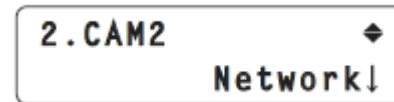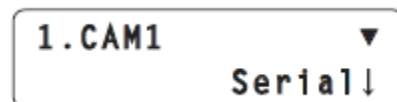# AW-RP50 Simple Manual
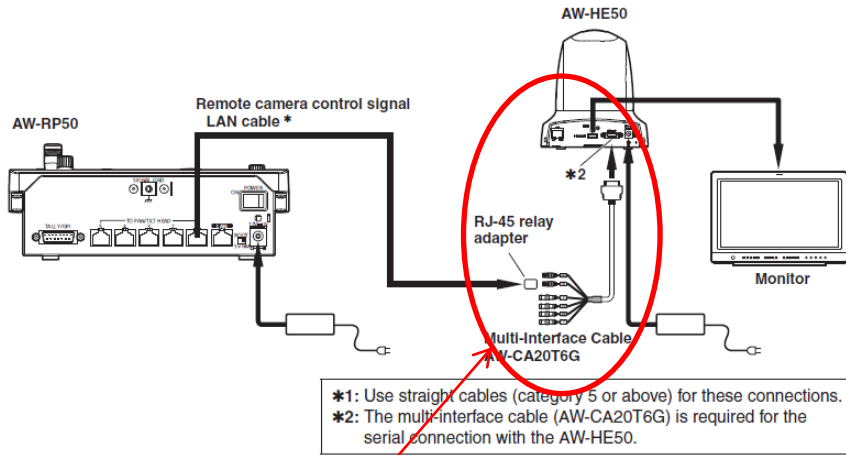
Getting started

- Camera control has 2 kinds of protocol.
  - Serial(RS422)
  - IP（Ethernet)
- Both cables are CAT5. But CAT5 has 2 kinds of interconnections.
  - RS422（Serial): Cross Cable because direct connection.
  - IP(Ethernet):　Straight Cable because it is connected to HUB.
- Don't forget menu setting of RP50.
  - [SYSTEM] – [CAMERA CTL] – [CAM1] to [CAM100]
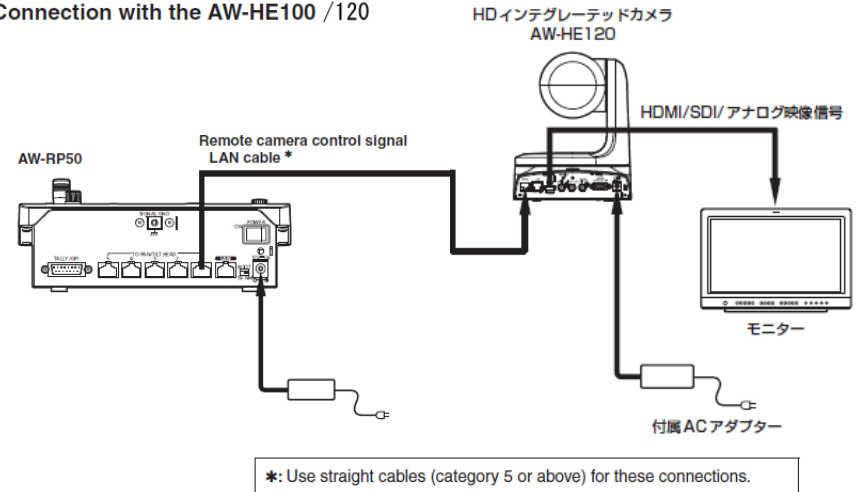   - Select Serial or Network

```
1.CAM1        ▼           2.CAM2        ◆
        Serial↓                  Network↓
```

Note for Serial Connection

● Connection with the AW-HE50

AW-HE50

AW-RP50

Remote camera control signal
LAN cable *

*2

RJ-45 relay
adapter

Monitor

Multi-Interface Cable
AW-CA20T6G

*1: Use straight cables (category 5 or above) for these connections.
*2: The multi-interface cable (AW-CA20T6G) is required for the
    serial connection with the AW-HE50.

