-RC10) is connected to this unit and enabled. (However, POWER ON/OFF, AWB/ABB, MODE CHECK, and REC START/STOP can also be operated from the camcorder.)
- Operation by the camcorder will be enabled when the remote control unit (AG-EC4 or AJ-RC10) is connected to this unit and disabled.
- When this unit is used together with the AG-CA300 and the camcorder, connect the GENLOCK OUT terminal of the AG-CA300 with the GENLOCK IN terminal of the camcorder using the BNC cable. Also set the GENLOCK item to [EXT] on the camcorder using the GENLOCK menu.
- There is only one line of video signal sent from the camera adapter to this unit. It is not possible to view the viewfinder image of the camcorder via the video signal output terminal of this unit.
- Video signal is not output from the video signal output terminal of this unit when the power is supplied only to this unit.
- Turn on the power of the remote control unit after turning on the power for this unit when the remote control unit is connected to this unit.
- Turn on the power after connecting the power supply cable and BNC cables.
- Turn the power off once, and turn it back on after changing the video format on the camcorder.
- INCOM becomes disconnected temporarily when the video format is changed on the camcorder.
- When the video format on the camcorder is 720P, there will be misalignment of  $\pm 1$  field between the TC (time code) that is superimposed on the SDI signal and the video signal, even if the composite signal is input to the GENLOCK IN signal terminal of this unit, since the 720P signal is a field unit signal.



# System Configuration Diagram

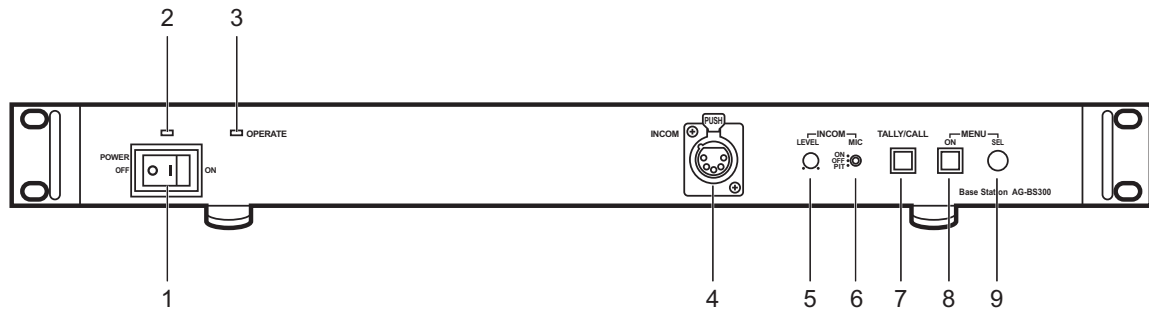


**<NOTE>**

Other compatible camera: AJ-HPX3700, AJ-HPX3000, AJ-HPX2700, AJ-HPX2100, AG-HPX555, AJ-HDX900, AJ-HDX400A

# Part Names and Functions

## Front Panel



### 1. POWER switch

### 2. POWER lamp

This indicates that the main power supply (AC power supply) is turned on.

### 3. OPERATE lamp

This indicates that this unit is operating.  
This is turned on while this unit is operating with an external DC input.  
This will flash when the fan motor in this unit is stopped.

### 4. INCOM headset connector

Connect the headset for the intercom.

### 5. INCOM volume level potentiometer

This is a potentiometer to adjust the volume level of the intercom.

### 6. MIC switch

This is the ON/OFF switch for the intercom microphone.  
There are three positions: ON/OFF/PTT.  
(PTT: Microphone is turned on only while pushed.)

### 7. TALLY lamp/CALL switch

This is turned on while the TALLY signal is input to this unit.  
The TALLY lamp on the camera adapter will be turned on while this is pressed.  
TALLY lamp on the AG-CA300 and the TALLY lamp connected to the CA\_VF terminal of the AG-CA300 will be turned on when the TALLY signal is input to this unit or when the connected camcorder is recording, and there will be no change even if the CALL switch is pressed.

<Note>

The viewfinder connected to the VF terminal of the camcorder will not turn on even if the CALL switch is pressed.

