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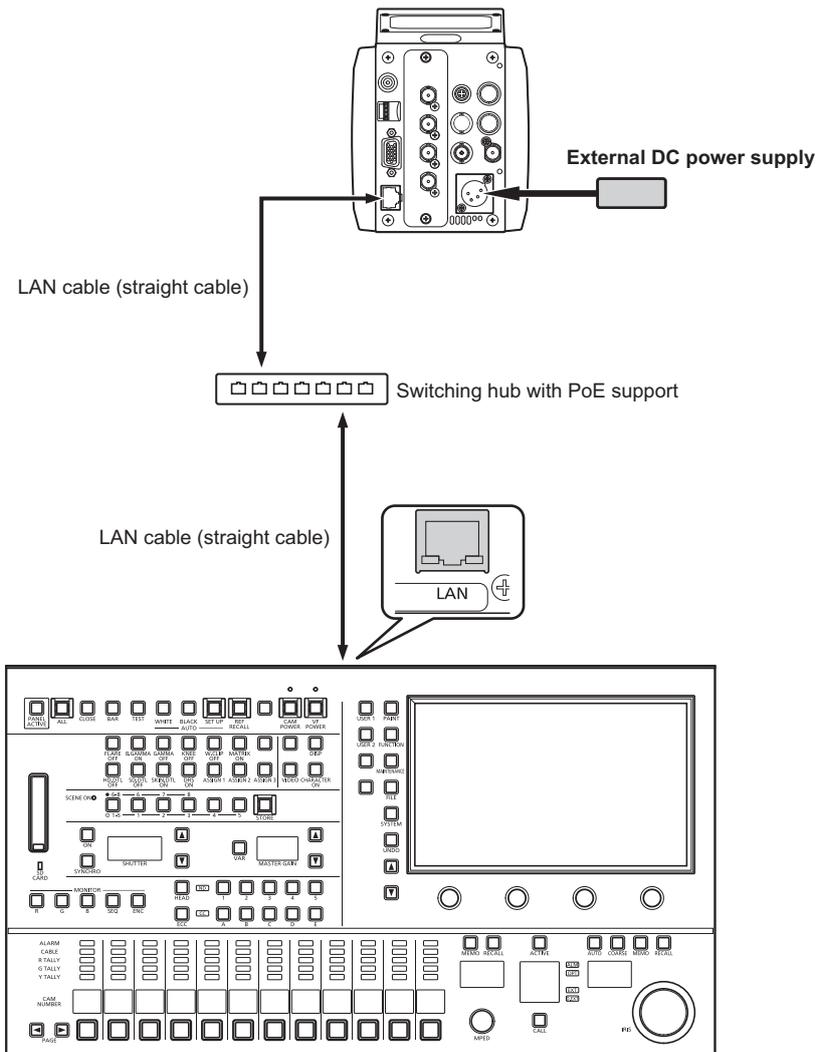
# Connecting the Unit to AK-UB300G Series Cameras

**NOTE**

- The descriptions in this document assume that the system version of the unit is V4.40-00-0.00 or later. Make sure that the system version of the AK-UB300G used in conjunction with the unit is V7.52-000-00.00 or later.

## Connection example

This is a connection example for connecting one AK-UB300G and one unit.



## Connections

- Set the connection setting to [LAN(AW)] in the [CONNECT SETTING] menu of [SYSTEM].

CAM01 : AK-UB300					1/1
	1	2	3	4	5
	CAMERA	CCU	CONNECT SETTING	CAM IP SETTING	MSU IP SETTING
1	CAM1 LAN(AW)	CAM2 NON	CAM3 NON	UPLOAD (turn)	
2	CAM4 NON	CAM5 NON	CAM6 NON	UPLOAD (turn)	
3	CAM7 NON	CAM8 NON	CAM9 NON	UPLOAD (turn)	
	CAM1 LAN(AW)	CAM2 NON	CAM3 NON	UPLOAD (turn)	

- When connecting, observe the following points.
  - Connect the [LAN] connector on this unit to the <LAN> terminal on the AK-UB300G using a LAN cable (sold separately).
  - Configure the camera IP address and port number settings of the connection destinations in [CAMERA IP SETTING] as well.
  - This unit can be powered using PoE+. Use a switching hub with PoE+ support.
  - Use a straight cable (category 5e or higher; up to 100 m (328.0 ft) in length) for the LAN cable (STP).
- For details on switching hubs and PoE+ injectors that have been verified to support PoE+, consult with your dealer.

### NOTE

- This unit does not support a serial connection with the AK-UB300G.



Number	Part name	✓ : Enabled ×: Disabled	Remarks
Front panel 2	[FLARE OFF] button	✓	Enabled starting with the following system version. AK-UB300G: V7.52-000-00.00 This unit: V4.40-00-0.00
	[B.GAMMA ON] button	✓	Enabled starting with the following system version. AK-UB300G: V7.52-000-00.00 This unit: V4.40-00-0.00
	[GAMMA OFF] button	✓	Enabled starting with the following system version. AK-UB300G: V7.52-000-00.00 This unit: V4.40-00-0.00
	[KNEE OFF] button	✓	Enabled starting with the following system version. AK-UB300G: V7.52-000-00.00 This unit: V4.40-00-0.00
	[W.CLIP OFF] button	×	
	[MATRIX ON] button	✓	
	[DISP] button	✓	
	[HD.DTL OFF] button	✓	
	[SD.DTL OFF] button	×	
	[SKINDTL ON] button	✓	
	[DRS ON] button	×	Enabled starting with the following system version. AK-UB300G: V7.52-000-00.00 This unit: V4.40-00-0.00
	[ASSIGN 1], [ASSIGN 2], and [ASSIGN 3] buttons	✓	This does not work when a function not available with AK-UB300G is assigned.
	[VIDEO] button	✓	
[CHARACTER ON] button	×		
Front panel 3	Memory card slot	✓	
	Memory card access indicator	✓	
	[SCENE ON] indicator	✓	
	Scene file page switching button	✓	
	[1/6], [2/7], [3/8], [4], and [5] buttons (SCENE FILE)	✓	
	[STORE] button	×	
	[(SHUTTER) ON] button	✓	
	[SYNCHRO] button	✓	
	[SHUTTER] display	✓	"----" is displayed when the synchro shutter is selected.
	[SHUTTER] setting buttons	✓	Use is not possible when the synchro shutter is selected.
	[VAR] button	✓	
	[MASTER GAIN] display	✓	
[MASTER GAIN] setting buttons	✓		

