

SONY®

3G FIBER TRANSMISSION UNIT

HKC-HB10

HKC-HB15

HKCU-HB10

HKCU-HB15

3G SINGLE LINK INTERFACE UNIT

HKCU2005

OPERATION MANUAL
1st Edition

English



4191937010

For the customers in the U.S.A.

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.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

All interface cables used to connect peripherals must be shielded in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

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

For the customers in Canada

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

Pour les clients au Canada

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

For the customers in Europe

This product with the CE marking complies with the EMC Directive issued by the Commission of the European Community.

Compliance with this directive implies conformity to the following European standards:

- EN55103-1 : Electromagnetic Interference(Emission)
- EN55103-2 : Electromagnetic Susceptibility(Immunity)

This product is intended for use in the following Electromagnetic Environments: E1 (residential), E2 (commercial and light industrial), E3 (urban outdoors), E4 (controlled EMC environment, ex. TV studio).

The manufacturer of this product is Sony Corporation, 1-7-1 Konan, Minato-ku, Tokyo, Japan.

The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany.

Pour les clients en Europe

Ce produit portant la marque CE est conforme à la Directive sur la compatibilité électromagnétique (EMC) émise par la Commission de la Communauté européenne.

La conformité à cette directive implique la conformité aux normes européennes suivantes :

- EN55103-1 : Interférences électromagnétiques (émission)

- EN55103-2 : Sensibilité électromagnétique (immunité)

Ce produit est prévu pour être utilisé dans les environnements électromagnétiques suivants : E1 (résidentiel), E2 (commercial et industrie légère), E3 (urbain extérieur) et E4 (environnement EMC contrôlé, ex. studio de télévision).

Le fabricant de ce produit est Sony Corporation, 1-7-1 Konan, Minato-ku, Tokyo, Japon.

Le représentant autorisé pour EMC et la sécurité des produits est Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Allemagne.

Für Kunden in Europa

Dieses Produkt besitzt die CE-Kennzeichnung und erfüllt die EMV-Richtlinie der EG-Kommission.

Angewandte Normen:

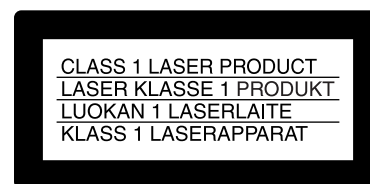
- EN55103-1: Elektromagnetische Verträglichkeit (Störaussendung)
- EN55103-2: Elektromagnetische Verträglichkeit (Störfestigkeit)

Für die folgenden elektromagnetischen Umgebungen: E1 (Wohnbereich), E2 (kommerzieller und in beschränktem Maße industrieller Bereich), E3 (Stadtgebiet im Freien) und E4 (kontrollierter EMV-Bereich, z.B. Fernsehstudio).

Der Hersteller dieses Produkts ist Sony Corporation, 1-7-1 Konan, Minato-ku, Tokyo, Japan.

Der autorisierte Repräsentant für EMV und Produktsicherheit ist Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Deutschland.

For HKC-HB10/HB15, HKCU-HB10/HB15 only



This 3G Fiber Transmission Unit is classified as a CLASS 1 LASER PRODUCT.

Dieses 3G-Fiberoptik-Übertragungsgerät ist als LASERPRODUKT DER KLASSE 1 eingestuft.

Tämä 3G-kuitusiirtolaite on luokiteltu 1. LUOKAN LASERTUOTTEEKSI.

Den här 3G Fiber Transmission Unit klassificeras som en LASERPRODUKT AV KLASSE 1.

Caution

The use of optical instruments with this product will increase eye hazard.

Caution

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

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Overview

The HKC-HB10/HB15 and HKCU-HB10/HB15 3G Fiber Transmission Units are function enhancement units for Sony HD color cameras or HD camera control units. The applicable cameras and camera control units are shown in the table below.

Notes

- Connection compatibility with HDC-900-series models is lost by function enhancement.
- Do not install the 3G Fiber Transmission Units in any cameras or camera control units other than the applicable models.

Camera / Camera Control Unit	3G Fiber Transmission Unit
HDC1000R	HKC-HB10
HDC1000	
HDC1500R	HKC-HB15
HDC1400R	
HDC1500	
HDCU1000 ¹⁾	HKCU-HB10
HDCU1500	HKCU-HB15

1) Only HDCU1000 units of serial number 14001 or higher (UC), 44001 or higher (CE), or 410001 or higher (CE) are applicable.

Installing these units provides conventional HD color camera and HD camera control units for HD-SDI optical transmission with “High Bit Rate” optical transmission capability.

The bit rate (High Bit Rate/HD-SDI) of optical transmission between the camera and the camera control unit is automatically switched, depending on connected devices.

The HKCU2005 3G Single Link Interface Unit is a function enhancement unit for the HDCU1000 with an HKCU-HB10 installed and the HDCU1500 with an HKCU-HB15 installed.

When an HKCU2005 is installed, max. four 3G-SDI signal outputs can be fed from the camera control unit.

Precaution

If these products are installed incorrectly, personal injury or damage to peripheral items may occur due to fire, shock, or other accidental circumstances. To avoid such risks, installation should be performed by trained service technicians.

About the manuals

This operation manual introduces the outlines of systems which can be established by installing the above-mentioned products in a camera or camera control unit, and it describes the functions added or changed by the function enhancement.

For conventional functions and operations of the camera or camera control unit, refer to the operation manual supplied with the camera or camera control unit.

Camera Systems That Become Available

The following camera systems become available with the 3G Fiber Transmission Units. (There are some restrictions, depending on the model and combination of the products. See the table “Additional Functions” in the next paragraph.)

- Fiber transmission system of Dual Link¹⁾ or Single Link²⁾ format (signal transmission at “High Bit Rate”)
- COAXIAL connection system of Single Link format using two coaxial cables
- Dual-Camera system
- Sub-Camera system (Only HDCU1000 with an HKCU-HB10 installed can be the main camera control unit.)

HDC1000R/1500R/1000/1500-series models with no 3G Fiber Transmission Unit installed can be used in combination.

For connections and settings, see “Connections and Settings” (page 23).

1) Dual Link formats:

1080/59.94P, 1080/50P

2) Single Link formats:

1080/59.94I, 1080/29.97PsF, 1080/23.98PsF, 720/59.94P, 1080/50I, 1080/25PsF, 1080/24PsF, 720/50P

Major Functions That Become Usable

- ① Dual Link format (1080/59.94P, 1080/50P) transmission
- ② Dual Link output from the camera and camera control unit
- ③ 3G-SDI output from the camera and camera control unit
- ④ HD-prompter/HD-trunk-video transmission between the camera and camera control unit
- ⑤ Sub-camera control via the AUX REMOTE connector added to the HDCU1000 rear panel

Note

AES/EBU signal cannot be used when AUX REMOTE is used.

Additional Functions

3G Fiber Transmission Unit	Applicable model		Added functions			
			①Dual Link format transmission ②Dual Link output	③3G-SDI output	④HD-prompter/HD-trunk-video transmission	⑤AUX REMOTE
HKC-HB10	Large camera	HDC1000R	yes	yes	yes	yes
		HDC1000	yes	yes	yes	
HKC-HB15	Portable camera	HDC1500R	yes	yes	yes	yes
		HDC1400R			yes	yes
		HDC1500	yes	yes	yes	
HKCU-HB10	Full-size CCU	HDCU1000	yes	yes ¹⁾	yes	yes ²⁾
HKCU-HB15	Portable CCU	HDCU1500	yes ³⁾	yes ¹⁾	yes	

1) An HKCU2005 3G Single Link Interface Unit is required.

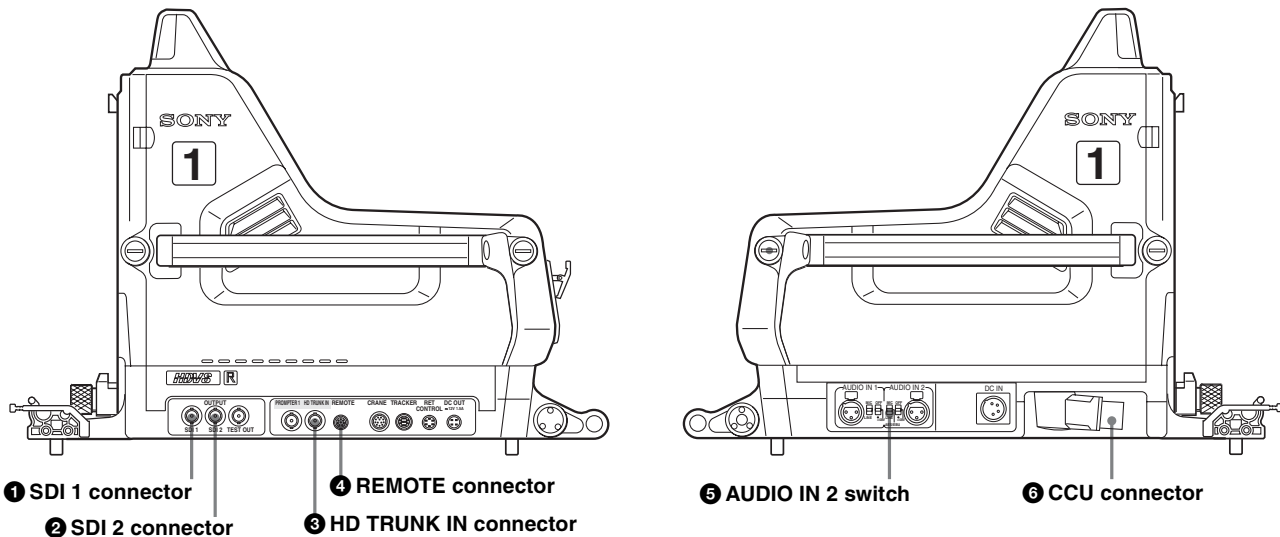
2) Available with HDCU1000 units of serial number 15001 or higher (UC), or 420002 or higher (CE).

3) An HKCU1005 SDI Output Expansion Unit is required for Dual Link output.

HDC1000R/1000: HKC-HB10 Installed

Side Panels

The figure shows an HDC1000R.



① SDI 1 connector (BNC type)

You can select the output signal with SDI-1 OUT on the <SDI OUT> page of the MAINTENANCE menu.

For Dual Link formats: LINK-A, HD PROMPTER, 3G-SDI

For Single Link formats: MAIN(HD-SDI), HD PROMPTER

Note

Output signal selection is not possible when the camera is used in a COAXIAL connection system (page 25) or Dual-Camera system (page 26), as the connector is used for connection to a camera control unit or connection between the primary camera and secondary camera.

For the signal settings, see “Video Formats and the Output Signals of the Camera” (page 11).