● Connection with the AW-HE100 /120

HDインテグレーテッドカメラ
AW-HE120

Remote camera control signal
LAN cable *

AW-RP50

HDMI/SDI/アナログ映像信号
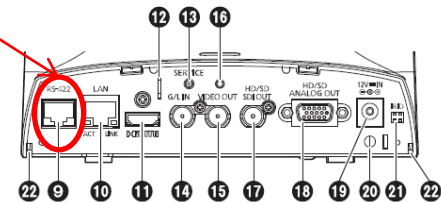
モニター

付属ACアダプター

*: Use straight cables (category 5 or above) for these connections.

HE50: CAT5 cable must be cross type.
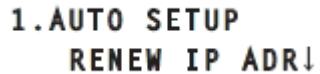And You need Multi-Interface Cable
AW-CA20T6G and RJ-45 relay adapter

HE120：CAT5 cable only. There is
no need to use special cable.

⑫ ⑬ ⑯

SERVICE

G/L IN VIDEO OUT HD/SD
                    SDI OUT

RS-422 LAN

HD/SD
ANALOG OUT

12V

㉒ ⑨ ⑩ ⑪ ⑭ ⑮ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒

Auto Setup of IP Address

- IP Address Auto Setting
  - If you cannot connect to a camera, try to do auto setup.
  - [MENU] --[SYSTEM] -- [AUTO SET IP] -- [AUTO SET UP]
  - [RENEW IP ADR] and press the F2 dial.

    ```
    1.AUTO SETUP
      RENEW IP ADR↓
    ```

  - Turn the F2 to select YES and press the F2 dial

    ```
    C:003/003 S:1/1
                YES↓
    ```
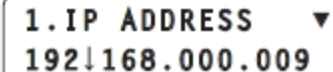
Manual Setup of IP Address

- IP Address Manual Setting
  - [MENU] -- [SYSTEM] -- [NETWORK]

    `[6]NETWORK    ⬥`

  - Press F1 dial and turn F1.
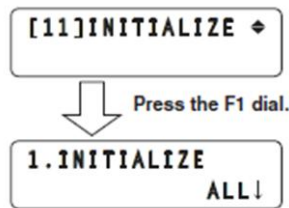 - Select [IP ADDRESS] and Press the F2 dial.
  - Turn F2 dial.

    `1.IP ADDRESS  ▼`
    `192↓168.000.009`

  - Select IP address and press F2 Dial.

Factory Setting

- Initialize
  - [MENU] -- [SYSTEM] -- [INITIALIZE]

[11]INITIALIZE ◈

Press the F1 dial.

