CCU SETTINGS and ADJUSTMENT

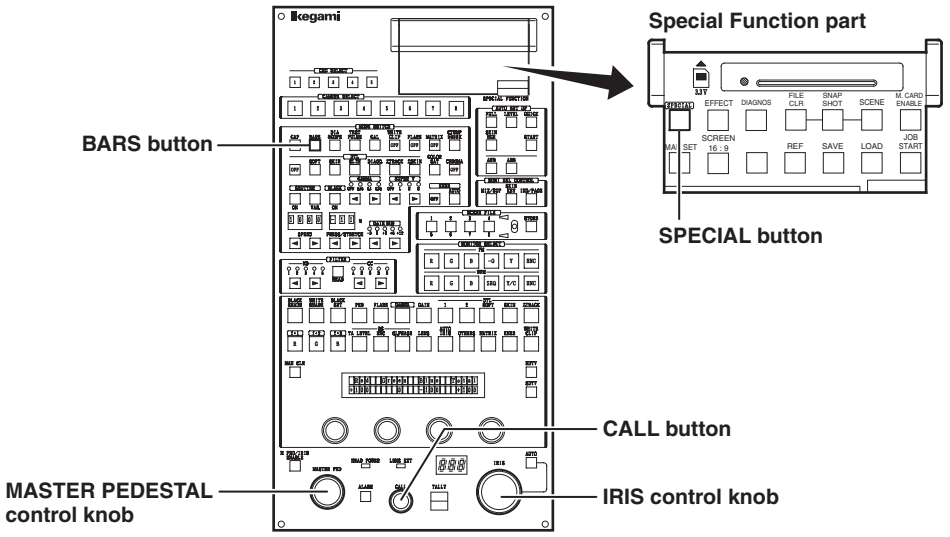
5

5.1 Settings from the CCU Menu

The menu operation for the CCU-970 is performed from the MCP or OCP. The setting of each item is performed by displaying the main menu/submenu screen on the PM screen.

Basic Operation of the Menu (Operation from the MCP)

The menu operation for the CCU-970 is performed from the MCP. The setting of each item is performed by displaying the main menu/submenu on the Picture Monitor (PM).



SPECIAL button/BARS button	:	Pressing the SPECIAL button then pressing the BARS button will switch to the menu mode and display the menu.
CALL button	:	Pressed to confirm the selection and setting.
MASTER PEDESTAL control knob/IRIS control knob	:	Used to select a setting item.

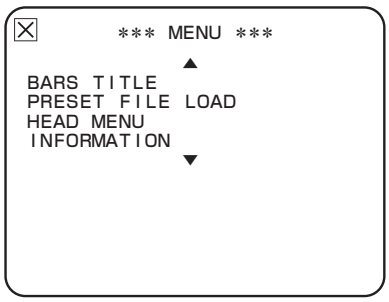
■ *Displaying the Main Menu*

This section explains how to display the main menu on the PM screen.

1 Press the SPECIAL button on the MCP.

2 Press the BARS button.

The main menu appears on the PM screen.



Note:

The flashing item on the main menu indicates the currently focused item. This flashing status is called the "flashing cursor" hereafter (displayed in gray in the screen example).

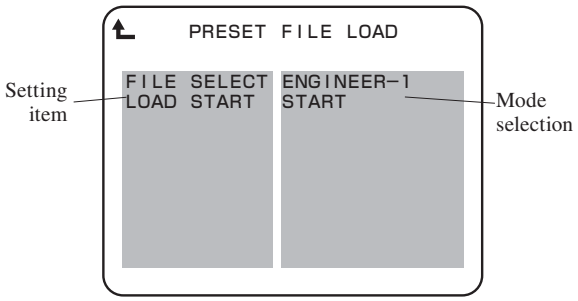
■ *Displaying the Submenu*

You can perform various settings on the submenu that is displayed from the main menu on the PM screen.

1 Make sure that the main menu is displayed on the PM screen.

2 Turn the MASTER PEDESTAL control knob or IRIS control knob on the MCP to position the flashing cursor on the setting item, and press the CALL button.

The submenu appears, on which you can perform various settings.



CAUTION:

Depending on the functions of the setting items, some items change the setting when the knob is turned; others change the setting when the CALL button is pressed.

Note:

- To return to the main menu, select "↰" and press the CALL button.
- The flashing item on the submenu indicates the currently focused item. This flashing status is called the "flashing cursor" hereafter (displayed in gray in the display example).
- Each time the CALL button is pressed, the flashing cursor switches to setting item -> mode selection -> setting item -> mode selection and so on.

■ *Exiting the Menu*

This section explains how to exit the main menu/submenu on the PM screen.

1 Exit the menu screen in the following two ways:

a) Select "☒" on the CCU main menu and press the CALL button.
b) Press the BARS button.
The main menu/submenu disappears.

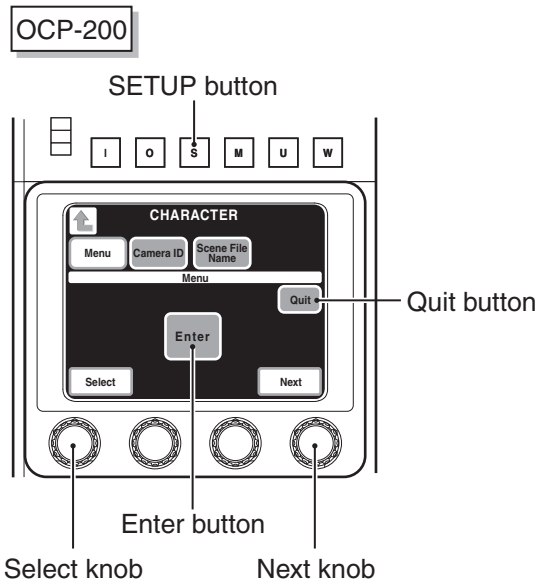
Basic Operation of the Menu (Operation from the OCP-200)

■ *Displaying the Main Menu*

This section explains how to display the main menu on the PM screen.

1 Press the SETUP button among the FUNCTION buttons on the OCP-200.

The screen shown in Fig.1 is displayed on the liquid crystal display (LCD) of the OCP.



2 Press the CHARACTER button on the LCD.

The screen shown in Fig.2 is displayed.

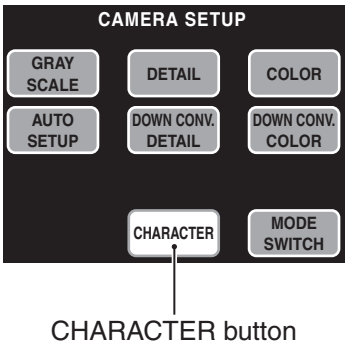


Fig.1

3 Press the Menu button on the LCD for a while.

The menu screen (Fig.3) appears on the LCD, and the main menu screen appears on the PM.

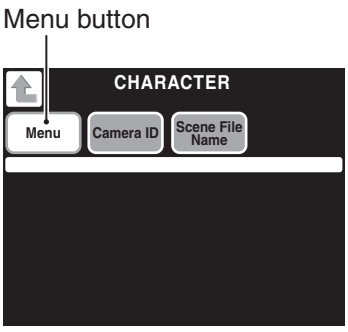


Fig.2

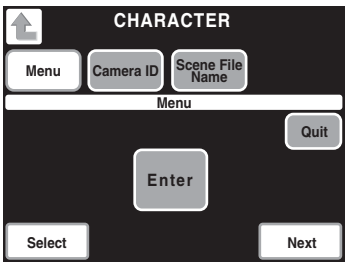


Fig.3 (Menu screen)

■ *Displaying the Submenu*

You can perform various settings on the submenu that is displayed from the main menu on the PM screen.

1 Make sure that the main menu screen is displayed on the PM screen.

2 Turn the Select knob or Next knob to position the flashing cursor on the setting item, and press the Enter button on the LCD.

The submenu appears, on which you can perform various settings.

CAUTION:

Depending on the functions of the setting items, some items change the setting when the knob is turned; others change the setting when the Enter button on the LCD is pressed.

■ *Exiting the Menu*

This section explains how to exit the main menu/submenu on the PM screen.

1 Exit the menu screen in the following ways:

a) Select "☒" on the CCU main menu and press the Enter button.
b) Press the QUIT button on the LCD.
c) Press the BARS button on the OCP.

Menu Configuration

The following lists the CCU-970 menu configuration.

Main menu name | Submenu name | Item	Description
☒	Exits the main menu.
■ MENU	
BARS TITLE	
↰	Returns to the main menu.
DISPLAY	Turns ON/OFF the BARS TITLE character display.
TITLE EDIT	Edits the BARS TITLE characters.
POSITION	Sets the display position of the BARS TITLE characters.
PRESET FILE LOAD	
↰	Returns to the main menu.
FILE SELECT	Sets the file to be initialized.
LOAD START	Sets the start of the initialization.
HEAD MENU	
	Sets the camera head menu.
INFORMATION	
↰	Returns to the main menu.
MODULE SW	Displays the switch setting status of the PULSE module and CONT/REF module.
ROM VER	Displays the ROM version of the CONT/REF module.
CHECK SUM	Displays the ROM data check sum.
■ ENGINEER (1/2)	
SYSTEM FORMAT	
↰	Returns to the main menu.
1080XXX or 720PXX	Selects the system format.
OUTPUT FORMAT	
↰	Returns to the main menu.
HD OUT-1	Sets HDTV output1 (2 channels) formats.
HD OUT-2	Sets HDTV output2 (2 channels) formats.
HD PM OUT-1	Sets HDTV PM output1 format.
HD PM OUT-2	Sets HDTV PM output2 format.
SD SCREEN MODE	Sets the screen display mode.
SD PM OUT-1	Selects the signal type for SD-PM output1.
SD PM OUT-2	Selects the signal type for SD-PM output2.
WFM OUT-1	Sets the type of the signal for WFM output1.
WFM OUT-2	Sets the type of the signal for WFM output2.
ANALOG OUT	Sets the type of the analog component output.
ANALOG SYNC ADD	Sets whether to add synchronization signals to the analog component output.
SYNC OUT	Sets the format of the synchronization signal output.
HD-SYNC 2-3ID ADD	Sets whether to embed pulse signals, which counted 1 to 5 frames, in the SYNC output.
SD-10 FIELD ID SIG	Selects whether to embed pulse signals (level 40IRE), which counted 1 to 5 frames on 15H and 278H, in the ENC signal (SMPTE 318M-compliant).
RET VIDEO FORMAT	
↰	Returns to the main menu.
FRAME SYNCHRO	Sets ON/OFF of the frame synchronization function.
RET1 VIDEO FORMAT	Sets the format of the return signal input to the camera head.
RET2 VIDEO FORMAT	
RET3 VIDEO FORMAT	
RET4 VIDEO FORMAT	
SDTV TYPE	Sets the type of the SDTV return signal input.
SD SCREEN MODE	Sets the screen display mode.
V PHASE	Sets the vertical phase.

