ADVC 3000

Advanced Digital Video Converter

User Manual

canopus

grass valley

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Please observe the following cautions when using this product. If you have any questions regarding the method of usage, the descriptions herein, or any other concerns, please contact Canopus Technical Support.

DANGER

The following conditions indicate the potential for serious bodily injury or loss of life.

Health precautions

In rare cases, flashing lights or stimulation from the bright light of a computer display or TV monitor may trigger temporary epileptic seizures or loss of consciousness. It is believed that even individuals who have never experienced such symptoms may be susceptible. If you or close relatives have experienced any of these symptoms, consult a doctor before using this product.

Do not use in environments requiring a high degree of reliability and safety

This product is not to be used in medical devices or life support systems. The characteristics of this product is not suited for use with such systems.

Protect against static electricity

An electrostatic discharge may damage components of this product. Do not directly touch any of the connectors.
Static electricity can be generated on clothing and on people. Before handling the product, discharge static electricity from your body by touching a grounded metal surface.

Do not disassemble

Do not remove the cover or modify the Product. Fire, electric shock or malfunction may result. For internal inspection or repair, please contact your system integrator or Canopus directly.

Do not operate at other than the specified voltage

Do not operate at other than the specified voltages of AC 100-240V. Operation at other than the rated voltage may result in fire or malfunction.

Do not operate with other than the specified power supply

Do not operate with other than the specified power cord, or with a car power supply. Such operation may result in fire or malfunction.

Handle the power cord carefully

Do not place heavy objects on top of the cord, or place it near hot objects. Doing so may damage the cord and result in fire, electrical shock, or malfunction. Altering the cord, or excessively bending or pulling the cord may result in fire or electrical shock. If the cord is damaged, please contact your local retail outlet or Canopus directly.

CAUTION

The following conditions indicate the potential for bodily harm, damage to hardware or loss of data.

Do not pull the power cord when disconnecting from electrical outlet

When disconnecting the power cord, pull on the plug, not the cord itself. Pulling on the cord can damage the cord and may result in fire or electric shock.

Do not touch the power cord with wet hands

Do not disconnect or plug in the power cord when your hands are wet. Contact with water may result in electric shock, fire or damage.

Do not setup in areas subject to heat

Do not setup in an area exposed to direct sunlight or near a heating apparatus. The heat can accumulate, causing burns, fire or damage. Also, the unit may become deformed or change color.

Only setup using the prescribed method

Do not setup in a manner other than prescribed. Do not use while wrapped in cloth or plastic. Heat can accumulate, causing burns, fire or damage.

If product will not be used for an extended period

If this product will not be used for an extended period of time, disconnect the power cord from the electrical outlet.

Do not block the ventilation holes

Do not use the ADVC3000 covered with a cloth or in an ill-ventilated room.
Covering the vent may cause heat inside of the product resulting in fire or product malfunction.
Confirm the enough space around the ventilation holes when mounting this unit on a rack.

Precautions for use of the power cord

The supplied power cord are for exclusive use of this product. Do not operate the product with other power cord or in other combinations.

FCC Notice

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.

CE Notice

WARNING

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Declaration of Conformity

According to FCC Part 15

Responsible Party Name: Canopus Corporation

Address: 711 Charcot Avenue San Jose, CA 95131

Telephone: 408-954-4500

Declares that product Model: ADVC3000

Complies with Part 15 of the FCC Rules.

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2. The description and specifications of this product are subject to future change without notice.
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About the Documentation

This document is the ADVC3000 User Manual.
Information not listed in this document may be listed elsewhere.
In cases where there is a difference between a description in this document and an actual operation method, the actual operation method takes precedence.

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Chapter 1
Introduction

This chapter introduces topics you should know prior to setting up the ADVC3000. Before you using the ADVC3000, read this chapter to ensure a trouble-free setup.

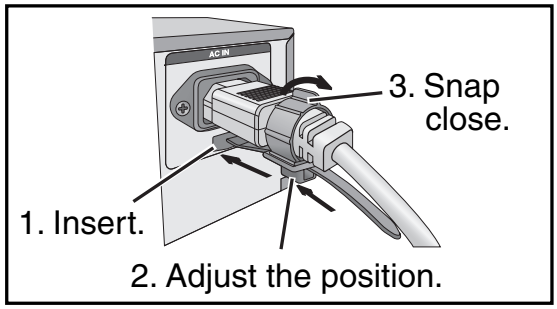
- Introduction
- Features of ADVC3000

1 Introduction

1-1. Package contents

Please verify that the following items are included in the ADVC3000 package. If any of the components are missing, please contact Canopus Customer Support.

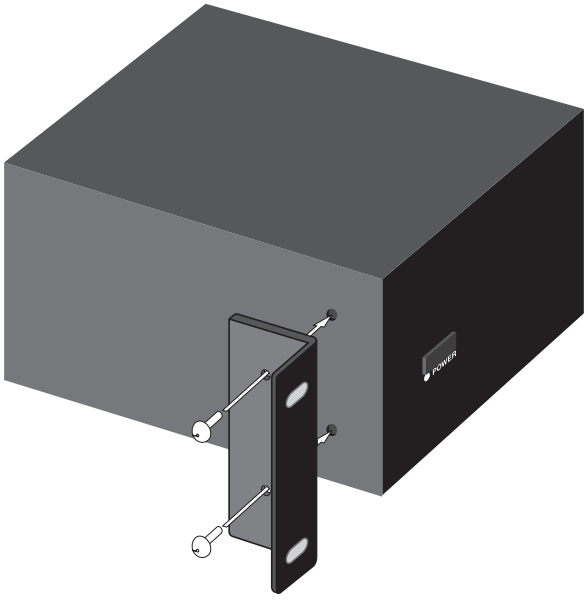
- 1 x ADVC3000 unit
- 1 x Power cord
- 1 x Power cord clamp
  (to prevent the power cord from accidentally pulling out)



- 1 x DV cable [6 pin - 4 pin]
- 2 x Rack-mount brackets
- 4 x Attachment screws
- 1 x ADVC3000 User Manual (this document)

When mounting the ADVC3000 on a rack:

1. Use a Phillips-head screwdriver to remove the four rubber feet from the bottom of the unit.
2. Attach the rack-mount bracket to the ADVC3000 unit with the screws provided.



1-2. Customer Support

For questions regarding hardware setup and usage, please contact your local Canopus office, distributor, or the store where you have purchased this product.

1-3. Canopus web-site

Including ADVC3000, the latest company information is announced at our website *http://www.canopus.com/*. The latest drivers, utilities, product manuals, FAQs, etc. are also available at our website.

1-4. Online user registration

You can register your ADVC3000 at the Canopus website.
http://www.canopus.com/support/supportcenter.php

1-5. Limitations

• Limitations on the nonstandard signal

While the ADVC3000 can convert the signals output by game consoles, there is a possibility that some software will be unable to synchronize some video and audio signals.

* In order to capture the nonstandard signal, such as one from a game console without audio noise, enable the “108 DVout frame sync”. In this instance, frame-skip or frame-hold will occur.

• Limitations on the ADVC3000 connection

Before you connect(or disconnect) your ADVC3000 to(or from) a PC, ensure that the PC has been powered off.

• Limitations on connecting your ADVC3000 to Windows 2000 PC through IEEE1394 interface (OHCI)

When the ADVC3000 is operating in NTSC mode, the DV frame rate being output from the OHCI driver is markedly slower than the standard frame rate. Therefore, glitches in both the frame hold and time-code can occur regularly while the DV output signal is being converted to an analog signal. This phenomenon does not occur, however, when the signal is input through OHCI from the ADVC3000.

2 Features of ADVC3000

■ High-specification video converter for professional use

The ADVC3000 is a converter designed to be used with professional VCR to convert Analog Component/SD-SDI to DV and vice versa. This unit enables the conversion of the data from Betacam, Digital Betacam, etc., to DV for use with nonlinear editing systems. Uncompressed 4:2:2 is used for Component-SDI conversion.

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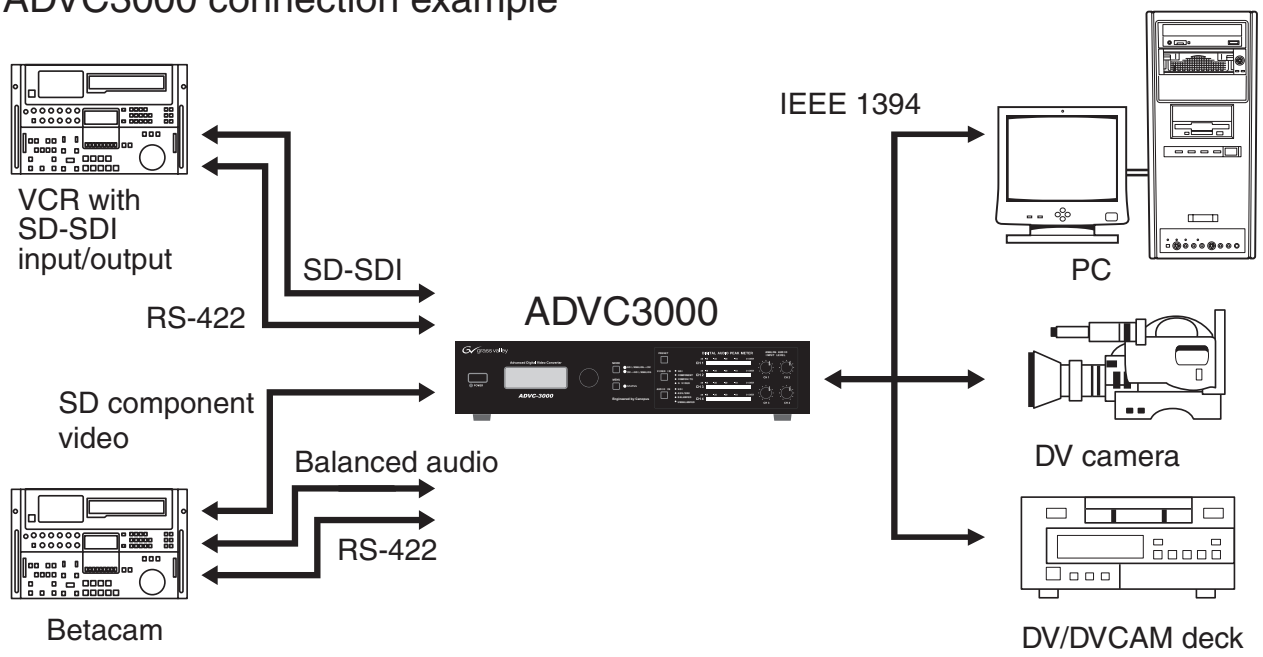
ADVC3000 connection example



■ DV to RS-422A conversion-driven VCR control

The ADVC3000 features DV to RS-422A conversion-driven VCR control. Its Perfect Sync technology (patent pending) results in precise synchronization without frame skipping. Using DV editing software, the ADVC3000 can import data from a wide range of professional VCRs. With two systems of input/output terminals, the integrated system connecting the Betacam and the Digital Betacam simultaneously can be established.

■ Professional specifications adaptable to a variety of studio uses

Equipped with TC input/output, ADVC3000 can perform conversion using LTC, DVITC and DV time code in any direction. ADVC3000 is compatible with 4ch audio and can realize the conversion of the balanced audio, embedded audio, AES, EBU and DV in any direction. ADVC3000 also has a Sync Generator (Black Burst output) function, thus it can be introduced to a variety of studio/video systems.

■ Easy-to-use input source switching

With control buttons for switching the input source and peak meters on the easy-to-access front panel, ADVC3000 enables easy settings with the help of the LCD display.

■ High audio/video synchronism: “Locked Audio”

The ADVC3000 uses a “locked audio function” to digitize the audio signal by synchronizing it precisely with the speed of the video signal. This function enables the easy conversion of long duration content.

■ Versatility with NTSC/PAL

As well as NTSC, which is the format used in Japan and US, PAL format, which is more common in European and other countries, can also be selected.

*NTSC-PAL (SECAM) cannot be converted.

■ 2U rack-mount size

The ADVC3000, as a 19-inch 2U rack mountable unit, to EIA standard, includes full specifications in a compact body. In addition, the ADVC3000, a stand-alone unit, does not need a PC.