Number	Part name	✓ : Enabled ×: Disabled	Remarks
Front panel 4	[MONITOR R, G, B, SEQ, ENC] (monitor switching) buttons	×	
	[HEAD] button	×	
	[ECC] button	×	
	[ND] indicator	✓	
	[1] to [5] (ND filter selection) buttons	✓	Only [1] to [4] are enabled for ND filters.
	[CC] indicator	×	
	[A] to [E] (CC filter selection) buttons	×	
Front panel 5	[USER 1, 2] button	✓	This does not work when a function not available with AK-UB300G is assigned.
	[PAINT] button	✓	
	[FUNCTION] button	✓	
	[MAINTENANCE] button	✓	
	[FILE] button	×	
	[SYSTEM] button	✓	
	[UNDO] button	✓	
	Cursor movement buttons	✓	
	LCD panel	✓	
	Menu operation dials	✓	
Front panel 6	[ALARM] indicators	✓	
	[CABLE] indicators	×	
	[R, G, Y TALLY] indicators	✓	Only [R TALLY] and [G TALLY] are enabled.
	[CAM NUMBER] displays	✓	
	[PAGE] buttons	✓	
	Camera selection buttons	✓	

Number	Part name	✓ : Enabled ×: Disabled	Remarks
Front panel 7	[(MPED) MEMO] button	×	
	[(MPED) RECALL] button	×	
	[MPED] display	✓	
	[ACTIVE] button	✓	
	Camera number/tally display	✓	
	[AUTO] button	✓	
	[COARSE] button	✓	
	[(IRIS) MEMO] button	×	
	[(IRIS) RECALL] button	×	
	[IRIS] display	✓	
	[MPED] dial	✓	
	[CALL] button	×	
	[ALM] indicator	✓	
	[OPT] indicator	×	
	[EXT] indicator	×	
	[D.EXT] indicator	×	
[IRIS] dial	✓		

# MSU menu (when AK-UB300G is connected)

## MSU menu list

When an AK-UB300G Multi-Purpose Camera is connected, the MSU menu will be as follows.

### NOTE

- The descriptions in this document assume that the system version of the unit is V4.40-00-0.00 or later. Make sure that the system version of the AK-UB300G used in conjunction with the unit is V7.52-000-00.00 or later.

For details on menu operations, refer to the following sections in the Operating Instructions.

➔ “Displaying menus and the menu configuration”

PAINT	1 PAINT SW	MATRIX	➔ “MATRIX” (see page 16)
		LINEAR.M	➔ “LINEAR.M” (see page 16)
		C.CORR	➔ “C.CORR” (see page 16)
		SKIN DTL	➔ “SKIN DTL” (see page 16)
		DTL	➔ “DTL” (see page 16)
		DNR	➔ “DNR” (see page 16)
		D.HAZE	➔ “D.HAZE” (see page 16)
		DRS	➔ “DRS” (see page 16)
		FLARE	➔ “FLARE” (see page 16)
		GAMMA	➔ “GAMMA” (see page 16)
		B.GAMMA	➔ “B.GAMMA” (see page 16)
		KNEE	➔ “KNEE” (see page 16)
	2 SHUTTER SPEED	STEP	➔ “STEP” (see page 17)
		SYNCHRO	➔ “SYNCHRO” (see page 17)
		SWITCH	➔ “SWITCH” (see page 17)
		MODE	➔ “MODE” (see page 17)
	3 PED	R PED	➔ “R PED” (see page 17)
		B PED	➔ “B PED” (see page 17)
		M.PED	➔ “M.PED” (see page 17)
	4 CHROMA	LEVEL	➔ “LEVEL” (see page 18)
		LEVEL SW	➔ “LEVEL SW” (see page 18)
	5 RB GAIN	R	➔ “R” (see page 18)
		B	➔ “B” (see page 18)
	6 COLOR TEMP	TEMP	➔ “TEMP” (see page 19)
	7 FLARE	R FLARE	➔ “R FLARE” (see page 19)
		G FLARE	➔ “G FLARE” (see page 19)
		B FLARE	➔ “B FLARE” (see page 19)
		M FLARE	➔ “M FLARE” (see page 19)
SWITCH		➔ “SWITCH” (see page 19)	

PAINT	8 GAMMA	R GAMMA	➔ "R GAMMA" (see page 20)
		B GAMMA	➔ "B GAMMA" (see page 20)
		MASTER	➔ "MASTER" (see page 20)
		GAM MODE	➔ "GAM MODE" (see page 20)
		B.STRETCH	➔ "B.STRETCH" (see page 20)
		DYNAMIC	➔ "DYNAMIC" (see page 20)
		K.POINT	➔ "K.POINT" (see page 20)
		K.SLOPE	➔ "K.SLOPE" (see page 20)
		SWITCH	➔ "SWITCH" (see page 20)
	9 BLACK GAMMA	R B.GAM	➔ "R B.GAM" (see page 20)
		B B.GAM	➔ "B B.GAM" (see page 20)
		MASTER	➔ "MASTER" (see page 20)
		SWITCH	➔ "SWITCH" (see page 20)
	10 KNEE	R POINT %	➔ "R POINT %" (see page 21)
		B POINT %	➔ "B POINT %" (see page 21)
		M.POINT %	➔ "M.POINT %" (see page 21)
		R SLOPE	➔ "R SLOPE" (see page 21)
		B SLOPE	➔ "B SLOPE" (see page 21)
		M.SLOPE	➔ "M.SLOPE" (see page 21)
		POINT %	➔ "POINT %" (see page 21)
		LEVEL %	➔ "LEVEL %" (see page 21)
		RESPONSE	➔ "RESPONSE" (see page 21)
		KNEE	➔ "KNEE" (see page 21)
	11 DTL	MASTER	➔ "MASTER" (see page 22)
		H LEVEL	➔ "H LEVEL" (see page 22)
		V LEVEL	➔ "V LEVEL" (see page 22)
		PEAK FRQ	➔ "PEAK FRQ" (see page 22)
		VDTL FRQ	➔ "VDTL FRQ" (see page 22)
		CRISP	➔ "CRISP" (see page 22)
		L.DPNDNT	➔ "L.DPNDNT" (see page 22)
		DETAIL SOURCE	➔ "DETAIL SOURCE" (see page 22)
		GAIN(+)	➔ "GAIN(+)" (see page 22)
		GAIN(-)	➔ "GAIN(-)" (see page 22)
		CLIP+	➔ "CLIP+" (see page 22)
		CLIP-	➔ "CLIP-" (see page 22)
		APERTURE	➔ "APERTURE" (see page 22)
		SWITCH	➔ "SWITCH" (see page 22)
	L.DPN SW	➔ "L.DPN SW" (see page 22)	