PHASE CONTROL

- ↰ ..... Returns to the main menu.
- PRIORITY ..... Sets the priority system.
- SYNC CONT ..... Sets the vertical synchronization phase in the HDTV format and in the SDTV format each.
- HD MASTER V PHASE ..... Adjusts the vertical phase of the HDTV output signals to match the input GENLOCK signal.
- HD OUT H PHASE ..... Adjusts the horizontal phase of the HD OUT signals to match the input GENLOCK signal.
- HD PM H PHASE ..... Adjusts the horizontal phase of the HD PM OUT signals to match the input GENLOCK signal.
- HD ANALOG H PHASE ..... Adjusts the horizontal phase of the HD ANALOG OUT signals to match the input GENLOCK signal.
- SD MASTER V PHASE ..... Adjusts the vertical phase of the SDTV output signals to match the input GENLOCK signal.
- SD SC PHASE COARSE ..... Coarse adjusts the sub carrier phase.
- SD SC PHASE FINE ..... Fine adjusts the sub carrier phase.
- SD SDI H PHASE ..... Adjusts the horizontal phase of the SD SDI OUT signals to match the input GENLOCK signal.
- SD ENC H PHASE ..... Adjusts the horizontal phase of the SD ENC OUT signals to match the input GENLOCK signal.
- SD ANALOG H PHASE ..... Adjusts the horizontal phase of the SD ANALOG OUT signals to match the input GENLOCK signal.
- SD PM H PHASE ..... Adjusts the horizontal phase of the SD PM OUT signals to match the input GENLOCK signal.
- SD WFM H PHASE ..... Adjusts the horizontal phase of the SD WFM OUT signals to match the input GENLOCK signal.
- SYNC OUT H PHASE ..... Adjusts the horizontal phase of external synchronization output.
- SYNC OUT V PHASE ..... Adjusts the vertical phase of external synchronization output.

AUDIO MANAGEMENT

- ↰ ..... Returns to the main menu.
- HD SYS EMBEDDED
  - HD OUT ..... Sets whether to embed audio signals to HD OUT signals.
  - HD PM ..... Sets whether to embed audio signals to HD PM OUT signals.
  - HD WFM ..... Sets whether to embed audio signals to HD WFM OUT signals.
- SD SYS EMBEDDED
  - SD SDI ..... Sets whether to embed audio signals to SD SDI OUT signals.
  - SD PM-1 ..... Sets whether to embed audio signals to SD PM-1 OUT signals.
  - SD PM-2 ..... Sets whether to embed audio signals to SD PM-2 OUT signals.
  - SD WFM ..... Sets whether to embed audio signals to SD WFM OUT signals.
- MASTER DELAY ..... Sets the amount of delay for the audio signals of all channels.
  - HD SYS DELAY ..... Sets the amount of delay for the audio signals of HDTV channels.
  - SD SYS DELAY ..... Sets the amount of delay for the audio signals of SDTV channels.
  - DIGITAL DELAY ..... Sets the amount of delay of the digital audio output.
  - MIC1/2 OUT DELAY ..... Sets the amount of delay of MIC output.

■ **ENGINEER (2/2)**

HDTV VIDEO PROCESS

- ↰ ..... Returns to the main menu.
- HV SLIM DTL TYPE ..... Sets a horizontal and/or vertical SLIM DTL for HDTV.
- V SLIM DTL FREQ ..... Sets a boost band and boost frequency for HDTV.
- V DTL FILTER ..... Turns ON/OFF a vertical DTL filter.
- FINE DTL ..... Sets the FINE DTL for HDTV.
- PbPr FILTER ..... Sets filter characteristic of HDTV color-difference signals.
- H FILTER ..... Sets the horizontal filter for HDTV output.
- V FILTER ..... Sets the vertical filter for HDTV output.
- MOTION DETECT ..... Sets the motion detection of HDTV output.
- GAMUT CLIP ..... Sets ON/OFF of the gamut clip function.
  - LEVEL ..... Sets the gamut clip level for HDTV output.
- HDTV BARS TYPE ..... Sets the type of the HDTV color bar.
  - ARIB BARS TYPE ..... Sets the pattern of the ARIB bar.
  - SMPTE BARS TYPE1 / SMPTE BARS TYPE2 ..... Sets the pattern of the SMPTE bar.
- CCU MENU&HUE MARKER ..... Sets the main output of CCU MENU/ HUE MARKER.
- SKIN TONE&COLOR KEY ..... Sets the main output of SKIN DTL/COLOR DTL KEY signal.
- CHAR LEVEL ..... Sets the character level on the HD OUT signals.
- CHAR BG LEVEL ..... Sets the background level of characters on the HD OUT signals.

SDTV VIDEO PROCESS

- ↰ ..... Returns to the main menu.
- HV SLIM DTL TYPE ..... Sets a horizontal and/or vertical SLIM DTL for SDTV.
- V SLIM DTL FREQ ..... Sets a boost band and boost frequency for SDTV.
- FINE DTL ..... Sets the FINE DTL for SDTV.
- COMB ..... Sets in the factory.
- COMB GAIN ..... Sets in the factory.
- H FILTER ..... Sets the horizontal filter for SDTV output.
- V FILTER..... Sets the vertical filter for SDTV output.
- MOTION DETECT ..... Sets the motion detection of SDTV output.
- GAMUT CLIP ..... Sets ON/OFF of the gamut clip function.
  - LEVEL..... Sets the gamut clip level for SDTV output.
- SDTV SETUP SEL ..... Sets in the factory.
- SDTV BARS TYPE ..... Sets the pattern of the SDTV bar.
- CHAR LEVEL..... Sets the character level on the SDTV OUT signals.
- CHAR BG LEVEL ..... Sets the background level of characters on the SDTV OUT signals.

HD PM VIDEO PROCESS

- ↰ ..... Returns to the main menu.
- PM DTL..... Sets the DTL for HD PM output.
  - H LEVEL ..... Sets the horizontal level of DTL.
  - V LEVEL..... Sets the vertical level of DTL.
- FRAME MARKER..... Sets the frame marker for HD PM output.
- ACTION MARKER..... Sets the action marker for HD PM output.
- TITLE MARKER..... Sets the title marker for HD PM output.
- CENTER MARKER..... Sets the center marker for HD PM output.
- SIDE MASK ..... Sets the side mask for HD PM output.
  - CONTRAST ..... Adjusts the side mask contrast.
  - BRIGHT ..... Adjusts the side mask brightness.
- SIDE MASK MARKER..... Sets the side mask marker for HD PM output.
  - WIDTH ..... Selects the side mask marker width.
- CHAR LEVEL..... Sets the character level on the HD PM OUT signals.
- CHAR BG LEVEL ..... Sets the background level of characters on the HD PM OUT signals.

SD PM VIDEO PROCESS

- ↰ ..... Returns to the main menu.
- PM DTL..... Sets the DTL for SD PM output.
  - H LEVEL ..... Sets the horizontal level of DTL.
  - V LEVEL..... Sets the vertical level of DTL.
- FRAME MARKER..... Sets the frame marker for SD PM output.
- ACTION MARKER..... Sets the action marker for SD PM output.
- TITLE MARKER..... Sets the title marker for SD PM output.
- CENTER MARKER..... Sets the center marker for SD PM output.
- SIDE MASK ..... Sets the side mask for SD PM output.
  - CONTRAST ..... Adjusts the side mask contrast.
  - BRIGHT ..... Adjusts the side mask brightness.
- SIDE MASK MARKER..... Sets the side mask marker for SD PM output.
  - WIDTH ..... Selects the side mask marker width.
- CHAR LEVEL..... Sets the character level on the SD PM OUT signals.
- CHAR BG LEVEL ..... Sets the background level of characters on the SD PM OUT signals.

FUNCTION SETTING

- ↰ ..... Returns to the main menu.
- INCOM LINE SEL ..... Sets the number of intercom lines at the system side.
- CAM PGM NO. ENABLE .....ON/OFF ..... Sets whether the CCU manages the camera program numbers.
- CAM PGM NO. SET ..... Sets how to display the camera program numbers for the camera head and control panel.
- CAM CODE..... option
- SAFETY&H.PWR ..... option
- REPEATER MODE..... option
- CAM PWR CONT ..... option
- SYNC FOLLOW..... Sets whether output signals are made to follow the format of GENLOCK signal.
- OUTPUT PRIORITY..... Sets the priority system format.
- Q-TV1 LEVEL ..... Adjusts the Q-TV1 level.
- Q-TV1 BLACK..... Adjusts the Q-TV1 black level.
- Q-TV2 LEVEL ..... Adjusts the Q-TV2 level.
- Q-TV2 BLACK..... Adjusts the Q-TV2 black level.

ENGINEER SET FILE RENEW
- ↰ ..... Returns to the main menu.
- FILE SELECT..... Sets the number of ENGINEER file.
- DATA RENEW MODE..... Renew the ENGINEER file.

PASSWORD ENTRY..... Sets the password.

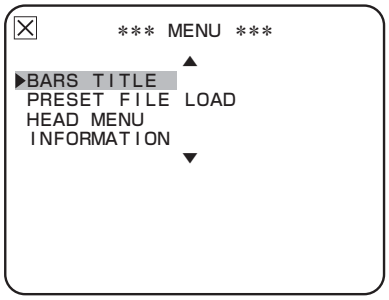
PROGRAM UPDATE
- ↰ ..... Returns to the main menu.
- CCU ROM..... Execute program update mode.

BARS TITLE

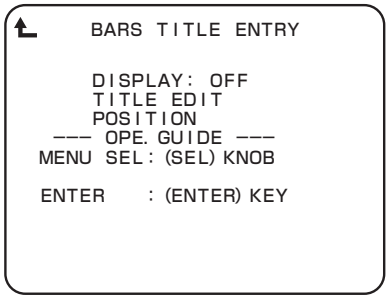
BARS TITLE sets the bars title related data.

Reference:

Refer to the manual for each control panel for details on how to set the bars title data.



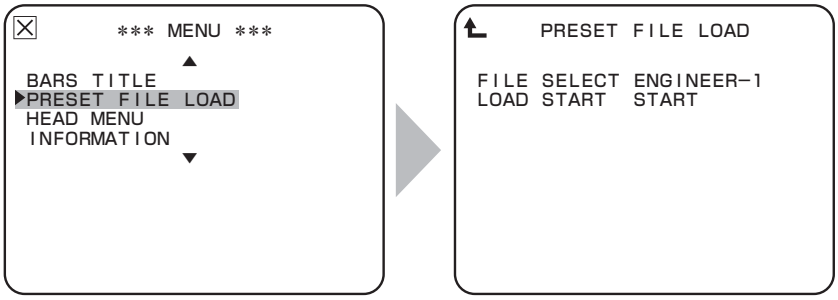
Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "BARS TITLE," and press the CALL button.



The submenu "BARS TITLE ENTRY" is displayed, on which you can perform various settings.