② SDI 2 connector (BNC type)

For HD-SDI or SD-SDI signal output.

Select the output signal with SDI-2 OUT on the <SDI OUT> page of the MAINTENANCE menu. You can select from among MAIN(HD-SDI), VF, RET, and SD-SDI. LINK-B can also be selectable when the camera is used with a Dual Link format.

For the signal settings, see “Video Formats and the Output Signals of the Camera” (page 11).

③ HD TRUNK IN connector (BNC type)

The conventional PROMPTER 2 output connector is changed to a trunk signal input connector.

When a camera control unit equipped with an HD TRUNK OUT connector is connected, an HD-SDI signal input from this connector is fed from the HD TRUNK OUT connector of the camera control unit.

Notes

- The HD trunk function cannot be used with a Dual Link format.
- By changing the installation method, the connector can be returned to the conventional PROMPTER 2 connector. For details, consult a Sony service or sales representative. Note that it does not function as an HD TRUNK IN connector in that status.
- The HD-SDI signal fed to this connector must be in frequency synchronization with the camera.
- Signal selection is not possible when the camera is used in a COAXIAL connection system (page 25) or Dual-Camera system (page 26), as the connector is used for connection to a camera control unit or connection between the primary camera and secondary camera.

④ REMOTE connector (8-pin)

When the camera is used as a main camera in a Sub-Camera system (page 27), connect with the REMOTE connector of the sub camera.

The connector operates the same as before function enhancement in other conditions.

Notes

- Sub-Camera system cannot be established with the HDC1000.

- The HDC1000R cannot be used as the sub camera in a Sub-Camera system.

⑤ AUDIO IN 2 switch

The AES/EBU setting is not valid in a Sub-Camera system (page 27).

⑥ CCU connector (optical/electrical multi-connector)

The connector becomes applicable both for HD-SDI and “High Bit Rate” transmission.

MAINTENANCE Menu

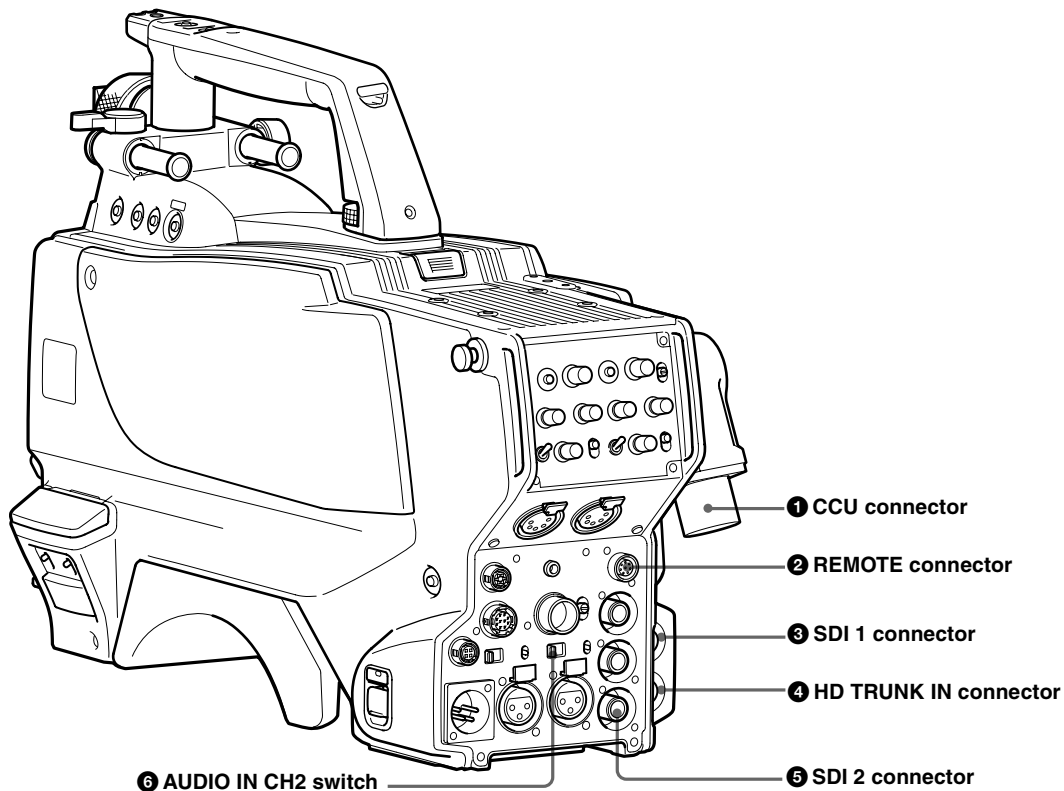
Parts of M12 and M18 are changed as follows, and the <EXT RETURN> page is added as M19.

Menu page	No.	Item/	Default	Settings	Remarks
<SDI OUT>	M12 (U17)	SDI-1 OUT	MAIN	MAIN, LINK-A, HD PROMPTER, 3G-SDI	MAIN: Displayed for Single Link formats only LINK-A: Displayed for Dual Link formats only
		SDI-2 OUT	MAIN	MAIN, VF, LINK-B, RET, SD-SDI	LINK-B: Valid with Dual Link formats only SD-SDI: SD signal selected for OUTPUT SIGNAL of <DOWN CONVERTER>
		(PWR SAVE)			Displayed only when SDI-2 OUT is in POWER SAVE mode
		CHARACTER	OFF	ON, OFF	Not displayed if SDI-2 OUT is set to VF or LINK-B
		EMB AUDIO	OFF	ON, OFF	
		(1-MIC1 2-MIC2) (3-AES1 4-AES2)			Displayed when SDI-2 OUT is MAIN or LINK-B (display only)
		(1-PGM1 2-PGM2) (3-ENG 4-PROD)			Displayed when SDI-2 OUT is VF, RET, or SD-SDI (display only)
<OTHERS 2>	M18	DATE TYPE	5 M/D/Y	1 Y/Mn/D, 2 Mn/D, 3 D/M/Y, 4 D/M, 5 M/D/Y, 6 M/D	As before
		FILTER WHT MEM	OFF	ON, OFF	As before
		F NO. DISP	CONTROL	CONTROL, RETURN	As before
		COAX MODE	OFF	ON, OFF	Set to OFF when using the camera in a COAXIAL connection system (page 25) or using it as the secondary camera in a Dual-Camera system (page 26).
<EXT RETURN>	M19	EXT RET IN	VBS	VBS, HD-SDI	Select the type of return signal. See “Format of the external return signal input” (page 10).
		STATUS			Display only
		FORMAT			Display only
		SD ASPECT	SQ	SQ, EC	Valid only when EXT RET IN is VBS
<OPTION KEY>	M20	READ (MS→CAM)		Execute by ENTER.	As before
		INSTALLED OPTION			As before

HDC1500R/1400R/1500: HKC-HB15 Installed

Connector Panel

The figure shows HDC1500R.



1 CCU connector (optical/electrical multi-connector)

The connector becomes applicable both for HD-SDI and “High Bit Rate” transmission.

2 REMOTE connector (8-pin)

When the camera is used as a main camera in a Sub-Camera system (*page 27*), connect with the REMOTE connector of the sub camera.

The connector operates the same as before function enhancement in other conditions.

Note

Sub-Camera system cannot be established with the HDC1500.

3 SDI 1 connector (BNC type)

You can select the output signal with SDI-1 OUT on the <SDI OUT> page of the MAINTENANCE menu.

For Dual Link formats: LINK-A (HDC1500R/1500 only), HD PROMPTER, 3G-SDI

For Single Link formats: MAIN(HD-SDI), HD PROMPTER

Note

Output signal selection is not possible when the camera is used in a COAXIAL connection system (*page 25*) or Dual-Camera system (*page 26*), as the connector is used for connection to a camera control unit or connection between the primary camera and secondary camera.

For the signal settings, see “Video Formats and the Output Signals of the Camera” (page 11).

4 HD TRUNK IN connector (BNC type)

The conventional PROMPTER 2 output connector is changed to a trunk signal input connector.

When a camera control unit equipped with an HD TRUNK OUT connector is connected: The input

signal from this connector is fed from the HD TRUNK OUT connector of the camera control unit.

When using the camera in stand-alone status (no camera control unit connected): The HD-SDI/VBS input signal from this connector can be displayed on the viewfinder as RET2. Select the input signal on the <EXT RETURN> page of the MAINTENANCE menu.

For applicable input signals, see “Format of the external return signal input” (page 10).

Notes

- By changing the installation method, the connector can be returned to the conventional PROMPTER 2 connector. For details, consult a Sony service or sales representative. Note that it does not function as an HD TRUNK IN connector in that status.
- The HD-SDI signal fed to this connector must be in frequency synchronization with the camera.

- Signal selection is not possible when the camera is used in a COAXIAL connection system (page 25) or Dual-Camera system (page 26), as the connector is used for connection to a camera control unit or connection between the primary camera and secondary camera.

5 SDI 2 connector (BNC type)

For HD-SDI or SD-SDI signal output.

Select the output signal with SDI-2 OUT on the <SDI OUT> page of the MAINTENANCE menu. You can select from among MAIN(HD-SDI), VF, RET, and SD-SDI. LINK-B can also be selectable when the camera is used with a Dual Link format.

For the signal settings, see “Video Formats and the Output Signals of the Camera” (page 11).

6 AUDIO IN CH2 switch

The AES/EBU setting is not valid in a Sub-Camera system (page 27).

MAINTENANCE Menu

Parts of M12, M13 (HDC1400R only), and M19 are changed as follows, and the <EXT RETURN> page is added as M20.