1.INITIALIZE
                    ALL↓

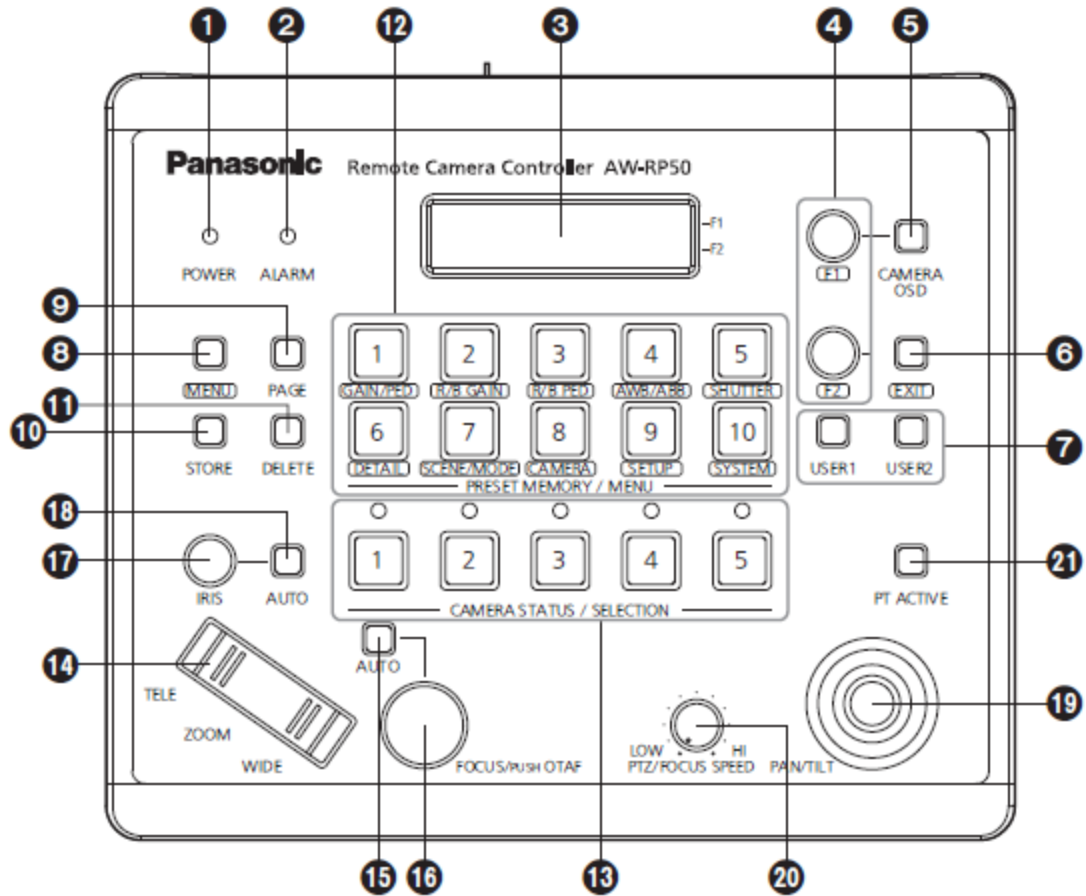 - Turn F2 dial and select [ALL] or [SETUP] and press F2.

ALL:
The settings controlled by the unit are returned to the factory statuses.

SETUP:
Only the settings on the menus below are returned to the factory statuses.

[CAMERA] menu
[2]POWER
[3]TALLY
[SETUP] menu
[1]USER
[2]SW LINK
[3]SW DISP
[4]OPERATE
[5]PRESET
[8]GPI
[9]LCD BL
[10]MENU CTL

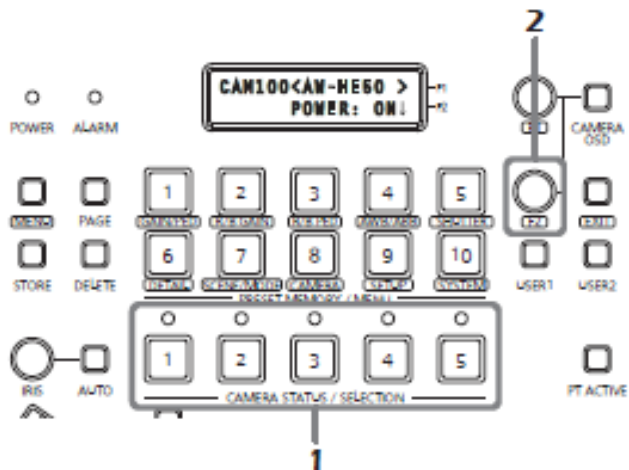# Outlook

Power ON/OFF of cameras

Power ON/OFF one camera
1. Select the camera.
   Hold down the number button.
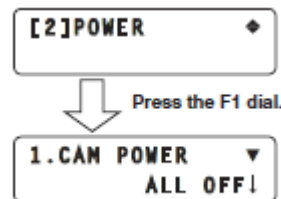2. Turn the F2 dial to select [ON] and Press the F2 dial.
Note: Hold down the number button during setting.