PRESET FILE LOAD

PRESET FILE LOAD loads the PRESET file.



Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "PRESET FILE LOAD," and press the CALL button.

The submenu "PRESET FILE LOAD" is displayed, on which you can perform various settings.

Setting Item	Set Value	Description
FILE SELECT	ENGINEER-1	Sets the ENGINEER-1 file
	ENGINEER-2	Sets the ENGINEER-2 file
	ENGINEER-3	Sets the ENGINEER-3 file
	FACTORY	Sets the FACTORY file
LOAD START	READY	Ready for initialization.
	START	Start initialization.
	CANCEL	Cancels initialization.

1 Positions the flashing cursor on "LOAD START," and presses the CALL button.

Flashing cursor moves to the mode setting and also the display of the mode setting value switches from "READY" to "START."

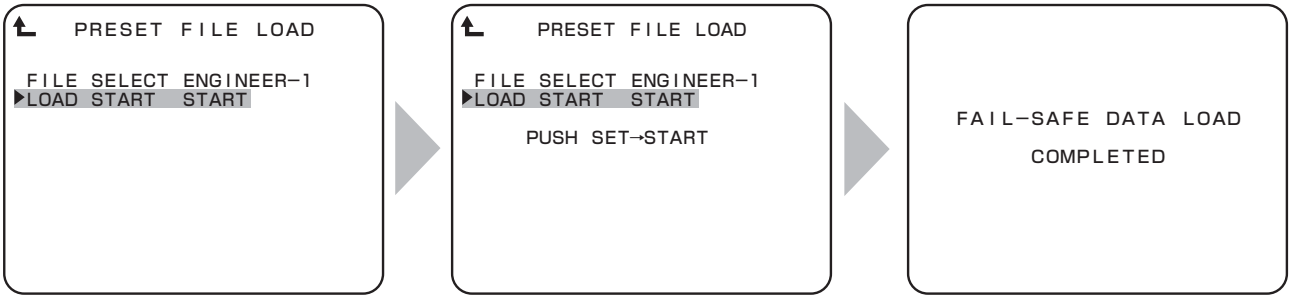
2 Turns the MASTER PEDESTAL control knob or IRIS control knob to adjust the setting value, and presses the CALL button.

The value can be confirmed.
- When "CANCEL" is selected, the setting is canceled and "PRESET FILE LOAD" exits.
- When "START" is selected, "PUSH SET → START" is displayed in the bottom of the screen.

When you select "START", take the step 3.

3 Presses the CALL button.

Starts initialization.
After reading data, "FAIL-SAFE DATA LOAD COMPLETED" is displayed.
And after that, CCU restarts and initialization is completed.



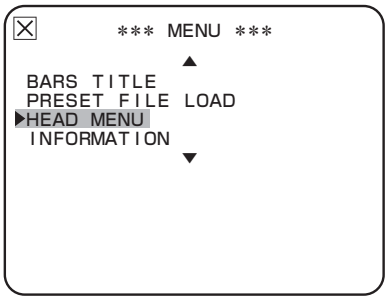
Position the flashing cursor on "LOAD START," and confirm the selection.

When "START" is selected, the message is displayed in the bottom of the screen.

"FAIL-SAFE DATA LOAD COMPLETED" is displayed in the middle of the screen.

HEAD MENU

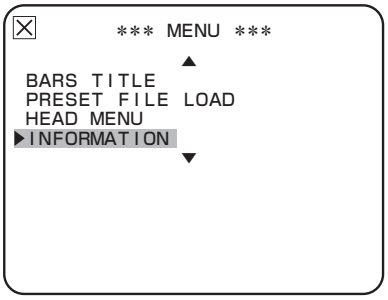
The camera head menu is displayed, and its control is possible.



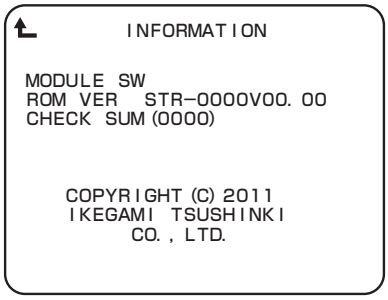
Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "HEAD MENU," and press the CALL button.

INFORMATION

INFORMATION displays the DIP switch settings and ROM version.



Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on "INFORMATION," and press the CALL button.

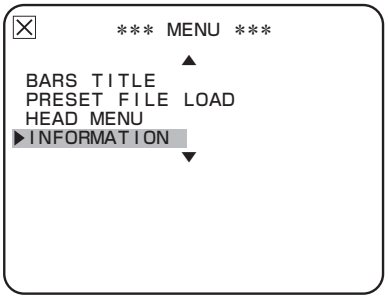


The submenu "INFORMATION" is displayed, on which you can check the settings.

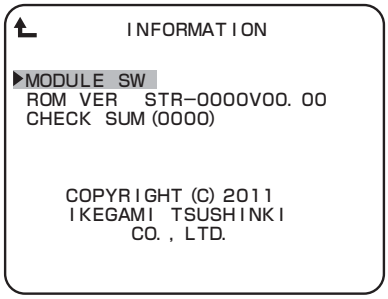
Setting Item	Set Value	Description
MODULE SW	-	Displays the DIP switch settings of the PULSE module and CONT/REF module.
ROM VER	-	Displays ROM version.
CHECK SUM	-	Displays the ROM check sum.

■ *MODULE SW*

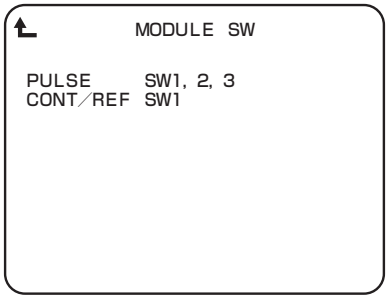
MODULE SW displays the DIP switch settings of the PULSE module and CONT/REF module.



Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on "INFORMATION," and press the CALL button.

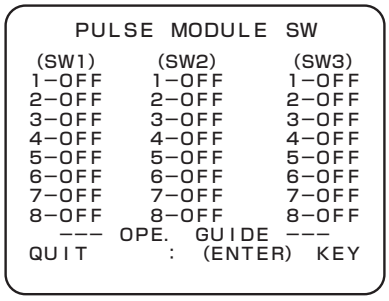


The submenu "INFORMATION" is displayed. Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on "MODULE SW," and press the CALL button.



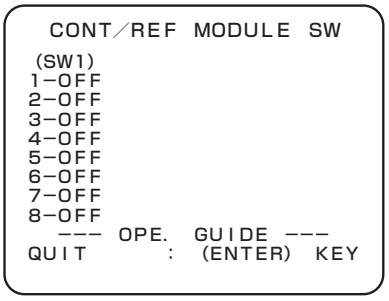
The submenu "MODULE SW" is displayed. Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the switch number, and press the CALL button.

● When "PULSE" is selected



The DIP switch settings of the PULSE module are displayed.

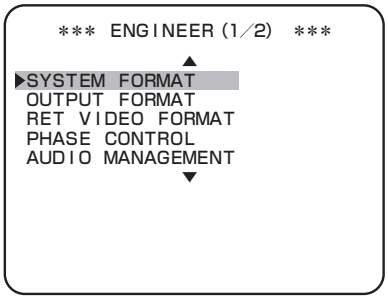
● When "CONT/REF" is selected



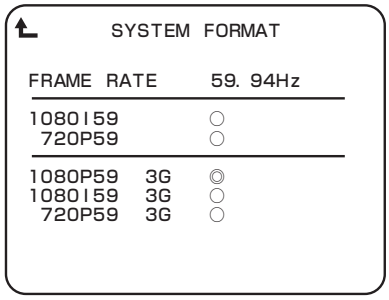
The DIP switch settings of the CONT/REF module are displayed.

SYSTEM FORMAT

SYSTEM FORMAT sets the system format.



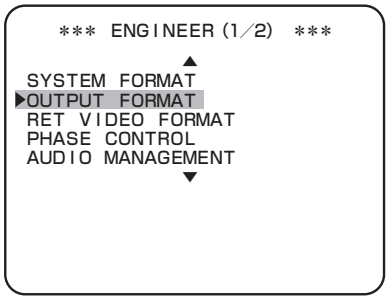
Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "SYSTEM FORMAT," and press the CALL button.



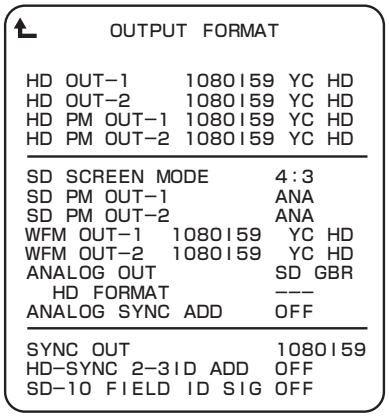
Position the flashing cursor on the format to set, and press the CALL button. Then the display changes to " ◎." (The figure is the case that FRAME RATE is 59.94Hz.)

OUTPUT FORMAT

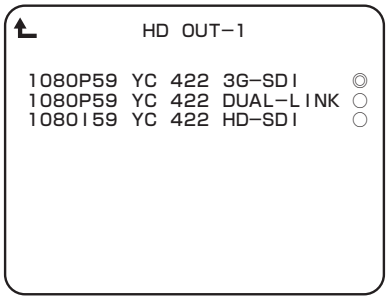
OUTPUT FORMAT sets the output format.



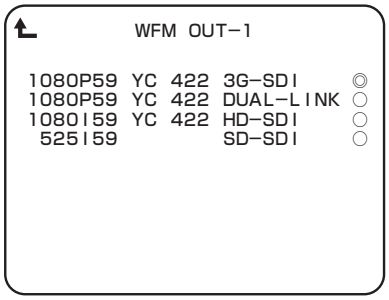
Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "OUTPUT FORMAT," and press the CALL button.



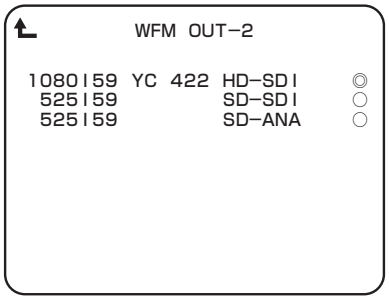
The submenu "OUTPUT FORMAT" is displayed, on which you can perform various settings.



This submenu is displayed in "HD OUT-1," "HD OUT-2," "HD PM OUT-1," and "HD PM OUT-2." (The figure is the case that SYSTEM FORMAT is 1080P59.)



This submenu is displayed in "WFM OUT-1." (The figure is the case that SYSTEM FORMAT is 1080P59.)



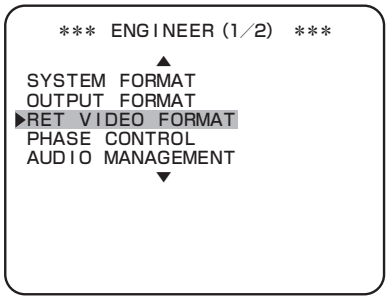
This submenu is displayed in "WFM OUT-2." (The figure is the case that SYSTEM FORMAT is 1080P59.)