### 8. MENU switch

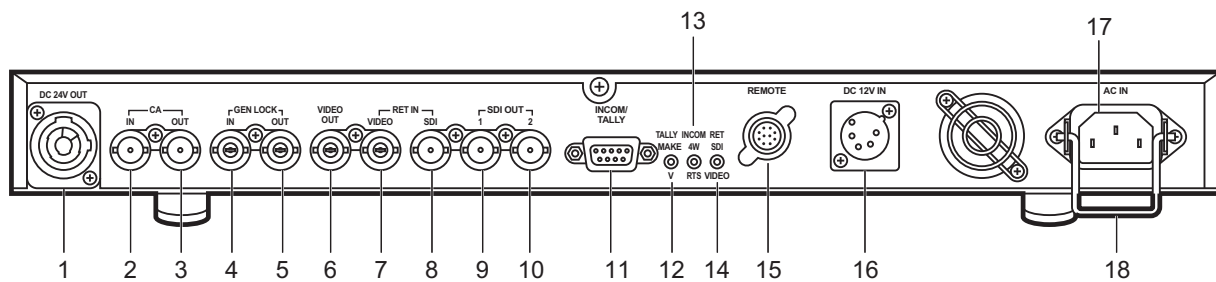
This is a switch to open the MENU to change the setting of this unit.

### 9. SELECT switch

This is a switch to select the settings of this unit from the MENU of this unit.

## Part Names and Functions (continued)

### Rear Panel



#### 1. DC 24V OUT terminal

DC 24 V is output while this unit is operating with the AC power supply.  
This will supply DC power supply to the camera adapter (AG-CA300).  
24 V is not output when this unit is operating with the DC power supply.

#### 2. CA IN terminal

Connect the BNC cable from the camera adapter.  
Connect with the BS OUT connector of the camera adapter (AG-CA300) using the BNC cable (5C-FW).

#### 3. CA OUT terminal

Connect the BNC cable from the camera adapter.  
Connect with the BS IN connector of the camera adapter (AG-CA300) using the BNC cable (5C-FW).

#### 4. GENLOCK IN terminal

This is a reference signal input terminal to lock this unit with an external sync.

#### 5. GENLOCK OUT terminal

This is a loop through with the GENLOCK IN connector.

#### 6. VIDEO OUT terminal

Composite signal is output.  
Color phase will be also locked to the reference signal when the BS signal (burst sync) is input as a reference signal into the GENLOCK IN connector.  
The composite signal is not output from the VIDEO OUT terminal when the video format for the camcorder is set to 1080-23.98PsF.

#### 7. RET IN VIDEO signal input terminal

This is an input terminal for the return video signal from this unit to the camera adapter (AG-CA300).  
This will input a composite signal.  
Video cannot be viewed on the CRT VF when the video format for the camcorder is set to 1080-23.98PsF.

#### 8. RET IN SDI signal input terminal

This is an input terminal for the return video signal from this unit to the camera adapter (AG-CA300).  
This will input a SDI signal.  
Video cannot be viewed on the CRT VF when the video format for the camcorder is set to 1080-23.98PsF.

#### 9. SDI 1 output terminal

This will output the SDI signal that was output from the camcorder.

#### 10. SDI 2 output terminal

This will output the SDI signal that was output from the camcorder.  
Same signal as the signal output from SDI 1 output terminal is output.

#### 11. INCOM/TALLY terminal

This is a connector between this unit and the external intercom system and TALLY system.

#### 12. TALLY selection switch

This is a switch to match with the TALLY system connected to the INCOM/TALLY terminal.  
Select either contact or supplied voltage. For supplied voltage: compatible with 12 V or less.

Connect to the power outlet using the attached power supply cable.

MAKE: Select this when the TALLY input signal is a contact  
V: Select this when the TALLY input signal is a supplied voltage

#### 13. INCOM selection switch

This is a switch to match with the INCOM system connected to the INCOM/TALLY terminal.  
Select either 4-wire format or RTS format.

4W: Select this when it is a 4-wire format  
RTS: Select this when it is a RTS format

#### 14. RET signal selection switch

This is a switch to select the return signal from this unit to the camera adapter (AG-CA300).  
Select the RET signal supplied to either the RET IN VIDEO signal input terminal or the RET IN SDI signal input terminal.

VIDEO: Selects the VIDEO signal supplied to the RET IN VIDEO signal input terminal.

SDI: Selects the SDI signal supplied to the RET IN SDI signal input terminal.

#### 15. REMOTE terminal

Connect the AG-EC4 (optional) or the AJ-RC10 (optional), and controls the camcorder.