Menu page	No.	Item/	Default	Settings	Remarks
<SDI OUT>	M12 (U18)	SDI-1 OUT	MAIN	MAIN, LINK-A, HD PROMPTER, 3G-SDI	MAIN: Displayed for Single Link formats only LINK-A: Displayed for Dual Link formats only (HDC1500R/1500 only)
		SDI-2 OUT	MAIN	MAIN, VF, LINK-B, RET, SD-SDI	LINK-B: Valid with Dual Link formats only (HDC1500R/1500 only) SD-SDI: SD signal selected for OUTPUT SIGNAL of <DOWN CONVERTER>
		(PWR SAVE)			Displayed only when SDI-2 OUT is in POWER SAVE mode
		CHARACTER	OFF	ON, OFF	Not displayed if SDI-2 OUT is set to VF or LINK-B
		EMB AUDIO	OFF	ON, OFF	
		(1-MIC1 2-MIC2) (3-AES1 4-AES2)			Displayed when SDI-2 OUT is MAIN or LINK-B (display only)
		(1-PGM1 2-PGM2) (3-ENG 4-PROD)			Displayed when SDI-2 OUT is VF, RET, or SD-SDI (display only)
<POWER SAVE>	M13 (U11)	SDI-2 OUT	PWR SAVE	PWR SAVE, ACTIVE	As before (HDC1500R/1500 only)
		DOWN CONVERTER	ACTIVE	PWR SAVE, ACTIVE	As before

Menu page	No.	Item/	Default	Settings	Remarks
<OTHERS 2>	M19	DATE TYPE	5 M/D/Y	1 Y/Mn/D, 2 Mn/D, 3 D/M/Y, 4 D/M, 5 M/D/Y, 6 M/D	As before
		FILTER WHT MEM	OFF	ON, OFF	As before (HDC1500R/1500 only)
		F NO. DISP	CONTROL	CONTROL, RETURN	As before
		COAX MODE	OFF	ON, OFF	Set to OFF when using the camera in a COAXIAL connection system (page 25) or using it as the secondary camera in a Dual-Camera system (page 26).
<EXT RETURN>	M20	EXT RET IN	VBS	VBS, HD-SDI	Select the type of return signal. See "Format of the external return signal input" below.
		STATUS			Display only
		FORMAT			Display only
		SD ASPECT	SQ	SQ, EC	Valid only when EXT RET IN is VBS
<OPTION KEY>	M21	READ (MS→CAM)		Execute by ENTER.	As before
		INSTALLED OPTION			As before

Format of the external return signal input

EXT RET IN: VBS

Camera format	Usable return signal format
1080/59.94P	NTSC
1080/59.94i	NTSC
1080/29.97PsF	NTSC
1080/23.98PsF	Not usable
720/59.94P	NTSC
1080/50P	PAL
1080/50i	PAL
1080/25PsF	PAL
1080/24PsF	Not usable
720/50P	PAL

EXT RET IN: HD-SDI

Camera format	Usable return signal format (HD-SDI only)
1080/59.94P	1080/59.94i or 1080/29.97PsF
1080/59.94i	1080/59.94i or 1080/29.97PsF
1080/29.97PsF	1080/59.94i or 1080/29.97PsF
1080/23.98PsF	Not usable
720/59.94P	720/59.94P
1080/50P	1080/50i or 1080/25PsF
1080/50i	1080/50i or 1080/25PsF
1080/25PsF	1080/50i or 1080/25PsF
1080/24PsF	Not usable
720/50P	720/50P

Video Formats and the Output Signals of the Camera

You can specify video signals to be directly output from the camera on the following MAINTENANCE menu pages.

- <POWER SAVE>
- <OUTPUT FORMAT>
- <TEST OUT>
- <SDI OUT>
- <DOWN CONVERTER>
- <EXT RETURN>

Set the items on these pages as shown in the table.

Note

The MAIN (camera picture), RET (return video), or VF (the same picture as that displayed on the viewfinder screen) setting is common to SD-SDI and VBS. Different signals cannot be output.

Outputting the signal being shot (camera picture)

To output as 3G-SDI (SDI 1 connector)

Menu page	Item	Setting
<SDI OUT>	SDI-1 OUT	3G-SDI

To output as HD-SDI (SDI 1 connector)

Menu page	Item	Setting
<SDI OUT>	SDI-1 OUT	MAIN

To output as HD-SDI (SDI 2 connector)

Menu page	Item	Setting
<POWER SAVE>	SDI-2 OUT	ACTIVE
<SDI OUT>	SDI-2 OUT	MAIN

To output as SD-SDI (SDI 2 connector)

Menu page	Item	Setting
<POWER SAVE>	SDI-2 OUT	ACTIVE
	DOWN CONVERTER	ACTIVE
<DOWN CONVERTER>	OUTPUT SIGNAL	MAIN
<SDI OUT>	SDI-2 OUT	SD-SDI

To output as VBS (TEST OUT connector)

Menu page	Item	Setting
<POWER SAVE>	DOWN CONVERTER	ACTIVE
<DOWN CONVERTER>	OUTPUT SIGNAL	MAIN
<TEST OUT>	OUTPUT	VBS

The same textual information as that displayed on the viewfinder screen can be added to the output signal from the SDI 2 and TEST OUT connectors by setting CHARACTER to “ON” on the <SDI OUT> or <TEST OUT> page.

Constantly outputting return video

To output as HD-SDI (SDI 2 connector)

Menu page	Item	Setting
<POWER SAVE>	SDI-2 OUT	ACTIVE
<SDI OUT>	SDI-2 OUT	RET

To output as SD-SDI (SDI 2 connector)

Menu page	Item	Setting
<POWER SAVE>	SDI-2 OUT	ACTIVE
	DOWN CONVERTER	ACTIVE
<DOWN CONVERTER>	OUTPUT SIGNAL	RET
<SDI OUT>	SDI-2 OUT	SD-SDI

To output as VBS (TEST OUT connector)

Menu page	Item	Setting
<POWER SAVE>	DOWN CONVERTER	ACTIVE
<DOWN CONVERTER>	OUTPUT SIGNAL	RET
<TEST OUT>	OUTPUT	VBS

The same textual information as that displayed on the viewfinder screen can be added to the output signal from the SDI 2 and TEST OUT connectors by setting CHARACTER to “ON” on the <SDI OUT> or <TEST OUT> page.

Using an external return signal in stand-alone operation

When using the camera in the standalone status, the signal supplied to the HD TRUNK IN connector can be used as the RET2 signal.

For usable signal format, see “Format of the external return signal input” (page 10).

To accept an HD-SDI signal

Menu page	Item	Setting
<EXT RETURN>	EXT RET IN	HD-SDI

To accept a VBS signal

Menu page	Item	Setting
<EXT RETURN>	EXT RET IN	VBS

Outputting the same image as that on the viewfinder screen

To output as HD-SDI (SDI 2 connector)

Menu page	Item	Setting
<POWER SAVE>	SDI-2 OUT	ACTIVE
<SDI OUT>	SDI-2 OUT	VF

To output as SD-SDI (SDI 2 connector)

Menu page	Item	Setting
<POWER SAVE>	SDI-2 OUT	ACTIVE
	DOWN CONVERTER	ACTIVE
<DOWN CONVERTER>	OUTPUT SIGNAL	VF
<SDI OUT>	SDI-2 OUT	SD-SDI

To output as VBS (TEST OUT connector)

Menu page	Item	Setting
<POWER SAVE>	DOWN CONVERTER	ACTIVE
<DOWN CONVERTER>	OUTPUT SIGNAL	VF
<TEST OUT>	OUTPUT	VBS

Outputting via Dual Link (1080/59.94P or 1080/50P) (HDC1000R/1500R/1000/1500 only)

The SDI-1 output is assigned to Link A, SDI-2 output to Link B.

Menu page	Item	Setting
<OUTPUT FORMAT>	ACTIVE LINE	1080
	(Format)	59.94P or 50P
<POWER SAVE>	SDI-2 OUT	ACTIVE
<SDI OUT>	SDI-1 OUT	LINK-A
	SDI-2 OUT	LINK-B

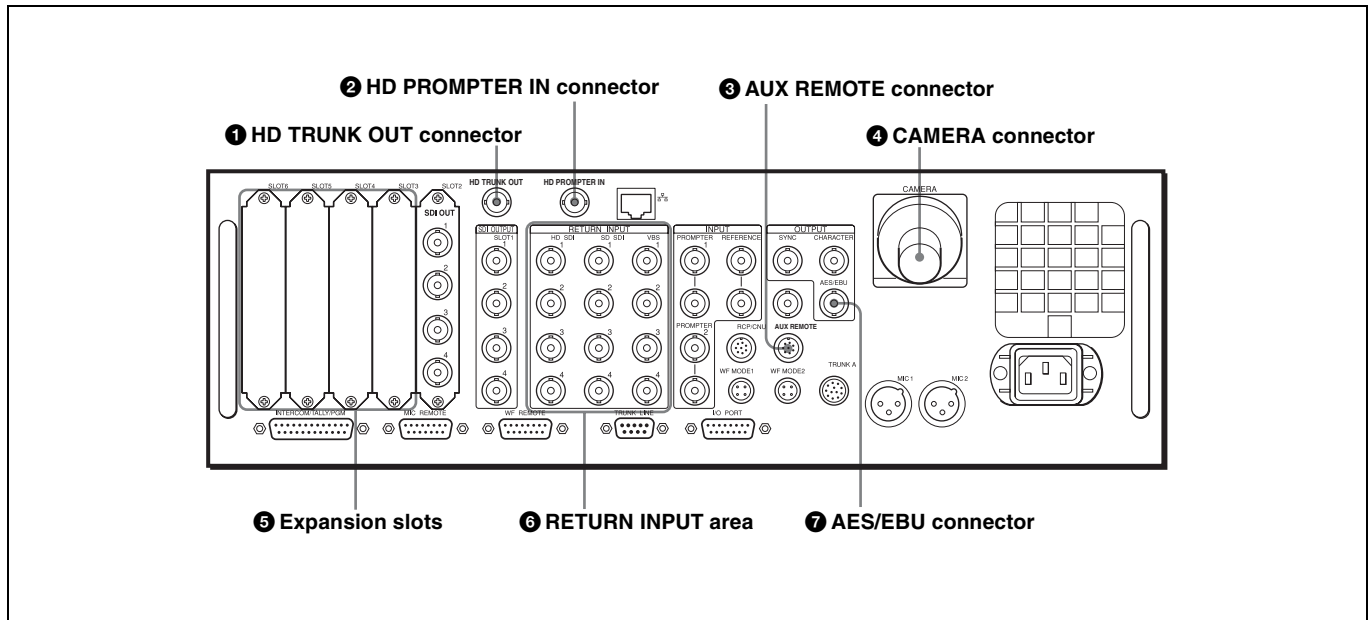
Outputting the HD prompter signal

The signal being fed to the HD PROMPTER IN connector can be output from the SDI 1 connector.

Menu page	Item	Setting
<SDI OUT>	SDI-1 OUT	HD PROMPTER

HDCU1000: HKCU-HB10 Installed

Rear Panel



1 HD TRUNK OUT connector (BNC type)

When a camera that supports the HD trunk function is connected via the CAMERA connector, an HD-SDI signal fed to the HD TRUNK IN connector of the camera is output from this connector.

2 HD PROMPTER IN connector (BNC type)

When a camera that supports the HD prompter function is connected via the CAMERA connector, an HD-SDI signal fed to this connector can be output from the SDI 1 connector of the camera.

Note

The HD-SDI signal fed to this connector must be in frequency synchronization with the camera control unit.

3 AUX REMOTE connector (8-pin) (for sub camera control)

Connect to an RCP-1000-series Remote Control Panel for the sub camera in a Sub-Camera system (page 27).