Setting Item	Set Value			Description
HD OUT-1	-			Position the flashing cursor on the format to set, and press the CALL button. Then the display changes to " ◎."
HD OUT-2	-			Position the flashing cursor on the format to set, and press the CALL button. Then the display changes to " ◎."
HD PM OUT-1	-			Position the flashing cursor on the format to set, and press the CALL button. Then the display changes to " ◎."
HD PM OUT-2	-			Position the flashing cursor on the format to set, and press the CALL button. Then the display changes to " ◎."
SD SCREEN MODE	4:3			Sets the screen display mode to "4:3."
	16:9			Sets the screen display mode to "16:9."
	LETTER			Sets the screen display mode to "Letterbox."
SD PM OUT-1	SDI			Selects the SD-PM output1 to the SD-SDI signal.
	ANA			Selects the SD-PM output1 to the SDTV analog signal.
SD PM OUT-2	SDI			Selects the SD-PM output2 to the SD-SDI signal.
	ANA			Selects the SD-PM output2 to the SDTV analog signal.
WFM OUT-1	-			Position the flashing cursor on the format to set, and press the CALL button. Then the display changes to " ◎."
WFM OUT-2	-			Position the flashing cursor on the format to set, and press the CALL button. Then the display changes to " ◎."
ANALOG OUT	SD			Sets the analog component output to "SDTV."
	HD			Sets the analog component output to "HDTV."
	GBR			Sets the analog component output to "GBR."
	YPbPr or YCbCr			Sets the analog component output to "YPbPr" (when "HDTV" is selected) or "YCbCr" (when "SDTV" is selected).
HD FORMAT	-			-
ANALOG SYNC ADD	(HDTV selected)	(GBR selected)	OFF	Sets not to add tri-sync signals to all the analog HDTV RGB output.
			ON	Sets to add tri-sync signals to all the analog HDTV RGB output.
		(YPbPr selected)	Y ONLY	Sets to add tri-sync signals only to the Y signal among the analog HDTV YPbPr output.
			ALL	Sets to add tri-sync signals to all the analog HDTV YPbPr output.
	(SDTV selected)	(GBR selected)	OFF	Sets not to add tri-sync signals to all the analog SDTV RGB output.
			ON	Sets to add tri-sync signals to all the analog SDTV RGB output.
		(YCbCr selected)	Y ONLY	Sets to add tri-sync signals only to the Y signal among the analog SDTV YCbCr output.
SYNC OUT	1080P59.			The synchronization signal for the external synchronization output associates with the "1080P59.94" format.
	1080I59.			The synchronization signal for the external synchronization output associates with the "1080I59.94" format.
	1080P23.SF			The synchronization signal for the external synchronization output associates with the "1080P23.97 segment frame" format.
	1080P23.			The synchronization signal for the external synchronization output associates with the "1080P23.97" format.
	720P59.			The synchronization signal for the external synchronization output associates with the "720P59.94" format.
	1080P50.			The synchronization signal for the external synchronization output associates with the "1080P50" format.
	1080I50.			The synchronization signal for the external synchronization output associates with the "1080I50" format.
	720P50.			The synchronization signal for the external synchronization output associates with the "720P50" format.
	SDTV.			The external synchronization output becomes the SDTV synchronization signal.
HD-SYNC 2-3ID ADD*	OFF			Sets not to embed pulse signals, which counted 1 to 5 frames, in the SYNC output.
	ON			Sets to embed pulse signals, which counted 1 to 5 frames, in the SYNC output.
SD-10 FIELD ID SIG	OFF			Sets not to embed pulse signals (level 40IRE), which counted 1 to 5 frames on 15H and 278H, in the ENC signal.
	ON			Sets to embed pulse signals (level 40IRE), which counted 1 to 5 frames on 15H and 278H, in the ENC signal.

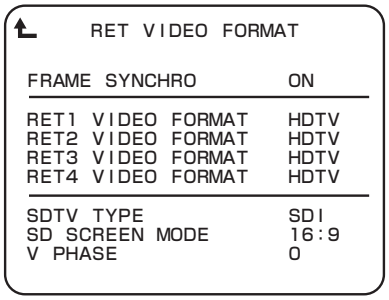
* When "OUT1/OUT2 FORMAT" of "HDTV CONT (1/2)" is either "1080I59.PD," "1080P23.SF" or "1080P23," and "SYNC OUT SEL" is other than "SDTV," selecting ON/OFF is enabled.

RET VIDEO FORMAT

RET VIDEO FORMAT sets the return video signals.



Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "RET VIDEO FORMAT," and press the CALL button.



The submenu "RET VIDEO FORMAT" is displayed, on which you can perform various settings.

Setting Item	Set Value	Description
FRAME SYNCHRO	OFF	Sets the function to synchronize the RET signal to be input with the CCU to OFF.
	ON	Sets the function to synchronize the RET signal to be input with the CCU to ON.
RET1 VIDEO FORMAT	HDTV *1	Selects "HD-SDI" from the RET1 signal input to the HD RET IN module and SD RET IN module.
	SD-SDI/(SDTV) *3	Selects "SD-SDI" from the RET1 signal input to the HD RET IN module and SD RET IN module.
RET2 VIDEO FORMAT	HDTV *1	Selects "HD-SDI" from the RET2 signal input to the HD RET IN module and SD RET IN module.
	SD-SDI/(SDTV) *3	Selects "SD-SDI" from the RET2 signal input to the HD RET IN module and SD RET IN module.
RET3 VIDEO FORMAT *2	HDTV *1	Selects "HD-SDI" from the RET3 signal input to the HD RET IN module and SD RET IN module.
	SD-SDI	Selects "SD-SDI" from the RET3 signal input to the HD RET IN module and SD RET IN module.
RET4 VIDEO FORMAT *2	HDTV *1	Selects "HD-SDI" from the RET4 signal input to the HD RET IN module and SD RET IN module.
	SD-SDI	Selects "SD-SDI" from the RET4 signal input to the HD RET IN module and SD RET IN module.
SDTV TYPE *3	SDI	Sets to "SD-SDI" when "SDTV" is selected in RET VIDEO FORMAT and the input RET signal is "SD-SDI."
	VBS (option)	Sets to "VBS" when "SDTV" is selected in RET VIDEO FORMAT and the input RET signal is "VBS."
SD SCREEN MODE	4:3	Sets the screen display mode to "4:3."
	16:9	Sets the screen display mode to "16:9."
	LETTER	Sets the screen display mode to "Letterbox."
V PHASE	Sets the vertical phase.	

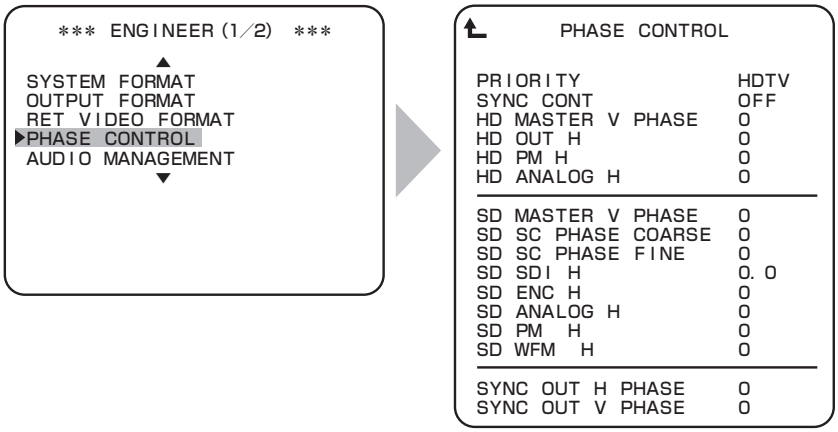
*1 When the SDTV RET module has not been installed, the set value is fixed to "HDTV." In this case, the setting is displayed as "(HD)."

*2 When FRAME SYNCHRO is set to "ON," the RET input supports 2 channels, and items for RET3 VIDEO FORMAT and RET4 VIDEO FORMAT are not displayed.

*3 When the SD RET IN module employs the RET2 channel specification (enabled by the switch in the module), "SDTV" is displayed for RET VIDEO FORMAT, and then "SDI" or "VBS" can be selected from SDTV TYPE.
However, when FRAME SYNCHRO is set to "ON," the setting of RET VIDEO FORMAT is fixed to "SDI," and the item for SDTV TYPE is not displayed.

PHASE CONTROL

PHASE CONTROL sets the various phases.



Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "PHASE CONTROL" and press the CALL button.

The submenu "PHASE CONTROL" is displayed, on which you can perform various settings.

Setting Item	Set Value	Description
PRIORITY	HDTV	Priority is given to the HDTV system phase.
	SDTV	Priority is given to the SDTV system phase.
SYNC CONT [*1]	OFF	Each output SYNC signal in both the HDTV format and the SDTV format is in phase of each input SYNC signal.
	SD +90H	The output SYNC signal in the SDTV format is phase shifted by +90H of the input SYNC signal in the SDTV format.
	SD +90H CL	The output SYNC signal in the SDTV format is phase shifted by +90H of the input SYNC signal in the SDTV format. The phase difference between the video signal sent from the camera head and the SYNC signal of the video signal sent from the CCU-970 is delayed at least +6H to +8H. In this setting, when you switch the HDTV format signal to the return signal, the image on the viewfinder is less scrambled due to the switching.
	FD (FRAME DELAY)	Each output SYNC signal in both the HDTV format and the SDTV format is in phase of each input SYNC signal. The camera head operates in about 1 frame ahead. (The delay depends on transmission distance of the camera and the CCU.)
	SD FD +90H	The output SYNC signal in the SDTV format is phase shifted by +90H of the input SYNC signal in the SDTV format. The camera head operates in about 1 frame ahead. (The delay depends on transmission distance of the camera and the CCU.)
	SD +120H	The output SYNC signal in the SDTV format is phase shifted by +120H of the input SYNC signal in the SDTV format.
	SD +120H CL	The output SYNC signal in the SDTV format is phase shifted by +120H of the input SYNC signal in the SDTV format. The phase difference between the video signal sent from the camera head and the SYNC signal of the video signal sent from the CCU-970 is delayed at least +6H to +8H. In this setting, when you switch the HDTV format signal to the return signal, the image on the viewfinder is less scrambled due to the switching.
	SD FD +120H	The output SYNC signal in the SDTV format is phase shifted by +120H of the input SYNC signal in the SDTV format. The camera head operates in about 1 frame ahead. (The delay depends on transmission distance of the camera and the CCU.)
	HD -90H CL	The output SYNC signal in the HDTV format is phase shifted by -90H of the input SYNC signal in the HDTV format, and the output SYNC signal in the SDTV format is in phase with the input SYNC signal in the SDTV format. The phase difference between the video signal sent from the camera head and the SYNC signal of the video signal sent from the CCU-970 is delayed at least +6H to +8H. In this setting, when you switch the HDTV format signal to the return signal, the image on the viewfinder is less scrambled due to the switching.
	HD -120H CL	The output SYNC signal in the HDTV format is phase shifted by -120H of the input SYNC signal in the HDTV format, and the output SYNC signal in the SDTV format is in phase with the input SYNC signal in the SDTV format. The phase difference between the video signal sent from the camera head and the SYNC signal of the video signal sent from the CCU-970 is delayed at least +6H to +8H. In this setting, when you switch the HDTV format signal to the return signal, the image on the viewfinder is less scrambled due to the switching.
	AUTO CL	Depending on the input SYNC signal, following settings are automatically set. HDTV - Camera head format 1080I: SD +90H CL - Camera head format 720P: SD +120H CL SDTV or none - Camera head format 1080I: HD -90H CL - Camera head format 720P: HD -120H CL
HD MASTER V PHASE	0 to 1124	Adjusts the vertical phase of the HDTV output signals to match the input GENLOCK signal.
	0 to 1499 (720P)	
HD OUT H PHASE	[*2]	Adjusts the horizontal phase of the HD OUT signal to match the input GENLOCK signal.
HD PM H PHASE	[*2]	Adjusts the horizontal phase of the HD PM OUT signal to match the input GENLOCK signal.
HD ANALOG H PHASE	[*2]	Adjusts the horizontal phase of the HD ANALOG OUT signals to match the input GENLOCK signal.
SD MASTER V PHASE	0 to 524 (NTSC)	Sets vertical phases for all SDTV outputs (digital and analog).
	0 to 625 (PAL)	
SC PHASE COARSE	-100 to 100	Coarse adjusts the sub carrier phase.
SC PHASE FINE	-100 to 100	Fine adjusts the sub carrier phase.
SD SDI H PHASE	[*3]	Adjusts the horizontal phase of the SD SDI OUT signals to match the input GENLOCK signal.
SD ENC H PHASE	[*3]	Adjusts the horizontal phase of the SD ENC OUT signals to match the input GENLOCK signal.