*The rack-mount bracket and the screws are provided with the unit.

Chapter 2
Basic Operations

This chapter explains the basics of the ADVC3000, such as part names, functions, etc.

- Part names and functions
- Connecting devices
- Menu setting operations

1 Part names and functions

1-1. ADVC3000 front panel

The front panel of the ADVC3000 unit has the following controllers and indicators.

Select dial

Turn the Select dial to choose the menu items, and press it to confrim.

MODE button

Refer to page 15 for details.

MODE indicator

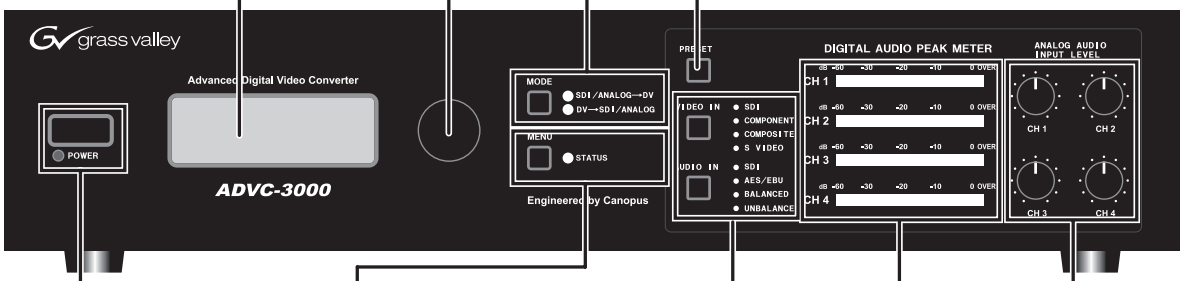
Displays the currently selected operation mode.

PRESET button

Each time you press the button, preset 1 to 4 is recalled. (Refer to page 33 for details.)

LCD

Displays input/output status and setting menu.



POWER switch

Turn the ADVC3000 unit on and off.

POWER LED

Video input select button [VIDEO IN] Audio input select button [AUDIO IN]

Chooses the video and audio input format.

Audio level meter [DIGITAL AUDIO PEAK METER]

Displays the peak level of the audio currently output.

MENU button

Switches between Main screen and Menu screen.
In sub-menu, press this button to return to the main menu.

Video input indicator Audio input indicator

Displays the video and audio input format currently chosen.

Audio Input level dial (CH1 to CH4) [ANALOG AUDIO INPUT LEVEL]

Adjusts the analog audio level input to CH1 to CH4.
Turn clockwise to increase the input level.

STATUS LED

Refer to page 15 for details.

*The position of the average audio level is where the dial clicks when you turn it.

• MODE button

Used to switch on the operation mode of the ADVC3000. Pressing the button will activate the Encode operation and Decode operation alternately.
When "SDI/ANALOG → DV" LED illuminates, ADVC3000 converts input SDI or analog signal to DV signal (DV Encode). When "DV → SDI/ANALOG" LED illuminates, it converts input DV signal to SDI signal and analog signal (DV Decode).

• STATUS LED

Displays the following status.

Off:..... 9-pin remote control is disabled.
Lit green:..... 9-pin remote control is enabled.
Lit red:..... 9-pin remote control has been set to enabled, but remote control is prevented by a communication error. Check that the 9-pin remote cable is correctly connected, that the connected device's power is ON, and that the remote control setting has been enabled on the connected device.
Flashing red: ... A major ADVC3000 operation error has occurred, or several signals required for operation can't be detected. Check the error status display screen. Input the required signals correctly or change the settings for ADVC3000.

* For more information on error status, see "Error status screen" (p.25).

1-2. ADVC3000 rear panel

The rear panel of the ADVC3000 has the following connectors.

S-VIDEO

Input and output connectors for S-Video signal.

COMPONENT VIDEO

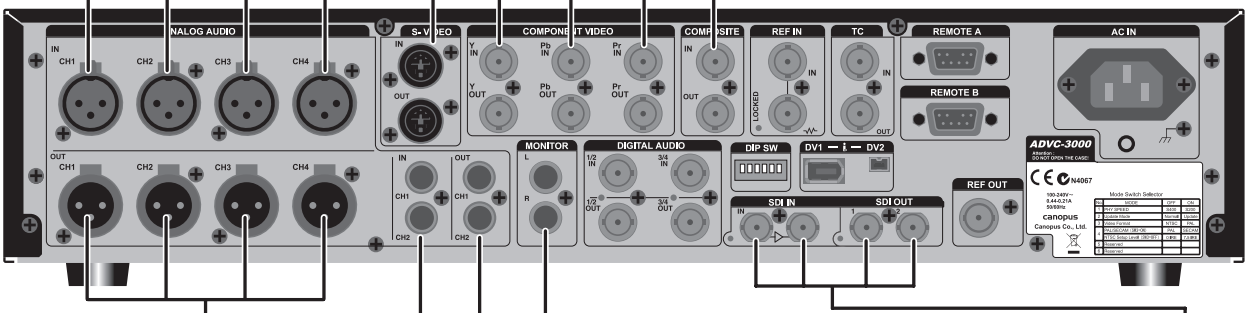
Input and output connectors for component video signal.

ANALOG AUDIO IN (Balanced input)

Input connectors for balanced audio signal.

COMPOSITE

Input and output connectors for composite video signal.



ANALOG AUDIO OUT (Balanced output)

Output connectors for balanced audio signal.

MONITOR

Output connectors for the monitor and speakers. CH1 to CH4 audio can be chosen to be mixed and output to L and R.

ANALOG AUDIO IN (Unbalanced input)

Input connectors for unbalanced audio signal.

ANALOG AUDIO OUT (Unbalanced output)

Output connectors for unbalanced audio signal.

SDI IN/OUT

Input and output connectors for digial video and embedded audio signals. When SDI input is detected, the LED next to the SDI input connector lights red. During SDI output, the LED next to the SDI output connector lights red.

REF IN

Input connectors for receiving a reference signal (sync signal).The LED lights red when reference signal is detected and external sync setting is REF IN. The REF connector has through output. If a cable is not connected to the output connector, it has a 75 Ω automatic terminaltion.

TC

Time code input and output connectors.

REMOTE A/B

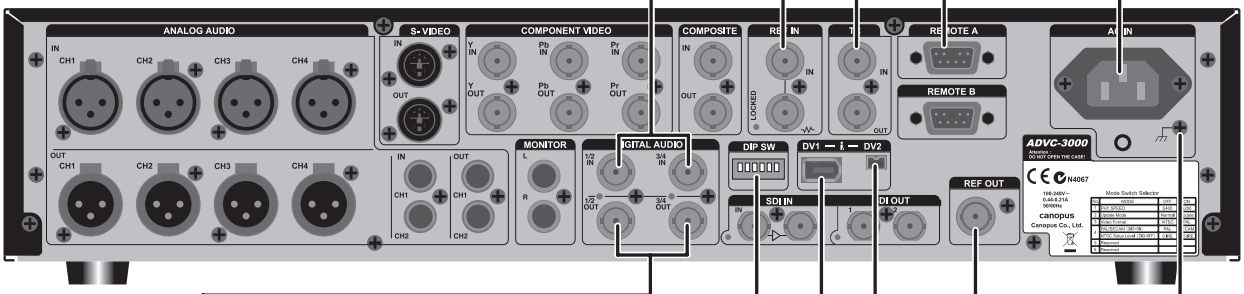
Remote control connector. Select “REMOTE A” or “REMOTE B” from the menu.

AC IN

Connect the provided power cord and then fix it with the provided power cord clamp (refer to page10).

DIGITAL AUDIO IN

Digital audio input connectors.



DIGITAL AUDIO OUT

Digital audio output connectors.

DIP switch

Refer to page 18 for details.

Earth terminal

Connect an earth wire to this terminal, if necessary.

DV1 (6-pin)

Use a DV cable to connect the ADVC3000 to a DV device or a PC. (Bus power is not supplied.)

DV2 (4-pin)

Use a DV cable to connect the ADVC3000 to a DV device or a PC.

REF OUT

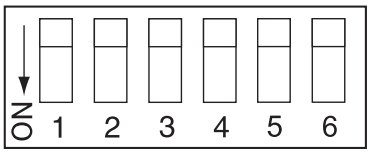
Output connector for reference signal (sync signal).

NOTES

- This unit will not work as an OHCI Hub with Canopus DV products.
- To use this unit as a Hub with OHCI devices, the application also needs to support two or more devices.

1-3. DIP switch settings

The rear panel of the ADVC3000 unit has the following DIP switches. Default SW3, SW4 settings may differ depending on the place of purchase.



No.	MODE	OFF	ON
1	PHY SPEED	S400	S200
2	Update Mode	Normal	Update
3	Video Format	NTSC	PAL
4	PAL/SECAM (When SW3 is set to ON)	PAL	SECAM
	NTSC Setup Level (When SW3 is set to OFF)	0 IRE	7.5 IRE
5	Reserved		
6	Reserved		

- **SW1: PHY Speed**
  Designates the PHY speed.
  OFF: S400 *ON: S200*
- **SW2: Update Mode**
  Used to update the internal software.
  (Set this switch to the OFF position for normal operations.)
  OFF: Normal *ON: Update*
- **SW3: Video Format**
  Designates the video signal format.
  * Enabled only when the setting in the menu option “107 video standard” is “set by DIP switch”.
  OFF: NTSC *ON: PAL*
- **SW4: PAL/SECAM (When SW3 is set to ON)**
  * Enabled only when the setting in the menu option “107 video standard” is “set by DIP switch”.
  OFF: PAL *ON: SECAM*
  : NTSC Setup Level (When SW3 is set to OFF)
  * Enabled only when the setting in the menu option “107 video standard” is “set by DIP switch”.
  OFF: 0 IRE *ON: 7.5 IRE*
- **SW5: Reserved**
  Not used. (Set this switch to the OFF position for normal operations.)
- **SW6: Reserved**
  Not used. (Set this switch to the OFF position for normal operations.)

CAUTION

- Turn off the power of ADVC3000 unit before making any changes for DIP switch settings.
- DIP switches 5 and 6 should be set to OFF. Otherwise, malfunction may occur.