Note

The AUX REMOTE connector can be used on HDCU1000 units of serial number 15001 or higher (UC), or 420002 or higher (CE).

4 CAMERA connector (optical/electrical multi-connector)

The connector becomes applicable both for HD-SDI and “High Bit Rate” transmission.

5 Expansion slots

Install the optional HKCU1001 SD Encoder Unit, HKCU1003 Multi Interface Unit, or HKCU1005 SDI Output Expansion Unit.

For details on installation, contact a Sony service or sales representative.

6 RETURN INPUT area

The connectors do not support 3G-SDI input. They can be used as before for HD-SDI, SD-SDI and VBS input.

7 AES/EBU connector (BNC type)

This connector cannot be used in a Sub-Camera system (page 27).

Output Signals: in Dual Link Format (1080/59.94P, 1080/50P) Transmission

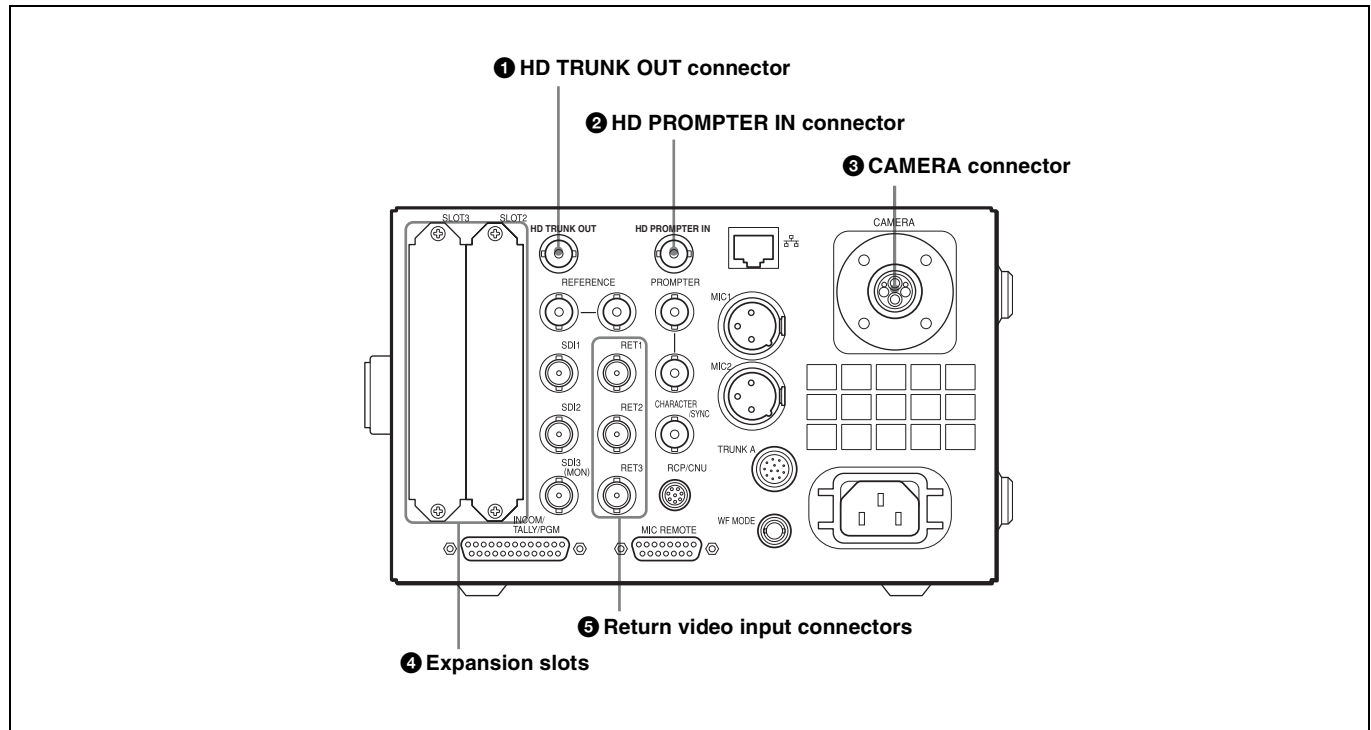
Slot	Output connector	Output signal format ¹⁾	
SLOT 1 (HDCU1000 standard)	SDI OUTPUT 1&2	1080/59.94P (Link-A)	1080/50P (Link-A)
	SDI OUTPUT 3&4	<ul style="list-style-type: none"> • M1080/59.94P (Link-A) • M525/59.94I (Link-A)²⁾ 	<ul style="list-style-type: none"> • M1080/50P (Link-A) • M625/50I (Link-A)²⁾
SLOT 2 (HDCU1000 standard)	SDI OUT 1&2	<ul style="list-style-type: none"> • 1080/59.94P (Link-B) • 1080/59.94I • 525/59.94I 	<ul style="list-style-type: none"> • 1080/50P (Link-B) • 1080/50I • 625/50I
	SDI OUT 3&4	<ul style="list-style-type: none"> • M1080/59.94P (Link-B) • M1080/59.94I • M525/59.94I 	<ul style="list-style-type: none"> • M1080/50P (Link-B) • M1080/50I • M625/50I

1) The prefix “M” for the output signal format means that the signal is output with character data of the camera control unit.

2) SD-SDI for monitoring obtained by downconverting Link-A.

HDCU1500: HKCU-HB15 Installed

Rear Panel



① HD TRUNK OUT connector (BNC type)

When a camera that supports the HD trunk function is connected via the CAMERA connector, an HD-SDI signal fed to the HD TRUNK IN connector of the camera is output from this connector.

② HD PROMPTER IN connector (BNC type)

When a camera that supports the HD prompter function is connected via the CAMERA connector, an HD-SDI signal fed to this connector can be output from the SDI 1 connector of the camera.

Note

The HD-SDI signal fed to this connector must be in frequency synchronization with the camera control unit.

③ CAMERA connector (optical/electrical multi-connector)

The connector becomes applicable both for HD-SDI and “High Bit Rate” transmission.

④ Expansion slots

Install the optional HKCU1001 SD Encoder Unit, HKCU1003 Multi Interface Unit, or HKCU1005 SDI Output Expansion Unit.

For details on installation, contact a Sony service or sales representative.

⑤ Return video input connectors (BNC type)

The connectors do not support 3G-SDI input. They can be used as before HD-SDI, SD-SDI and VBS input.

Output Signals: in Dual Link Format (1080/59.94P, 1080/50P) Transmission

When installing an HKCU1005 SDI Output Expansion Unit in slot 2

Slot	Output connector	Output signal format ¹⁾	
SLOT 1 (HDCU1500 standard)	SDI1&SDI2	1080/59.94P (Link-A)	1080/50P (Link-A)
	SDI3 (MON)	<ul style="list-style-type: none"> • M1080/59.94P (Link-A) • M525/59.94I (Link-A)²⁾ 	<ul style="list-style-type: none"> • M1080/50P (Link-A) • M625/50I (Link-A)²⁾
SLOT 2 (HKCU1005)	SDI OUT 1&2	<ul style="list-style-type: none"> • 1080/59.94P (Link-B) • 1080/59.94I • 525/59.94I 	<ul style="list-style-type: none"> • 1080/50P (Link-B) • 1080/50I • 625/50I
	SDI OUT 3&4	<ul style="list-style-type: none"> • M1080/59.94P (Link-B) • M1080/59.94I • M525/59.94I 	<ul style="list-style-type: none"> • M1080/50P (Link-B) • M1080/50I • M625/50I

1) The prefix “M” for the output signal format means that the signal is output with character data of the camera control unit.

2) SD-SDI for monitoring obtained by downconverting Link-A.

HKCU2005 3G Single Link Interface Unit

The HKCU2005 consists of a DRX-8 front board and a HIF-57 rear board. It is designed to be installed in slot 2 of an HDCU1000 with an HKCU-HB10 installed or that of HDCU1500 with an HKCU-HB15 installed.

When the HKCU2005 is installed, max. four 3G-SDI signal outputs can be fed from the HDCU1000/1500.

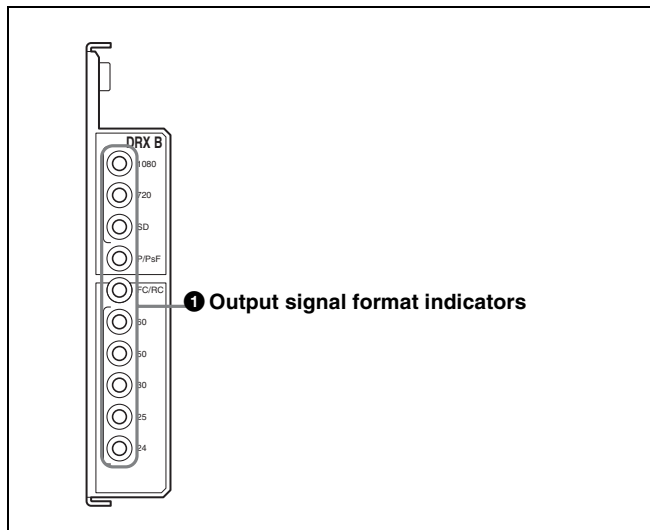
A signal of 1080P format transmitted from a camera and a converted signal of 720P format can be output simultaneously.

The format of SDI signal output from the HIF-57 board can be specified independently for the two upper connectors and two lower connectors.

Notes

- Always install the HKCU2005 in slot 2 of a camera control unit with an HKCU-HB10/HB15 installed.
- Do not install two or more HKCU2005 unit in the same camera control unit.

DRX-8 Board



1 Output signal format indicators

Displays the format status of the output signal.

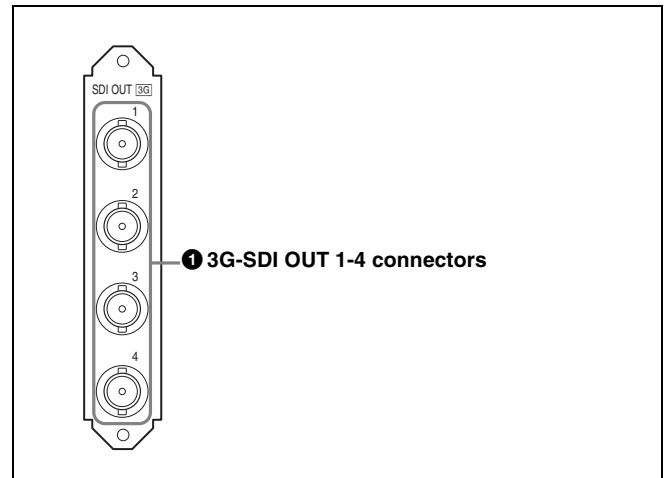
1080/720/SD: One of these indicators corresponding to the signal status of output connectors 1 and 2 of the four SDI signal outputs from this unit lights.