SD ANALOG H PHASE	*3	Adjusts the horizontal phase of the SD ANALOG OUT signals to match the input GENLOCK signal.
SD PM H PHASE	*3	Adjusts the horizontal phase of the SD PM OUT signals to match the input GENLOCK signal.
SD WFM H PHASE	*3	Adjusts the horizontal phase of the SD WFM OUT signals to match the input GENLOCK signal.
SYNC OUT H PHASE	*4	Adjusts the horizontal phase of external synchronization output.
SYNC OUT V PHASE	*4	Adjusts the vertical phase of external synchronization output.

*1 Items to be set are very much depending on the HD-SDI output format.
*2 Depending on the format of the output signal, variable range for H PHASE.

Output Signal	Output H PHASE
1080I59.	-1100 to 1100
1080P59.	-1100 to 1100
1080P23.SF	-1300 to 1300
1080P23.	-1300 to 1300
720P59.	-825 to 825
1080I50.	-1320 to 1320
1080P50.	-1320 to 1320
720P59.	-990 to 990

*3 Depending on the format of the output signal, variable range for H PHASE.

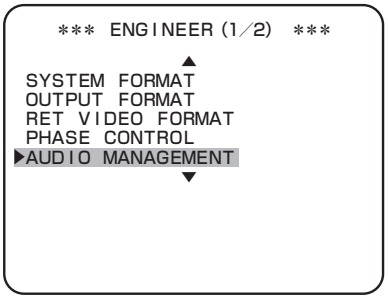
Output Signal	Output H PHASE
NTSC (525I/59)	-858 to 858
PAL(625I/50)	-864 to 864

*4 Depending on the format of the output signal, variable range for H PHASE and V PHASE.

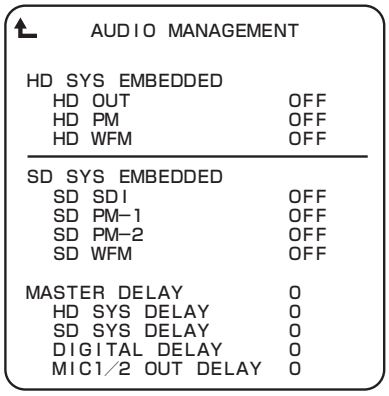
Output Signal	Output H PHASE	Output V PHASE
1080I59.	-1100 to 1100	0 to 1124
1080P59.	-1100 to 1100	0 to 1124
1080P23.SF	-1300 to 1300	0 to 1124
1080P23.	-1300 to 1300	0 to 1124
720P59	-825 to 825	0 to 1499
1080I50.	-1320 to 1320	0 to 1124
1080P50.	-1320 to 1320	0 to 1124
720P59.	-990 to 990	0 to 1499
NTSC (525I/59)	-858 to 858	0 to 524
PAL(625I/50)	-864 to 864	0 to 625

AUDIO MANAGEMENT

AUDIO MANAGEMENT sets the various audio managements.



Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "AUDIO MANAGEMENT," and press the CALL button.

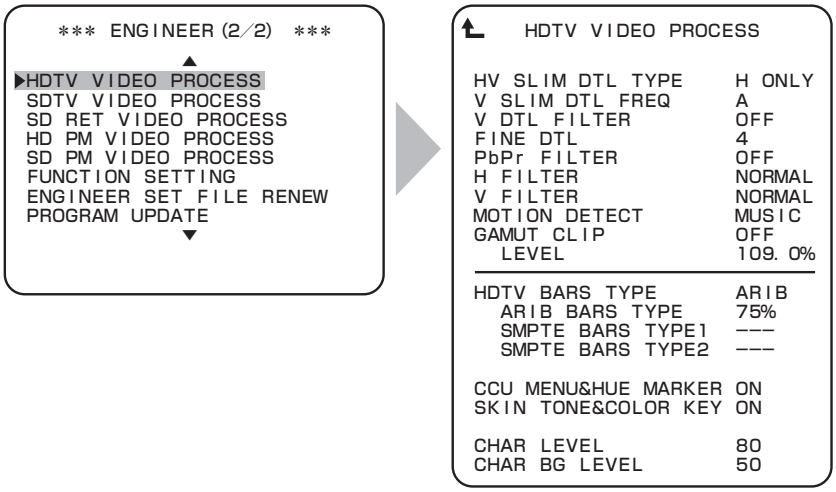


The submenu "AUDIO MANAGEMENT" is displayed, on which you can perform various settings.

Setting Item		Set Value	Description
HD SYS EMBEDDED	HD OUT	OFF	Sets not to embed audio signals in the HD OUT signals.
		ON	Sets to embed audio signals in the HD OUT signals.
	HD PM	OFF	Sets not to embed audio signals in the HD PM OUT signals.
		ON	Sets to embed audio signals in the HD PM OUT signals.
	HD WFM	OFF	Sets not to embed audio signals in the HD WFM OUT signals.
		ON	Sets to embed audio signals in the HD WFM OUT signals.
SD SYS EMBEDDED	SD SDI	OFF	Sets not to embed audio signals in the SD SDI OUT signals.
		ON	Sets to embed audio signals in the SD SDI OUT signals.
	SD PM-1	OFF	Sets not to embed audio signals in the SD PM-1 OUT signals.
		ON	Sets to embed audio signals in the SD PM-1 OUT signals.
	SD PM-2	OFF	Sets not to embed audio signals in the SD PM-2 OUT signals.
		ON	Sets to embed audio signals in the SD PM-2 OUT signals.
	SD WFM	OFF	Sets not to embed audio signals in the SD WFM OUT signals.
		ON	Sets to embed audio signals in the SD WFM OUT signals.
MASTER DELAY		0 to 21	Sets the amount of delay for the audio signals of all channels.
HD SYS DELAY		0 to 21	Sets the amount of delay for the audio signals of HDTV channels.
SD SYS DELAY		0 to 21	Sets the amount of delay for the audio signals of SDTV channels.
DIGITAL DELAY		0 to 21	Sets the amount of delay of the digital audio output.
MIC1/2 OUT DELAY		0 to 21	Sets the amount of delay of the MIC output (2 channels).

HDTV VIDEO PROCESS

HDTV VIDEO PROCESS sets the various HDTV video processes.



Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "HDTV VIDEO PROCESS," and press the CALL button.

The submenu "HDTV VIDEO PROCESS" is displayed, on which you can perform various settings.

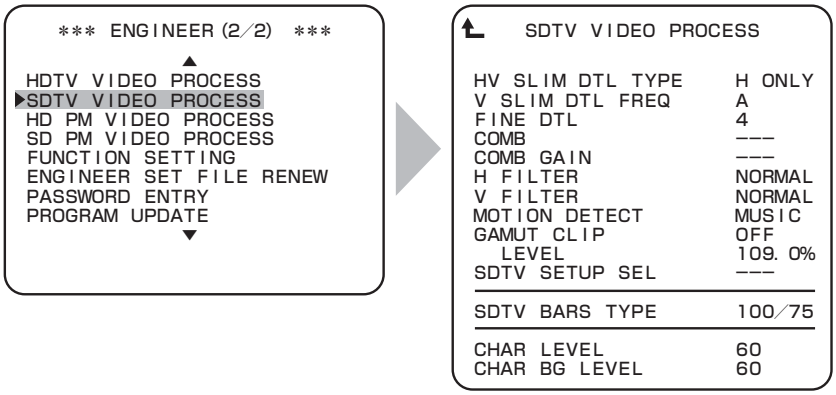
Setting Item	Set Value	Description
HV SLIM DTL TYPE	H ONLY	Sets SLIM DTL to be effective only in the horizontal direction.
	V ONLY	Sets SLIM DTL to be effective only in the vertical direction.
	H+V	Sets SLIM DTL to be effective both in the horizontal/vertical direction.
V SLIM DTL FREQ[*1]	(In interlace frame output or segmented frame output)	Sets a boost band.
	A	Number of effective lines × 0.41
	B	Number of effective lines × 0.38
	C	Number of effective lines × 0.36
	D	Number of effective lines × 0.34
	(In progressive frame output)	Sets a frequency to boost.
	A	Number of effective lines × 0.64
	B	Number of effective lines × 0.75
	C	Number of effective lines × 0.86
	D	Number of effective lines
V DTL FILTER	OFF	Sets a vertical DTL filter to OFF.
	ON	Sets a vertical DTL filter to ON.
FINE DTL[*2]	0 to 8	Sets the FINE DTL.
PbPr FILTER	OFF	Sets filter characteristic of HDTV color-difference signals. (The level around 18MHz increases in 5% for WIDE compared to NORMAL.)
	NORMAL	
	WIDE	
H FILTER [*3]	NORMAL	Sets the horizontal resolution to NORMAL.
	WIDE	Though the horizontal resolution goes up, sets it such that a little bit false signal occurs.
	NARROW	Though the horizontal resolution goes down, sets it such that the false signal is suppressed.
V FILTER [*3]	NORMAL	Sets the vertical resolution to NORMAL.
	WIDE	Though the vertical resolution goes up, sets it such that a little bit false signal occurs.
	NARROW	Though the vertical resolution goes down, sets it such that the false signal is suppressed.