Power ON/OFF all cameras
Menu – 8 (CAMERA)

Power All Off

```
[2]POWER          ◆
```
         ⬇ Press the F1 dial.
```
1.CAM POWER       ▼
        ALL OFF↓
```

Select POWER by F1
Press F1

Power All On

```
1.CAM POWER       ▼
        ALL ON↓
```
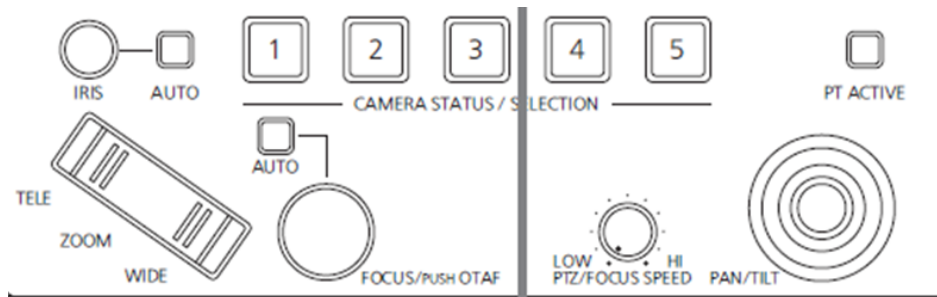
Select ALL ON by F2
Press F2

Basic Operation

1. How to adjust a camera.
   1. Press **MENU** button and select a function.
2. How to control Pan/Tilt, Iris and Zoom.
   1. Press PC ACTIVE button, Adjust PTZ/SPEED dial, and use PAN/TILT lever, ZOOM lever, FOCUS dial and IRIS dial.

3. How to preset a camera position.
   1. Select a camera **(CAMERA STATUS / SELECTION)**, move to the specific position, press **STORE** button, press **PAGE** button, and hold down Number button.
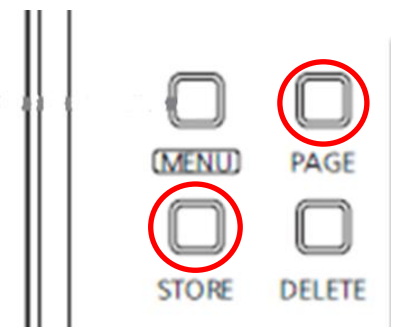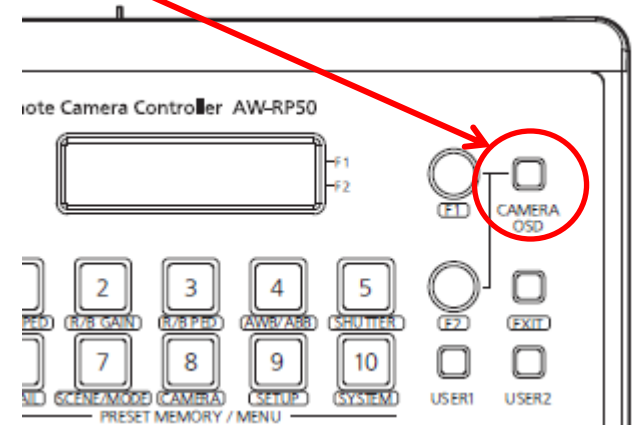
Advanced Operation