P/PsF: Lights when the video camera is operating in Progressive mode.

FC/RC: Lights when the frame rate converter/rate converter function of the unit is performed.

60/50/30/25/24: One of these indicators corresponding to the field/frame frequency of the output signals lights.

HIF-57 Board



1 3G-SDI OUT (3G/HD serial digital interface output) 1-4 connectors (BNC-type)

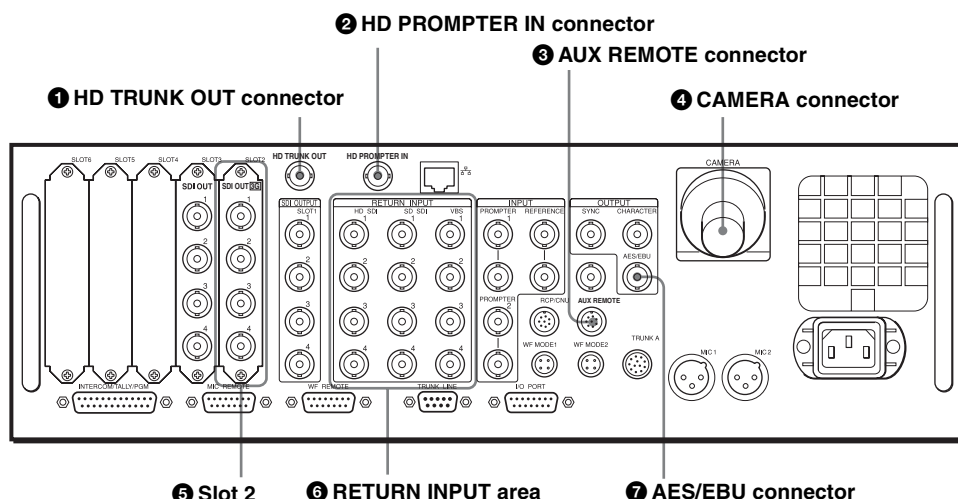
Four 3G-SDI or HD-SDI signals as well as two 3G-SDI and two HD-SDI signals can be output.

For connectors 3 and 4, character ON/OFF is selectable.

HDCU1000: HKCU-HB10 and HKCU2005 Installed

Rear Panel

The figure shows an HDCU1000 with an HKCU2005 in slot 2 and the standard DRX-5/HIF-26 boards in slot 3 mounted.



1 HD TRUNK OUT connector (BNC type)

When a camera that supports the HD trunk function is connected via the CAMERA connector, an HD-SDI signal fed to the HD TRUNK IN connector of the camera is output from this connector.

2 HD PROMPTER IN connector (BNC type)

When a camera that supports the HD prompter function is connected via the CAMERA connector, an HD-SDI signal fed to this connector can be output from the SDI 1 connector of the camera.

Note

The HD-SDI signal fed to this connector must be in frequency synchronization with the camera control unit.

3 AUX REMOTE connector (8-pin) (for sub camera remote control)

Connect to an RCP-1000-series Remote Control Panel for the sub camera in a Sub-Camera system (page 27).

Note

The AUX REMOTE connector can be used on HDCU1000 units of serial number 15001 or higher (UC), or 420002 or higher (CE).

4 CAMERA connector (optical/electrical multi-connector)

The connector becomes applicable both for HD-SDI and “High Bit Rate” transmission.

5 Slot 2

Install the optional HKCU2005 3G Single Link Interface Unit after removing the HDCU1000’s standard DRX-5/HIF-26 boards.

For details on the HKCU2005, see “HKCU2005 3G Single Link Interface Unit” (page 17).

6 RETURN INPUT (return video input) area

The connectors do not support 3G-SDI input. They can be used As before for HD-SDI, SD-SDI and VBS input.

7 AES/EBU connector (BNC type)

This connector cannot be used in a Sub-Camera system (page 27).

Output Signals: in Dual Link Format (1080/59.94P, 1080/50P) Transmission

When installing an HKCU2005 3G Single Link Interface Unit in slot 2 and the DRX-5/HIF-26 (HDCU1000 standard) in slot 3

Slot	Output connector	Output signal format ¹⁾	
SLOT 1 (HDCU1000 standard)	SDI OUTPUT 1&2	1080/59.94P (Link-A)	1080/50P (Link-A)
	SDI OUTPUT 3&4	<ul style="list-style-type: none"> • M1080/59.94P (Link-A) • M525/59.94I (Link-A)²⁾ 	<ul style="list-style-type: none"> • M1080/50P (Link-A) • M625/50I (Link-A)²⁾
SLOT 2 (HKCU2005)	SDI OUT 1&2	<ul style="list-style-type: none"> • 1080/59.94P (3G) • 1080/59.94P (Link-B) • 720/59.94P³⁾ 4) • 1080/59.94I⁴⁾ 	<ul style="list-style-type: none"> • 1080/50P (3G) • 1080/50P (Link-B) • 720/50P³⁾ 4) • 1080/50I⁴⁾
	SDI OUT 3&4	<ul style="list-style-type: none"> • M1080/59.94P (3G) • M1080/59.94P (Link-B) • M720/59.94P³⁾ • M1080/59.94I 	<ul style="list-style-type: none"> • M1080/50P (3G) • M1080/50P (Link-B) • M720/50P³⁾ • M1080/50I
SLOT 3 (HDCU1000 standard DRX-5/HIF-26)	SDI OUT 1&2	<ul style="list-style-type: none"> • 720/59.94P³⁾ • 1080/59.94I • 525/59.94I 	<ul style="list-style-type: none"> • 720/50P³⁾ • 1080/50I • 625/50I
	SDI OUT 3&4	<ul style="list-style-type: none"> • M720/59.94P³⁾ • M1080/59.94I • M525/59.94I 	<ul style="list-style-type: none"> • M720/50P³⁾ • M1080/50I • M625/50I

1) The prefix "M" for the output signal format means that the signal is output with character data of the camera control unit.

2) SD-SDI for monitoring obtained by downconverting Link-A.

3) 720P is valid only when CCU VIDEO CONVERT is enabled.

4) Not selectable when 1080/59.94P (3G) or 1080/50P (3G) is selected for SDI OUT 3&4.

When installing an HKCU2005 in slot 2, the DRX-5/HIF-26 in slot 3, an HKCU1005 SDI Output Expansion Unit in slot 4, and an HKCU1001 SD Encoder Unit in slot 5

Slot	Output connector	Output signal format ¹⁾	
SLOT 1 (HDCU1000 standard)	SDI OUTPUT 1&2	1080/59.94P (Link-A)	1080/50P (Link-A)
	SDI OUTPUT 3&4	<ul style="list-style-type: none"> • M1080/59.94P (Link-A) • M525/59.94I (Link-A)²⁾ 	<ul style="list-style-type: none"> • M1080/50P (Link-A) • M625/50I (Link-A)²⁾
SLOT 2 (HKCU2005)	SDI OUT 1&2	<ul style="list-style-type: none"> • 1080/59.94P (3G) • 1080/59.94P (Link-B) • 720/59.94P³⁾ 4) • 1080/59.94I⁴⁾ 	<ul style="list-style-type: none"> • 1080/50P (3G) • 1080/50P (Link-B) • 720/50P³⁾ 4) • 1080/50I⁴⁾
	SDI OUT 3&4	<ul style="list-style-type: none"> • M1080/59.94P (3G) • M1080/59.94P (Link-B) • M720/59.94P³⁾ • M1080/59.94I 	<ul style="list-style-type: none"> • M1080/50P (3G) • M1080/50P (Link-B) • M720/50P³⁾ • M1080/50I
SLOT 3 (HDCU1000 standard DRX-5/HIF-26)	SDI OUT 1&2	<ul style="list-style-type: none"> • 720/59.94P³⁾ • 1080/59.94I • 525/59.94I 	<ul style="list-style-type: none"> • 720/50P³⁾ • 1080/50I • 625/50I
	SDI OUT 3&4	<ul style="list-style-type: none"> • M720/59.94P³⁾ • M1080/59.94I • M525/59.94I 	<ul style="list-style-type: none"> • M720/50P³⁾ • M1080/50I • M625/50I

Slot	Output connector	Output signal format ¹⁾	
SLOT 4 (HKCU1005)	SDI OUT 1&2	<ul style="list-style-type: none"> • 720/59.94P³⁾ • 1080/59.94I • 525/59.94I 	<ul style="list-style-type: none"> • 720/50P³⁾ • 1080/50I • 625/50I
	SDI OUT 3&4	<ul style="list-style-type: none"> • M720/59.94P³⁾ • M1080/59.94I • M525/59.94I 	<ul style="list-style-type: none"> • M720/50P³⁾ • M1080/50I • M625/50I
SLOT 5 (HKCU1001)	VBS 1&2	NTSC	PAL
	PIX OUT	NTSC	PAL
	WF OUT	NTSC	PAL

1) The prefix “M” for the output signal format means that the signal is output with character data of the camera control unit.

2) SD-SDI for monitoring obtained by downconverting Link-A.

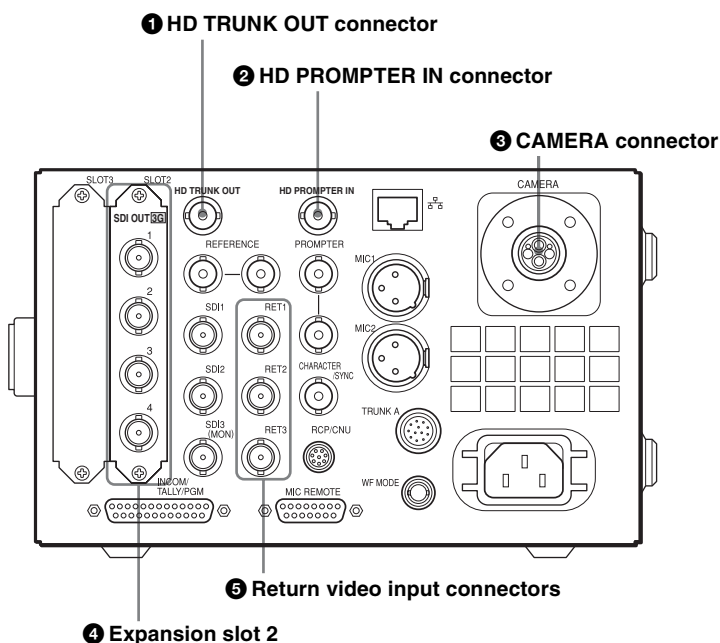
3) 720P is valid only when CCU VIDEO CONVERT is enabled.