## Part Names and Functions (continued)

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### 16. DC 12V IN terminal

External DC power supply is connected when operating this unit with DC. Use a power supply with a capacity of DC 12 V 3 A or higher.

This unit will go into DC operation status when the DC power supplying connector is connected to this terminal, and DC 24 V will not be output from the DC 24 V OUT terminal.

### 17. AC IN terminal

This is a terminal to supply AC power supply to this unit.

This is connected to the power outlet using the attached power supply cable.

### 18. Cable hook

This is used to prevent the power supply cable slipping off.

## Setting up the Camcorder

---

Setup the camcorder to configure a system by connecting this unit with the AG-CA300 and the camcorder. For the setting of the camcorder, refer to the operating instructions of the camcorder.

### Setting of the video format

Set the video signal format output from the SDI output terminal of the camcorder using the menu operation of the camcorder.

### Setting of the GENLOCK MODE

Set the GENLOCK MODE of the camcorder to GENLOCK: EXT using the menu operation of the camcorder.

### Setting of the GENLOCK PHASE

Set the GL PHASE of the camcorder to GL PHASE: HD SDI or GL PHASE: SDI using the menu operation of the camcorder.

### Setting of the CRT VF

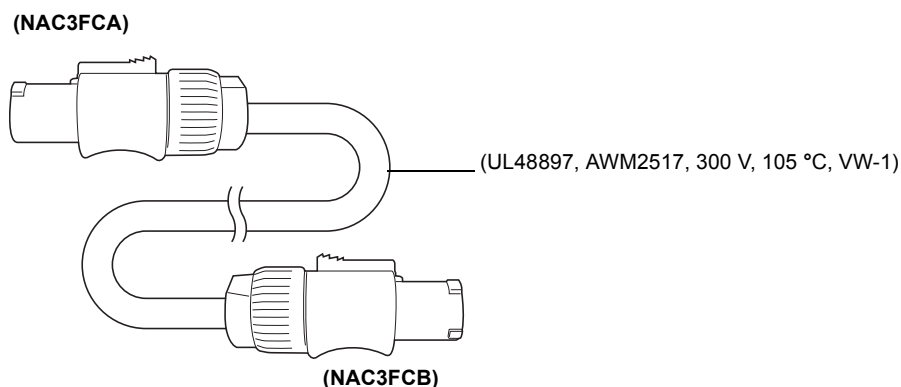
Set the VF TYPE to be used on the camcorder using the menu operation of the camcorder.

Return video (RET video) from this unit will be SD video only when it is set to VF TYPE: SD.

# About the Power Supply Cable

Use the power supply cable with the following specifications with this unit.

The extension length of 100 m cannot be maintained between the base station (AG-BS300) and the camera adapter (AG-CA300) especially if the resistance value is larger than the following specifications.



## 1) Real cross-section area of the conductor

3.5 mm<sup>2</sup>

## 2) Structure

Number of wires: 4

Cross-section area of each wire: 1.75 mm<sup>2</sup>

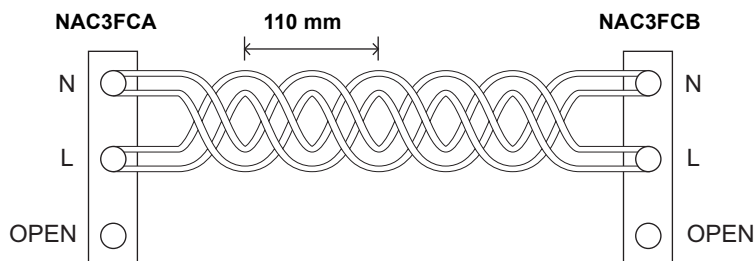
## 3) Withstanding voltage

AC 60 V or higher

Real applied voltage: DC 24 V

## 4) Stranding pitch

Stranding pitch for 4 wires: 110 mm



## 5) Finished external dimensions

10 mm or less

## 6) End connector part numbers

AG-CA300 side: NAC3FCA

(Manufacturer: Neutrik)

AG-BS300 side: NAC3FCB

(Manufacturer: Neutrik)

## 7) Recommended cables

DC50V10-NACAB-SC (50 m)

DC100V10-NACAB-SC (100 m)

(UL48897, AWM2517, 300 V, 105 °C, VW-1, Manufacturer: Canare Electric)

# Menu Display

This unit can display the setting menu on the VIDEO OUT terminal, the SDI OUT1 terminal, and the SDI OUT2 terminal on the rear panel.