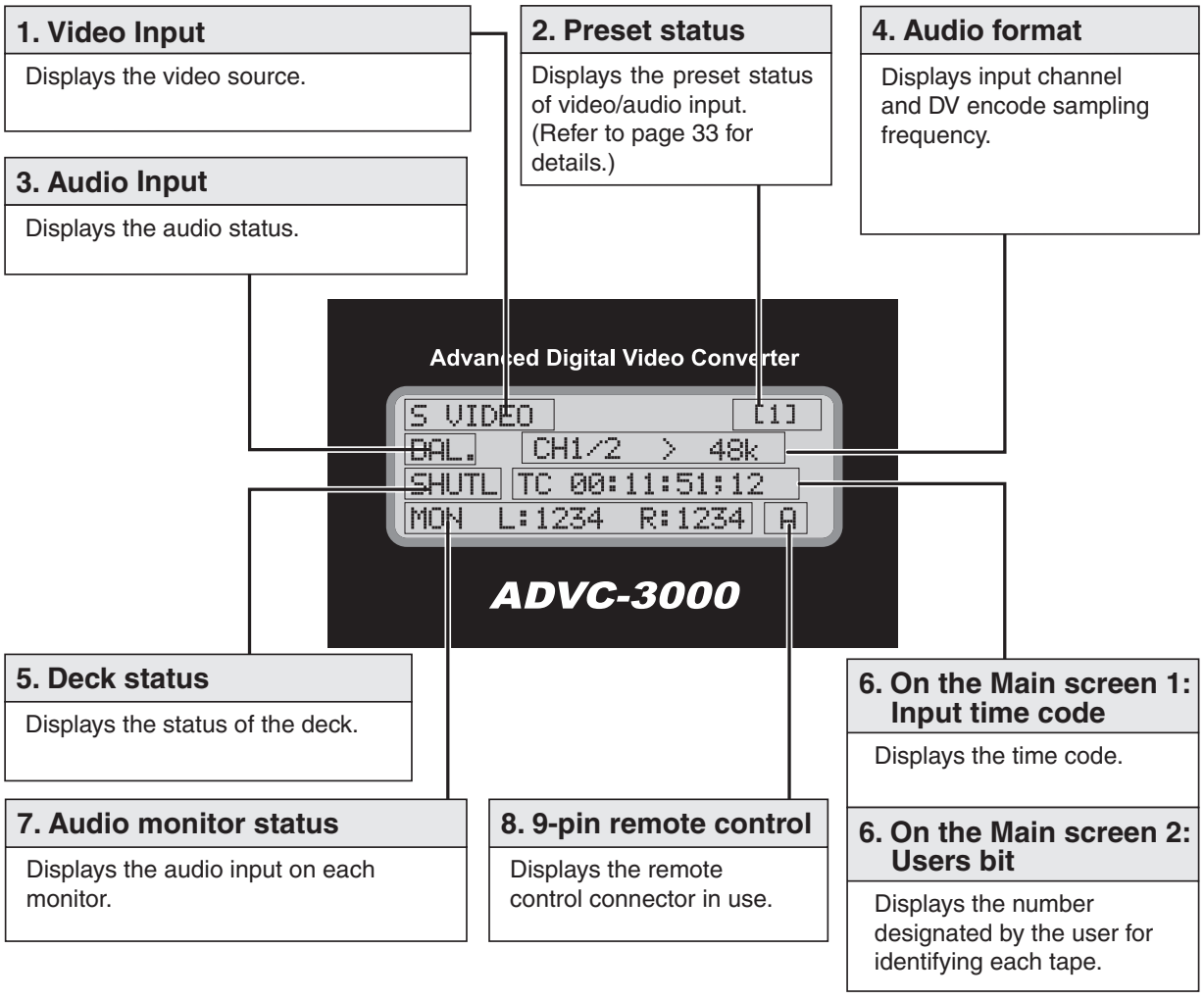
1-4. LCD screen displays

ADVC3000 has three main screens and an error status screen. Turn the Select dial to switch between the main screens and the error status screen. Pressing the MENU button displays the setting menu screen.

Main screens 1 and 2

Main screens 1 and 2 differ from each other only in the right portion of the third line (Item 6, below). This screen shows the current status of the operation.

• In the SDI/ANALOG → DV mode



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(Continued)

1. Video input

SDI.....Signal from the SDI connector is input.
COMPONENT .....Signal from the component connector is input.
S VIDEO .....Signal from the S-Video connector is input.
COMPOSITE .....Signal from the composite connector is input.
SG.....Color bar is output.

2. Preset status

Displays the preset status of video/audio input.
(Refer to page 33 for how to store and recall the settings.)

[1].....Preset 1 is selected.
[2].....Preset 2 is selected.
[3].....Preset 3 is selected.
[4].....Preset 4 is selected.
[-].....Setting other than preset 1 to 4 is selected.

3. Audio input

SDI.....Signal from the SDI input connector is input.
AES.....Signal from the digital audio input connector is input.
BAL. .....Signal from the balanced audio input connector is input.
UNBAL.....Signal from the unbalanced audio input connector is input.
SG.....1kHz test audio is output.

4. Audio format

CH 1-4 > 32 k.....Converts the input audio signal CH1 to 4 to 32kHz, 12bit, 4ch audio.
CH 1/2 > 48 k.....Converts the input audio signal CH1 and 2 to 48kHz, 16bit, 2ch audio.
CH 3/4 > 48 k.....Converts the input audio signal CH3 and 4 to 48kHz, 16bit, 2ch audio.

5. Deck status

If blank .....9-pin remote control is not in use.
NoDev .....Can’t find deck. Check cable connection.
PLAY .....Deck is playing.
PLAY*.....Deck is playing. (SERVO LOCK)
REC .....Deck is recording.
REC*.....Deck is recording. (SERVO LOCK)
F.FWD .....Deck is fast-forwarding.
REW .....Deck is rewinding.
STOP .....Deck is stopped.
PAUSE .....Deck is shuttling. (Paused)
SHUTL .....Deck is shuttling.
EJECT .....No tape in deck.

6. <u>On the Main screen 1</u>: Input time code

TC 00:00:03:22 .....For PAL/NTSC NDF (Non Drop Frame)

* A colon is used between seconds and frames as a delimiter.

TC 00:00:03;22 .....For NTSC DF (Drop Frame)

* A semicolon is used between seconds and frames as a delimiter.

TC --:--:--:-- .....No DV signal output.

* Free-run time code is used during built-in color bar output or when time code is not input.
* "T✳" is displayed if the time code set by "301 TC source" cannot be found.

<u>On the Main screen 2</u>: Users bit

UB 00 00 00 00.....The letters or numbers designated by the user are displayed.

UB -- -- -- -- .....No DV signal is output.

* "U✳" is displayed if the users bit cannot be found.

7. Audio monitor status

-----.....The channel is not monitored.

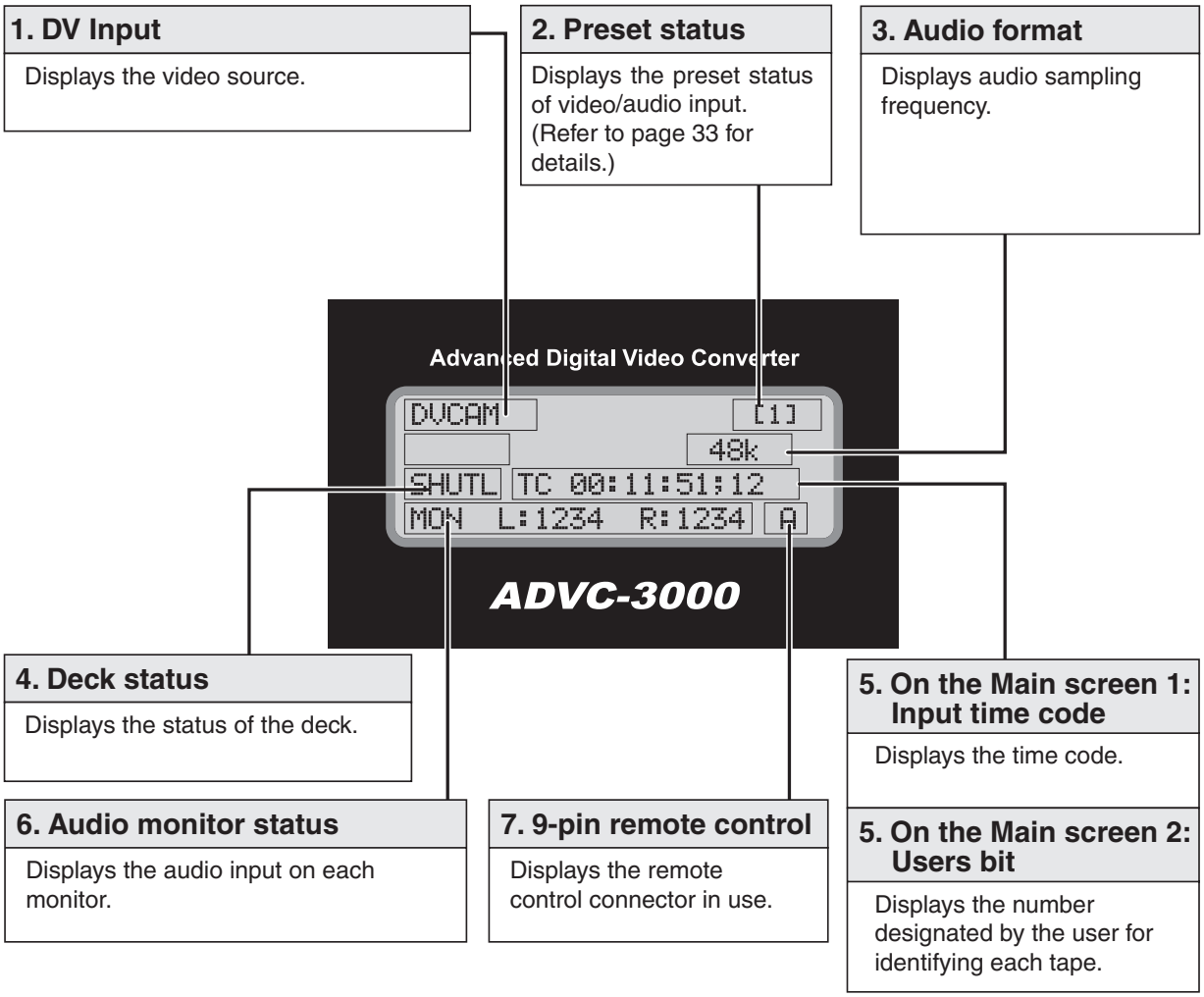
8. 9-pin remote system

A .....REMOTE A is selected.

B .....REMOTE B is selected.

If blank .....The remote connectors are disabled.

• In the DV → SDI/ANALOG mode



1. Video input

DVCAM .....DVCAM signal is input.
DV .....DV signal is input.
SG.....Color bar is output.
-----.....No DV signal is detected.

2. Preset status

Displays the preset status of video/audio input.
(Refer to page 33 for how to store and recall the settings.)

[1].....Preset 1 is selected.
[2].....Preset 2 is selected.
[3].....Preset 3 is selected.
[4].....Preset 4 is selected.
[-].....Setting other than preset 1 to 4 is selected.

3. Audio format

48 k .....DV audio signal of 48kHz, 16bit audio is input.
44 k .....DV audio signal of 44.1kHz, 16bit audio is input.
32 k .....DV audio signal of 32kHz, 16bit or 12bit audio is input.
----- .....No signal is detected.

4. Deck status

If blank .....9-pin remote control is not in use.
NoDev .....Can't find deck. Check cable connection.
PLAY .....Deck is playing.
PLAY* .....Deck is playing. (SERVO LOCK)
REC .....Deck is recording.
REC* .....Deck is recording. (SERVO LOCK)
F.FWD .....Deck is fast-forwarding.
REW .....Deck is rewinding.
STOP .....Deck is stopped.
PAUSE .....Deck is shuttling. (Paused)
SHUTL .....Deck is shuttling.
EJECT .....No tape in deck.

5. <u>On the Main screen 1</u>: Input time code

TC 00:00:03:22 .....For PAL/NTSC NDF (Non Drop Frame)
* A colon is used between seconds and frames as a delimiter.
TC 00:00:03;22 .....For NTSC DF (Drop Frame)
* A semicolon is used between seconds and frames as a delimiter.
TC --:--:--:-- .....No DV signal is detected.
* Free-run time code is used during built-in color bar output or when time code is not input.

<u>On the Main screen 2</u>: Users bit

UB 00 00 00 00 .....The letters or numbers designated by the user are displayed.
UB -- -- -- -- .....No DV signal is output.

6. Audio monitor status

----- .....The channel is not monitored.

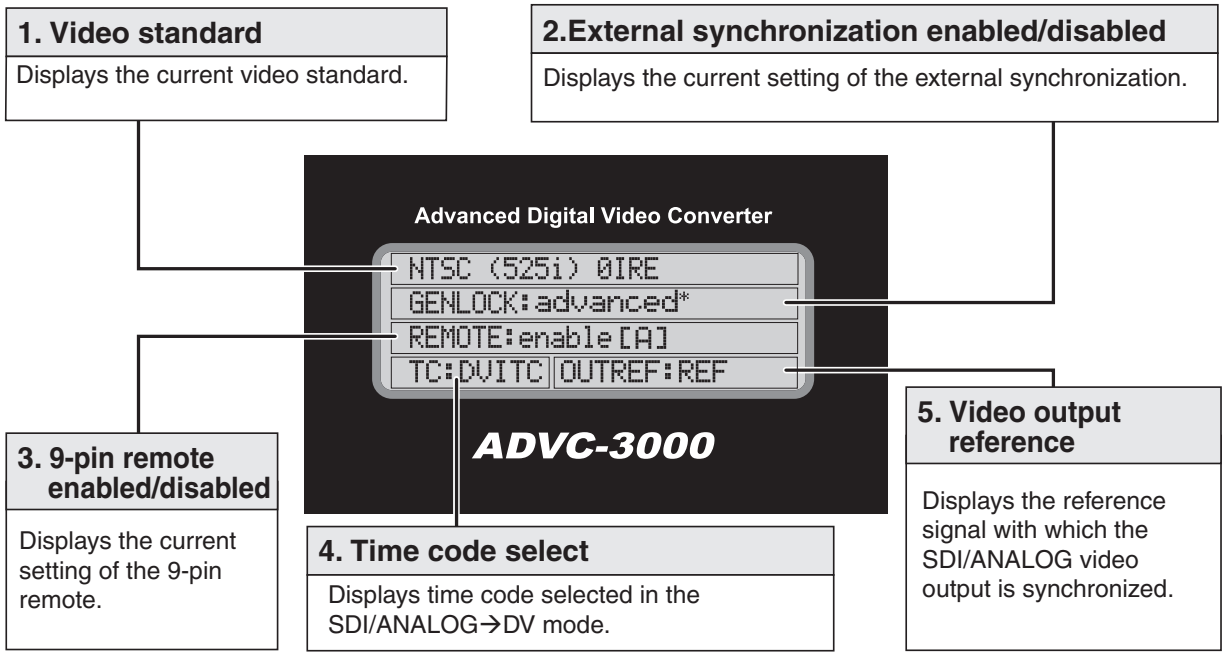
7. 9-pin remote system

A .....REMOTE A is selected.
B .....REMOTE B is selected.
If blank .....The remote connectors are disabled.

