SONY

CAMERA CONTROL UNIT

CCU-900
CCU-900P

SUPPLEMENT-1

FOR INSTALLATION AND MAINTENANCE MANUAL

Some of the pages in the manual for this model have been revised.
Please update the manual in your possession by adding or replacing
the indicated pages with those supplied as part of this supplement.

Applicable Manual (Manual Code)

1st Edition (3-204-336-01)

Contents

Correction

Section 2 Setting Menu

Additional information for RETURN MATRIX / DUAL CAMERA MODE settings.

Section 3 System Setup

CCU-900 (J, UC)
CCU-900P (CE) J, E
9-968-557-01

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Table of Contents

Manual Structure

1. Installation Overview

2. Setting Menu

3. System Setup

4. Service Overview

Color Bars Setup Display

```
        * ColorBars *
>Char Color/BW  BW
 Char Level     Y 8 C 0
 Char BD Level  Y 3 C 0
 Char Color     White
 Char BG Color  White
```

Item	Setup	Function	Factory setting
Char Color/Bw	C/BW	Selects whether the character signal to be super-imposed on the color-bar signal is set to color or to white. C : Color BW : White	BW
Char Level	Y : 0 to 15/C : 0 to 15	Sets the level of the character signal to be super-imposed on the color-bar signal. C is valid in the color mode.	
Char BD Level	Y : 0 to 15/C : 0 to 15	Sets the level of the character signal's border to be super-imposed on the color-bar signal. C is valid in the color mode.	
Char Color	White/Yellow/Green/ Magenta/Cyan/Blue/ Red/Black	Sets the color of the character signal to be super-imposed on the color-bar signal.	White
Char BG Color	White/Yellow/Green/ Magenta/Cyan/Blue/ Red/Black	Sets the level of the character signal background to be super-imposed on the color-bar signal.	White

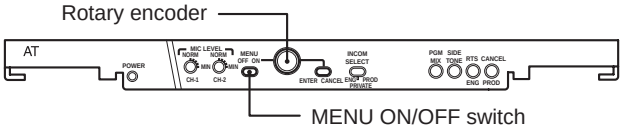
Display of Other Setups

```
          * Others *
>Reference    Analog
 Dual Mode    OFF
 FRONT PGM    PGM1
 PGM INPUT    SERIAL
 SDI AUDIO    ON
 CF Shift
```

Item	Setup	Function	Factory setting
Reference	Digital/Analog	Selects the genlock source. Digital : SERIAL RET INPUT1 Analog : REFERENCE INPUT	Analog
Dual Mode	OFF/Primary/ Secondary	Sets use of a dual CCU. OFF : When one machine is only used Primary : When the machine is used on the primary side for a dual system Secondary : When the machine is used on the secondary side for a dual system	OFF
FRONT PGM	PGM1/PGM2	Selects a PGM channel to be mixed with the front INTERCOM connector. PGM1 : 1 ch PGM2 : 2 ch	PGM1
PGM INPUT	Serial/Analog	Selects the AUDIO input to be used as PGM. Serial : Embedded audio signal of SERIAL RET INPUT1 Analog : Input signal of INTERCOM/TALLY/PGM connector	Analog
SDI AUDIO	ON/OFF	Selects whether audio signal is mixed with serial out.	ON
CF Shift	–	Press the rotary encoder once to shift a color frame of the VBS output of PIX1/PIX2/WF1/WF2 of CCU-900/900P by one frame.	

3-3-5. Adjusting the Level of Signals for Picture Monitor

The video output signal can be checked on the picture monitor connected to the PIX output connector. Use the color bars to adjust the level of the PIX output signal.
In addition, in the system with the MSU-700A/750, CNU-700/500 or VCS-700, the video signal of the unit can be checked on the picture monitor connected to the VCS-700. For more details, refer to the system manual or the VCS-700 maintenance manual.