PAINT	12 SKIN DTL	MEM SEL	➔ "MEM SEL" (see page 23)
		CURSOR	➔ "CURSOR" (see page 23)
		POS H	➔ "POS H" (see page 23)
		POS V	➔ "POS V" (see page 23)
		SKIN GET	➔ "SKIN GET" (see page 23)
		ZEBRA	➔ "ZEBRA" (see page 23)
		EFFECT	➔ "EFFECT" (see page 23)
		MEMORY	➔ "MEMORY" (see page 23)
		CRISP	➔ "CRISP" (see page 23)
		I CENTER	➔ "I CENTER" (see page 23)
		I WIDTH	➔ "I WIDTH" (see page 23)
		Q WIDTH	➔ "Q WIDTH" (see page 23)
		Q PHASE	➔ "Q PHASE" (see page 23)
		SWITCH	➔ "SWITCH" (see page 23)
		13 MATRIX	TABLE
	CLR CORR		➔ "CLR CORR" (see page 24)
	R-G P		➔ "R-G P" (see page 24)
	R-G N		➔ "R-G N" (see page 24)
	R-B P		➔ "R-B P" (see page 24)
	R-B N		➔ "R-B N" (see page 24)
	G-R P		➔ "G-R P" (see page 24)
	G-R N		➔ "G-R N" (see page 24)
	G-B P		➔ "G-B P" (see page 24)
	G-B N		➔ "G-B N" (see page 24)
	B-R P		➔ "B-R P" (see page 24)
	B-R N		➔ "B-R N" (see page 24)
	B-G P		➔ "B-G P" (see page 24)
	B-G N		➔ "B-G N" (see page 24)
	SWITCH		➔ "SWITCH" (see page 24)
	C.COR SW	➔ "C.COR SW" (see page 24)	
LINEAR SW	➔ "LINEAR SW" (see page 24)		

PAINT	14 COLOR CORRE	TABLE	➔ "TABLE" (see page 25)
		CORR TBL	➔ "CORR TBL" (see page 25)
		CORRECT	➔ "CORRECT" (see page 25)
		SAT	➔ "SAT" (see page 25)
		PHASE	➔ "PHASE" (see page 25)
		SAT G	➔ "SAT G" (see page 25)
		PHS G	➔ "PHS G" (see page 25)
		SAT CY_G	➔ "SAT CY_G" (see page 26)
		PHS CY_G	➔ "PHS CY_G" (see page 26)
		SAT CY	➔ "SAT CY" (see page 26)
		PHS CY	➔ "PHS CY" (see page 26)
		SAT B_CY	➔ "SAT B_CY" (see page 26)
		PHS B_CY	➔ "PHS B_CY" (see page 26)
		SAT B	➔ "SAT B" (see page 26)
		PHS B	➔ "PHS B" (see page 26)
		SAT MG_B	➔ "SAT MG_B" (see page 26)
		PHS MG_B	➔ "PHS MG_B" (see page 26)
		SAT MG	➔ "SAT MG" (see page 26)
		PHS MG	➔ "PHS MG" (see page 26)
		SAT R_MG	➔ "SAT R_MG" (see page 26)
		PHS R_MG	➔ "PHS R_MG" (see page 26)
		SAT R	➔ "SAT R" (see page 26)
		PHS R	➔ "PHS R" (see page 26)
		SAT YL_R	➔ "SAT YL_R" (see page 26)
		PHS YL_R	➔ "PHS YL_R" (see page 26)
		SAT YL	➔ "SAT YL" (see page 26)
		PHS YL	➔ "PHS YL" (see page 26)
		SAT G_YL	➔ "SAT G_YL" (see page 26)
		PHS G_YL	➔ "PHS G_YL" (see page 26)
		SWITCH	➔ "SWITCH" (see page 26)
		C.COR SW	➔ "C.COR SW" (see page 26)
		LINEAR SW	➔ "LINEAR SW" (see page 26)
		15 SKIN CORRE	HUE
	TONE		➔ "TONE" (see page 27)
	SWITCH		➔ "SWITCH" (see page 27)
	TABLE		➔ "TABLE" (see page 27)
	16 DNR	LEVEL	➔ "LEVEL" (see page 27)
		SWITCH	➔ "SWITCH" (see page 27)

PAINT	17 HDR PAINT	B.GAMMA R	➔ "B.GAMMA R" (see page 28)
		B.GAMMA B	➔ "B.GAMMA B" (see page 28)
		B.GAMMA M	➔ "B.GAMMA M" (see page 28)
		B.GAMM SW	➔ "B.GAMM SW" (see page 28)
		KNEE PINT	➔ "KNEE PINT" (see page 28)
		KNEE SLPE	➔ "KNEE SLPE" (see page 28)
		KNEE SW	➔ "KNEE SW" (see page 28)
		HLG TYPE	➔ "HLG TYPE" (see page 28)
		HLG MODE	➔ "HLG MODE" (see page 28)
		SDR MODE	➔ "SDR MODE" (see page 28)
		SHOOTING	➔ "SHOOTING" (see page 28)
		DNR LEV	➔ "DNR LEV" (see page 28)
		DNR SW	➔ "DNR SW" (see page 28)
		SDR GAIN	➔ "SDR GAIN" (see page 28)
		SDR CLIP	➔ "SDR CLIP" (see page 28)
FUNCTION	1 SYSTEMCAM	CROP OUT	➔ "CROP OUT" (see page 29)
		MARKER	➔ "MARKER" (see page 29)
		CROP ADJ	➔ "CROP ADJ" (see page 29)
		CROP H %	➔ "CROP H %" (see page 29)
		CROP V %	➔ "CROP V %" (see page 29)
	2 AUTO IRIS	LEVEL	➔ "LEVEL" (see page 29)
	3 D.HAZE CLEAR	LEVEL	➔ "LEVEL" (see page 30)
		SWITCH	➔ "SWITCH" (see page 30)

MAINTENANCE	1 CCU MENU CNT		This is not used when connected with an AK-UB300G. ("—" is displayed for the parameter of each item.)
	2 CAMERA MENU	MENU	➔ "MENU" (see page 31)
		CURSOR	➔ "CURSOR" (see page 31)
		EXECUTE	➔ "EXECUTE" (see page 31)
	3 MSU SETTING	USER 1-1 to 1-10	Refer to the following section in the Operating Instructions. ➔ "MAINTENANCE - 3 MSU SETTING"
		USER 2-1 to 2-10	
		ASSIGN 1 to 3	
		ASSIGN.S	
		LCD BRI	
		7SG BR1	
		7SG BR2	
		LED BRI	
		BUZZER	
		PERIOD	
		CYCLE	
		STD ND	
		STD CC	
		IN FMT	
		OUT FMT	
		DATA SAVE	
DATA LOAD			
CARD FRMT			
INIT ALL			
INIT			
POWER BUTTON			
UPGRADE			
SYSTEM VERSION			
SOFT VERSION			
FPGA VERSION			