ENGLISH

Main Screen 3

This screen shows the information on the current settings.



1.Video standard

NTSC .....ADVC3000 operates in NTSC mode.
PAL .....ADVC3000 operates in PAL mode.
SECAM .....ADVC3000 operates in SECAM mode.

2. External synchronization enabled/disabled

disable .....External synchronization function is disabled.
enable .....External synchronization function is enabled.
advanced .....External synchronization function in the “perfect sync mode” is enabled.

NOTES

“advanced” setting is effective only when DV signal is output from the PC’s IEEE1394 board, 1394OHCI standard and “✳” is displayed.

3. 9-pin remote enabled/disabled

disable .....9-pin remote control function is disabled.
enable[A].....Remote control connector A is selected.
enable[B].....Remote control connector B is selected.

4. Time code select

DVITC .....ADVC3000 is acquiring the time code from DVITC of the SDI input connector.
LTC .....ADVC3000 is acquiring the time code from TC input connector.
auto.....ADVC3000 tries to acquire the time code from both DVITC of the SDI input connector and LTC and uses LTC if it is acquired and DVITC if LTC is not detected.

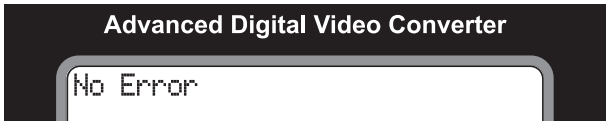
5. Video output reference

REF.....ADVC3000 is outputting the signal in synchronization with the REF signal input from the REF IN connector.
Vin.....ADVC3000 is outputting the signal in synchronization with the video signal selected by the VIDEO IN button.
DVin .....ADVC3000 is outputting the signal in synchronization with the DV-decoded video signal (only in DV→SDI/ANALOG mode).
INT .....ADVC3000 is outputting the internal SG signal (only in SG mode).

Error status screen

This screen shows error messages.

• When error is not detected



• When error is detected

COMPOSITEin/COMPONENTin/S VIDEOin/SDIin

- **In SDI/ANALOG→DV mode**
  Displayed when the video signal selected by the VIDEO IN button failed to be input. The LED does not flash, however, when “104 DVout auto-mute” is set to “off”. “SDIin” is displayed when SDI audio is selected by the AUDIO IN button but the SDI signal is not correctly recognized and LED does not flash.
- **In DV→SDI/ANALOG mode**
  Displayed when the video signal selected by the VIDEO IN button failed to be input with “401 ext. sync” set to “enable” or “advanced” (external sync is enabled) and with “404 ext. sync source” set to “input video”.

REFin

- **In SDI/ANALOG→DV mode**
  Displayed when the REF signal cannot be detected in the REF IN connector (sync cannot be locked) with “109 Vout ref. select” set to “REF”.
- **In DV→SDI/ANALOG mode**
  Displayed when the REF signal cannot be detected in the REF IN connector (sync cannot be locked) with “401 ext. sync” set to “enable” or “advanced” (external sync is enabled) and with “404 ext. sync source” set to “REF”.

AES12

AES/EBU audio input is selected for SDI/ANALOG → DV mode, but signals for CH1 and CH2 can’t be detected.

AES 34

AES/EBU audio input is selected for SDI/ANALOG → DV mode, but signals for CH3 and CH4 can’t be detected.

AES1234

AES/EBU audio input is selected for SDI/ANALOG → DV mode, but signals for CH1, CH2, CH3 and CH4 can’t be detected.

NOTES

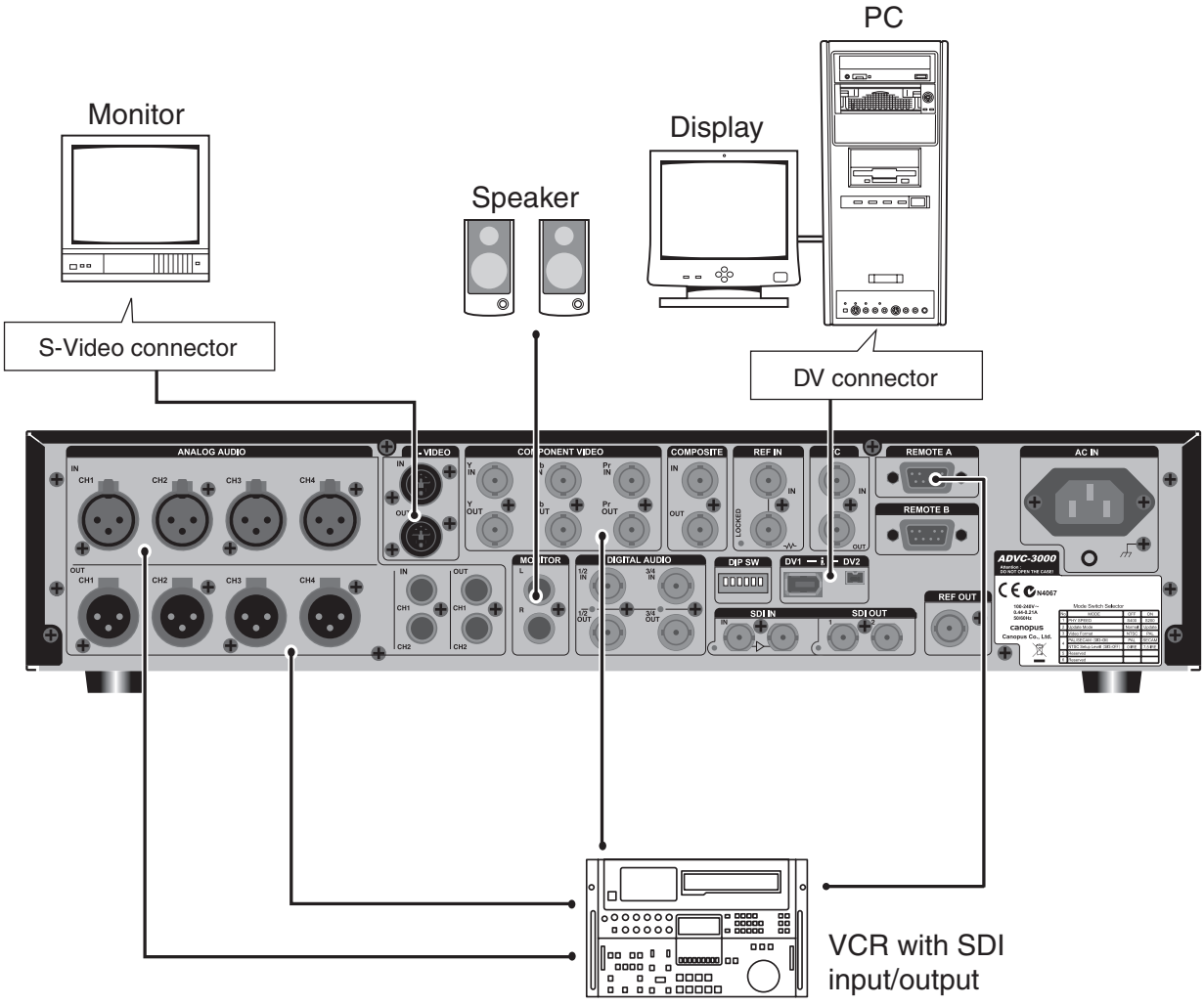
When “601 SG output” is set to ON, these messages will not be displayed.

2 Connecting devices

2-1. Connecting ADVC3000 unit

Connect the ADVC3000 unit to your system. The diagram below illustrates the typical connection of the ADVC3000.

• Standard (Connection to a VCR with component connectors and a PC)



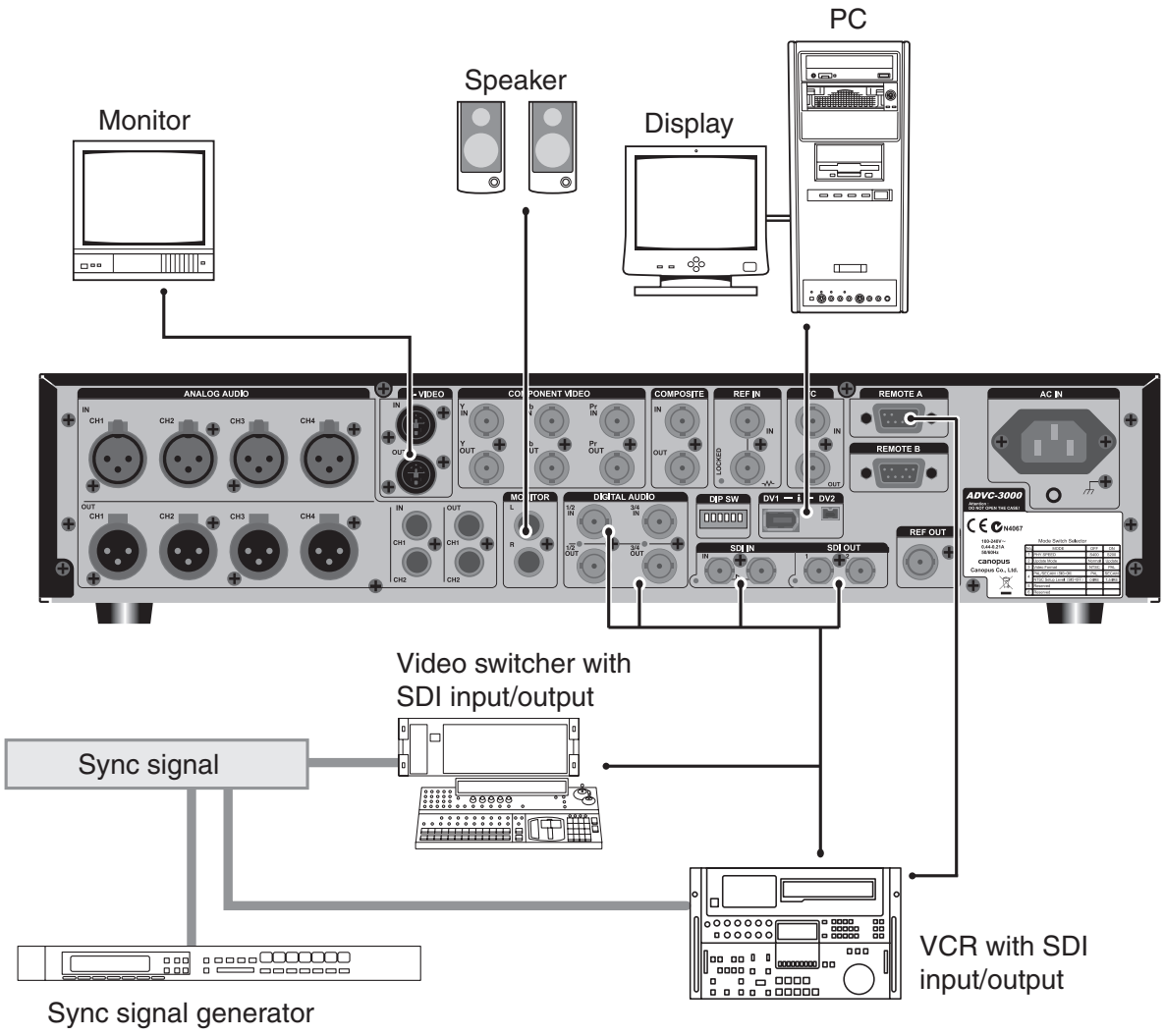
NOTES

DV editing software is required to playback or capture video files for use on a PC or to record the file data onto tape. In addition, the PC should be equipped with an IEEE1394 connector.