AT-122 board

1. While pressing the rotary encoder on the AT-122 board panel, set the MENU ON/OFF switch to ON. The engineering menu will be displayed.
2. Press the BAR button of the MSU-700A/750, RCP-740/741 or others, and press the ENC button of the PICTURE MONITOR button (or the MONITOR SELECT button) to display the color bar on the waveform monitor.
3. Select “DA1” from the engineering menu entry display.

```
    * Engineering Menu *
>DA1
 DA2
 DA3
 Others
```

4. Select “PIX1 Gain” and adjust the color bar signal so that it is within the specified levels.

```
          * DA1 *
>PIX1 Gain          80
 PIX1 DC            A2
 WFM1 Gain          80
 WFM1 DC            A2


 EEPROM Store
```

5. Select “EEPROM Store” and save the adjustment value.
6. Select “DA2” from the engineering menu entry display.

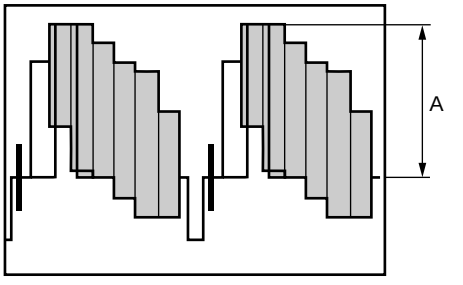
```
    * Engineering Menu *
 DA1
>DA2
 DA3
 Others
```

7. Select “PIX2 Gain” and adjust the color bar signal so that it is within the specified levels.

```
          * DA2 *
>PIX2 Gain          80
 PIX2 DC            A2
 PROMPT Gain        80
 WFM2 Gain          80
 WFM2 DC            A2

 EEPROM Store
```

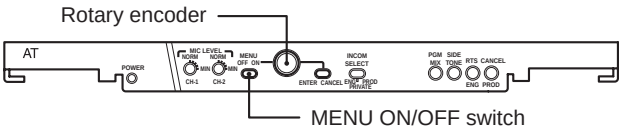
8. Select “EEPROM Store” and save the adjustment value.
   Measurement point : PIX1/2 OUT connector of CCU rear panel
   Specification : A = 100 ±1 IRE (CCU-900)
   A = 700 ±7 mV p-p (CCU-900P)



3-3-6. Setting the RETURN MATRIX

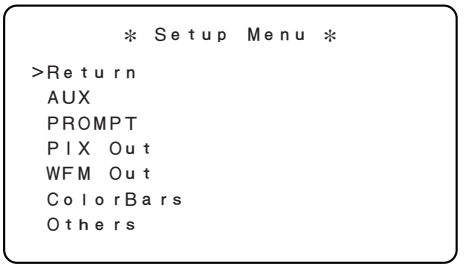
Each input signal of the SERIAL RET INPUT1 to 4 and SERIAL AUX IN connectors on the SDI-31 board rear panel and that of RET INPUT1 to 4 and PROMPTER IN connectors on the IF-730 board, can be allocated to RET1 to 4 selected from the camera side by using the RETURN MATRIX function.
Perform this setting on the setup menu of the unit or on the configuration menu of the MSU-700A/750.

Setting on the setup menu of the unit

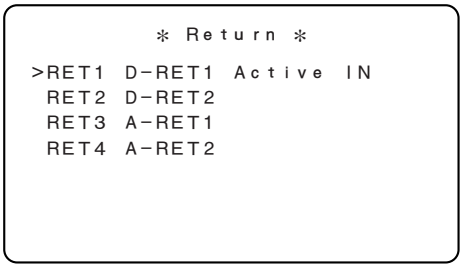


AT-122 board

1. Set the MENU ON/OFF switch on the AT-122 board panel to ON. The setup menu will be displayed.
2. Select “Return” from the setup menu entry display.



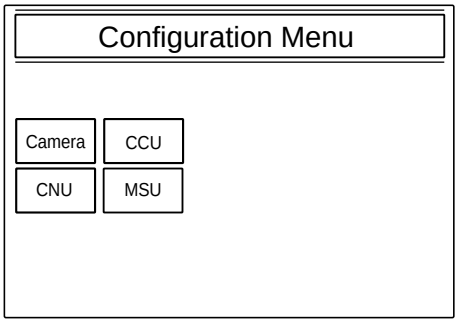
3. Select the RET number to be allocated using the rotary encoder and press the rotary encoder.