SYSTEM	1 CAMERA	FORMAT	➔ "FORMAT" (see page 32)
		G.LCK IN	➔ "G.LCK IN" (see page 32)
		G.LCK CRS	➔ "G.LCK CRS" (see page 32)
		G.LCK FNE	➔ "G.LCK FNE" (see page 32)
		SHOOTING	➔ "SHOOTING" (see page 32)
	2 CCU	This is not used when connected with an AK-UB300G.	
	3 CONNECT SETTING	CAM1	➔ "CAM1" (see page 33)
		CAM2 to 99	➔ "CAM2 to 99" (see page 33)
		UPLOAD	➔ "UPLOAD" (see page 33)
	4 CAM IP SETTING	CAM SEL	Refer to the following section in the Operating Instructions. ➔ "SYSTEM - 4 CAM IP SETTING"
		CAM01 to CAM99 IP	
		PORT	
		UPLOAD	
	5 MSU IP SETTING	IP	Refer to the following section in the Operating Instructions. ➔ "SYSTEM - 5 MSU IP SETTING"
		PORT	
		UPLOAD	
		SUBNET	
		DEF GW	
		UPLOAD	
		MAC ADDRESS	

# PAINT

## 1 PAINT SW

CAM01 : AK-UB300						1/2
	1 PAINT SW	2 SHUTTER SPEED	3 PED	4 CHROMA	5 RB GAIN	
	6 COLOR TEMP	7 FLARE	8 GAMMA	9 BLACK GAMMA	10 KNEE	
1	MATRIX ON	LINEAR.M ON	C.CORR ON	SKIN DTL ON		
2	DTL ON	DNR ON	D.HAZE ON	DRS ON		1/1
3	FLARE ON	GAMMA ON	B.GAMMA ON	KNEE MANUAL		
	MATRIX ON	LINEAR.M ON	C.CORR ON	SKIN DTL ON		

Item	Setting details
<b>MATRIX</b>	Enables/disables matrix (linear matrix/12-axis color correction).
<b>LINEAR.M</b>	Enables/disables linear matrix.
<b>C.CORR</b>	Enables/disables 12-axis color correction.
<b>SKIN DTL</b>	Enables/disables the skin tone detail.
<b>DTL</b>	Enables/disables the detail.
<b>DNR</b>	Enables/disables the noise reduction function.
<b>D.HAZE</b>	Enables/disables the haze reduction function.
<b>DRS</b>	Enables or disables the dynamic range stretcher. [---] is displayed during UHD mode or UHD CROP mode.
<b>FLARE</b>	Enables or disables the flare.
<b>GAMMA</b>	Enables or disables the gamma.
<b>B.GAMMA</b>	Enables or disables the black gamma. <ul style="list-style-type: none"> <li>This setting is not available when [DRS] of [PAINT SWITCH] is set to [ON].</li> </ul>
<b>KNEE</b>	Enables or disables the knee.

## 2 SHUTTER SPEED

CAM01 : AK-UB300						1/2
◀	1	2	3	4	5	▶
	PAINT SW	SHUTTER SPEED	PED	CHROMA	RB GAIN	
	6	7	8	9	10	
	COLOR TEMP	FLARE	GAMMA	BLACK GAMMA	KNEE	
1	STEP	SYNCHRO				▲
	100	—				
2	SWITCH	MODE				1/1
	ON	SHUT				
						▼
	STEP	SYNCHRO				
	100	—				

Item	Setting details
STEP	Sets the shutter speed.
SYNCHRO	The setting cannot be set.
SWITCH	Enables/disables the shutter function.
MODE	Selects the operation mode of the shutter.

## 3 PED

CAM01 : AK-UB300						1/2
◀	1	2	3	4	5	▶
	PAINT SW	SHUTTER SPEED	PED	CHROMA	RB GAIN	
	6	7	8	9	10	
	COLOR TEMP	FLARE	GAMMA	BLACK GAMMA	KNEE	
1	R PED		B PED	M.PED		▲
	0		0	0		
						1/1
						▼
	R PED		B PED	M.PED		
	0		0	0		

Item	Setting details
R PED	Sets the correction level of red to the master pedestal.
B PED	Sets the correction level of blue to the master pedestal.
M.PED	Adjusts the black level of the master pedestal.

**4 CHROMA**

CAM01 : AK-UB300						1/2
◀	1	2	3	4	5	▶
	PAIN SW	SHUTTER SPEED	PED	CHROMA	RB GAIN	
	6	7	8	9	10	
	COLOR TEMP	FLARE	GAMMA	BLACK GAMMA	KNEE	
1	LEVEL				LEVEL SW	▲
	0				OFF	
						1/1
						▼
	LEVEL				LEVEL SW	
	0				OFF	

Item	Setting details
LEVEL	Adjusts the chroma gain when [LEVEL SW] is set to [ON].
LEVEL SW	Enables/disables the gain adjustment of chroma.

**5 RB GAIN**

CAM01 : AK-UB300						1/2
◀	1	2	3	4	5	▶
	PAIN SW	SHUTTER SPEED	PED	CHROMA	RB GAIN	
	6	7	8	9	10	
	COLOR TEMP	FLARE	GAMMA	BLACK GAMMA	KNEE	
1	R			B		▲
	0			0		
						1/1
						▼
	B			B		
	0			0		

Item	Setting details
R	Sets the correction level of red to the gain.
B	Sets the correction level of blue to the gain.

### 6 COLOR TEMP

CAM01 : AK-UB300						1/2
1	2	3	4	5		
PAINT SW	SHUTTER SPEED	PED	CHROMA	RB GAIN		
6	7	8	9	10		
COLOR TEMP	FLARE	GAMMA	BLACK GAMMA	KNEE		
1	TEMP					
	3200					
						1/1
	TEMP					
	3200					

Item	Setting details
TEMP	Sets color temperature settings.