CAUTION

When connecting a PC to the ADVC3000 unit, make sure that the PC's power is turned off.

• System integrated (Connection to a VCR with SDI connectors and a PC)



* Analog connection (shown on page 26) and SDI connection (shown above) are possible at the same time. Input source can be selected by the VIDEO IN button and the AUDIO IN button on the front panel.

NOTES

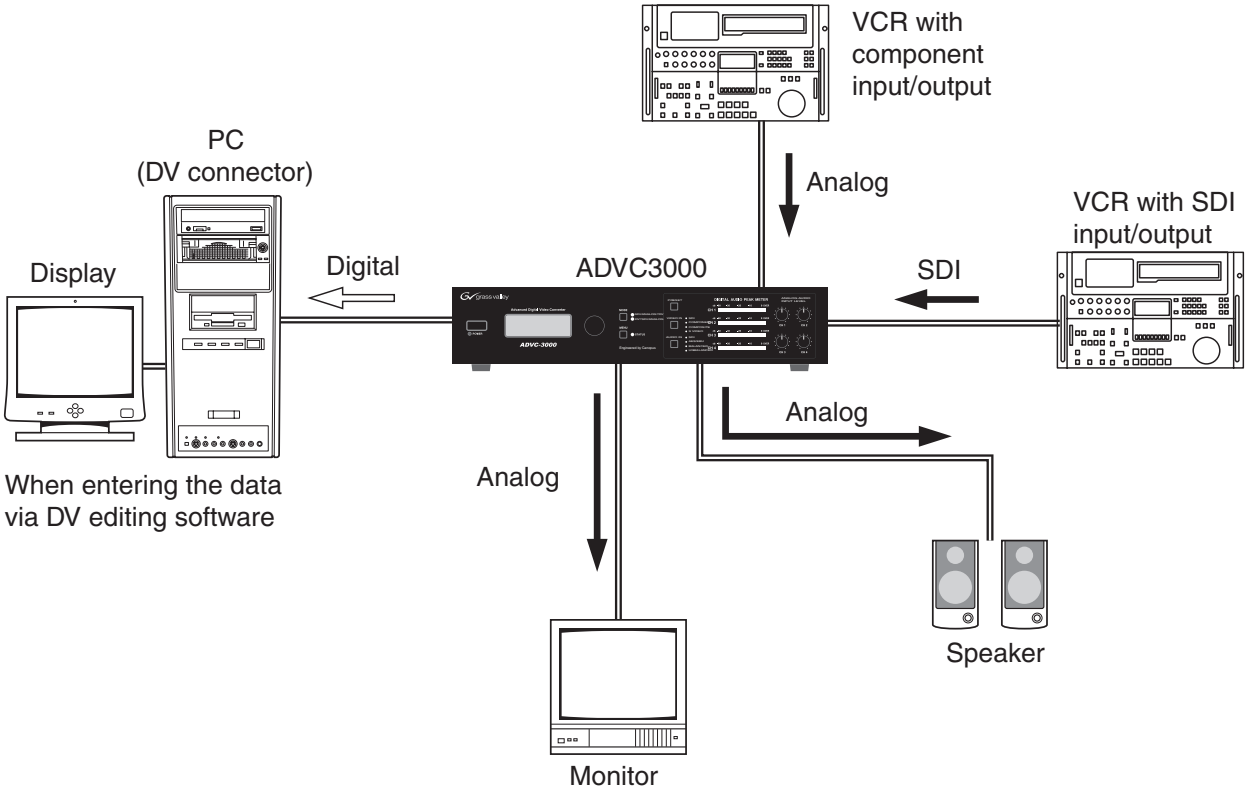
DV editing software is required to playback or capture video files for use on a PC or to record the file data onto tape. In addition, the PC should be equipped with an IEEE1394 connector.

CAUTION

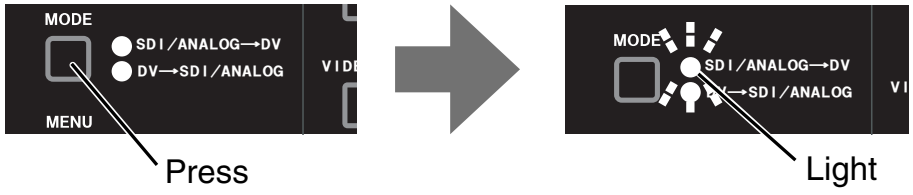
When connecting a PC to the ADVC3000 unit, make sure that the PC's power is turned off.

2-2. Importing VCR data to your PC

Import the material of the tape on VCR into a PC.



1 Press the MODE button on the front panel of the ADVC3000 to switch the mode to [SDI/ANALOG → DV].

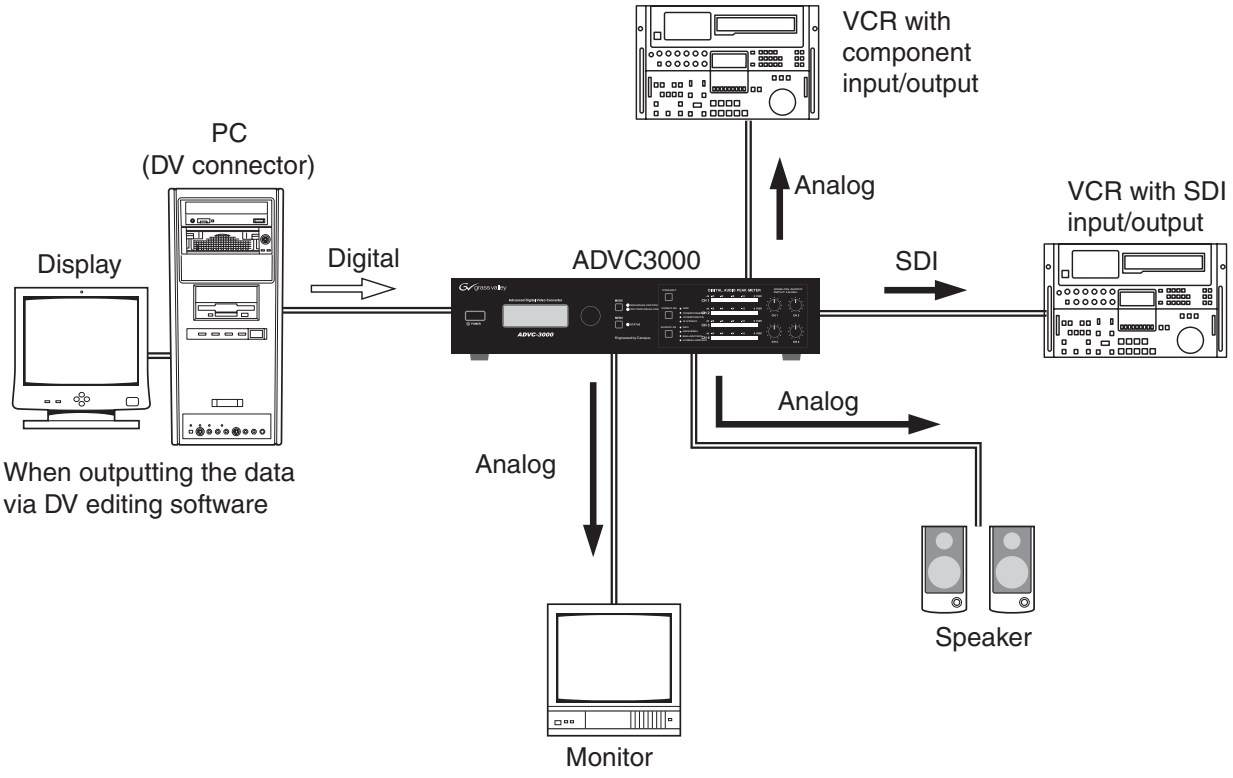


2 Capture the data by using DV editing software.

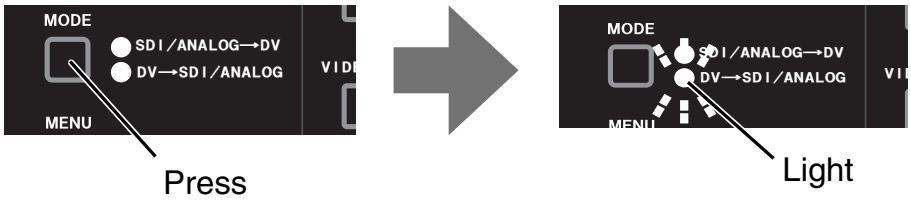
* For the operational procedure of the DV editing software, refer to the instruction manual provided with your DV editing software.

2-3. Recording PC-edited data onto a tape with VCR

Output the DV data from a PC and record it with a VCR.



1 Press the MODE button on the front panel of the ADVC3000 to switch the mode to the [DV → SDI/ANALOG].



2 Use the DV editing software to output your data.

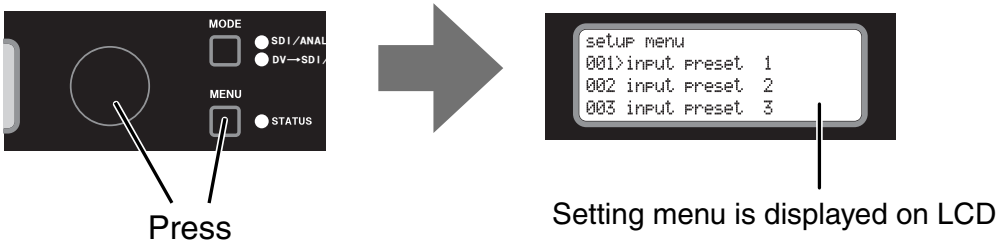
* For the operational procedure of the DV editing software, refer to the instruction manual provided with your DV editing software.

3 Use the VCR to record the data on tape.

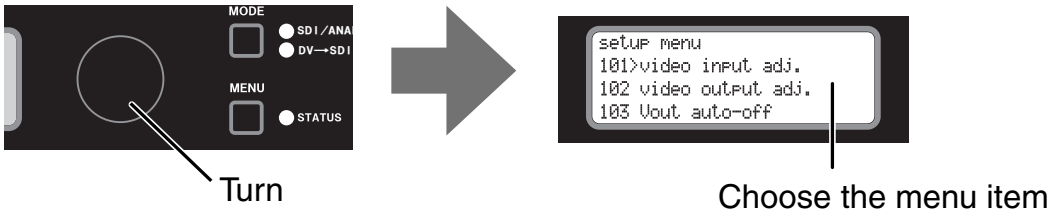
3 Menu setting operations

3-1. Menu screen operations

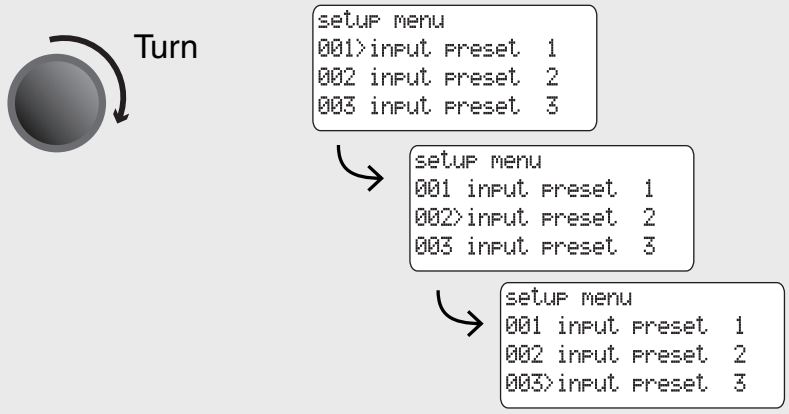
1 Press the Select dial or MENU button to go to the setting menu screen.