1. Camera Detailed Setting by OSD

   1. Hold down the [CAMERA OSD]

   2. Use F1/F2 to select an item.

   3. Top Menu

      1. Camera Scene

      2. System

      3. Maintenance

MENU (Camera Adjustment)
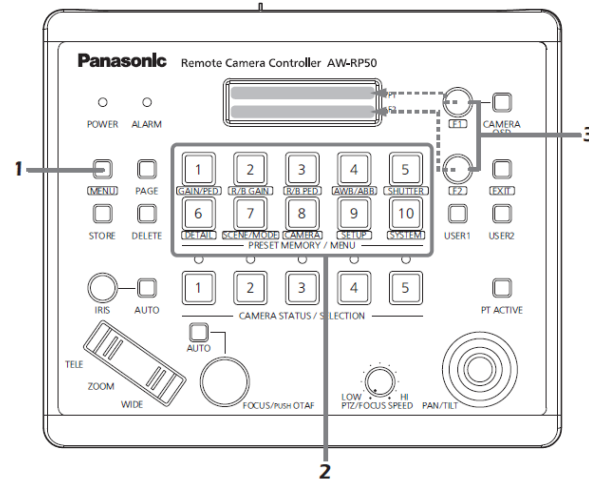
1. Press [Menu]
    – If [PAGE] button lights on, you cannot switch [ON].
2. Press number button of PRESET MEMORY/MENU area.
    – 1: GAIN/PED, 2: R/B GAIN, 3: R/B PED, 4: AWB/ABB, 5: SHUTTE, 6: DETAIL, 7: SCENE/MODE, 8: CAMERA, 9: SETUP, 10: SYSTEM
3. Turn F1/F2 to change mode or adjust.
4. Some settings (AWB,ABB,MODE and so on) require to execute. At that time press F1 or F2 to execute.

Control Pan/Tilt

- Hold down the [PT ACTIVE]
- Select a Camera (SELECTION)
- Adjust IRIS
  - Auto button lights on: Auto iris
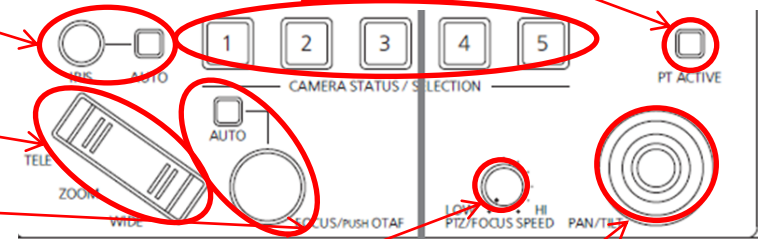 - Auto button lights off: Manual iris
- ZOOM lever

- Adjust FOCUS
  - Auto button lights on: Auto focusing.
  - Auto button lights off: Manual focusing
    - OTAF: One-touch autofocus
    - Press focusing dial and autofocusing works.
- Adjust PTZ/SPEED dial
  - Clockwise: Speed increases. Counter-clockwise: Speed decreases.
- Make a camera move by PAN/TILT lever

PRESET (Camera Position Store)

- How to store the camera position.
    1. Select a camera. (1~5)
    2. Adjust the camera position.
    3. Press the [STORE] button.
    4. Press the[PAGE] button and then press the number button.
        1. This is page number.
    5. Hold down the number button.
        1. This is number of the page.
        2. If you press 2 and 5, preset number becomes 25.

PRESET (Camera Position Recall)

- Executing the preset data.
    1. Select a camera. (1~5)
    2. Press the [PAGE] button and then press number button.
        1. This is page number.
    3. Press the number button.
        1. This is number of the page.
    4. The camera moves to the preset number position.
        1. If you press 2 and 5, the camera moves to the preset number 25.

Delete PRESET (Camera Position)

- Deleting the preset data.
    1. Select a camera. (1~5)
    2. Press the [DELETE]
    3. Press the [PAGE] button and then press the number button.
        1. This is page number.
    4. Hold down the number button.
        1. This is number of the page.
    5. If you press 2 and 5, the data of the preset number 25 is deleted.

Setting the USER buttons

Menu item	Details of operation performed	
SWLINK	This sets the link control between the unit and switcher.	**On:** Enable **Off:** Disable
BUSCONT	This is the bus switching setting.	**On:** Enable **Off:** Disable
FASIST	This sets the focus assist function.	**On:** Enable **Off:** Disable
CAMSEL	This displays icons at the bottom left of the images from the remote camera selected by the unit on the multi view display of the switcher.	**On:** Display **Off:** Non-display
TALLY_IP	This sends the tally information sent periodically by UDP from the switcher to the remote camera.	**On:** Enable **Off:** Disable
CAMINF	This sends the camera information of the remote camera selected to the switcher.	**On:** Enable **Off:** Disable
AWB	AWB is executed when the USER button, in which AWB has been assigned, is pressed. When AWB is executed successfully, the indicator of the button goes off; conversely, when it is not executed successfully, it blinks.	
ABB	ABB is executed when the USER button, in which ABB has been assigned, is pressed. When ABB is executed successfully, the indicator of the button goes off; conversely, when it is not executed successfully, it blinks.	
POWER OFF	When the USER button in which POWER OFF has been assigned is held down, the indicator of the button lights for an instant, and power OFF is requested for all the remote cameras connected.	