4) Not selectable when 1080/59.94P (3G) or 1080/50P (3G) is selected for SDI OUT 3&4.

HDCU1500: HKCU-HB15 and HKCU2005 Installed

Rear Panel

The figure shows an HDCU1500 with an HKCU2005 in slot 2 mounted.



1 HD TRUNK OUT connector (BNC type)

When a camera that supports the HD trunk function is connected via the CAMERA connector, an HD-SDI signal fed to the HD TRUNK IN connector of the camera is output from this connector.

2 HD PROMPTER IN connector (BNC type)

When a camera that supports the HD prompter function is connected via the CAMERA connector, an HD-SDI signal fed to this connector can be output from the SDI 1 connector of the camera.

Note

The HD-SDI signal fed to this connector must be in frequency synchronization with the camera control unit.

3 CAMERA connector (optical/electrical multi-connector)

The connector becomes applicable both for HD-SDI and “High Bit Rate” transmission.

4 Expansion slot 2

Install the optional HKCU2005 3G Single Link Interface Unit to use 3G-SDI output.

For details on the HKCU2005, see “HKCU2005 3G Single Link Interface Unit” (page 17).

5 Return video input connectors

The connectors do not support 3G-SDI input. They can be used as before for HD-SDI, SD-SDI and VBS input.

Output Signals: in Dual Link Format (1080/59.94P, 1080/50P) Transmission

When installing an HKCU2005 3G Single Link Interface Unit in slot 2

Slot	Output connector	Output signal format ¹⁾	
SLOT 1 (HDCU1500 standard)	SDI1&SDI2	1080/59.94P (Link-A)	1080/50P (Link-A)
	SDI3 (MON)	<ul style="list-style-type: none"> • M1080/59.94P (Link-A) • M525/59.94I (Link-A)²⁾ 	<ul style="list-style-type: none"> • M1080/50P (Link-A) • M625/50I (Link-A)²⁾
SLOT 2 (HKCU2005)	SDI OUT 1&2	<ul style="list-style-type: none"> • 1080/59.94P (3G) • 1080/59.94P (Link-B) • 720/59.94P³⁾ 4) • 1080/59.94I⁴⁾ 	<ul style="list-style-type: none"> • 1080/50P (3G) • 1080/50P (Link-B) • 720/50P³⁾ 4) • 1080/50I⁴⁾
	SDI OUT 3&4	<ul style="list-style-type: none"> • M1080/59.94P (3G) • M1080/59.94P (Link-B) • M720/59.94P³⁾ • M1080/59.94I 	<ul style="list-style-type: none"> • M1080/50P (3G) • M1080/50P (Link-B) • M720/50P³⁾ • M1080/50I

1) The prefix “M” for the output signal format means that the signal is output with character data of the camera control unit.

2) SD-SDI for monitoring obtained by downconverting Link-A.

3) 720P is valid only when CCU VIDEO CONVERT is enabled.

4) Not selectable when 1080/59.94P (3G) or 1080/50P (3G) is selected for SDI OUT 3&4.

When installing an HKCU2005 3G Single Link Interface Unit in slot 2 and an HKCU1005 SDI Output Expansion Unit in slot 3

Slot	Output connector	Output signal format ¹⁾	
SLOT 1 (HDCU1500 standard)	SDI1&SDI2	1080/59.94P (Link-A)	1080/50P (Link-A)
	SDI3 (MON)	<ul style="list-style-type: none"> • M1080/59.94P (Link-A) • M525/59.94I (Link-A)²⁾ 	<ul style="list-style-type: none"> • M1080/50P (Link-A) • M625/50I (Link-A)²⁾
SLOT 2 (HKCU2005)	SDI OUT 1&2	<ul style="list-style-type: none"> • 1080/59.94P (3G) • 1080/59.94P (Link-B) • 720/59.94P³⁾ 4) • 1080/59.94I⁴⁾ 	<ul style="list-style-type: none"> • 1080/50P (3G) • 1080/50P (Link-B) • 720/50P³⁾ 4) • 1080/50I⁴⁾
	SDI OUT 3&4	<ul style="list-style-type: none"> • M1080/59.94P (3G) • M1080/59.94P (Link-B) • M720/59.94P³⁾ • M1080/59.94I 	<ul style="list-style-type: none"> • M1080/50P (3G) • M1080/50P (Link-B) • M720/50P³⁾ • M1080/50I
SLOT 3 (HKCU1005)	SDI OUT 1&2	<ul style="list-style-type: none"> • 720/59.94P³⁾ • 1080/59.94I • 525/59.94I 	<ul style="list-style-type: none"> • 720/50P³⁾ • 1080/50I • 625/50I
	SDI OUT 3&4	<ul style="list-style-type: none"> • M720/59.94P³⁾ • M1080/59.94I • M525/59.94I 	<ul style="list-style-type: none"> • M720/50P³⁾ • M1080/50I • M625/50I

1) The prefix “M” for the output signal format means that the signal is output with character data of the camera control unit.

2) SD-SDI for monitoring obtained by downconverting Link-A.

3) 720P is valid only when CCU VIDEO CONVERT is enabled.

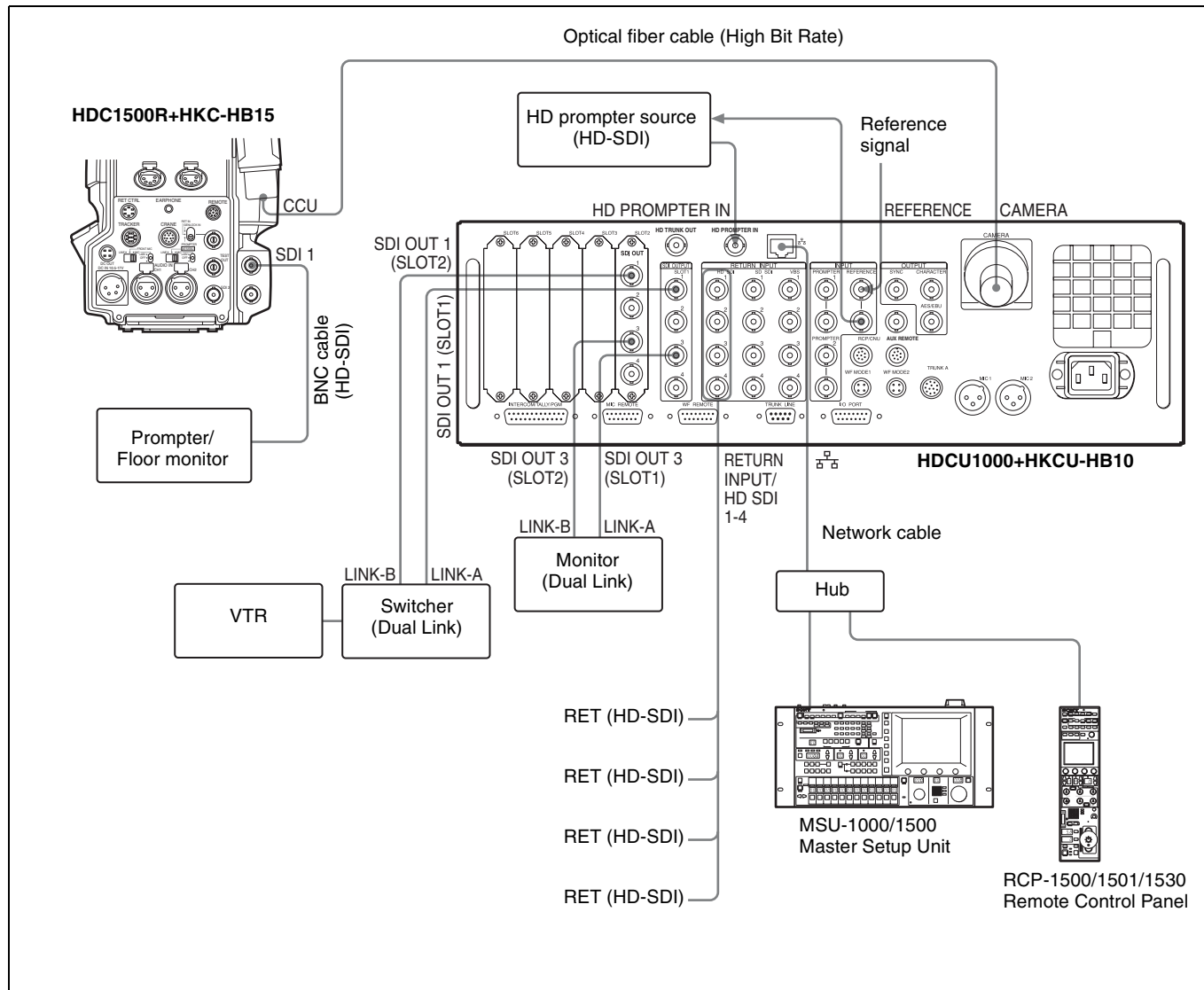
4) Not selectable when 1080/59.94P (3G) or 1080/50P (3G) is selected for SDI OUT 3&4.

Connections and Settings

Fiber Transmission System of Dual Link Format

The camera and the camera control unit are connected via a single optical fiber cable, and transmission is achieved at “High Bit Rate.”