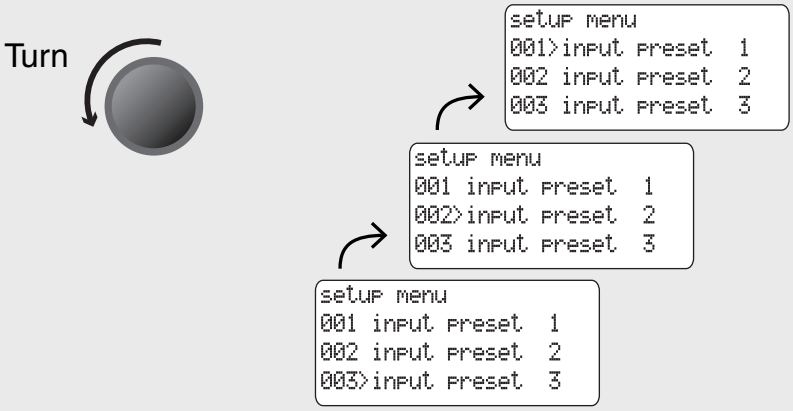
2 Turn the Select dial to choose the menu item to set.



Turn the Select dial clockwise to proceed to the setup menus.



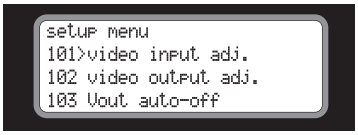
Turn the Select dial counterclockwise to go back the setting menus.



(Continued on the next page)

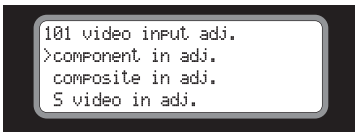
(Continued)

3 After selecting the menu item with the Select dial, turn the Select dial to change its setting. If the menu item chosen has a sub-menu, press the Select dial to display the sub-menu.



The item has been chosen in step 2.

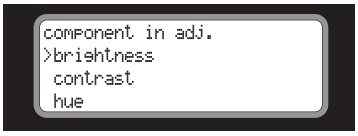
Press the Select dial.



Turn the Select dial to choose the item.

Press the Select dial.

Sub-menu



Turn the Select dial to choose the item.

Press the Select dial.

Turn the Select dial to choose the setting.

*Press the MENU button if you want to cancel the setting.

Press the Select dial.

The setting has been changed.

4 Press the MENU button to return to the main menu.

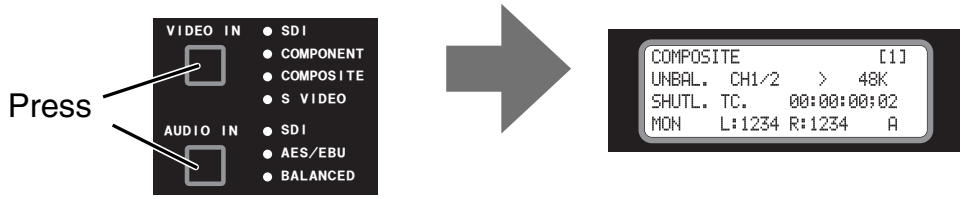
3-2. Presetting the video/audio input

4 combinations of video and audio input* can be stored in “001 input preset 1” to “004 input preset 4” and can be recalled by one press of the button.

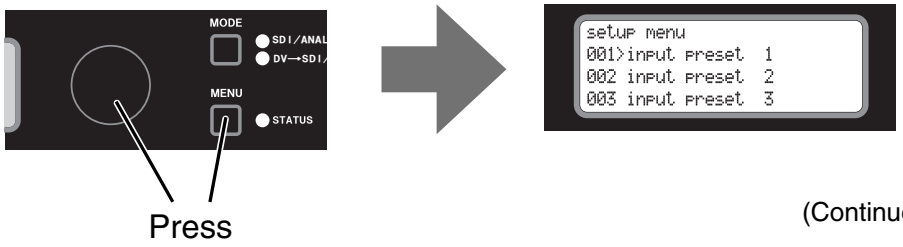
* In addition to video and audio input, remote A and B setting (501 9P remote) and DV audio format (201 DV audio encode) setting can be stored in preset 1 to 4.

Storing the settings

1 Press the VIDEO IN button and AUDIO IN button to choose the desired input settings.



2 Press the Select dial, or MENU button.



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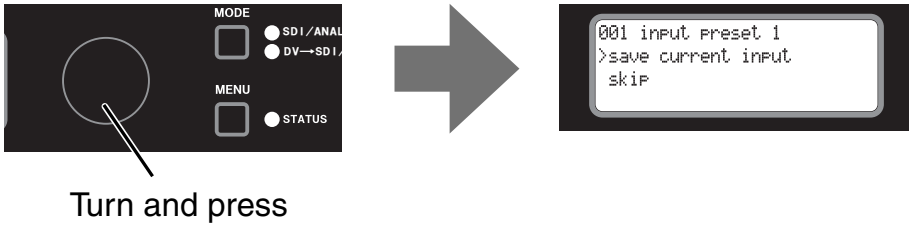
(Continued)

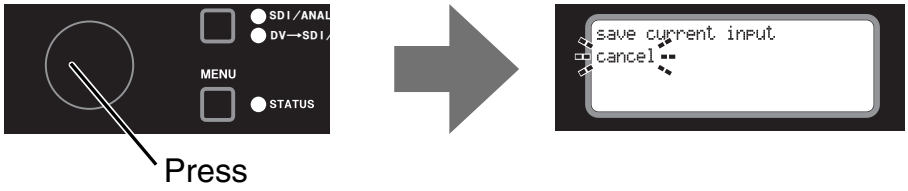
3 Turn the Select dial to choose the desired number (001 to 004) and press the Select dial.



Turn and press

- You can make settings so that only some preset items will be recalled (unnecessary items can be skipped).
  1. Turn the Select dial to choose “skip” and press the Select dial.
  2. Confirm “on” is selected and press the Select dial to set the SKIP function.
     Choose “off” when you want to cancel the SKIP function.

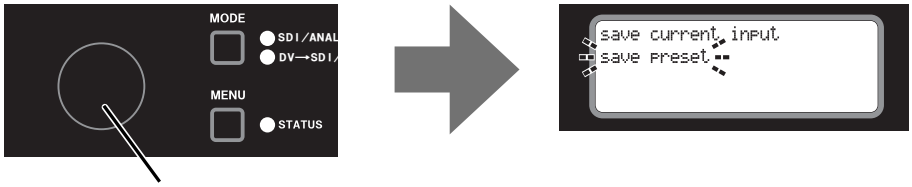
4 Confirm “save current input” is selected and press the Select dial.



Press

- When you want to go back to step 3, press the Select dial when “cancel” is chosen.

5 Turn the Select dial to display “save preset” and press the Select dial.



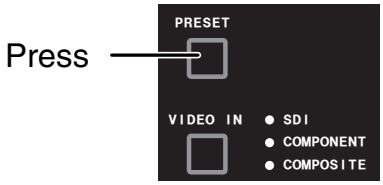
Turn and press

The setting is stored and the screen at the step 3 is displayed.

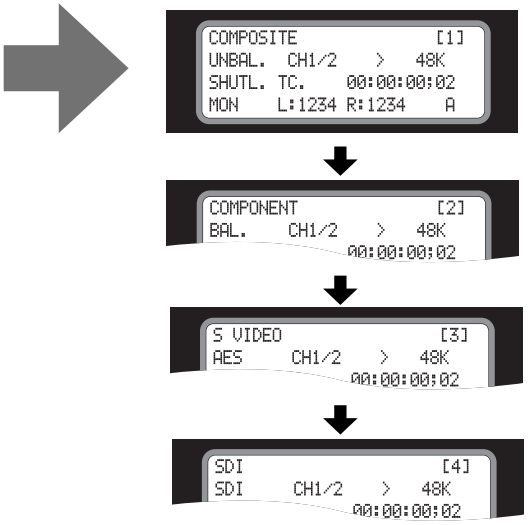
- Repeat steps 2 to 5 to store another settings.

Recalling the settings

Press the PRESET button.



Each time you press the button, settings 1 to 4 are recalled in turn.



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3-3. Setting parameters

001 input preset 1
002 input preset 2
003 input preset 3
004 input preset 4

Stores 4 combinations of video and audio input. Each time you press the PRESET button, preset 1 to 4 is recalled in turn. (Refer to page 33 for details.)

Video/audio input preset

LCD display	
Example: Preset 1 setup menu 001>input preset 1 002 input preset 2 003 input preset 3	Selects the preset to be stored.
Sub-menu	
001 input preset 1 >save current input skip	Stores the current preset.
001 input preset 1 save current input >skip	Selects whether the preset is recalled or skipped when the PRESET button is pressed. off: To be recalled when the PRESET button is pressed. on: To be skipped when the PRESET button is pressed.

101 video input adj.

Adjusts the video quality of the input video.

Video input adjustment settings

* According to the settings of the video standard or video input, some menu items may not be available and do not appear in the display.

1. Select the video input and press the Select dial.

```
101 video input adj.
>component in adj.
 composite in adj.
 S video in adj.
```

2. Turn the Select dial to select the item to be adjusted from the sub-menu and press the Select dial.

Example:

```
component in adj.
>brightness
 contrast
 hue
```

* When setting the sub-menu, you cannot change settings with PRESET button, VIDEO IN button and AUDIO IN button.

Sub-menu items

brightness	Adjusts brightness of image. The smaller the value is, the darker the image is; the larger, the brighter. Set specified numerical value between 0 and 1023. (Factory default: 512)
contrast	Adjusts contrast of image. The smaller the value is, the weaker the contrast is; the larger, the stronger. Set specified numerical value between 0 and 255. (Factory default: 128)
hue	Adjusts hue of image. Taking yellow as an example, the smaller the value is, the closer to red; the larger, the closer to green. Set specified numerical value between 0 and 255. (Factory default: 128)

(Continued on the next page)

(Continued)

saturation	Adjusts color strength. The smaller the value is, the lighter the color is; the larger, the darker. You can reproduce complete gray-scale with minimum value 0 (zero). Set specified numerical value between 0 and 255. (Factory default: For composite/S video) NTSC 0 IRE: 128, 7.5 IRE: 138, PAL:128, SECAM:128 (Factory default: For component) NTSC Betacam 0 IRE:148, 7.5IRE:160, SMPTE:148, PAL:213, SECAM:213	
sharpness	Adjusts sharpness of image outline. The smaller the value is, the more blur image outline is; the larger, the sharper. Set specified numerical value between 0 and 255. (Factory default: 128)	
component level	Specifies the component level (NTSC/component only)	
	Betacam	Sets Betacam (Factory default)
	SMPTE	Sets SMPTE.
3D visual processing	Sets the effects for 3D noise reduction and 3D video processing. (NTSC only) (Available only to composite or S-video)	
	none	Disables the 3D noise reduction. (Factory default)
	3D Y/C	Enables 3D Y/C. (composite only)
	3D NR (low)	Enables low 3D noise reduction filter.
	3D NR (middle)	Enables medium 3D noise reduction filter.
	3D NR (high)	Enables high 3D noise reduction filter.
2D luma NR	Eliminates the noise on the luminance component by non-linear noise extract filter.	
	none	Disables the 2D luminance noise extract. (Factory default)
	low	Enables low 2D noise extract filter.
	middle	Enables medium 2D noise extract filter.
	high	Enables high 2D noise extract filter.

(Continued on the next page)

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2D chroma NR	Eliminates the noise on the color component by non-linear noise extract filter.	
	none	Disables the 2D chrominance noise extract. (Factory default)
	low	Enables low 2D noise extract filter.
	middle	Enables medium 2D noise extract filter.
	high	Enables high 2D noise extract filter.
black gain	Strengthens the gain in low luminance area toward luminance signal. As the setting becomes stronger, black gain becomes more emphasized. When set to [none], the “B adaptation level”, “black threshold” settings will be invalid.	
	none	Disables the black gain. (Factory default)
	low	Enables low black gain filter.
	middle	Enables medium black gain filter.
	high	Enables high black gain filter.
B adaptation level	Sets the adjustment volume for black expansion. As the adjustment volume is larger, the black gain becomes more emphasized.	
	level 1	(Factory default)
	level 2 to 4	
black threshold	Specifies the luminance level to enhance black element. The higher the value, the brighter the luminance level will be. Set specified numerical value between 0 and 255. (Factory default: 0)	
white gain	Weakens the gain in high luminance areas toward luminance signal. This option improves reproduction of gradation in damaged area that are seen as white due to high luminance. When set to [none], the “W adaptation level”, “white threshold” settings will be invalid.	
	none	Disables the white gain. (Factory default)
	low	Enables low white gain filter.
	middle	Enables medium white gain filter.
	high	Enables high white gain filter.