### 7 FLARE

CAM01 : AK-UB300						1/2
1	2	3	4	5		
PAINT SW	SHUTTER SPEED	PED	CHROMA	RB GAIN		
6	7	8	9	10		
COLOR TEMP	FLARE	GAMMA	BLACK GAMMA	KNEE		
1	R FLARE	G FLARE	B FLARE	M FLARE		
	0	0	0	0		
2	SWITCH					1/1
	ON					
	R FLARE	G FLARE	B FLARE	M FLARE		
	0	0	0	0		

Item	Setting details
R FLARE	Adjusts the Rch flare.
G FLARE	Adjusts the Gch flare.
B FLARE	Adjusts the Bch flare.
M FLARE	Adjusts the master flare.
SWITCH	Enables or disables flare correction.

## 8 GAMMA

CAM01 : AK-UB300						1/2					
◀	1	PAIN SW	2	SHUTTER SPEED	3	PED	4	CHROMA	5	RB GAIN	▶
	6	COLOR TEMP	7	FLARE	8	GAMMA	9	BLACK GAMMA	10	KNEE	
1	R GAMMA	B GAMMA	MASTER								▲
	0	0	0.045								
2	GAM MODE	B.STRECH	DYNAMIC								1/1
	HD	0	500								
3	K.POINT	K.SLOPE			SWITCH						▼
	30	150			ON						
	R GAMMA	B GAMMA	MASTER								
	0	0	0.045								

Item	Setting details
<b>R GAMMA</b>	Adjusts the red gamma characteristic for the master gamma.
<b>B GAMMA</b>	Adjusts the blue gamma characteristic for the master gamma.
<b>MASTER</b>	Adjusts the gamma characteristic.
<b>GAM MODE</b>	Sets the gamma characteristic type.
<b>B.STRETCH</b>	Sets the gamma stretch position for when [GAMMA MODE] is set to [FILM REC].
<b>DYNAMIC</b>	Sets the dynamic range for when [GAMMA MODE] is set to [FILM REC].
<b>K.POINT</b>	Sets the knee point for when [GAMMA MODE] is set to [VIDEO REC].
<b>K.SLOPE</b>	Sets the knee slope for when [GAMMA MODE] is set to [VIDEO REC].
<b>SWITCH</b>	Enables or disables gamma correction.

## 9 BLACK GAMMA

CAM01 : AK-UB300						1/2					
◀	1	PAIN SW	2	SHUTTER SPEED	3	PED	4	CHROMA	5	RB GAIN	▶
	6	COLOR TEMP	7	FLARE	8	GAMMA	9	BLACK GAMMA	10	KNEE	
1	R B.GAM	B B.GAM	MASTER								▲
	0	0	0								
2	SWITCH									1/1	
	OFF										
											▼
	R B.GAM	B B.GAM	MASTER								
	0	0	0								

Item	Setting details
<b>R B.GAM</b>	Adjusts the red gamma characteristic near black for the master gamma.
<b>B B.GAM</b>	Adjusts the blue gamma characteristic near black for the master gamma.
<b>MASTER</b>	Adjusts the gamma characteristic near black.
<b>SWITCH</b>	Enables or disables the black gamma. <ul style="list-style-type: none"> <li>This setting is not available when [DRS] of [PAINT SWITCH] is set to [ON].</li> </ul>

## 10 KNEE

CAM01 : AK-UB300					1/2
1	PAINT SW	SHUTTER SPEED	PED	CHROMA	RB GAIN
6	COLOR TEMP	FLARE	GAMMA	BLACK GAMMA	KNEE
1	R POINT %	B POINT %	M.POINT %		
	0.00	0.00	95.00		
2	R SLOPE	B SLOPE	M.SLOPE		
	0	0	130		1/1
3	POINT %	LEVEL %	RESPONSE	KNEE	
	95.00	108	4	MANUAL	
	R POINT %	B POINT %	M.POINT %		
	0.00	0.00	95.00		

Item	Setting details
<b>R POINT %</b>	Adjusts the red knee point for [POINT MASTER].
<b>B POINT %</b>	Adjusts the blue knee point for [POINT MASTER].
<b>M.POINT %</b>	Sets the knee point position.
<b>R SLOPE</b>	Adjusts the red knee slope for [SLOPE MASTER].
<b>B SLOPE</b>	Adjusts the blue knee slope for [SLOPE MASTER].
<b>M.SLOPE</b>	Sets the knee slope.
<b>POINT %</b>	Sets the bend position for auto knee.
<b>LEVEL %</b>	Sets the maximum level for auto knee.
<b>RESPONSE</b>	Sets the auto knee response speed. Smaller setting values increase the response speed.
<b>KNEE</b>	Enables or disables the knee function.

## 11 DTL

CAM01 : AK-UB300					2/2
	11 DTL	12 SKIN DTL	13 MATRIX	14 COLOR CORRE	15 SKIN CORRE
	16 DNR	17 HDR PAINT			
1	MASTER 0	H LEVEL 15	V LEVEL 27	PEAK FRQ 18	
2	VDTL FRQ 18	CRISP 0	L.DPNDNT 8		1/2
3	DETAIL SOURCE (G+R)/2		GAIN(+) 0	GAIN(-) 0	
	MASTER 0	H LEVEL 15	V LEVEL 27	PEAK FRQ 18	

CAM01 : AK-UB300					2/2
	11 DTL	12 SKIN DTL	13 MATRIX	14 COLOR CORRE	15 SKIN CORRE
	16 DNR	17 HDR PAINT			
4	CLIP+ 0	CLIP- 0	APERTURE 5		
5	SWITCH ON	L.DPN SW OFF			2/2
	CLIP+ 0	CLIP- 0	APERTURE 5		

Item	Setting details
<b>MASTER</b>	Adjusts the level of master detail.
<b>H LEVEL</b>	Adjusts the level of horizontal detail.
<b>V LEVEL</b>	Adjusts the level of vertical detail.
<b>PEAK FRQ</b>	Sets the peak frequency of the horizontal detail.
<b>VDTL FRQ</b>	Sets the vertical detail frequency.
<b>CRISP</b>	Sets the detail signal noise elimination level.
<b>L.DPNDNT</b>	Sets the level to eliminate the detail in the dark areas.
<b>DETAIL SOURCE</b>	Selects the source signals for creating the detail components.
<b>GAIN(+)</b>	Changes the detail gain level in the + (up) direction.
<b>GAIN(-)</b>	Changes the detail gain level in the - (down) direction.
<b>CLIP+</b>	Adjust the detail clip to reduce glare produced by an excess of details.
<b>CLIP-</b>	Limits the length of the undershoot portion of the detail edge component.
<b>APERTURE</b>	Adjusts the knee aperture level.
<b>SWITCH</b>	Enables/disables all detail functions.
<b>L.DPN SW</b>	Enables/disables the function to remove details of dark areas.