Connection example 1



Settings

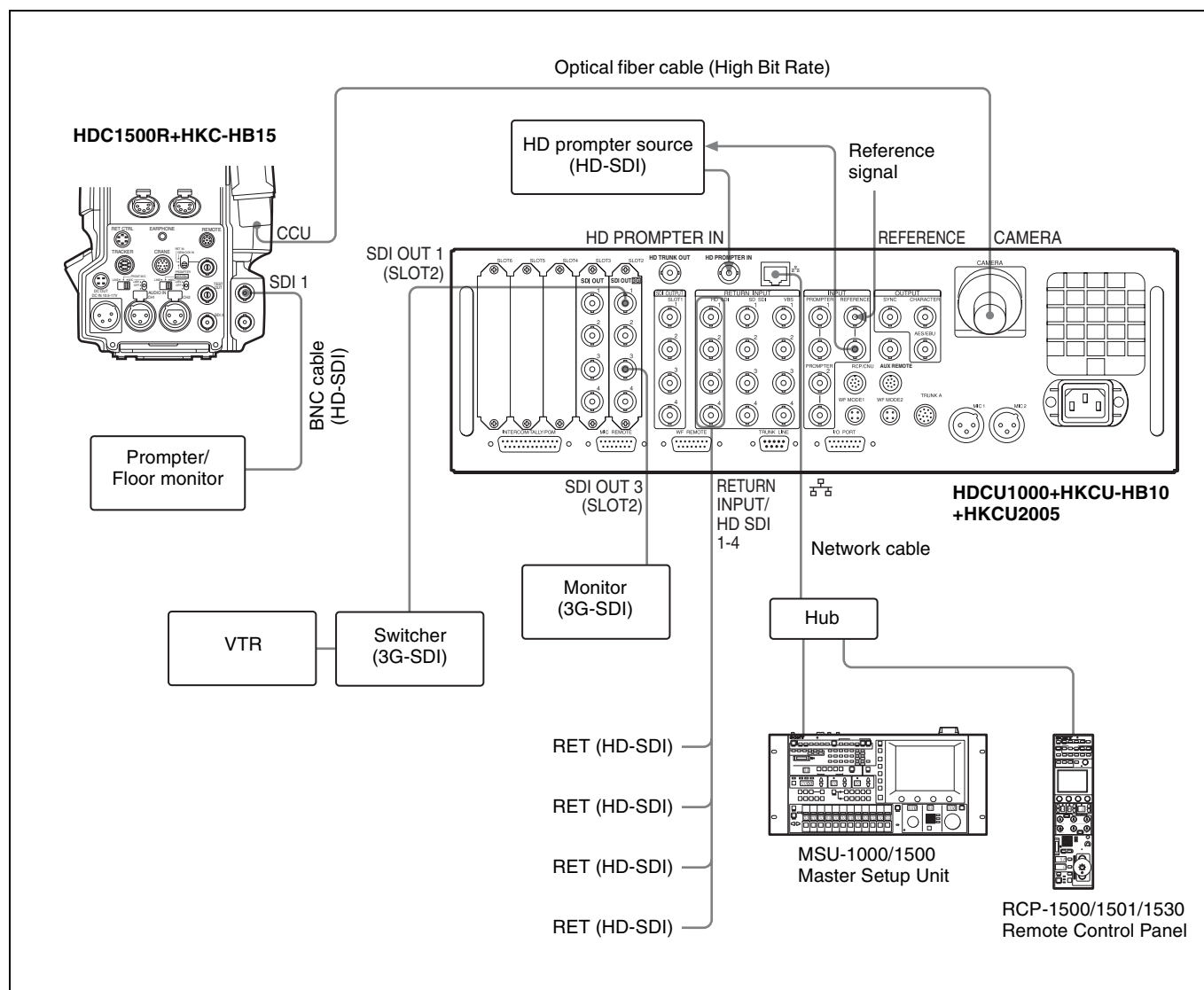
Camera

MAINTENANCE menu, <SDI OUT> page:
Set SDI-1 OUT to HD PROMPTER.

Camera control unit

Format: Select a Dual Link format of 1080/59.94P or 1080/50P.

Connection example 2



Settings

Camera

MAINTENANCE menu, <SDI OUT> page:
Set SDI-1 OUT to HD PROMPTER.

Camera control unit

Format: Select a Dual Link format of 1080/59.94P or 1080/50P.

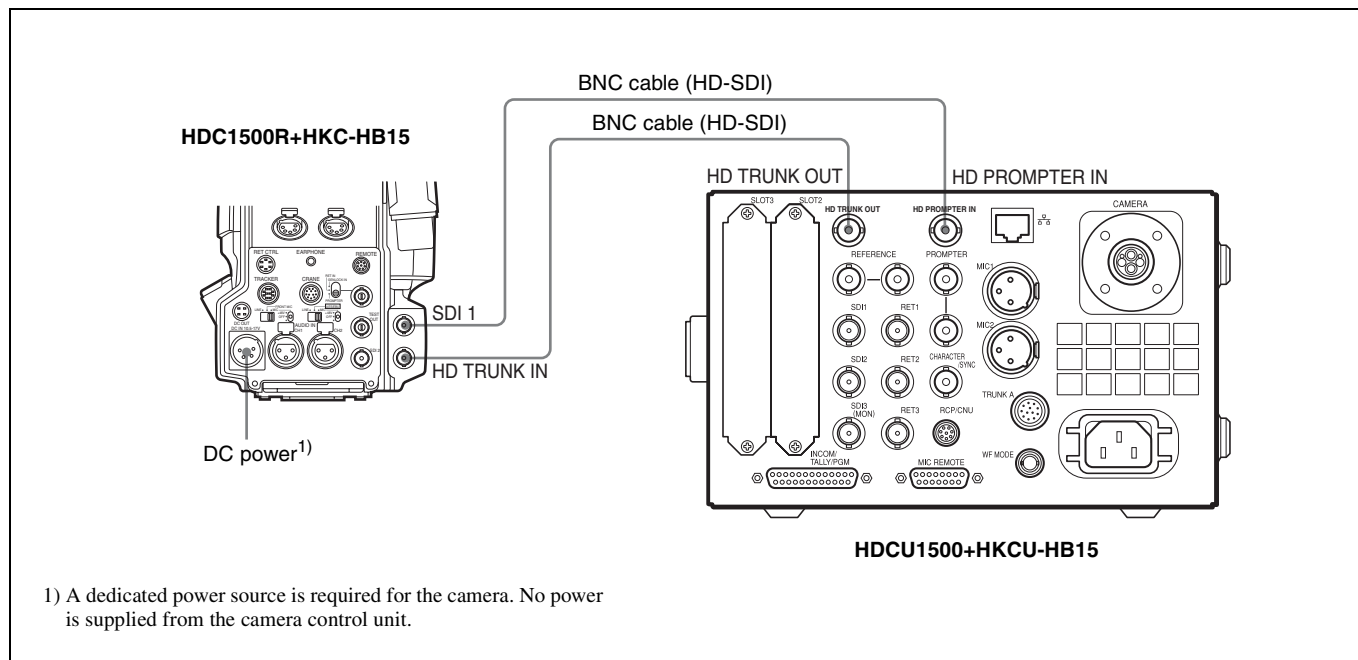
COAXIAL Connection System

The camera and the camera control unit is connected via two coaxial cables in place of an optical fiber cable, and transmission is achieved with HD-SDI. Unlike fiber transmission, Dual Link formats cannot be used.

Note

Do not connect an optical fiber cable in a COAXIAL connection system. If an optical fiber cable is connected, the SHORT LED of the CABLE ALARM indicators will flash on the front panel of the camera control unit.

Connection example



Settings

Camera

MAINTENANCE menu, <OTHERS 2> page:
Set COAX MODE to ON.

Camera control unit

Format: Select a Single Link format.
CCU CONFIGURATION menu, <PROMPT/TRUNK>
page: Set CABLE to COAX.

Two pairs of cameras and camera control units are connected via an optical fiber cable for “High Bit Rate” transmission.

- The primary camera and the secondary camera must be in genlock status.
- Do not connect any optical fiber cable to the secondary system.

The diagram illustrates the HDCU1000+HKCU-HB10 system, showing the connections between two camera control units and two cameras. The system is divided into two main sections: the top section for the Primary camera and the bottom section for the Secondary camera.

Primary camera section:

- Primary camera (HDC1500R+HKC-HB15):** Shown on the left, it has connections for CCU, SDI 1, and HD TRUNK IN.
- Primary camera control unit (HDCU1000+HKCU-HB10):** Shown on the right, it has connections for Reference signal, CAMERA, HD TRUNK OUT, HD PROMPTER IN, and BNC cables (HD-SDI).

Secondary camera section:

- Secondary camera (HDC1500R+HKC-HB15):** Shown on the left, it has connections for SDI 1, HD TRUNK IN, and DC power¹⁾.
- Secondary camera control unit (HDCU1000+HKCU-HB10):** Shown on the right, it has connections for HD TRUNK OUT, HD PROMPTER IN, and BNC cables (HD-SDI).

Connections:

- Optical fiber cable (High Bit Rate):** Connects the Reference signal input of the Primary camera control unit to the Reference signal input of the Secondary camera control unit.
- BNC cable (HD-SDI):** Connects the HD TRUNK OUT of the Primary camera control unit to the HD TRUNK IN of the Secondary camera.
- BNC cable (HD-SDI):** Connects the HD TRUNK OUT of the Secondary camera control unit to the HD TRUNK IN of the Primary camera.

Footnote:

1) A dedicated power source is required for the secondary camera. No power is supplied from the camera control unit.

MAINTENANCE menu, <SDI OUT> page:
Set SDI-1 OUT to HD PROMPTER.

MAINTENANCE menu, <OTHERS 2> page:
Set COAX MODE to ON.

Format: Set it to a Single Link format.
CCU CONFIGURATION menu, <PROMPT/TRUNK>
page: Set CABLE to CAMERA CABLE.

Format: Set it to a Single Link format.
CCU CONFIGURATION menu, <PROMPT/TRUNK>
page: Set CABLE to COAX.

