Panasonic Broadcast

AW-E860N
Menu Information

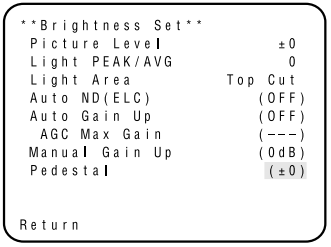
Adjustment

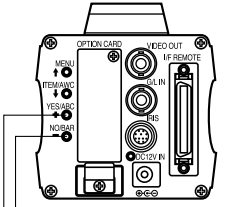
■ Total pedestal level adjustment

(Use an oscilloscope or a waveform monitor for this adjustment.)
This step is to adjust the black levels (pedestal levels) of two or more cameras to be the same.

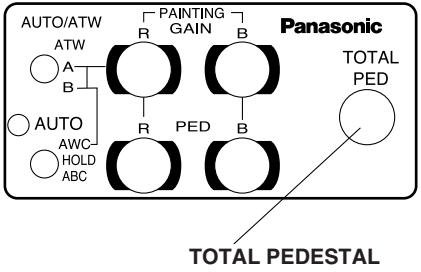
[ADJUSTMENT by CAMERA]

1. Close the lens.
2. Select Pedestal item in the brightness setting Sub Menu. (Select [Pedestal] in the [Iris, Shutter, Gain Set] sub menu in User Mode.)
3. Set the pedestal level to 5 IRE (0.035 V) with the YES/ABC switch or the NO/BAR switch.





[ADJUSTMENT with RCU (RCB, Hybrid control panel)]
Adjust the pedestal level to 5 IRE with the total pedestal adjustment.

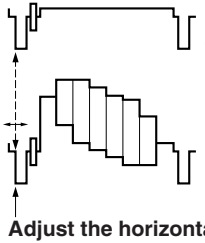


■ Gen-lock adjustment

Phase adjustments must be performed with the camera or the RCU (RCB) when external synchronizing signals are supplied to the system in cases where multiple cameras are used or peripheral devices are connected.

● Horizontal phase control

Observe the waveform of the external synchronizing input signal (black burst signal) and video output signal on a two-channel oscilloscope. Then match the horizontal phase of both signals by adjusting them with the cameras or RCU's horizontal phase control.



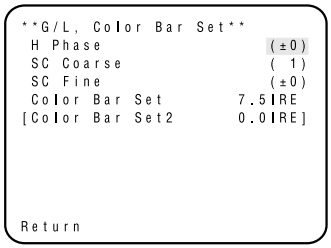
External gen-lock input signal (black burst output of special effect generator)

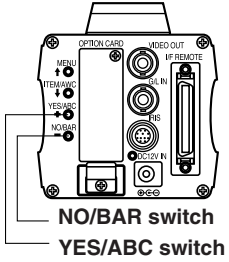
Video signal

Adjust the horizontal phase

[ADJUSTMENT by CAMERA]

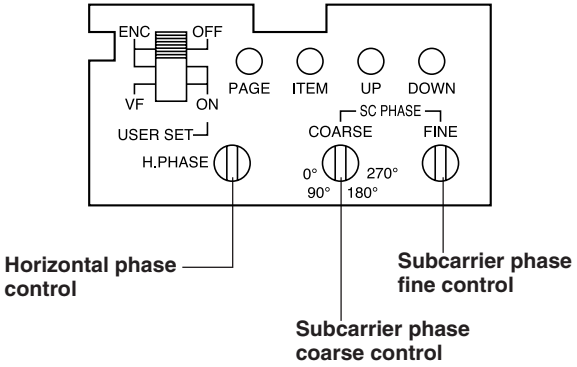
1. Press the NO/BAR switch for over 5 seconds to display the color bar.
2. Select [G/L Adjustment] on the main menu, then select [H Phase] on the submenu.
3. Adjust the horizontal phase with the YES/ABC and NO/BAR switch.





[ADJUSTMENT with RCU (RCB, Hybrid control panel)]

Use the horizontal phase control.

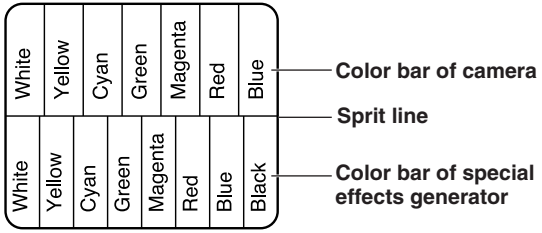


Adjustment

Caution:
- When horizontal phase adjustment is required using RCU (RCB) or hybrid control panel, BAR/CAM switch should be set to BAR. Horizontal phase cannot be adjusted if the switch is in the CAM position. After adjustment set BAR/CAM switch back to CAM.
- When horizontal phase adjustment is moved, color phase is also moved. Adjust color phase whenever horizontal phase adjustment is moved.