## 12 SKIN DTL

CAM01 : AK-UB300						2/2
	11	12	13	14	15	
	DTL	SKIN DTL	MATRIX	COLOR CORRE	SKIN CORRE	
	16	17				
	DNR	HDR PAINT				
1	MEM SEL					
	A					
2	CURSOR	POS H	POS V	SKIN GET		1/2
	OFF	50.00	50.00	(turn)		
3	ZEBRA	EFEECT	MEMORY			
	OFF	A+B+C	A+B+C			
	MEM SEL					
	A					

CAM01 : AK-UB300						2/2
	11	12	13	14	15	
	DTL	SKIN DTL	MATRIX	COLOR CORRE	SKIN CORRE	
	16	17				
	DNR	HDR PAINT				
4	CRISP					
	+63					
5	I CENTER	I WIDTH	Q WIDTH	Q PHASE		2/2
	18	8	43	90		
6	SWITCH					
	OFF					
	CRISP					
	+63					

Item	Setting details
MEM SEL	Selects the skin tone table for the subject to apply the skin tone detail to.
CURSOR	Enables/disables the position cursor that obtains the saturation and color phase information for controlling skin tone detail effects.
POS H	Sets horizontal cursor position.
POS V	Sets vertical cursor position.
SKIN GET	Automatically acquires saturation and hue information from the cursor position.
ZEBRA	Sets whether to add a zebra pattern to the Y signals of the PM output to make areas subject to skin tone detail effects easily identifiable.
EFFECT	Selects the table of the zebra display.
MEMORY	Selects the skin tone table used for applying the skin tone detail.
CRISP	Adjusts the skin tone detail.
I CENTER	Sets the center position (area to which skin tone is applied) on the I axis.
I WIDTH	Sets the width of the area to which skin tone is applied on the I axis using the [I CENTER] setting as the center.
Q WIDTH	Sets the width of the area to which skin tone is applied on the Q axis using the [I CENTER] setting as the center.
Q PHASE	Sets the phase of the area where the skin tone effect is applied, with the Q axis being the reference.
SWITCH	Enables/disables the skin tone detail.

## 13 MATRIX

CAM01 : AK-UB300						2/2
	11	12	13	14	15	
	DTL	SKIN DTL	MATRIX	COLOR CORRE	SKIN CORRE	
	16	17				
	DNR	HDR PAINT				
1	TABLE		CLR CORR			
	A		A			
2	R-G P	R-G N	R-B P	R-B N		1/2
	0	0	0	0		
3	G-R P	G-R N	G-B P	G-B N		
	0	0	0	0		
	TABLE		CLR CORR			
	A		A			

CAM01 : AK-UB300						2/2
	11	12	13	14	15	
	DTL	SKIN DTL	MATRIX	COLOR CORRE	SKIN CORRE	
	16	17				
	DNR	HDR PAINT				
4	B-R P	B-R N	B-G P	B-G N		
	0	0	0	0		
5	SWITCH	C.COR SW	LINEAR SW			2/2
	OFF	OFF	OFF			
	B-R P	B-R N	B-G P	B-G N		
	0	0	0	0		

Item	Setting details
TABLE	Selects the table for linear matrix.
CLR CORR	Selects the table for color correction.
R-G P	Adjusts the linear matrix between red and green.
R-G N	Adjusts the linear matrix between red and green.
R-B P	Adjusts the linear matrix between red and blue.
R-B N	Adjusts the linear matrix between red and blue.
G-R P	Adjusts the linear matrix between green and red.
G-R N	Adjusts the linear matrix between green and red.
G-B P	Adjusts the linear matrix between green and blue.
G-B N	Adjusts the linear matrix between green and blue.
B-R P	Adjusts the linear matrix between blue and red.
B-R N	Adjusts the linear matrix between blue and red.
B-G P	Adjusts the linear matrix between blue and green.
B-G N	Adjusts the linear matrix between blue and green.
SWITCH	Enables/disables the matrix function.
C.COR SW	Enables/disables the 12-axis color correction function.
LINEAR SW	Enables/disables the linear matrix function.

14 COLOR CORRE

CAM01 : AK-UB300					2/2
11	12	13	14	15	
DTL	SKIN DTL	MATRIX	COLOR CORRE	SKIN CORRE	
16	17				
DNR	HDR PAINT				
1	TABLE	CORR TBL			
	A	A			
2	CORRECT	SAT	PHASE		1/3
	G	0	0		
3	SAT G	PHS G	SAT CY_G	PHS CY_G	
	0	0	0	0	
	TABLE	COLOR TBL			
	A	A			

CAM01 : AK-UB300					2/2
11	12	13	14	15	
DTL	SKIN DTL	MATRIX	COLOR CORRE	SKIN CORRE	
16	17				
DNR	HDR PAINT				
4	SAT CY	PHS CY	SAT B_CY	PHS B_CY	
	0	0	0	0	
5	SAT B	PHS B	SAT MG_B	PHS MG_B	2/3
	0	0	0	0	
6	SAT MG	PHS MG	SAT R_MG	PHS R_MG	
	0	0	0	0	
	SAT CY	PHS CY	SAT B_CY	PHS B_CY	
	0	0	0	0	

CAM01 : AK-UB300					2/2
11	12	13	14	15	
DTL	SKIN DTL	MATRIX	COLOR CORRE	SKIN CORRE	
16	17				
DNR	HDR PAINT				
7	SAT R	PHS R	SAT YL_R	PHS YL_R	
	0	0	0	0	
8	SAT YL	PHS YL	SAT G_YL	PHS G_YL	3/3
	0	0	0	0	
9	SWITCH	C.COR SW	LINEAR SW		
	OFF	OFF	OFF		
	SAT R	PHS R	SAT YL R	PHS YL R	
	0	0	0	0	

Item	Setting details
TABLE	Selects the table for linear matrix.
CORR TBL	Selects the table for color correction.
CORRECT	Selects the color component in 12-axis matrix memory to adjust.
SAT	Adjusts the saturation of the color component selected in [CORRECT].
PHASE	Adjusts the hue of the color component selected in [CORRECT].
SAT G	Adjusts green color saturation.
PHS G	Adjusts green hue.