## Basic structure of the menu

Menu setting is operated with the MENU switch and the SEL switch (JOG dial button).

Menu is divided into main menu, and submenu and setting items. Set data is written and saved into the internal memory of this unit.

## Basic operation of menu display

- 1 Press the MENU switch (page 10) on the front panel for 3 seconds. Setting menu will be displayed on the VIDEO OUT terminal, the SDI OUT1 terminal, and the SDI OUT2 terminal.**

There are three setting menus, SYSTEM, GENLOCK, and DOWN CONV.

```
*** MAIN MENU ***
→ SYSTEM
  GENLOCK
  DOWN CON
```

- 2 To open the submenu, turn the SEL switch aligning the arrow with SYSTEM, GENLOCK, or DOWN CONV and then press the SEL switch.**

```
*** MAIN MENU ***
  SYSTEM
→ GENLOCK
  DOWN CON
```

- 3 Items to set will flash when the arrow ( ) is moved to the item to set by turning the SEL switch, and pressing the SEL switch. Change the setting of the item by turning the SEL switch.**

**To increase the setting value:**

Turn the SEL switch clockwise.

**To decrease the setting value:**

Turn the SEL switch counter-clockwise.

**To switch between ON/OFF of the setting value:**

Turn the SEL switch clockwise to set ON. Turn the SEL switch counter-clockwise to set OFF.

```
*** GENLOCK ***
→ GENLOCK          :EXT
  H PHASE COARSE(HD) :+ 28
  H PHASE FINE(HD)   :+ 28
  SC PHASE COARSE(SD):
  SC PHASE FINE(SD)  :
  H PHASE COARSE(SD) :+ 28
  H PHASE FINE(SD)   :+ 28
```

- 4 Press the SEL switch.**

Flashing of the setting value will stop, and the setting value will be set.

- 5 Repeat steps 3 and 4 to continue to change other settings on the same page.**

- 6 To return to the SYSTEM, the GENLOCK, or the DOWN CONV screen from the submenu screen, move the arrow to the menu title by turning the SEL switch, and press the SEL switch.**

```
→ *** GENLOCK ***
  GENLOCK          :EXT
  H PHASE COARSE(HD) :+ 28
  H PHASE FINE(HD)   :+ 28
  SC PHASE COARSE(SD):
  SC PHASE FINE(SD)  :
  H PHASE COARSE(SD) :+ 28
  H PHASE FINE(SD)   :+ 28
```

```
*** MAIN MENU ***
→ SYSTEM
  GENLOCK
  DOWN CON
```

- 7 Press the MENU switch once the setting is completed.**

It will exit from the menu setting mode, and return to the normal operation mode.

# List of Menus

## <SYSTEM>

Item / Data Saved	Variable Range	Note
<b>FORMAT</b>	1080-59.94i 1080-23.98PsF 1080-24PsF 1080-50i	Displays the format used in this unit. Status display only. This cannot be changed by the menu.
<b>CAMERA VF</b>	<u>HD</u> SD	Set the format of the CRT viewfinder used on the camcorder. <b>HD:</b> HD format viewfinder <b>SD:</b> SD format viewfinder

## <GENLOCK>

Item / Data Saved	Variable Range	Note
<b>GL PHASE</b>	<u>HD SDI</u> COMPOSIT	Select the output signal to lock the phase to the signal input to the GEN LOCK IN terminal. <b>HD SDI:</b> HD SDI signal will be locked to the GENLOCK input. Start position for the video of the down convert signal will be delayed approximately 90 lines. <b>COMPOSIT:</b> Down convert signal will be locked to the GENLOCK input. Start position for the video of the HD SDI output signal will be forwarded approximately 90 lines.  <Note> Set the GL PHASE in the camcorder to HD SDI.
<b>H PHASE COARSE(SD)</b>	+15 <u>0</u> -15	When the system is composed in SD format, coarse adjustment of the phase focusing for the horizontal synchronization is performed.
<b>H PHASE FINE(SD)</b>	+30 <u>0</u> -30	When the system is composed in SD format, fine adjustment of the phase focusing for the horizontal synchronization is performed.
<b>SC PHASE COARSE(SD)</b>	<u>0</u> 3	Coarse adjustment of sub-carrier phase of the VIDEO output terminal is performed.
<b>SC PHASE FINE(SD)</b>	+75 <u>0</u> -75	Fine adjustment of sub-carrier phase of the VIDEO output terminal is performed.
<b>H PHASE COARSE(HD)</b>	+60 <u>0</u> -60	When the system is composed in HD format, coarse adjustment of the phase focusing for the horizontal synchronization is performed.
<b>H PHASE FINE(HD)</b>	+100 <u>0</u> -100	When the system is composed in HD format, fine adjustment of the phase focusing for the horizontal synchronization is performed.