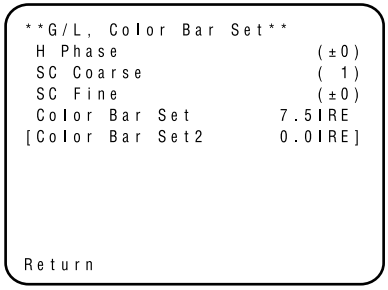
● Color phase adjustment

Supply the output signal (split color bar) from the color special effect generator to a color monitor or vectorscope. Adjust the color phase of the camera.



[ADJUSTMENT by CAMERA]

1. Press the NO/BAR switch for over 5 seconds for the color bar mode.
2. Select [G/L Adjustment] on the main menu, then select [SC Coarse] on the sub menu.
3. Make coarse adjustment with the YES/ABC switch and the NO/BAR switch.
4. Select [SC Fine] on the sub menu. Perform fine adjustment with the YES/ABC switch and the NO/BAR switch.



[ADJUSTMENT with RCU (RCB, Hybrid control panel)]

Use the subcarrier phase coarse adjustment control and subcarrier phase fine control.

❊ It is recommended that a vectorscope be used for maximum accuracy in color phase adjustment.

Caution:
- When color phase adjustment is required using RCU (RCB) or hybrid control panel, BAR/CAM switch should be set to BAR. Color phase cannot be adjusted if the switch is in the CAM position. After adjustment set BAR/CAM switch back to CAM.
- When horizontal phase adjustment is moved, color phase is also moved. Adjust color phase whenever horizontal phase adjustment is moved.

Use mode setting

■ Use Mode Setting

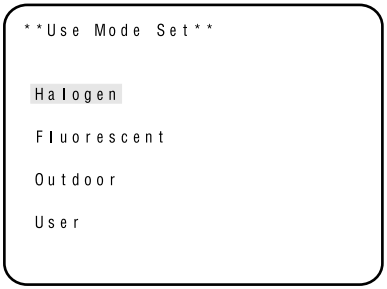
The camera has four use modes, and various functions for four use modes have been preset.
Functions can be set as best suited to each use mode.

- Halogen mode
  Suited to indoor shooting, such as at weddings, parties, lecture meetings, events, etc.
  Settings can be changed using a simple menu.
- Fluorescent mode
  Suited to indoor shooting under fluorescent lighting.
  Settings can be changed using a simple menu.
- Outdoor mode
  Suited to outdoor shooting.
  Settings can be changed using a simple menu.
- User mode
  Settings can be changed using a detail menu.

■ Setting by camera

1. Turn the camera on while keeping the MENU switch depressed.
   The use mode setting menu shown at right appears on the monitor screen and one of the use mode blinks.

2. Press the MENU switch, ITEM/AWC switch, or NO/BAR switch to let the desired use mode blink.
   MENU switch (⬆):
   The blinking item moves up by one.
   ITEM/AWC switch (⬇), NO/BAR switch (–):
   The blinking item moves down by one.



3. Press the YES/ABC switch.
   The blinking use mode comes into effect. After the use mode setting menu is shown for about 5 seconds, the camera returns to be ready for operation.
   Then, the camera operates in the selected use mode.

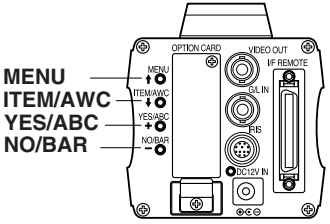
Use mode setting

■ Setting by RCU (RCB) or hybrid control panel

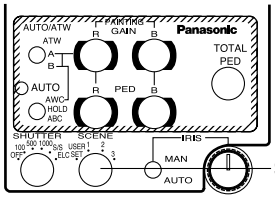
An operation mode is selected depending on the position of the scene file switch.