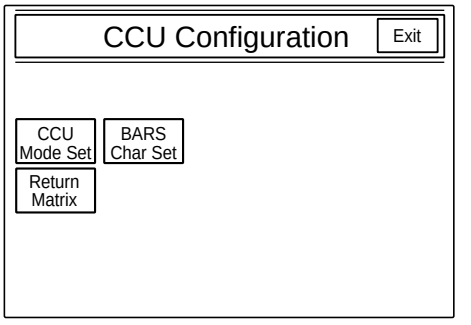
4. The signals that can be allocated blink. Select the desired signal using the rotary encoder and press Enter. The signal to be allocated can be selected from D-RET1/2/3/4, A-RET1/2/3/4, AUX, PROMPTER and CAM.
   For the details, refer to Section 2-2, “Setup Menu”.

Setting on the MSU-700A/750

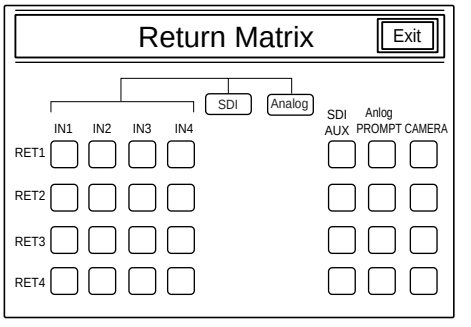
1. Press the CONFIG button of the MODE block of the MSU-700A/750 to light up the button.
   The configuration menu will be displayed.



2. Press CCU.
   The CCU configuration items will be displayed.



3. Select Return Matrix from the configuration items.
4. The Return Matrix select display appears.
   The allocating RET numbers are displayed in the vertical axis and the signals to be allocated is displayed in the horizontal axis.
   To allocate D-RET1/2/3/4, light up SDI. To allocate A-RET1/2/3/4, light up Analog.



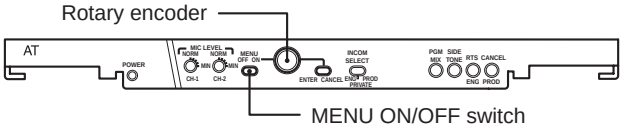
3-3-7. Setting the DUAL CAMERA MODE

When AUX IN and AUX OUT on the rear panel of the unit are respectively connected to the BNC cable, two CAMERA systems can be operated by using one fiber cable. In this case, set the CCU connected by using the fiber cable to Dual Mode: Primary and the CCU connected by using the BNC cable to Dual Mode: Secondary.
Perform this setting on the setup menu of the unit or on the configuration menu of the MSU-700A/750.

Note

The AUX MATRIX setting of the CCU that is set to Primary or Secondary is fixed to AUX and cannot be changed. In addition, AUX1/2/3 cannot be switched from the CA-950/950P. The Primary CCU and Secondary CCU must be synchronized.

Setting on the setup menu of the unit



AT-122 board

1. Set the MENU ON/OFF switch on the AT-122 board panel to ON. The setup menu will be displayed.
2. Select “Others” from the setup menu entry display.

```
        * Setup Menu *
  Return
  AUX
  PROMPT
  PIX Out
  WFM Out
  ColorBars
 >Others
```

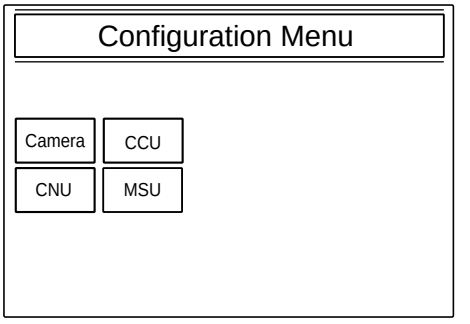
3. Select “DUAL MODE” of the rotary encoder. Press the rotary encoder.

```
          * Others *
  Reference     Analog
 >Dual Mode     OFF
  FRONT PGM     PGM1
  PGM INPUT     SERIAL
  SDI AUDIO     ON
  CF Shift
```

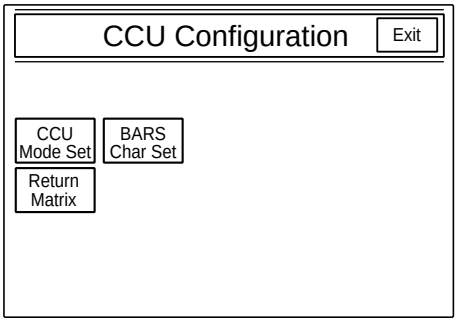
4. Set OFF (normal mode), Primary or Secondary according to the relevant CCU.
   For the details, refer to Section 2-2, “Setup Menu”.