Item	Setting details
<b>SAT CY_G</b>	Adjusts the color saturation between cyan and green.
<b>PHS CY_G</b>	Adjusts the hue between cyan and green.
<b>SAT CY</b>	Adjusts cyan color saturation.
<b>PHS CY</b>	Adjusts cyan hue.
<b>SAT B_CY</b>	Adjusts the color saturation between blue and cyan.
<b>PHS B_CY</b>	Adjusts the hue between blue and cyan.
<b>SAT B</b>	Adjusts blue color saturation.
<b>PHS B</b>	Adjusts blue hue.
<b>SAT MG_B</b>	Adjusts the color saturation between magenta and blue.
<b>PHS MG_B</b>	Adjusts the hue between magenta and blue.
<b>SAT MG</b>	Adjusts magenta color saturation.
<b>PHS MG</b>	Adjusts magenta hue.
<b>SAT R_MG</b>	Adjusts the color saturation between red and magenta.
<b>PHS R_MG</b>	Adjusts the hue between red and magenta.
<b>SAT R</b>	Adjusts red color saturation.
<b>PHS R</b>	Adjusts red hue.
<b>SAT YL_R</b>	Adjusts the color saturation between yellow and red.
<b>PHS YL_R</b>	Adjusts the hue between yellow and red.
<b>SAT YL</b>	Adjusts yellow color saturation.
<b>PHS YL</b>	Adjusts yellow hue.
<b>SAT G_YL</b>	Adjusts the color saturation between green and yellow.
<b>PHS G_YL</b>	Adjusts the hue between green and yellow.
<b>SWITCH</b>	Enables/disables the matrix function.
<b>C.COR SW</b>	Enables/disables the 12-axis color correction function.
<b>LINEAR SW</b>	Enables/disables the linear matrix function.

## 15 SKIN CORRE

CAM01 : AK-UB300					2/2
	11	12	13	14	15
	DTL	SKIN DTL	MATRIX	COLOR CORRE	SKIN CORRE
	16	17			
	DNR	HDR PAINT			
1	HUE		TONE		
	0		0		
2	SWITCH		TABLE		
	OFF		A		1/1
	HUE		TONE		
	0		0		

Item	Setting details
<b>HUE</b>	Finely adjusts the hue of the skin tone area.
<b>TONE</b>	Finely adjusts the tone of the skin tone area.
<b>SWITCH</b>	Enables/disables the function to finely adjust the color of the skin tone area.
<b>TABLE</b>	Selects the table for the skin tone area.

## 16 DNR

CAM01 : AK-UB300					2/2
	11	12	13	14	15
	DTL	SKIN DTL	MATRIX	COLOR CORRE	SKIN CORRE
	16	17			
	DNR	HDR PAINT			
1	LEVEL		SWITCH		
	3		ON		
					1/1
	LEVEL		SWITCH		
	3		ON		

Item	Setting details
<b>LEVEL</b>	Sets the level for the noise reduction. The larger the value, the stronger the noise reduction effect.
<b>SWITCH</b>	Enables/disables the noise reduction function.

## 17 HDR PAINT

CAM01 : AK-UB300					2/2
	11	12	13	14	15
	DTL	SKIN DTL	MATRIX	COLOR CORRE	SKIN CORRE
	16	17			
	DNR	HDR PAINT			
1	B.GAMM R	B.GAMM B	B.GAMM M		
	0	0	0		
2	B.GAMM SW				
	OFF				1/2
3	KNEE PINT	KNEE SLPE	KNEE SW	HLG TYPE	
	80.00	130	OFF	NORMAL	
	B.GAMM R	B.GAMM B	B.GAMM M		
	0	0	0		

CAM01 : AK-UB300					2/2
	11	12	13	14	15
	DTL	SKIN DTL	MATRIX	COLOR CORRE	SKIN CORRE
	16	17			
	DNR	HDR PAINT			
4	HLG MODE	SDR MODE			
	FIX	FIX			
5	SHOOTING	DNR LEV	DNR SW		
	NORMAL	3	ON		2/2
6	SDR GAIN	SDR CLIP			
	0	HIGH			
	HLG MODE	SDR MODE			
	FIX	FIX			

Item	Setting details
<b>B.GAMMA R</b>	Adjusts the red gamma characteristic near black for the master gamma.
<b>B.GAMMA B</b>	Adjusts the blue gamma characteristic near black for the master gamma.
<b>B.GAMMA M</b>	Adjusts the gamma characteristic near black.
<b>B.GAMM SW</b>	Enables or disables the black gamma.
<b>KNEE PINT</b>	Sets the knee point for when [GAMMA MODE] is set to [VIDEO REC].
<b>KNEE SLPE</b>	Sets the knee slope for when [GAMMA MODE] is set to [VIDEO REC].
<b>KNEE SW</b>	Enables or disables the knee function.
<b>HLG TYPE</b>	Sets the HLG type.
<b>HLG MODE</b>	Sets the HLG mode.
<b>SDR MODE</b>	Sets the SDR mode.
<b>SHOOTING</b>	Sets the shooting mode.
<b>DNR LEV</b>	Sets the level for the noise reduction.
<b>DNR SW</b>	Enables/disables the noise reduction function.
<b>SDR GAIN</b>	Sets the SDR gain.
<b>SDR CLIP</b>	Sets the SDR clip.

## FUNCTION

### 1 SYSTEM CAM

CAM01 : AK-UB300					1/1
	1	2	3		
	SYSTEM CAM	AUTO IRIS	D.HAZE CLEAR		
1	CROP OUT	MARKER	CROP ADJ		
	YL	Y+G+M	YL		
2	CROP H %	CROP V %			1/1
	0.00	0.00			
	CROP OUT	MARKER	CROP ADJ		
	YL	Y+G+M	YL		

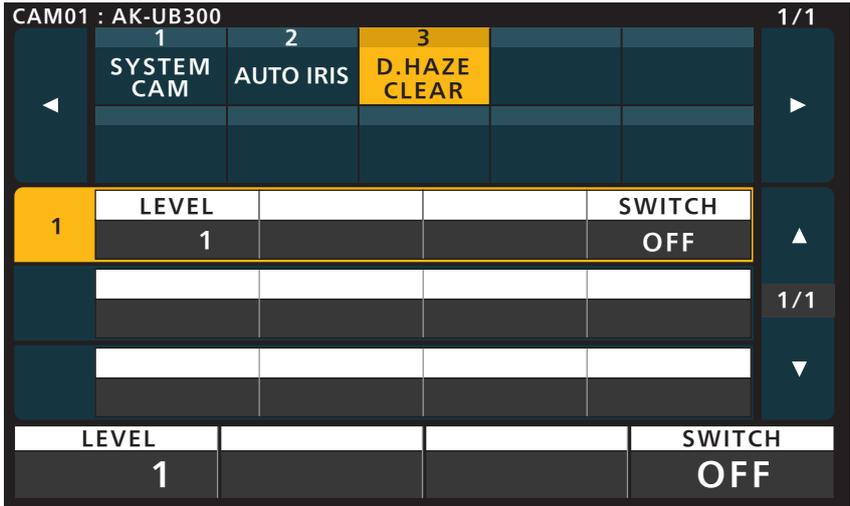
Item	Setting details
CROP OUT	Sets the crop output image during cropping.
MARKER	Sets the crop frame to display during cropping.
CROP ADJ	Sets the crop frame to adjust the position during cropping.
CROP H %	Sets the horizontal position of crop during cropping.
CROP V %	Sets the vertical position of crop during cropping.