MOTION DETECT	Sets the motion detection function.	
	MUSIC	Normal mode.
	DRAMA	Suitable for still-image editing using a VTR in a drama. This remains a few afterimages because framing is done.
	STILL	Suitable for shooting still images such as picture shooting.
	OFF	Suitable for shooting from a helicopter. Neither afterimages nor images remain because field handling is done.
	SPORTS	Suitable for broadcasting quick-motion sports.
GAMUT CLIP	ON	Sets the gamut clip function to ON.
	OFF	Sets the gamut clip function to OFF.
LEVEL	98 to 109	Sets the gamut clip level for HDTV output.
HDTV BARS TYPE	ARIB	Sets the HDTV color bar complying with the ARIB-standard multi-format color bar.
	100/75	Sets the HDTV color bar complying with the 100/0/75/0 color bar.
	100/100	Sets the HDTV color bar complying with the 100/0/100/0 color bar.
	75/75	Sets the HDTV color bar complying with the 75/0/75/0 color bar.
	SMPTE	Sets the HDTV color bar complying with the SMPTE-standard color bar.
ARIB BARS TYPE	75%	Sets the pattern 2 of the ARIB-standard color bar to "75% White."
	100%	Sets the pattern 2 of the ARIB-standard color bar to "100% White."
	+I	Sets the pattern 2 of the ARIB-standard color bar to "+I signal."
SMPTE BARS TYPE1	75%	Sets the pattern 2 of the SMPTE-standard color bar to "75% White."
	100%	Sets the pattern 2 of the SMPTE-standard color bar to "100% White."
	+I	Sets the pattern 2 of the SMPTE-standard color bar to "+I signal."
	-I	Sets the pattern 2 of the SMPTE-standard color bar to "-I signal."
SMPTE BARS TYPE2	0%	Sets the pattern 3 of the SMPTE-standard color bar to "0% Black."
	+Q	Sets the pattern 3 of the SMPTE-standard color bar to "+Q signal."
CCU MENU/HUE MARKER	ON	Sets to embed the CCU MENU/HUE MARKER in the main signal.
	OFF	Sets not to embed the CCU MENU/HUE MARKER in the main signal.
SKIN TONE/COLOR KEY	ON	Sets to embed the SKIN DTL/COLOR DTL KEY signal in the main signal.
	OFF	Sets not to embed the SKIN DTL/COLOR DTL KEY signal in the main signal.
CHAR LEVEL	0 to 200	Sets the character level of the HD OUT signals.
CHAR BG LEVEL	-100 to 100	Sets the background level of characters on the HD OUT signals.

*1 When "SLIM DTL" is "OFF" or SLIM DTL is set to be effective only in the horizontal direction ("H ONLY" is set to "HV SLIM DTL TYPE"), the frequency to boost is half the number of effective lines.
*2 This item is valid only when the camera head to be connected is the HDK-790EXⅡ or HDK-790EXⅢ or HDK-97A.
*3 It is displayed in 1080I → 720P convert.

SDTV VIDEO PROCESS

SDTV VIDEO PROCESS sets the various SDTV video processes.



Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "SDTV VIDEO PROCESS," and press the CALL button.

The submenu "SDTV VIDEO PROCESS" is displayed, on which you can perform various settings.

Setting Item	Set Value	Description
HV SLIM DTL TYPE	H ONLY	Sets SLIM DTL to be effective only in the horizontal direction.
	V ONLY	Sets SLIM DTL to be effective only in the vertical direction.
	H+V	Sets SLIM DTL to be effective both in the horizontal/vertical direction.
V SLIM DTL FREQ *1	Sets a boost band.	
	A	Number of effective lines × 0.41
	B	Number of effective lines × 0.38
	C	Number of effective lines × 0.36
	D	Number of effective lines × 0.34
FINE DTL*2	0 to 8	Sets the FINE DTL.
COMB	-	Sets in the factory.
COMB GAIN	-	Sets in the factory.
H FILTER *3	NARROW	Sets the horizontal filter. The frequency characteristics improve in the order of "NARROW" < "NORMAL" < "WIDE" < "SUPER."
	NORMAL	
	WIDE	
	SUPER	
V FILTER	NARROW	Sets the vertical filter. The frequency characteristics improve in the order of "NARROW" < "NORMAL" < "WIDE" < "SUPER."
	NORMAL	
	WIDE	
	SUPER	
MOTION DETECT	Sets the motion detection function of the down-converter.	
	MUSIC	Specifies the normal mode.
	DRAMA	Suitable for still-image editing using a VTR in a drama. This remains a few afterimages because framing is done.
	STILL	Suitable for shooting still images such as picture shooting.
	OFF	Suitable for shooting from a helicopter. Neither afterimages nor images remain because field handling is done.
	SPORTS	Suitable for broadcasting quick-motion sports.
GAMUT CLIP	ON	Sets the gamut clip function to ON.
	OFF	Sets the gamut clip function to OFF.
LEVEL	98 to 109	Sets the gamut clip level for SDTV output.
SDTV SETUP SEL	-	Sets in the factory.

SDTV BARS TYPE	100/75	Sets the SDTV color bar complying with the 100/0/75/0 color bar.
	100/100	Sets the SDTV color bar complying with the 100/0/100/0 color bar.
	75/75	Sets the SDTV color bar complying with the 75/0/75/0 color bar.
CHAR LEVEL	0 to 200	Sets the character level of the SDTV OUT signals.
CHAR BG LEVEL	-100 to 100	Sets the background level of characters on the SDTV OUT signals.

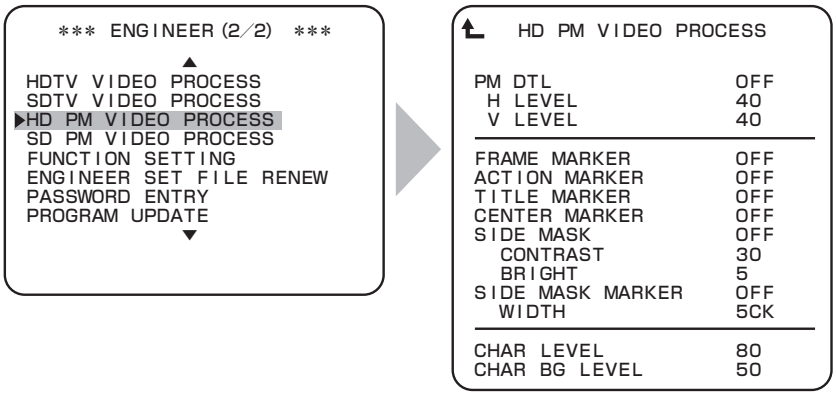
*1 When "SLIM DTL" is "OFF" or SLIM DTL is set to be effective only in the horizontal direction ("H ONLY" is set to "HV SLIM DTL TYPE"), the frequency to boost is half the number of effective lines.

*2 This item is valid only when the camera head to be connected is the HDK-790EXⅡ or HDK-790EXⅢ or HDK-97A.

*3 When the format of the camera head is 720P59.94, only "NORMAL" can be selected.

HD PM VIDEO PROCESS

HD PM VIDEO PROCESS sets the various HDTV PM video processes. (* USA option)



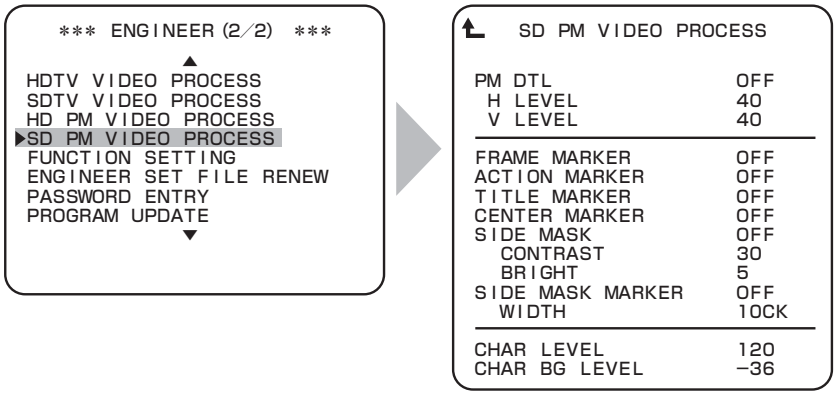
Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "HD PM VIDEO PROCESS," and press the CALL button.

The submenu "HD PM VIDEO PROCESS" is displayed, on which you can perform various settings.

Setting Item	Set Value	Description
PM DTL	OFF	Sets DTL to OFF.
	ON	Sets DTL to ON.
(PM DTL) H LEVEL	0 to 100	Sets the horizontal level of DTL.
(PM DTL) V LEVEL	0 to 100	Sets the vertical level of DTL.
FRAME MARKER	OFF	Does not display the frame marker.
	ON-16:9	Displays the frame marker with 16:9 aspect ratio.
	ON-14:9	Displays the frame marker with 14:9 aspect ratio.
	ON-13:9	Displays the frame marker with 13:9 aspect ratio.
	ON-4:3	Displays the frame marker with 4:3 aspect ratio.
ACTION MARKER	OFF	Does not display the action area marker.
	ON-16:9	Displays the action area marker with 16:9 aspect ratio.
	ON-14:9	Displays the action area marker with 14:9 aspect ratio.
	ON-13:9	Displays the action area marker with 13:9 aspect ratio.
	ON-4:3	Displays the action area marker with 4:3 aspect ratio.
TITLE MARKER	OFF	Does not display the title area marker.
	ON-16:9	Displays the title area marker with 16:9 aspect ratio.
	ON-14:9	Displays the title area marker with 14:9 aspect ratio.
	ON-13:9	Displays the title area marker with 13:9 aspect ratio.
	ON-4:3	Displays the title area marker with 4:3 aspect ratio.
CENTER MARKER	OFF	Does not display the center marker.
	ON	Displays the center marker.
SIDE MASK	OFF	Does not display the side mask.
	ON-14:9	Displays the side mask with 14:9 aspect ratio.
	ON-13:9	Displays the side mask with 13:9 aspect ratio.
	ON-4:3	Displays the side mask with 4:3 aspect ratio.
(SIDE MASK) CONTRAST	0 to 100	Adjusts the side mask contrast. (The larger the value, the contrast gets higher.)
(SIDE MASK) BRIGHT	0 to 100	Adjusts the side mask brightness. (The larger the value, the brightness gets higher.)
SIDE MASK MARKER	OFF	Does not display the side mask marker.
	ON	Displays the side mask marker.
(SIDE MASK MARKER) WIDTH	5CK	Selects the side mask marker width. (The width gets wider in the order of 5CK<10CK<15CK<20CK.)
	10CK	
	15CK	
	20CK	
CHAR LEVEL	0 to 200	Sets the character level of the HD PM OUT signals.
CHAR BG LEVEL	-100 to 100	Sets the background level of characters on the HD PM OUT signals.