## List of Menus (continued)

### <DOWNCON SETTING>

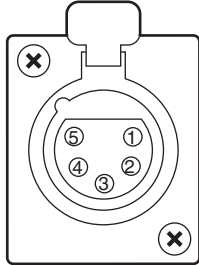
Item / Data Saved	Variable Range	Note
<b>MODE</b>	<u>SQUEEZE</u> S-CROP LT-BOX	Set the mode for the composite signal output from the VIDEO OUT terminal. <b>SQUEEZE:</b> Video will be squeezed horizontally. <b>S-CROP:</b> Video will be cropped on both sides. <b>LT-BOX:</b> Video will be squeezed vertically.
<b>DETAIL</b>	<u>ON</u> OFF	Set the ON/OFF of the detail function of the composite signal output from the VIDEO OUT terminal. <b>ON:</b> Detail signal will be added. <b>OFF:</b> Detail signal will not be added.  Detail component that was set during the HD signal processing of the camcorder is included in the composite signal output from the VIDEO OUT terminal. This setting will superimpose the detail signal of the composite signal output from the VIDEO OUT terminal on the signal from the camcorder. Detail signal that was added during the HD signal processing cannot be turned OFF even if this setting is turned OFF.
<b>DETAIL LEVEL</b>	0 <u>8</u> 31	Set the level of the detail component for the composite signal output from the VIDEO OUT terminal.
<b>CORING</b>	0 <u>5</u> 15	Set the level of the noise elimination level included in the detail component for the composite signal output from the VIDEO OUT terminal.
<b>2D LPF</b>	<u>ON</u> OFF	Perform the setting of the 2D low-pass filter which will reduce the cross-color. <b>ON:</b> Reduction of cross-color is performed. <b>OFF:</b> Reduction of cross-color is not performed.
<b>SET UP</b>	0% 7.5%	Perform the setting of the setup level against the composite signal output from the VIDEO OUT terminal. (Only for 1080/59.94i) <b>0%:</b> Setup level is 0 %. <b>7.5%:</b> Setup level is 7.5 %. Setup level will become 0 % when the system frequency is 50 Hz.



# Connector Signals

INCOM	
1	GND
2	INCOM TALK
3	GND
4	INCOM RECEIVE
5	INCOM RECEIVE

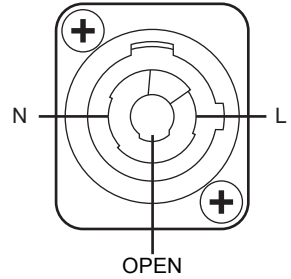
Panasonic part number  
K1AB105H0003  
Manufacturer part number  
HA16PRH-5S  
(Hirose Denki)



DC OUT	
L	DC24 V
N	GND

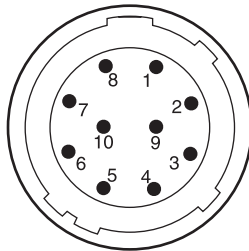
Panasonic part number  
K2A93H000005  
Manufacturer part number  
NAC3MPB  
(Neutrik)

Cable side connector  
Manufacturer part number  
NAC3FCB  
(Neutrik)



REMOTE	
1	CAM DATA (H)
2	CAM DATA (C)
3	CAM CONT (H)
4	CAM CONT (C)
5	ECU ON
6	VIDEO
7	VIDEO_GND
8	
9	+12 V
10	GND

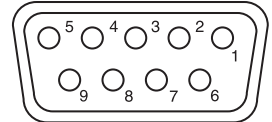
Panasonic part number  
K1AY110JA001  
Manufacturer part number  
HR10A-10R-10SC(71)  
(Hirose Denki)  
Cable side connector  
Manufacturer part number  
HR10A-10P-10PC(73)  
(Hirose Denki)



INCOM/TALLY	
1	INCOM IN (C)
2	INCOM GND
3	INCOM OUT (C)
4	GND
5	G TALLY IN
6	INCOM IN (H)
7	INCOM OUT (H)
8	GND
9	R TALLY IN