### 2 AUTO IRIS

CAM01 : AK-UB300					1/1
	1	2	3		
	SYSTEM CAM	AUTO IRIS	D.HAZE CLEAR		
1	LEVEL				
	50				
					1/1
	LEVEL				
	50				

Item	Setting details
LEVEL	Adjusts the auto iris level.

### 3 D.HAZE CLEAR



Item	Setting details
<b>LEVEL</b>	Sets the level of the haze elimination. The larger the value, the stronger the haze elimination effect.
<b>SWITCH</b>	Enables/disables the haze elimination function.

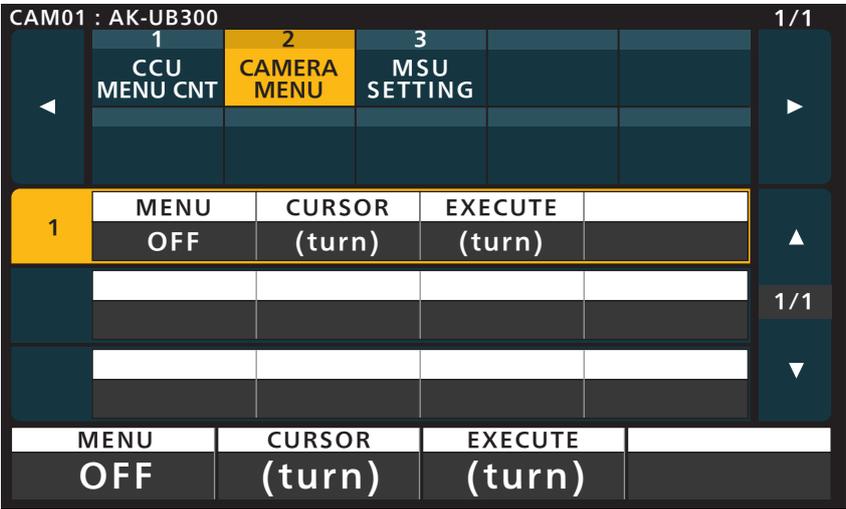
# MAINTENANCE

## 1 CCU MENU CNT

This is not used when connected with an AK-UB300G.

("—" is displayed for the parameter of each item.)

## 2 CAMERA MENU



Item	Setting details
MENU	Turns the menu on or off.
CURSOR	Moves the menu cursor or changes setting values.
EXECUTE	Executes the selected process.

## 3 MSU SETTING

For details on operations and settings, refer to the following sections in the Operating Instructions.

➡ "MAINTENANCE - 3 MSU SETTING"

## SYSTEM

### 1 CAMERA

CAM01 : AK-UB300					1/1
1	2	3	4	5	
CAMERA	CCU	CONNECT SETTING	CAM IP SETTING	MSU IP SETTING	
1	FORMAT				
	1080/59.94P				▲
2	G.LCK IN	G.LCK CRS	G.LCK FNE		1/1
	BNC	0	0		
3	SHOOTING				▼
	H.SENS				
FORMAT					
1080/59.94p					

Item	Setting details
<b>FORMAT</b>	Displays the system format. (This cannot be changed.)
<b>G.LCK IN</b>	Sets whether the synchronization signal is inputted from BNC or from D-SUB.
<b>G.LCK CRS</b>	Roughly adjusts the phase of horizontal synchronization.
<b>G.LCK FNE</b>	Finely adjusts the phase of horizontal synchronization.
<b>SHOOTING</b>	Sets the shooting mode.

### 2 CCU

This is not used when connected with an AK-UB300G.

## 3 CONNECT SETTING

CAM01 : AK-UB300					1/1
	1	2	3	4	5
	CAMERA	CCU	CONNECT SETTING	CAM IP SETTING	MSU IP SETTING
1	CAM1 LAN(AW)	CAM2 NON	CAM3 NON	UPLOAD (turn)	
2	CAM4 NON	CAM5 NON	CAM6 NON	UPLOAD (turn)	
3	CAM7 NON	CAM8 NON	CAM9 NON	UPLOAD (turn)	
CAM1		CAM2	CAM3	UPLOAD	
LAN(AW)		NON	NON	(turn)	

CAM01 : AK-UB300					1/1
	1	2	3	4	5
	CAMERA	CCU	CONNECT SETTING	CAM IP SETTING	MSU IP SETTING
4	CAM10 NON	CAM11 NON	CAM12 NON	UPLOAD (turn)	
5	CAM13 NON	CAM14 NON	CAM15 NON	UPLOAD (turn)	
6	CAM16 NON	CAM17 NON	CAM18 NON	UPLOAD (turn)	
CAM10		CAM11	CAM12	UPLOAD	
NON		NON	NON	(turn)	

}

CAM01 : AK-UB300					1/1
	1	2	3	4	5
	CAMERA	CCU	CONNECT SETTING	CAM IP SETTING	MSU IP SETTING
31	CAM91 NON	CAM92 NON	CAM93 NON	UPLOAD (turn)	
32	CAM94 NON	CAM95 NON	CAM96 NON	UPLOAD (turn)	
33	CAM97 NON	CAM98 NON	CAM99 NON	UPLOAD (turn)	
CAM91		CAM92	CAM93	UPLOAD	
NON		NON	NON	(turn)	

Item	Setting details
<b>CAM1</b>	Sets the connection method for camera 1. The settings are applied when [UPLOAD] is selected after changing the settings. Select [LAN(AW)] when connecting to the AK-UB300G series.
<b>CAM2 to 99</b>	Sets the connection method for cameras 2 to 99. The settings are applied when [UPLOAD] is selected after changing the settings. Select [LAN(AW)] when connecting to the AK-UB300G series.
<b>UPLOAD</b>	When you press the menu operation dial, the connection methods of the target cameras are set.

## 4 CAM IP SETTING

For details on operations and settings, refer to the following sections in the Operating Instructions.

➡ "SYSTEM - 4 CAM IP SETTING"

## 5 MSU IP SETTING

For details on operations and settings, refer to the following sections in the Operating Instructions.

➡ "SYSTEM - 5 MSU IP SETTING"