■ Registering functions in the USER buttons

1 Set the MENU button to ON.
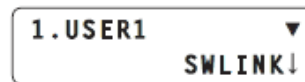
Press the MENU button to light its indicator.

2 Set the PRESET MEMORY/MENU 9 button (SETUP) to ON.

When the button is pressed and its indicator lights, the [SETUP] menu is displayed on the LCD panel.

```
[1]USER                 ▼
```

3 Press the F1 dial.

4 Turn the F1 dial to display [USER1] or [USER2].

```
1.USER1                 ▼
               SWLINK↓
```

5 Turn the F2 dial to select the item to be assigned, and press the F2 dial.

```
1.USER1                 ▼
               SWLINK↓
```
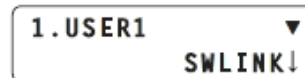
Turn the F2 dial, and then press it.

```
1.USER1                 ▼
              BUSCONT↓
```
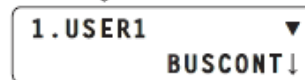
# The Movement Range of the Remote Camera
(Limiter Function)

● **Setting the upper limit**

From the [SETUP] menu, select [PTZ ADJ] and display [LIMIT UP]. Then set the upper limit.

The setting that is displayed differs between the AW-HE50 and other remote cameras.

Display that appears with the AW-HE50

The current setting status is displayed in the LIMIT UP item.

```
2.LIMIT UP      ◆
            Off↓
```
⬇ Turn the F2 dial, and then press it.
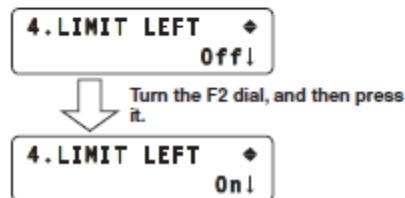```
2.LIMIT UP   ◆
            On↓
```
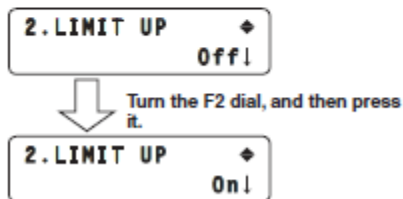
● **Setting the left limit**

From the [SETUP] menu, select [PTZ ADJ] and display [LIMIT LEFT]. Then set the left limit.

The setting that is displayed differs between the AW-HE50 and other remote cameras.

| Display that appears with the AW-HE50 |
|---|

The current setting status is displayed in the LIMIT LEFT item.

```
4.LIMIT LEFT   ◆
            Off↓
```
⬇ Turn the F2 dial, and then press it.
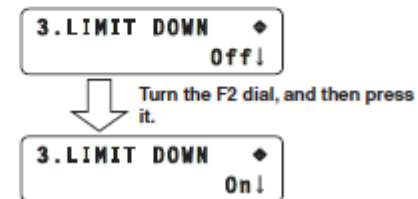```
4.LIMIT LEFT    ◆
            On↓
```

● **Setting the lower limit**

From the [SETUP] menu, select [PTZ ADJ] and display [LIMIT DOWN]. Then set the lower limit.

The setting that is displayed differs between the AW-HE50 and other remote cameras.

Display that appears with the AW-HE50

The current setting status is displayed in the LIMIT DOWN item.

```
3.LIMIT DOWN    ◆
            Off↓
```
⬇ Turn the F2 dial, and then press it.
```
3.LIMIT DOWN   ◆
            On↓
```

● **Setting the right limit**

From the [SETUP] menu, select [PTZ ADJ] and display [LIMIT RIGHT]. Then set the right limit.