Setting using the MSU-700A/750

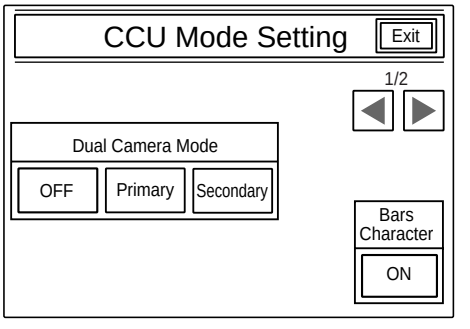
1. Press the CONFIG button of the MODE block of the MSU-700A/750 to light up the button.
   The configuration menu will be displayed.



2. Press CCU.
   The CCU configuration items will be displayed.



3. Select CCU Mode Set from the configuration items.
4. The CCU mode setting display appears.
   Select OFF (normal mode), Primary or Secondary according to the relevant CCU.



3-3-8. Settings for the Signals of the Optional Boards

Setting the Three-time Speed Output Format

Either the MAV or the DISC2 format can be selected as the video signal format of the three-time speed output signal from the SS-A, SS-B and SS-C connectors on the rear panel using the switch S1108 on the VPR-57 board. The MAV format suits to the multi-access video disk recorder MAV-555 (when the optional super motion input board BKMA-520SS is installed). The DISC2 format supports EVS-SLMS.
For more details, refer to Section 1-5. “Settings of Switches and Controls on Boards.”

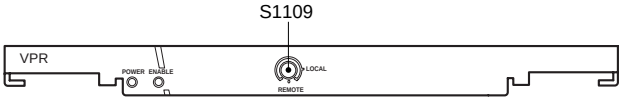
Setting the Normal Speed Video Signal Generation (Frame Interpolation)

When operating in the super motion mode, the CCU-900/900P standard output mode (for SERIAL OUTPUT 1/2/3, SERIAL MONITOR OUTPUT, PIX1/2 and WF1/2 connectors of the rear panel) enables the normal speed video signal output to be executed with minimum unnatural movement from the three-time speed video signal.

How to set from CCU-900/900P

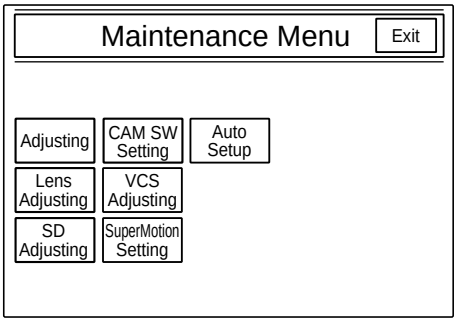
Perform setting using the switch S1109 on the VPR-57 board.
For more details, refer to Section 1-5. “Settings of Switches and Controls on Boards.”

How to set from MSU-700A/750



VPR-57 board

1. Set 0 (REMOTE) to the switch S1109 on the VPR-57 board panel of the CCU-900/900P.
2. Press the MAINTENANCE button of the MODE block of MSU-700A/750 to turn on the button.
   The maintenance menu appears.



3. Press SuperMotion Setting.
   The super motion setting menu appears.
4. Select the desired mode of generating the normal speed video signal using the Frame Interpolation switches.
   - Off : Does not generate the normal speed video signal. The same video signal as the output signal from the SS-A connector on the rear panel is output as the CCU standard output.
   - A : Standard interpolation ratio (Normally set)
   - B : Quick object mode
     Used when the motion speed of object is high and the video signal is unnatural with the setting “A”.
   - C : Slow object mode
     Used when the motion speed of object is slow and the video signal is unnatural with the setting “A”.