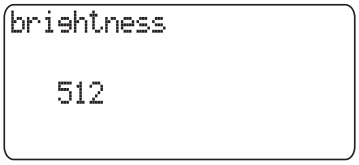
(Continued on the next page)

(Continued)

W adaptation level	Sets the adjustment volume for white gain limit. As the limit volume is larger, white gain will be adjusted to lower.	
	level 1	(Factory default)
	level 2 to 4	
white threshold	Sets the level of luminance (brightness) to which white gain will be lowered. Larger values will result in darker level settings. Set specified numerical value between 0 and 255. (Factory default: 255)	
H outline enhance	Sets the outline adjustment for horizontal direction (edge of vertical line).	
	none	Disables horizontal outline enhance. (Factory default)
	low	Enables low horizontal outline enhance.
	middle	Enables medium horizontal outline enhance.
	high	Enables high horizontal outline enhance.
V outline enhance	Sets the outline adjustment for vertical direction (edge of horizontal line).	
	none	Disables vertical outline enhance. (Factory default)
	low	Enables low vertical outline enhance.
	middle	Enables medium vertical outline enhance.
	high	Enables high vertical outline enhance.

3.Turn the Select dial to choose the setting and press the Select dial.

Example:



102 video output adj

Adjusts settings on output video.

Video output adjustment settings

LCD display	
102 video output adj >component level composite/S gain component gain	Press the Select dial to display the sub-menu. In the sub-menu, turn the Select dial to adjust the level or setting.
Sub-menu	
component level >Betacam SMPTE	Specifies the component level (NTSC only). Betacam: Specifies the component level to Betacam. (Factory default) SMPTE: Specifies the component level to SMPTE.
composite/S gain 0	Adjusts the composite/S gain. Set specified numerical value between -32 and 32. (Factory default: 0)
component gain 0	Adjusts the component gain. Set specified numerical value between -32 and 32. (Factory default: 0)

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103 Vout auto-off

Specifies the output connector that automatically stops the video output in SDI/ANALOG→DV mode. When the reference signal is not used, set this option to [auto-off] to prevent a looped connection with a connected device.

Video output auto-off settings

LCD display	
103 Vout auto-off >SDI component composite	Press the Select dial to display the sub-menu. In the sub-menu, turn the Select dial to set the item.
Sub-menu	
SDI >output auto-off	Specifies the SDI output setting. output: Does not stop outputting video signal. (Factory default) auto-off: Stops outputting video signal.
component >output auto-off	Specifies the component output setting. output: Does not stop outputting video signal. (Factory default) auto-off: Stops outputting video signal.
composite >output auto-off	Specifies the composite output setting. output: Does not stop outputting video signal. (Factory default) auto-off: Stops outputting video signal.
S video >output auto-off	Specifies the S-video output setting. output: Does not stop outputting video signal. (Factory default) auto-off: Stops outputting video signal.

104 DVout auto-mute

Selects the conditions where ADVC3000 automatically stops the DV stream in SDI/ ANALOG→DV mode.

DV output auto-off setting

LCD display	
104 DVout auto-mute >off no video signal	Does not stop DV stream.
104 DVout auto-mute off >no video signal	Stops DV stream automatically when video is not input. (Factory default)

105 DV aspect info

Specifies the aspect ratio for the DV stream that ADVC3000 outputs in SDI/ANALOG→DV mode.

DV output aspect ratio settings

LCD display	
For NTSC	
105 DV aspect info >4:3 16:9 (letter box)	Sets the DV stream in 4:3 aspect ratio. (Factory default)
105 DV aspect info 4:3 >16:9(letter box)	Sets the DV stream in16:9 aspect ratio (letter box).
105 DV aspect info 16:9(letter box) >16:9(squeeze)	Sets the DV stream in16:9 aspect ratio (squeeze).
For PAL/SECAM	
105 DV aspect info >4:3 16:9 (letter box)	Sets the DV stream in 4:3 aspect ratio. (Factory default)
105 DV aspect info 4:3 >16:9(letter box)	Sets the DV stream in16:9 aspect ratio (letter box).
105 DV aspect info 16:9(letter box) >16:9(anamorphic)	Sets the DV stream in16:9 aspect ratio (anamorphic).

* This is effective only when the DV device to which the signals are output is compatible with the aspect signal of DV standard.

106 Sout aspect info

Specifies the aspect ratio for the S-Video that ADVC3000 outputs.

S-Video output aspect ratio setting

LCD display	
106 Sout aspect info >4:3 16:9(letter box)	Sets the S-Video in 4:3 aspect ratio. (Factory default)
106 Sout aspect info 4:3 >16:9(letter box)	Sets the S-Video in16:9 aspect ratio (letter box).
106 Sout aspect info 16:9(letter box) >16:9	Sets the S-Video in16:9 aspect ratio.

* This is effective only when the video device to which the signals are output is compatible with the aspect signal of S Video standard.

107 video standard

Specifies the video standard. Once you have changed the video standard settings (or the setup level), you are prompted to turn the power off to make the new setting take effect.

Video standard settings

LCD display	
107 video standard >video standard	Press the Select dial to display the sub-menu. In the sub-menu, turn the Select dial to display the sub-menu in turn.
Sub-menu	
ENTER:set MENU:quit NTSC(525)/0IRE	Select the video standard.
	NTSC(525)/0IRE — Sets to NTSC with the setup level of 0 IRE.
	NTSC(525)/7.5IRE — Sets to NTSC with the setup level of 7.5 IRE.
	PAL(625) — Sets to PAL.
	SECAM(625) — Sets to SECAM.
	set by DIP switch — Adopts the setting by the DIP switch on the rear panel. (Factory default)

108 DVout frame sync

Enables/Disables the frame synchronizer on the output DV stream in SDI/ANALOG→DV mode.

DV out frame synchronizer setting

LCD display	
108 DVout frame sync >disable enable	Disables the frame synchronizer. (Factory default)
108 DVout frame sync disable >enable	Enables the frame synchronizer.

* Regardless of this setting, the synchronizer takes effect on the output analog video.
* The sync signal of the frame synchronizer is set in “109 Vout ref. select”.
* This option is invalid if “501 9P remote” is set to remote A or remote B.

109 Vout ref. select

Selects the source to be used as sync signal in SDI/ANALOG→DV mode.

Video output synchronizing signal settings

LCD display	
109 Vout ref. select >input video REF	Synchronizes with the chosen video signal. (Factory default)
109 Vout ref. select input video >REF	Synchronizes with the sync signal to be input through REF IN connector.

110 Vout ref. conf.

Sets the amount (in unit of 37 nanoseconds) to increase/decrease the ADVC3000 video output delay (system phase) relative to the synchronization source in SDI/ANALOG→DV mode.

Video out delay setting

LCD display	
110 Vout ref. conf. 0	Set specified numerical value between -1024 and 1023. (Factory default: 0)

111 Vout audio delay

Sets the amount (in unit of milliseconds) to increase/decrease the ADVC3000 audio output delay relative to the video output, when the external sync is enabled in SDI/ANALOG→DV mode.

*When “108 DVout frame sync” is set to disable, the DV output data is not delayed.

Audio out delay setting

LCD display	
111 Vout audio delay 0 msec	Set specified numerical value between -100 and 100 msec. (Factory default: 0)

201 DV audio encode

Specifies the DV audio format and channel in SDI/ANALOG→DV mode.

DV audio encode setting

LCD display	
201 DV audio encode >48kHz 16bit CH1/2 32kHz 12bit CH1234	Encodes audio input CH1 and CH2 in the audio format of 48kHz/16bit. (Factory default)
201 DV audio encode 48kHz 16bit CH1/2 >32kHz 12bit CH1234	Encodes audio input CH1, CH2, CH3, and CH4 in the audio format of 32kHz/12bit.
201 DV audio encode 32kHz 12bit CH1234 >48kHz 16bit CH3/4	Encodes audio input CH3 and CH4 in the audio format of 48kHz/16bit.

202 audio headroom

Specifies the input/output headroom of the Balanced audio (XLR).

Balanced audio headroom
(Reference level)

LCD display	
202 audio headroom >in headroom out headroom	Press the Select dial to display the sub-menu. In the sub-menu, turn the Select dial to move the cursor. When the Select dial is pressed, headroom of the highlighted channel is changed.

Sub-menu		
in headroom CH1>20dB CH2 20dB CH3 20dB CH4 20dB MENU:exit SAVE	Specifies the input headroom.	
	16 dB	Sets to 16 dB.
	18 dB	Sets to 18 dB. (Factory default for PAL/SECAM)
	20 dB	Sets to 20 dB. (Factory default for NTSC)
out headroom CH1>20dB CH2 20dB CH3 20dB CH4 20dB MENU:exit SAVE	Specifies the output headroom.	
	16 dB	Sets to 16 dB.
	18 dB	Sets to 18 dB. (Factory default for PAL/SECAM)
	20 dB	Sets to 20 dB. (Factory default for NTSC)

203 audio level

Specifies the input/output level of the Balanced audio (XLR).

Balanced audio input/output level

LCD display

```
203 audio level
>in Level
 out Level
```

Press the Select dial to display the sub-menu.
In the sub-menu, turn the Select dial to move the cursor, and press the Select dial again to change the input/output level of the channel that you select.

sub-menu

```
in Level
 CH1>+4dBm CH2 +4dBm
 CH3 +4dBm CH4 +4dBm
 MENU:exit     SAVE
```

Specifies the input level of the balanced audio.

+4 dBm	Sets to +4 dBm. (Factory default)
0 dBm	Sets to 0 dBm.

```
out Level
 CH1>+4dBm CH2 +4dBm
 CH3 +4dBm CH4 +4dBm
 MENU:exit     SAVE
```

Specifies the output level of the balanced audio.

+4 dBm	Sets to +4 dBm. (Factory default)
0 dBm	Sets to 0 dBm.

204 analog audio mon

Sets the mix output to the analog monitor audio output connectors.

Analog monitor audio mixing output

LCD display

```
204 analog audio mon
 L>CH1 -  CH3  -
 R  - CH2  -  CH4
 MENU:exit    SAVE
```

Turn the Select dial to select the channel and press the Select dial to turn on or off the channel.

Selected channels will be mixed and output for each L and R of the analog monitor audio output connectors.

205 600 ohm term.

Sets the termination at the balanced audio (XLR) input connector.

Balanced audio (XLR) input termination

LCD display		
205 600 ohm term. CH1>ON CH2 ON CH3 ON CH4 ON MENU:exit SAVE	Press the Select dial to move the cursor, and press the Select dial to change ON/OFF alternately.	
	ON	600Ω termination
	OFF	High impedance

301 TC source

Reads the time code from the deck in SDI/ ANALOG→DV mode.

DV encoding time code settings

LCD display	
301 TC source >DVITC LTC	Acquires time code from DVITC of the SDI input connector. *Incompatible with VITC from the analog video input connector.
301 TC source DVITC >LTC	Acquires time code from LTC of the TC input connector.
301 TC source LTC >auto	Acquires time code from DVITC in SDI input and LTC. Adopts LTC if LTC is acquired, adopts DVITC only if not. (Factory default)

302 VITC insert line

Selects the line at which DVITC is inserted in SDI output or the line at which DVITC is read from SDI input.

DVITC settings

LCD display	
302 VITC insert line >encode line 1 encode line 2 decode line	Press the Select dial to display the sub-menu. In the sub-menu, turn the Select dial to select the line.
Sub-menu	
encode line 1 >line 16 line 17	Sets the line (line 1) in which to insert DVITC in SDI output.
	line ×× — NTSC: 10 to 20 (Factory default: 16) PAL: 6 to 22 (Factory default: 19)
	off — Will not be inserted.
encode line 2 >line 18 line 19	Sets the line (line 2) in which to insert DVITC in SDI output.
	line ×× — NTSC: 10 to 20 (Factory default: 18) PAL: 6 to 22 (Factory default: 21)
	off — Will not be inserted.
decode line line 20 >auto detect	Sets the line in which to read DVITC from SDI input in SDI/ANALOG → DV mode.
	line ×× — NTSC: 10 to 20 PAL: 6 to 22
	auto detect — Detects automatically. (Factory default)

ENGLISH

401 ext. sync

External synchronization

Enables/Disables the external sync operation in DV → SDI/ANALOG mode.