SD PM VIDEO PROCESS

SD PM VIDEO PROCESS sets the various SDTV PM video processes. (* USA option)



Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "SD PM VIDEO PROCESS," and press the CALL button.

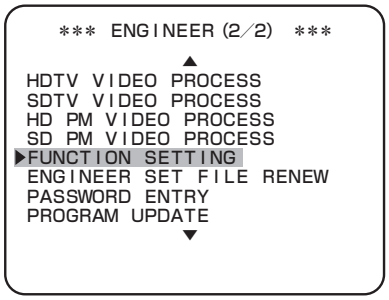
The submenu "SD PM VIDEO PROCESS" is displayed, on which you can perform various settings.

Setting Item	Set Value	Description
PM DTL	OFF	Sets DTL to OFF.
	ON	Sets DTL to ON.
(PM DTL) H LEVEL	0 to 100	Sets the horizontal level of DTL.
(PM DTL) V LEVEL	0 to 100	Sets the vertical level of DTL.
FRAME MARKER *1	OFF	Does not display the frame marker.
	ON-16:9	Displays the frame marker with 16:9 aspect ratio.
	ON-14:9	Displays the frame marker with 14:9 aspect ratio.
	ON-13:9	Displays the frame marker with 13:9 aspect ratio.
	ON-4:3	Displays the frame marker with 4:3 aspect ratio.
ACTION MARKER *1	OFF	Does not display the action area marker.
	ON-16:9	Displays the action area marker with 16:9 aspect ratio.
	ON-14:9	Displays the action area marker with 14:9 aspect ratio.
	ON-13:9	Displays the action area marker with 13:9 aspect ratio.
	ON-4:3	Displays the action area marker with 4:3 aspect ratio.
TITLE MARKER *1	OFF	Does not display the title area marker.
	ON-16:9	Displays the title area marker with 16:9 aspect ratio.
	ON-14:9	Displays the title area marker with 14:9 aspect ratio.
	ON-13:9	Displays the title area marker with 13:9 aspect ratio.
	ON-4:3	Displays the title area marker with 4:3 aspect ratio.
CENTER MARKER	OFF	Does not display the center marker.
	ON	Displays the center marker.
SIDE MASK *2	OFF	Does not display the side mask.
	ON-14:9	Displays the side mask with 14:9 aspect ratio.
	ON-13:9	Displays the side mask with 13:9 aspect ratio.
	ON-4:3	Displays the side mask with 4:3 aspect ratio.
(SIDE MASK) CONTRAST	0 to 100	Adjusts the side mask contrast. (The larger the value, the contrast gets higher.)
(SIDE MASK) BRIGHT	0 to 100	Adjusts the side mask brightness. (The larger the value, the brightness gets higher.)
SIDE MASK MARKER	OFF	Does not display the side mask marker.
	ON	Displays the side mask marker.
(SIDE MASK MARKER) WIDTH	10CK	Selects the side mask marker width. (The width of 20CK is wider than that of 10CK.)
	20CK	
CHAR LEVEL	0 to 200	Sets the character level of the SD PM OUT signals.
CHAR BG LEVEL	-100 to 100	Sets the background level of characters on the SD PM OUT signals.

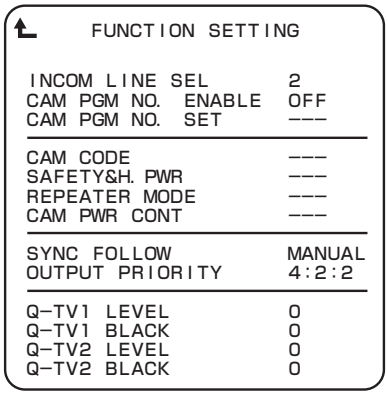
*1 When "SCREEN MODE" is set to "4:3," only "OFF" or "ON-4:3" can be selected for "FRAME MARKER," "ACTION MARKER," and "TITLE MARKER."
*2 When "SCREEN MODE" is set to "4:3," "SIDE MASK" is fixed to "OFF."

FUNCTION SETTING

FUNCTION SETTING sets the various function settings.



Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "FUNCTION SETTING," and press the CALL button.



The submenu "FUNCTION SETTING" is displayed, on which you can perform various settings.

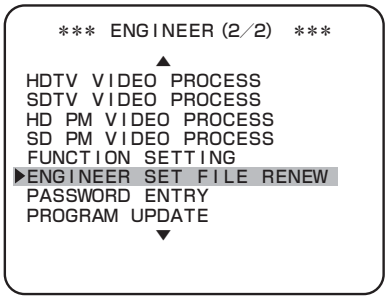
Setting Item	Set Value	Description
INCOM LINE SEL	2	Sets to "2" when 2 lines of intercom (ENG and PROD) are used for the system.
	1	Sets to "1" when the PROD line audio is mixed in the ENG line audio and 1 line of intercom (ENG) is used for the system.
CAM PGM NO. ENABLE *1	OFF	Sets to "OFF" when the CCU does not manage the camera program numbers.
	ON	Sets to "ON" when the CCU manages the camera program numbers.
CAM PGM NO. SET *2	OFF	Sets not to display the camera program numbers for the camera head and control panel.
	1 to 99	Sets to display the camera program numbers for the camera head and control panel.
CAM CODE	-	option
SAFETY&H.PWR	-	option
REPEATER MODE	-	option
CAM PWR CONT	-	option
SYNC FOLLOW	MANUAL	Output signals are not made to follow the format of GENLOCK signal.
	AUTO	Output signals are made to follow the format of GENLOCK signal. In addition, formats made to follow are only 1080I59, 720P59, 1080I50, and 720P50.
OUTPUT PRIORITY	4:4:4	Priority is given to 4:4:4 for the format made to follow.
	4:2:2	Priority is given to 4:2:2 for the format made to follow.
Q-TV1 LEVEL	0 to 100	Sets the Q-TV1 level. (Sets in the factory.)
Q-TV1 BLACK	0 to 100	Sets the Q-TV1 black level. (Sets in the factory.)
Q-TV2 LEVEL	0 to 100	Sets the Q-TV1 level. (Sets in the factory.)
Q-TV2 BLACK	0 to 100	Sets the Q-TV1 black level. (Sets in the factory.)

*1 For the camera program numbers, refer to the instructions accompanying the control panel such as the OCP-200 that supports the camera program numbers.

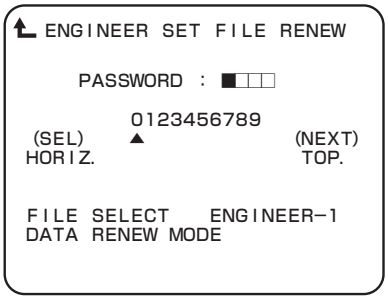
*2 The setting for the camera program numbers is enabled when CAM PGM NO. ENA is set to "ON."

ENGINEER SET FILE RENEW

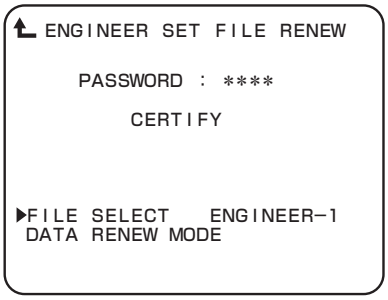
ENGINEER SET FILE RENEW renew the ENGINEER file.



Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "ENGINEER SET FILE RENEW," and press the CALL button.



The submenu "ENGINEER SET FILE RENEW" is displayed. Turn the MASTER PEDESTAL control knob and IRIS control knob, input a password, and press the CALL button.



You can perform various settings.

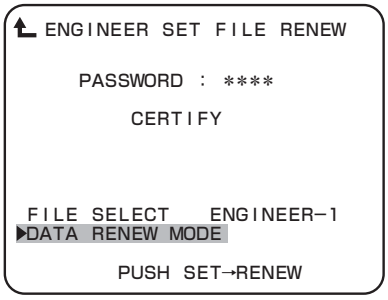
Setting Item	Set Value	Description
FILE SELECT	ENGINEER-1	Sets the ENGINEER-1 file
	ENGINEER-2	Sets the ENGINEER-2 file
	ENGINEER-3	Sets the ENGINEER-3 file
DATA RENEW MODE	-	The operation is as follows.

1 Position the flashing cursor on "DATA RENEW MODE," and press the CALL button.

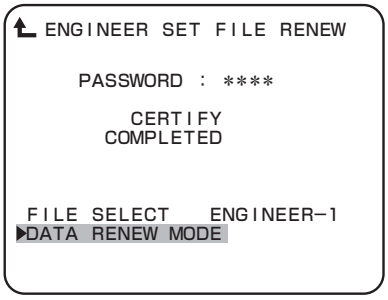
"PUSH SET → RENEW " is displayed in the bottom of the screen.

2 Press the CALL button.

Renew the ENGINEER file.
After the data is written, "COMPLETED" is displayed.



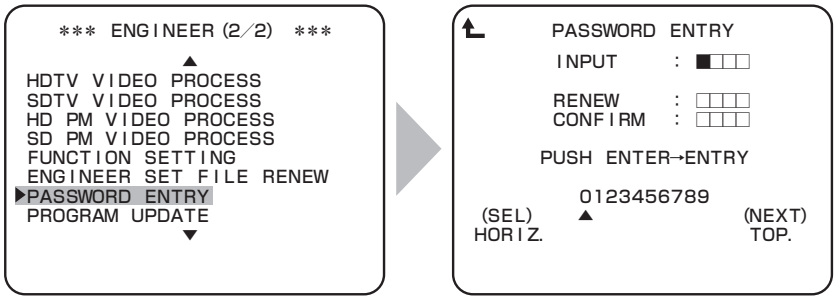
When the CALL button is pressed, the message is displayed in the bottom of the screen.



"COMPLETED" is displayed in the middle of the screen.

PASSWORD ENTRY

PASSWORD ENTRY sets the password.



Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "PASSWORD ENTRY," and press the CALL button.

Turn the MASTER PEDESTAL control knob and IRIS control knob, input a password, and press the CALL button.

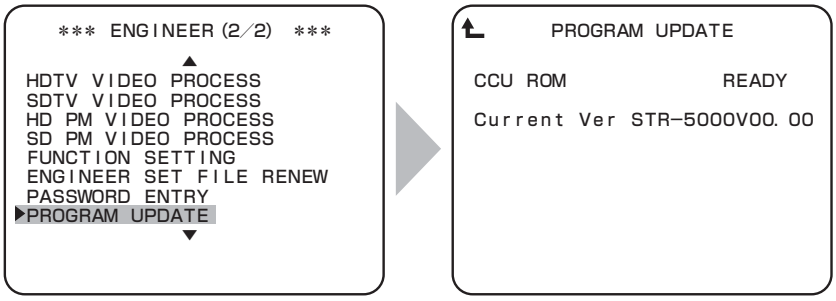
Note:

The initial password is "0000." The PASSWORD ENTRY is displayed when S3 No.3 ON of the PULSE module or the password except "0000" is registered.