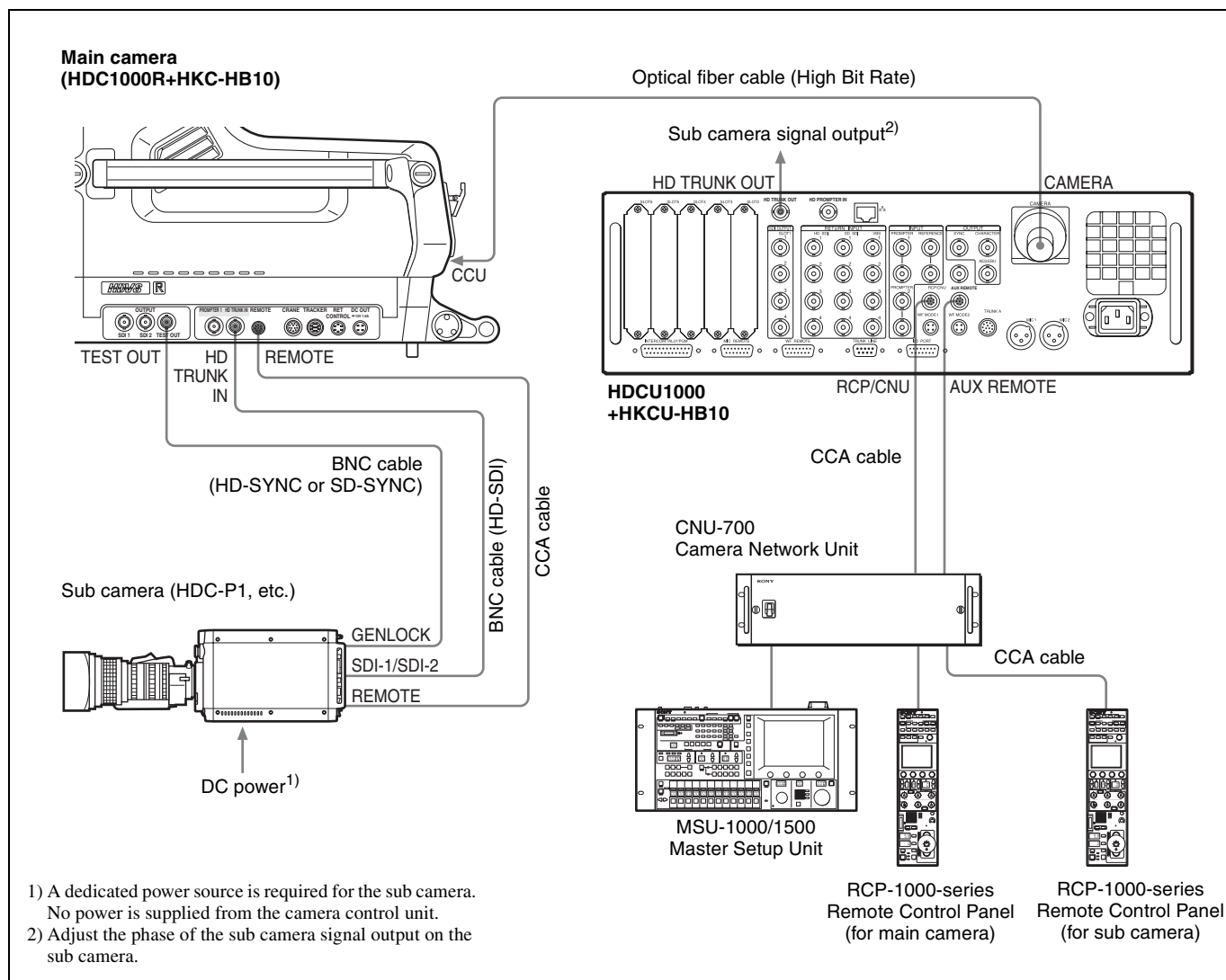
Sub-Camera System

Use an HDC-P1, etc. as the sub camera, which can be controlled via the AUX REMOTE connector of the HDCU1000.

Notes

- Only HDCU1000 units of serial number 15001 or higher (UC), or 420002 or higher (CE) support this system. HDC1500 cannot be used.
- AES/EBU signal cannot be used between the camera and camera control unit.

Connection example



Settings

Main camera

MAINTENANCE menu, <TEST OUT> page:
Set OUTPUT to HD-SYNC or SD-SYNC.

Sub camera

Enable the genlock function.

Note

To use the tally function of the sub camera, supply the tally signal directly to the sub camera.

Camera control unit

Format: Set it to a Single Link format.

CCU CONFIGURATION menu, <PROMPT/TRUNK> page: Set AUX REMOTE to ENABLE.

Specifications

HKC-HB10

General

Power consumption	8.4 W (HKC-HB10 only)
Operating temperature	−20°C to +45°C (−4°F to +113°F)
Storage temperature	−20°C to +60°C (−4°F to +140°F)
Dimensions (w/h)	SDI-95 board: Approx. 154 × 102 mm (6 1/8 × 4 1/8 inches)
Mass	Approx. 0.3 kg (10.6 oz)

Input connector

HD TRUNK IN	BNC type (1) HD trunk video, or EXT RET (HD-SDI) in COAXIAL transmission or standalone status: Conforming to BTA S-004/SMPTE 292M, 75 ohms, 1.485 Gbps/1.4835 Gbps EXT RET (VBS) in standalone status: 1.0 Vp-p, 75 ohms
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Output connector

SDI 1	BNC type (1) MAIN (Link-A)/HD PROMPTER or COAXIAL transmission: Conforming to BTA S-004/SMPTE 292M, 0.8 Vp-p, 75 ohms, 1.485 Gbps/ 1.4835 Gbps 3G-SDI: Conforming to SMPTE 424M/ 425M Level-B, 0.8 Vp-p, 75 ohms, 2.970 Gbps/2.967 Gbps
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Input/output connectors other than those mentioned above are the same as the cameras (HDC1000R/1000).

Design and specifications are subject to change without notice.

HKC-HB15

General

Power consumption	7.9 W (HKC-HB15 only)
Operating temperature	−20°C to +45°C (−4°F to +113°F)

Storage temperature	−20°C to +60°C (−4°F to +140°F)
Dimensions (w/h)	SDI-95 board: Approx. 154 × 102 mm (6 1/8 × 4 1/8 inches)
Mass	Approx. 1.0 kg (2 lb 3.3 oz)

Input connector

HD TRUNK IN	BNC type (1) HD trunk video, or EXT RET (HD-SDI) in COAXIAL transmission or standalone status: Conforming to BTA S-004/SMPTE 292M, 75 ohms, 1.485 Gbps/1.4835 Gbps EXT RET (VBS) in standalone status: 1.0 Vp-p, 75 ohms
-------------	---

Output connector

SDI 1	BNC type (1) MAIN (Link-A)/HD PROMPTER or COAXIAL transmission: Conforming to BTA S-004/SMPTE 292M, 0.8 Vp-p, 75 ohms, 1.485 Gbps/ 1.4835 Gbps 3G-SDI: Conforming to SMPTE 424M/ 425M Level-B, 0.8 Vp-p, 75 ohms, 2.970 Gbps/2.967 Gbps
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Input/output connectors other than those mentioned above are the same as the cameras (HDC1500R/1400R/1500).

Design and specifications are subject to change without notice.

HKCU-HB10

General

Power consumption	6.5 W (HKCU-HB10 only)
Operating temperature	+5°C to +40°C (+41°F to +104°F)
Storage temperature	−20°C to +60°C (−4°F to +140°F)
Dimensions (w/h/d)	Approx. 421 × 128 × 184 mm (16 5/8 × 5 1/8 × 7 3/8 inches)
Mass	Approx. 1.2 kg (2 lb 10.3 oz)

Input connector

HD PROMPTER IN	BNC type (1) Conforming to BTA S-004/SMPTE 292M, 75 ohms, 1.485 Gbps/ 1.4835 Gbps
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Output connectors

HD TRUNK OUT

BNC type (1)
Conforming to BTA S-004/SMPTE
292M, 0.8 Vp-p, 75 ohms, 1.485 Gbps/
1.4835 Gbps
(Effective only when the camera is in
Single Link format or in COAXIAL
transmission)

AES/EBU

BNC type (1)
AES/EBU format
Invalid in Sub-Camera system (AUX
REMOTE enabled)

SDI OUTPUT (SLOT 1)

BNC type (4)
Conforming to BTA S-004/SMPTE
292M/SMPTE 372M, 0.8 Vp-p, 75 ohms,
1.485 Gbps/1.4835 Gbps

SDI OUT (only when installed in SLOT 2. When installed
in slot 3 to 6, they function the same as
those of the HDCU1000)

BNC type (4)
Conforming to BTA S-004/SMPTE
292M/SMPTE 372M, 0.8 Vp-p, 75 ohms,
1.485 Gbps/1.4835 Gbps

Input/output connector

AUX REMOTE

8-pin multi-connector (1)
Valid in Sub-Camera system (AUX
REMOTE enabled)

Input/output connectors other than those mentioned above
are the same as the HDCU1000.

Design and specifications are subject to change without
notice.

HKCU-HB15

General

Power consumption

6.5 W (HKCU-HB15 only)

Operating temperature

−10°C to +40°C (+14°F to +104°F)

Storage temperature

−20°C to +60°C (−4°F to +140°F)

Dimensions (w/h/d)

Approx. 200 × 124 × 195 mm
(7 7/8 × 5 × 7 3/4 inches)

Mass

Approx. 0.6 kg (1 lb 5.2 oz)

Input connector

HD PROMPTER IN

BNC type (1)
Conforming to BTA S-004/SMPTE
292M, 75 ohms, 1.485 Gbps/
1.4835 Gbps

Output connectors

HD TRUNK OUT

BNC type (1)
Conforming to BTA S-004/SMPTE
292M, 0.8 Vp-p, 75 ohms, 1.485 Gbps/
1.4835 Gbps
(Effective only when the camera is in
Single Link format or in COAXIAL
transmission)

SDI1, SDI2, SDI3(MON) (SLOT 1)

BNC type (1 each)
Conforming to BTA S-004/SMPTE
292M/SMPTE 372M, 0.8 Vp-p, 75 ohms,
1.485 Gbps/1.4835 Gbps

SDI OUT (HKCU1005 installed in SLOT2)

BNC type (4)
Conforming to BTA S-004/SMPTE
292M/SMPTE 372M, 0.8 Vp-p, 75 ohms,
1.485 Gbps/1.4835 Gbps

Input/output connectors other than those mentioned above
are the same as the HDCU1500.

Design and specifications are subject to change without
notice.

HKCU2005

General

Power consumption

8.5 W (HKCU2005 only)

Operating temperature

−10°C to +40°C (+14°F to +104°F)

Storage temperature

−20°C to +60°C (−4°F to +140°F)

Dimensions (w/h/d)

DRX-8 board:

Approx. 19 × 110 × 226 mm
(3/4 × 4 3/8 × 8 7/8 inches)

HIF-57 board:

Approx. 19 × 98 × 159 mm
(3/4 × 3 7/8 × 6 1/4 inches)

Mass

Approx. 0.4 kg (14.1 oz)

Output connectors

3G-SDI OUT connectors (HIF-57 board)

BNC-type (4)

3G-SDI: Conforming to BTA S-004/
SMPTE 424M/SMPTE 425M
Level B, 0.8 Vp-p, 75 ohms,
2.970 Gbps/2.967 Gbps

HD-SDI: Conforming to BTA S-004/
SMPTE 292M/SMPTE 372M,
0.8 Vp-p, 75 ohms, 1.485 Gbps/
1.4835 Gbps

Design and specifications are subject to change without notice.

Note

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Product Configuration

HKC-HB10

SDI-95 board (1)
DC fan (1)
Coaxial cables (2)
Optical composite cable (1)
Indication labels (1 set)
Parts for radiation (1 set)
Installation guide (1)

HKC-HB15

SDI-95 board (1)
Power unit (1)
DC fan (1)
Coaxial cable (2)
Optical composite cable (1)
Indication labels (1 set)
Parts for radiation (1 set)
Installation guide (1)

HKCU-HB10

Rear-panel assembly (SDP-16 board, CN-2672G board,
optical composite cable included) (1 set)
Harness (1)
Shield-reinforcing parts (1 set)
Indication labels (1 set)
Parts for radiation (1 set)
Operation manual (this manual) (1)

HKCU-HB15

Rear-panel assembly (SDP-16 board included, optical
composite cable included) (1 set)
Shield-reinforcing parts (1 set)
Indication labels (1 set)
Parts for radiation (1 set)
Operation manual (this manual) (1)

HKCU2005

DRX-8 board (1)
HIF-57 board (1)
Indication labels (1 set)
Installation guide (1)

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<http://pro.sony.com.cn>

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