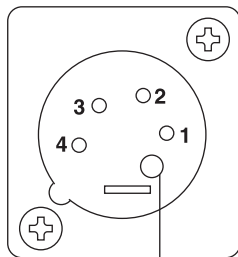
Panasonic part number  
K1FB109B0081  
Manufacturer part number  
RDED-9S-LNA(55)  
(Hirose Denki)

Cable side connector  
Manufacturer part number  
HDEB-9PF(05)  
(Hirose Denki)



DC IN	
1	GND
2	
3	
4	+12 V

Panasonic part number  
K1AA104H0038  
Manufacturer part number  
HA16RX-4P(SW1)(76)  
(Hirose Denki)



Switch

# Specifications

## [General]

Input: AC 100 - 240 V, 50/60 Hz, 1.6 A - 0.6 A DC 12 V, 1.1 A Output: DC 24 V, 4 A DC 13 V, 0.3 A
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 indicates safety information.

Operation ambient temperature:

0 °C - 40 °C

Storage temperature:

-20 °C - +60 °C

Operation ambient humidity:

10 % - 85 % (relative humidity)

Weight:

5 kg

External dimensions (width × height × depth):

484 mm × 44 mm × 330 mm

(Including rack adapter, excluding protrusions such as leg base)

## [Power Supply Unit]

AC IN

: AC inlet × 1

: AC 100 - 240 V, 50/60 Hz, 120 W

DC IN

: XLR 4 pin × 1, with SW

: DC 12 V (DC 11 - 17 V), 25 W

DC OUT

: DC OUT connector × 1

: DC 24 V, maximum 4 A

## [Transfer Unit]

DC power supply transfer (this unit ⇔ AG-CA300G)

: DC OUT connector × 1

: Maximum 100 m

(When using conductor cross-section area of 3.5 mm<sup>2</sup> or larger)

Signal transfer (this unit ⇔ AG-CA300G)

: Maximum 100 m

(When using the 5C-FW BNC cable)

## [Analog Signal Input Unit]

GENLOCK IN

: BNC × 1

HD: Analog 3-value sync, ±0.3 V, 75 Ω

SD: Black burst, 75 Ω

RET IN VIDEO

: BNC × 1

: VBS, 1 Vp-p, 75 Ω

: VS, 1 Vp-p, 75 Ω

## [Analog Signal Output Unit]

VIDEO OUT

: BNC × 1

: VBS, 1 Vp-p, 75 Ω

GENLOCK OUT (GENLOCK IN and loop through)

: BNC × 1

## [Digital Signal Input Unit]

RET IN SDI

: BNC × 1

: SDI 0.8 Vp-p, 75 Ω

CA IN

: BNC × 1

## [Digital Signal Output Unit]

SDI OUT1

: BNC × 1

: SDI 0.8 Vp-p, 75 Ω

: For HD SDI, compliant to SMPTE292M/299M Standard

: For SD SDI, compliant to SMPTE259M-C/272M-A

ITU-R.BT656-4 standards

SDI OUT2

: BNC × 1

: SDI, 0.8 Vp-p, 75 Ω

: For HD SDI, compliant to SMPTE292M/299M Standard

: For SD SDI, compliant to SMPTE259M-C/272M-A

ITU-R.BT656-4 standards

CA OUT

: BNC × 1

## [Control Unit]

REMOTE

10 pin round × 1

## [External Device Connection Unit]

INCOM/TALLY

9 pin, D-sub × 1

## [Intercom Unit]

INCOM

: 4-wire format 0 dBm (600 Ω balanced)

: RTS format 1 Vp-p (200 Ω balanced)

TALLY

: Switchable between supplied voltage and contact

: DC 12 V maximum for supplied voltage

Weight and dimensions when shown are approximately.  
Specifications are subject to change without notice.

## Information on Disposal for Users of Waste Electrical & Electronic Equipment (private households)



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

For proper treatment, recovery and recycling, please take these products to designated collection points, where they will be accepted on a free of charge basis. Alternatively, in some countries you may be able to return your products to your local retailer upon the purchase of an equivalent new product.

Disposing of this product correctly will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest designated collection point.

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

### For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

### Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union.

If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

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Emergency after hour parts orders Tel: 800-334-4881

e-mail: PBTSparts@us.panasonic.com

TECHNICAL SUPPORT: Emergency 24 Hour Service Tel: 800-222-0741

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