In addition, this function is for preventing overwrite of the data by incorrect operation, and does not aim at perfect security.

PROGRAM UPDATE

PROGRAM UPDATE updates the CCU ROM.



Turn the MASTER PEDESTAL control knob or IRIS control knob to position the flashing cursor on the submenu "PROGRAM UPDATE," and press the CALL button.

The submenu "PROGRAM UPDATE" is displayed, on which you can perform various settings.

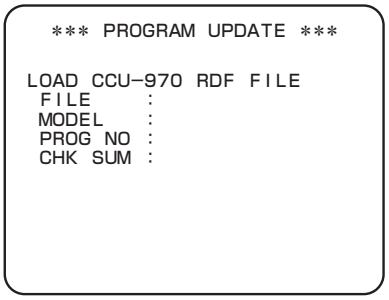
Setting Item	Set Value	Description
CCU ROM	READY	Ready for update.
	CANCEL	Cancels update.
	EXECUTE	Update the CCU ROM.

1 Position the flashing cursor on "CCU ROM," and presses the CALL button.

Flashing cursor moves to the mode setting, and also the display of the mode setting value switches from "READY" to "CANCEL."

2 Turn the MASTER PEDESTAL control knob or IRIS control knob to adjust the setting value, and press the CALL button.

The value can be confirmed.
- When "CANCEL" is selected, the setting is canceled and "PROGRAM UPDATE" exits.
- When "EXECUTE" is selected, the following screen is displayed.



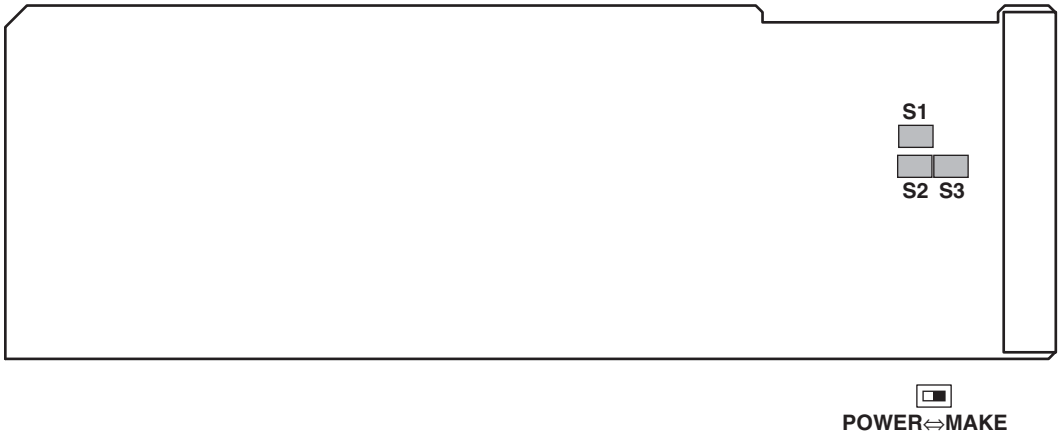
Please refer to "19.2 Update Procedure of Connected equipment" of OPERATION MANUAL of OCP-200 for the following operations.

5.2 Settings Using Switches on the Module

Depending on systems such as an external system connected to the CCU.

TALLY Mode Settings

Set the mode of the tally control signal input to the TALLY IN connector on the rear of the CCU. Select the mode by S1 to S3 switches on the AUX-A module.



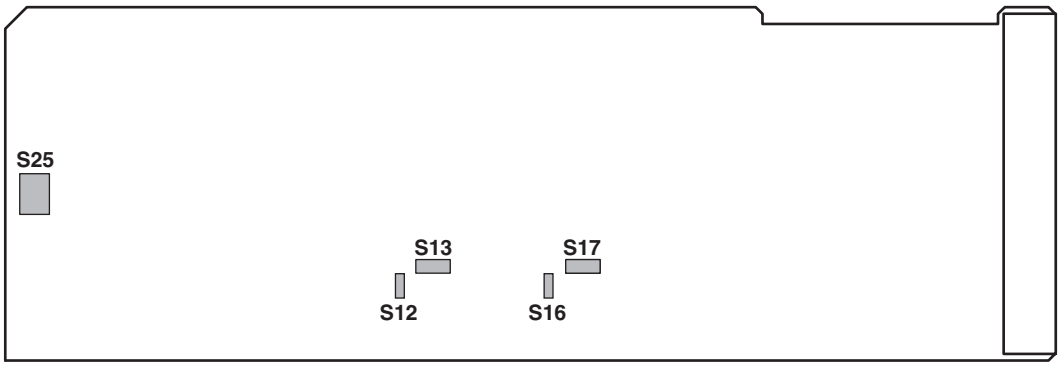
AUX-A Module (Side A)

Switch No.	Function Name	Setting	Description
S1	R TALLY	POWER	Sets the R TALLY signal input to the CCU to "POWER mode."
		MAKE	Sets the R TALLY signal input to the CCU to "MAKE/BREAK mode."
S2	G TALLY	POWER	Sets the G TALLY signal input to the CCU to "POWER mode."
		MAKE	Sets the G TALLY signal input to the CCU to "MAKE/BREAK mode."
S3 *	Y TALLY	POWER	Sets the Y TALLY signal input to the CCU to "POWER mode."
		MAKE	Sets the Y TALLY signal input to the CCU to "MAKE/BREAK mode."

* Currently, S3 supports "MAKE" only.

Intercom Settings

Set functions of the intercom according to the intercom system to be used. Select the function by S12, S13, S16, S17, and S25 switches on the AUX-A module.



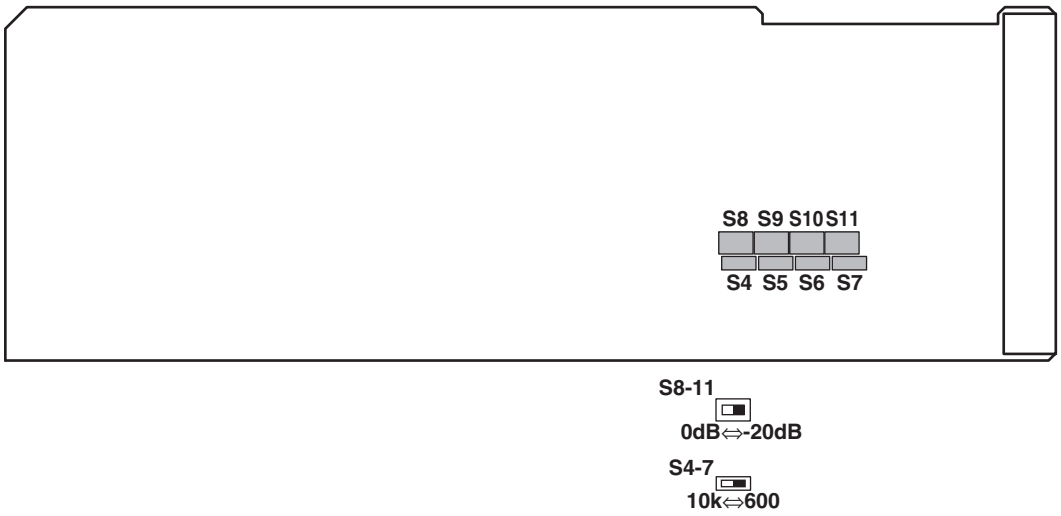
* S25 is set to "ON" when switched to the board side.

AUX-A Module (Side A)

Switch No.	Function Name		Setting	Description
S12	ENG RTS OFF		OFF	Sets to "OFF" when the ENG line of the system is used for "4W."
			ON	Sets to "ON" when the ENG line of the system is used for "RTS" or "clearcom."
S13	ENG TERMINATE		600	Sets terminal resistance of the ENG line to "600Ω."
			10k	Sets terminal resistance of the ENG line to "10kΩ."
S16	PROD RTS OFF		OFF	Sets to "OFF" when the PROD line of the system is used for "4W."
			ON	Sets to "ON" when the PROD line of the system is used for "RTS" or "clearcom."
S17	PROD TERMINATE		600	Sets terminal resistance of the PROD line to "600Ω."
			10k	Sets terminal resistance of the PROD line to "10kΩ."
S25	1	ENG RTS ON	OFF	Sets to "OFF" when the ENG line of the system is used for "4W."
			ON	Sets to "ON" when the ENG line of the system is used for "RTS" or "clearcom."
	2	ENG RTS -15dB ON	OFF	Sets to "OFF" when the ENG line of the system is used for "RTS."
			ON	Sets to "ON" when the ENG line of the system is used for "clearcom."
	3	PROD RTS ON	OFF	Sets to "OFF" when the PROD line of the system is used for "4W."
			ON	Sets to "ON" when the PROD line of the system is used for "RTS" or "clearcom."
	4	PROD RTS -15dB ON	OFF	Sets to "OFF" when the PROD line of the system is used for "RTS."
			ON	Sets to "ON" when the PROD line of the system is used for "clearcom."

PGM Settings

Set PGM (program sound) signals input to the INTERCOM connector on the rear of the CCU and audio trunk signals.
Select the signal by S4 to S11 switches on the AUX-A module.



AUX-A Module (Side A)

Switch No.	Function Name	Setting	Description
S4	PGM-1 TERMINATE	600	Sets the terminal resistance of the PGM-1 to "600Ω."
		10k	Sets the terminal resistance of the PGM-1 to "10kΩ."
S5	PGM-2 TERMINATE	600	Sets the terminal resistance of the PGM-2 to "600Ω."
		10k	Sets the terminal resistance of the PGM-2 to "10kΩ."
S6	PGM-3 TERMINATE	600	Sets the terminal resistance of the PGM-3 to "600Ω."
		10k	Sets the terminal resistance of the PGM-3 to "10kΩ."
S7	AUDIO TRUNK TERMINATE	600	Sets the terminal resistance of the AUDIO TRUNK to "600Ω."
		10k	Sets the terminal resistance of the AUDIO TRUNK to "10kΩ."
S8	PGM-1 LEVEL	0dB	Sets to "0dB" when the input level of the PGM-1 is "0dB."
		-20dB	Sets to "-20dB" when the input level of the PGM-1 is "-20dB."
S9	PGM-2 LEVEL	0dB	Sets to "0dB" when the input level of the PGM-2 is "0dB."
		-20dB	Sets to "-20dB" when the input level of the PGM-2 is "-20dB."
S10	PGM-3 LEVEL	0dB	Sets to "0dB" when the input level of the PGM-3 is "0dB."
		-20dB	Sets to "-20dB" when the input level of the PGM-3 is "-20dB."
S11	AUDIO TRUNK LEVEL	0dB	Sets to "0dB" when the input level of the AUDIO TRUNK is "0dB."
		-20dB	Sets to "-20dB" when the input level of the AUDIO TRUNK is "-20dB."