The setting that is displayed differs between the AW-HE50 and other remote cameras.

| Display that appears with the AW-HE50 |
|---|

The current setting status is displayed in the LIMIT RIGHT item.

```
5.LIMIT RIGHT   ▲
            Off↓
```
⬇ Turn the F2 dial, and then press it.
```
5.LIMIT RIGHT   ▲
            On↓
```
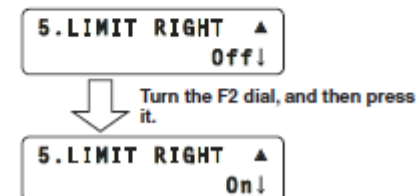
Note: Move the camera to the position where you want to limit at first.  Limit position becomes the position where you turn on.

# Appendix
# Camera OSD

# CAMERA OSD (HE120)

1. Hold down the [CAMERA OSD]
2. Use F1/F2 to select an item.
3. Top Menu

Camera Scene: Scene1~4

Scene

Brightness
Picture
Matrix

System

Genlock

Output

Other

Maintenance

Firmware Version

IP Network

Initialize

4. Press Return to return to upper menu.

# Camera Scene (HE120)

- Scene : Scene1 ~ 4
  - Brightness
    - Picture Level
    - Iris Mode
    - Shutter Mode
      - Step/Synchro
    - Gain
      - AGC Max Gain
    - Frame Mix
    - ND Filter
    - Return
  - Picture
    - Chroma Level:   -3~+3
    - White Balance Mode : AWB A/AWB B/3200K/5600K
      - R Gain: -150~+150
      - B Gain: -150~+150
    - Pedestal
      - R Pedestal [#]
      - B Pedestal [#]
    - Return
  - Matrix
    - Matrix Type : Normal/EBU/NTSC/User
      - [Linear Matrix]
      - [Color Correction ½]
      - [Color Correction 2/2]

- Scene
  - Matrix
    - Matrix Type : Normal/EBU/NTSC/User
      - [Linear Matrix]
        - »           Saturation     Phase
        - » R-G
        - » R-B
        - » G-R
        - » G-B
        - » B-R
        - » B-G
      - [Color Correction 1/2]
        - »           Saturation     Phase
        - » B_Mg
        - » Mg_R
        - » R
        - » R_Yl
        - » Yl
      - [Color Correction 2/2]
        - »           Saturation     Phase
        - » Yl_G
        - » G
        - » G_Cy
        - » Cy
        - » Cy_B
        - » B

# System (HE120)

- Genlock
  - Horizontal Phase:-206~+49
  - Horizontal Phase Step:1~10
- Output
  - Format: 1080/59.94i/720/59.94p/1080/29.97PsF/
  - Down CONV. Mode: Squeeze/SideCut/LetterBox
  - HDMI Color: RGB-NOR/RGB-ENH/YCbCr422/YCbCr444
  - Component: Y/Pb/Pr, RGB
  - Frequency: 59.94Hz/50Hz
  - Color Bars Setup: Off/On
- Other (Next Page)
  - Other 1/3
  - Other 2/3
  - Other 3/3

# Other (HE120)

- Other 1/3
  - Install Position:  Desktop/Hanging
  - Smart Picture Flip: Off/Auto
    - Flip Detect Angle: 60~120
  - Preset Speed: 1~30
  - Preset Scope: Mode A/Mode B/Mode C
  - Digital Zoom: Enable/Disable
  - Speed With Zoom POS.
  - Return
- Other 2/3
  - Focus Mode:Auto/Manual
    - Focus ADJ With PTZ.: On/Off
  - Digital Zoom: Enable/Disable
    - Max Digital Zoom:x2~x10
  - Tally Enable :Enable/Disable
  - Wireless Control :Enable/Disable
  - Return
- Other 3/3
  - OSD Mix
    - SDI Out: On/Off
    - HDMI Out: On/Off
    - Component Out: On/Off
    - Video Out: On/Off
  - OSD Off With Tally: On/Off
  - OSD Status: On/Off
  - Return