LCD display	
401 ext. sync >disable enable	Disables the external sync operation. (Factory default)
401 ext. sync disable >enable	Enables the external sync operation.
401 ext. sync enable >advanced	Enables the external sync operation as “perfect sync mode”.

* The “advanced” setting is only available when DV signal is output from an IEEE1394 connector compliant with PC OHCI specifications. For supported PC operating systems, please refer to our website.
* When the ADVC3000 is connected to Canopus ADVC units through DV connectors, do not set to the “perfect sync mode”.

402 ext. sync conf.

External synchronization configuration

Sets the amount (in unit of 37 nanoseconds) to increase/decrease the ADVC3000 video output delay (system phase) relative to the external sync input in DV→SDI/ANALOG mode.

LCD display	
402 ext. sync conf. 0	Set specified numerical value between -1024 and 1023. (Factory default: 0)

403 audio out delay

Sets the amount (in unit of milliseconds) to increase/decrease the ADVC3000 audio output delay relative to the video output, when the external sync is enabled in DV→ SDI/ANALOG mode.

Audio out delay setting

LCD display	
403 audio out delay 0 msec	Set specified numerical value between -100 and 100 msec. (Factory default: 0 msec)

404 ext. sync source

Sets the source used as the sync signal when performing external synchronization in DV→ SDI/ANALOG mode.

External synchronization source settings

LCD display	
404 ext. sync source >input video REF	Synchronizes to sync signal contained in video signal input from the input connector selected by the VIDEO IN button.
404 ext. sync source input video >REF	Synchronizes to signal input into REF IN connector. (Factory default)

501 9P remote

Enables/Disables the deck control from the 9-pin remote controller.

9-pin remote control setting

LCD display	
501 9P remote >disable remote A	Disables the deck control from the remote connector.
501 9P remote disable >remote A	Enables the deck control from the remote A connector.

(Continued on the next page)

(Continued)

LCD display	
501 9P remote remote A >remote B	Enables the deck control from the remote B connector.

601 SG output

Selects the color bar output mode.

Color bar output

LCD display	
601 SG output >off on	Does not output color bar. (Factory default)
601 SG output off >on	Outputs color bar.

* External synchronization function cannot be used.
* Free-run time-code is output.

602 SG audio level

Selects the testing audio signal of 1kHz in color bar output mode.

SG audio level

LCD display	
602 SG audio level >-18 dB FS -20 dB FS	Sets to -18 dB FS. (Factory default for PAL/SECAM)
602 SG audio level -18 dB FS >-20 dB FS	Sets to -20 dB FS. (Factory default for NTSC)

701 1394 clock adj.

IEEE1394 clock adjustment

Sets the IEEE1394 system clock.

LCD display	
701 1394 clock adj. 127	In most cases, factory default settings (127) should be used. (Factory default: 127)

702 local disable

Local switch disable

Enables/Disables the MODE button, VIDEO IN button, AUDIO IN button and PRESET button.

LCD display	
702 local disable >off on	Permits operation by the MODE button, VIDEO IN button, AUDIO IN button and PRESET button. (Factory default)
702 local disable off >on	Prohibits operation by the MODE button, VIDEO IN button, AUDIO IN button and PRESET button.
702 local disable on >auto	Prohibits operation by the MODE button, VIDEO IN button, AUDIO IN button and PRESET button, only when the deck control by 9-pin remote connector is enabled.
702 local disable auto >off (PB mode)	Permits operation by the MODE button, VIDEO IN button, AUDIO IN button and PRESET button, with the switching by AV/C command prohibited.

704 resample filter

Selects the type of horizontal resampling filter for Cb/Cr signal.
(NTSC only)

Resample filter setting

LCD display	
704 resample filter >normal sharp 1	Sets normal modulus. (Factory default)
704 resample filter normal >sharp 1	Sets modulus that emphasizes anti-alias.
704 resample filter sharp 1 >sharp 2	Sets modulus that emphasizes frequency characteristic.

705 AV/C transaction

Selects the type of AV/C transaction at the time AV/C command is received.

AV/C transaction setting

LCD display	
705 AV/C transaction >immediate deferred	Executes AV/C immediate transaction. (Factory default)
705 AV/C transaction immediate >deferred	Sends INTERIM response, and then executes AV/C immediate transaction.

706 data rate cap.

Selects the maximum communication speed of the “dr cap” field of “iMPR/oMPR” at the time of booting and setting change.
Once you have changed this setting, you are prompted to turn the power off to make the new setting take effect.

Maximum data rate setting

LCD display	
706 data rate cap. >S100 S200	Sets to S100. (Factory default)
706 data rate cap. S100 >S200	Sets to S200.
706 data rate cap. S200 >S400	Sets to S400.

707 LCD backlight

Sets the backlight lighting period of the front panel LCD.

LCD backlight illuminating period settings

LCD display	
707 LCD backlight 10sec >on	Press the Select dial to display the sub-menu. In the sub-menu, turn the Select dial to select the lighting period.
sub-menu	
707 LCD backlight > 5sec 10sec	Lights for 5 seconds after operating the front panel.
707 LCD backlight >10sec on	Lights for 10 seconds after operating the front panel.
707 LCD backlight 10sec >on	The backlight always lights. (Factory default)

708 LED dimmer

Sets the brightness of the front panel LED.

LED brightness settings

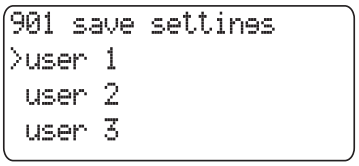
LCD display	
708 LED dimmer 50% >100%	Turn the Select dial to display the sub-menu. In the sub-menu, turn the Select dial to select the brightness.
sub-menu	
708 LED dimmer > 50% 100%	Sets to 50% brightness.
708 LED dimmer 50% >100%	Sets to 100% brightness. (Factory default)

* Power LED cannot be darkened.

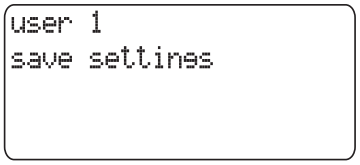
901 save settings

Saves the current setting to the user 1 to 3 settings.

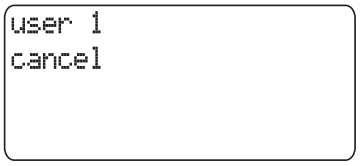
Save settings



1. Turn the Select dial to select user 1 to 3, and press the Select dial.
   user1: save the current setting as user 1
   user2: save the current setting as user 2
   user3: save the current setting as user 3



2. Turn the Select dial and display “save settings” (flashing) to save the current settings, and press the Select dial.



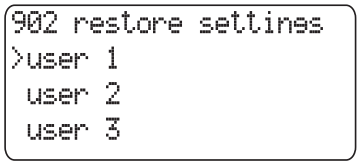
When you cancel the setting, display “cancel” (flashing) and press the Select dial.
(returns to the step 1 display)

---

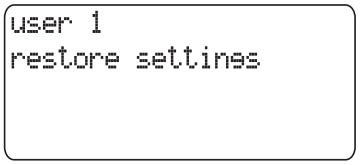
902 restore settings

Restores the current settings to the user setting, or to the factory default.
Once you have changed this setting, you may be prompted to turn the power off to make the new setting take effect.

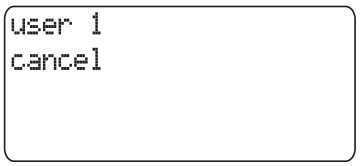
Restore settings (Default settings)



1. Turn the Select dial to select user 1 to 3 or “factory default”, and press the Select dial.
   user1: return the setting to user 1 setting
   user2: return the setting to user 2 setting
   user3: return the setting to user 3 setting
   factory default: return the setting to the factory default



2. Turn the Select dial and display “restore settings” (flashing) to change the settings, and press the Select dial.



When you cancel the setting, display “cancel” (flashing) and press the Select dial.
(returns to the step 1 display)

903 system version

This item contains sub-menus displaying firmware version numbers.

System version

LCD display	
903 system version >uCOM FPGA 1.0.0.0	Press the Select dial to display the sub-menu. In the sub-menu, turn the Select dial to choose the sub-menu item.
sub-menu	
903 system version >uCOM FPGA 1.0.0.0	Displays uCOM version.
903 system version uCOM >FPGA 1.0.0.0	Displays FPGA version.
903 system version FPGA >CPLD 1 1.0.0.0	Displays CPLD 1 version.
903 system version CPLD 1 >CPLD 2 1.0.0.0	Displays CPLD 2 version.
903 system version CPLD 2 >unit ID 0000100	Displays unit ID.

* The version numbers displayed above are examples and the actual screen may differ from the above screens.

Chapter 3
Appendix

This chapter provides supplementary information regarding the ADVC3000 operations.
- Specifications

1 Specifications

Video signal	Composite S Video	NTSC (525/59.94i), PAL (625/50i) * SECAM is available only for input. In that case, PAL signal is output.
	Component SD-SDI/DV	525/59.94i, 625/50i
	* 59.94i ⟷ 50i conversion is not possible.	
DV input/output		IEEE1394 4 pin x 1, IEEE1394 6 pin x 1(Without bus power supply) * Incompatible with DV stream of DVCPRO standard. Option/update is necessary to make DV standard stream output to DVCPRO VCR.
Video input	SD-SDI	BNC x 2 (SD-SDI IN + ACTIVE THROUGH, SMPTE 259M-C)
	Component	BNC (Component x 1, Y/Pb/Pr)
	Y/C	S teminal x 1
	Composite	BNC x 1 (Composite)
Video output	SD-SDI	BNC x 2 (SMPTE 259M-C)
	Component	BNC (Component x 1, Y/Pb/Pr)
	Y/C	S teminal x 1
	Composite	BNC x 1 (Composite)
Audio input	SD-SDI	Embedded audio (SMPTE 272M-A)
	AES/EBU	BNC x 2 (CH1 to CH4)
		32/44.1/48kHz, 16/20/24bit, Unlocked/Locked
		Can be converted anytime to 48kHz. Locked by built-in SRC
	Balanced	XLR-3-31 x 4 (CH1 to CH4) *600Ω termination or high impedance is selectable.
	Unbalanced	Pin jack (stereo 1 line, CH1 and CH2)
	DV	32/44.1/48kHz (Unlocked/Locked) 16bit, 2ch 32kHz (Unlocked/Locked) 12bit, 4ch
Audio output	SD-SDI	Embedded audio (SMPTE 272M-A)
	AES/EBU	BNC x 2 (CH1 to CH4)
	Balanced	XLR-3-32 x 4 (CH1 to CH4)
	Unbalanced	Pin jack (stereo 1 line, CH1 and CH2)
	DV	48kHz/Locked/16bit/2ch 32kHz/Locked/12bit/4ch
	Monitor output	Pin jack (stereo 1 line, mapping CH1 to CH4 on L/R is possible)
TC input/output	LTC input	BNC x 1
	LTC output	BNC x 1
	DVITC input	Separated from SD-SDI input *Incompatible with VITC from analog video input
	DVITC output	Repeatedly overlaps with SD-SDI output * Line select function is available. * Also overlaps with analog video.

Reference input	B.B input	BNC x 2 (INPUT and LOOP THROUGH, automatic 75Ω termination)
Reference output	B.B output	BNC x 1 * Does not synchronize with video output.
REMOTE output		RS-422A (D-sub 9 pin) x 2 Command converter for AV/C → RS422A
Others	Front panel	Input level adjusting volume (CH1 to CH4)
		Audio level meter
		Preset button
		Video input select button
		Video input indicator
		Audio input select button
		Audio input indicator
		Select dial, Menu button
		Mode LED
		Status LED
		Other LCDs
General specifications	Power source	AC 100-240V, 50/60Hz
	Current consumption	0.44A (100V), 0.21A (240V)
	Operating temperature	10–35°C
	Outside dimension	430(W) x 88(H) x 270(D) mm (excluding projecting parts and rubber feet)
		19" half rack-mounting
	Weight	Approx 4.6kg