Operation mode	Scene File Switch Position of RCU (RCB)	Scene File Switch Position of Hybrid control panel
Halogen Mode	1	1
Fluorescent Mode	2	2
Outdoor Mode	3	3
User's Mode	USER SET	4

CAMERA

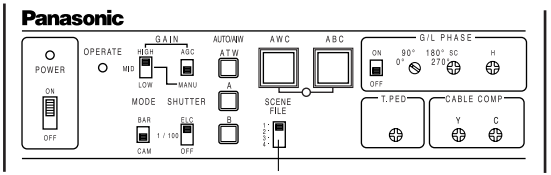


RCU (RCB)



SCENE FILE switch

Hybrid control panel



SCENE FILE switch

Menu item setting

■ Menu item setting

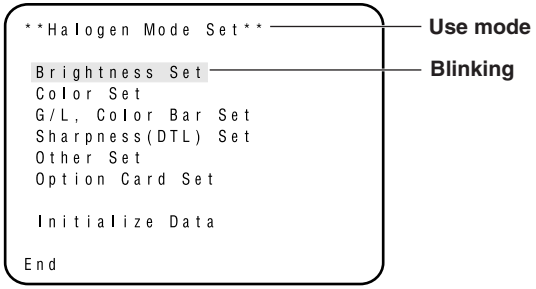
- Each of the four use modes of the camera has a main menu. (Shown at right)
- Each item of the main menu has a submenu, which consists of several settings.
- These settings have been preset to the optimum values to suit each use mode, and can be changed to suit actual shooting conditions.
- They can be set from the camera and RCU (RCB). They can also be set from the hybrid control panel using the switches, but the setting items are limited because the menu is not shown.

Notes:

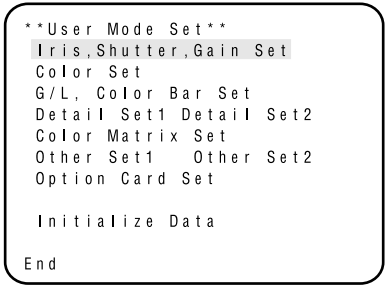
- Composite signals are output from the video output regardless of the position ENC/VF of the RCU (RCB) user set switch.
- [End] is displayed only in setting from the camera alone.
- [Option Card1] is shown only when an optional card is inserted into the camera. [Option Card2] is shown only when an additional card box is equipped with the camera and then an optional card is inserted into the camera.

● Main menu screen

Main menu of Halogen,
Fluorescent, Outdoor Mode



Main menu of User Mode



Menu item setting

❊ If the output signal from camera is color bar, only “G/L, Color Bar Set” screen is displayed.

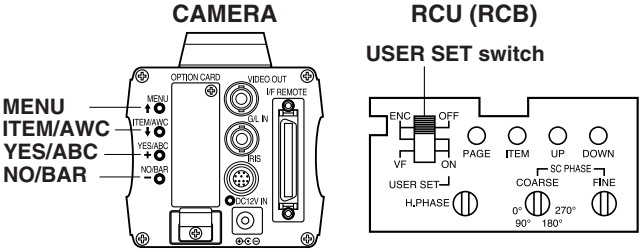
```
**G/L, Color Bar Set**
 H Phase                (±0)
 SC Coarse              ( 1)
 SC Fine                (±0)
 Color Bar Set       7.5IRE
[Color Bar Set2      0.0IRE]




Return
```

■ Setting

1. **From the camera alone:**
   Keep the MENU switch depressed for 5 seconds or more.
   From RCU (RCB):
   Set the user set switch in the pocket to the ON position.
   The main menu appears on the monitor screen.
2. Each time the MENU switch (⬆), ITEM/AWC switch (⬇), or NO/BAR switch (–) is pressed, the blinking item moves up or down.
3. When the YES/ABC switch is pressed after selecting the desired item to blink, the submenu for the selected item appears on the screen.
4. Select the desired item to be changed in its settings using the MENU switch (⬆) and ITEM/AWC switch (⬇).
5. Press the YES/ABC switch (+) or NO/BAR switch (–) to change the settings.
6. Select [Return] using the MENU switch and ITEM/AWC switch, then press the YES/ABC switch to return to the main menu.
7. After changing the settings, take the following steps.
   Camera alone:
   Select [End] using the MENU switch and ITEM/AWC switch and press the YES/ABC switch.
   RCU (RCB):
   Set the user set switch in the pocket to the OFF position.
   The camera will now operate according to the new settings.