# CAMERA OSD (HE50)

1. Hold down the [CAMERA OSD]
2. Use F1/F2 to select an item.
3. Top Menu

   Camera Scene: FullAuto/Manual1~3

      Scene

          Contrast

          Picture

          Color Matrix

   System

      Genlock

      Output

      Other

   Maintenance

      Firmware Version

      IP Network

      Initialize

4. Press Return to return to upper menu.

# Camera Scene (HE50)

- Scene : FullAuto, Manual1~3
  - Contrast
    - Contrast Mode
      - Contrast Level: -5~+5
      - Shutter Mode
        » Step/Synchro
        » Frame Mix
        » AutoF.Mix Max Gain :0,6,12,18dB
    - Gain:  Auto,0dB,3dB,6dB,9dB,12dB,15dB,18dB
    - AGC Max Gain: 6dB,12dB,18dB
    - Return
  - Picture
    - Chroma Level:   -3~+3
    - AWB Mode : AWB A/AWB B/ATW
    - Detail: Off/Low/High
    - Flesh Tone Mode: Off/Low/High
    - DNR: Off/Low/High
    - DRS: Off/Low/High
      - Gamma Type: Normal/Cinema//Off
      - Gamma Level: Low/Mid/High @Normal
    - Back Light Comp.: Off/Onj
    - Return
  - Matrix
    - Matrix Select : Normal/EBU/NTSC/USER

- Scene
  - Matrix (You can change at USER.)
    - Matrix Select : Normal/EBU/NTSC/User
      - [1/3]
        »           Saturation     Phase
        » Axis01
        » Axis02
        » Axis03
        » Axis04
        » Axis05
        » Axis06
      - [2/3]
        »           Saturation     Phase
        » Axis07
        » Axis08
        » Axis09
        » Axis10
        » Axis11
        » Axis12
      - [3/3]
        »           Saturation     Phase
        » Axis13
        » Axis14
        » Axis15
        » Axis16

# System (HE50)

- Genlock
  - Horizontal Phase:-206~+49
  - Subcarrier Phase
    - Coarse: 0.45,90,135,180225,270,315
    - Fine: =127~+127
  - H Phase, SC Fine Step:1~10
- Output
  - Format: 1080/59.94i/720/59.94p/1080/29.97PsF/
  - Down CONV. Mode: Squeeze/SideCut/LetterBox
  - HDMI Color:
- Other (Next Page)
  - Other 1/2
  - Other 2/2

# Other (HE50)

- Other ½
  - Install Position:  Desktop/Hanging
  - Preset Speed: 1~30
  - Preset Scope: Mode A/Mode B/Mode C
  - Digital Zoom: Enable/Disable
  - Speed With Zoom POS.
  - Focus Mode: Manual/Auto
    - Focus ADJ With PTZ.:  Off/On
  - Return
- Other 2/2
  - Tally Enable: Enable/Disable
  - OSD Off With Tally: Off/On
  - OSD Status: Off/On
  - Wireless Control :Enable/Disable

# What is SCOPE?

## ■ Setting the operations to be performed when a preset operation is executed

The operations which the remote camera is to performed when the preset operation is conducted can be set.

From the [SETUP] menu, select [PRESET] and display [SCOPE]. Then set the operations to be performed.

```
2.SCOPE        ◆
          MODE A↓
```
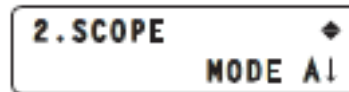
The operations that the camera performs when a preset operation is executed differ depending on the mode selected.

Mode	Operations performed
MODE A	Pan, tilt, zoom, focus, iris, gain, white balance
MODE B	Pan, tilt, zoom, focus, iris
MODE C	Pan, tilt, zoom, focus

Note

This function takes effect when the unit is connected to the AW-HE50. It does not work with any other models.