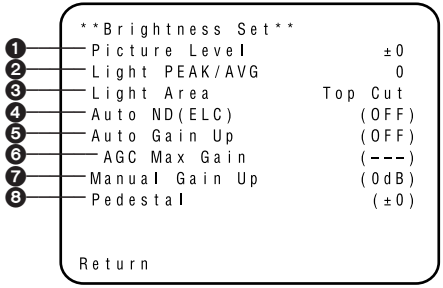
■ Changing the Language setting

The language on the menu screen can be changed from English to Japanese. (Factory setting: English)

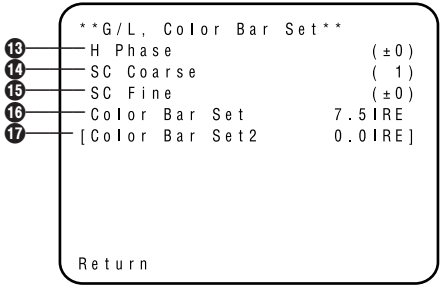
- Halogen, Fluorescent, Outdoor Mode
  Select “Japanese” in the “Language” setting in Other Set submenu.
- Use Mode
  Select “Japanese” in the “Language” setting in Other Set2 submenu.

■ Sub menu (Halogen Mode, Fluorescent Mode, Outdoor Mode)

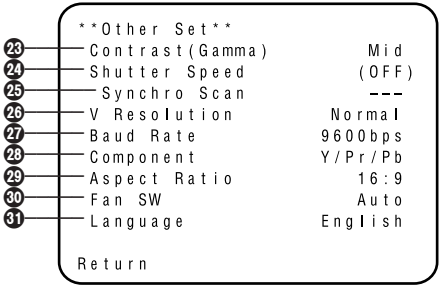
①Brightness Set Display



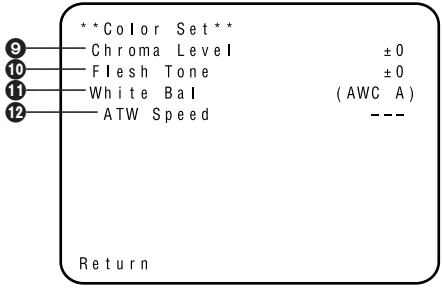
③G/L, Color Bar Set Display



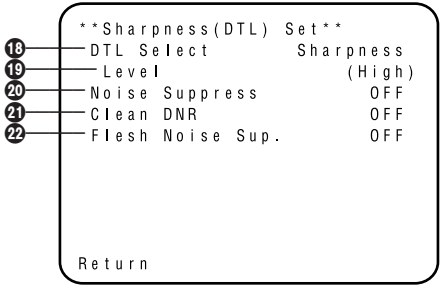
⑤Other Set Display



②Color Set Display



④Sharpness (DTL) Set Display



• Settings enclosed in parentheses can be set with the RCU (RCB) switch or VR in RCU (RCB) mode.
• Settings enclosed in [ ] is displayed when the optional card to process video signals (SDI card, etc.) is inserted.
• To return to the initial settings, refer to page 53.

Menu item setting

■ Setting and changing of the setting (Halogen Mode, Fluorescent Mode, Outdoor Mode)

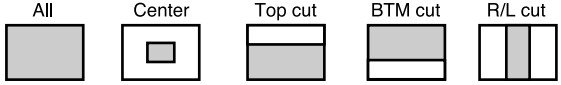
① Brightness Set Display

❶ Video Level Adjustment [Picture Level: –50 to +50]
Convergence level of AUTO IRIS/AUTO GAIN UP/ AUTO ND (ELC) can be adjusted.

❷ Detecting Ratio Adjustment [Light PEAK/AVG: P50 to A50]
The ratio of AUTO IRIS/AUTO GAIN UP/AUTO ND (ELC) detected peak to average can be adjusted within a predetermined range.

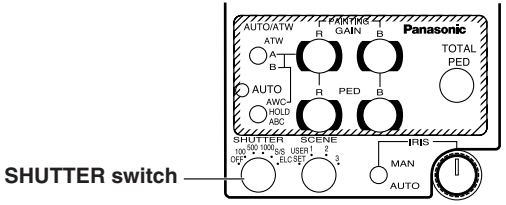
❸ Photometric Measurement Method Setting [Light Area: All, Center, Top cut, BTM cut, R/L cut]
A photometric measurement method can be selected for AUTO IRIS/AUTO GAIN UP/AUTO ND (ELC).

All: All the screen area is measured.
Center: The screen is measured mainly in the center area, about one-third of both the top and bottom and one-third of both the right and left portions of the screen are excluded from measurement.
Top cut: About one-third of the top part of the screen is excluded from measurement.
BTM cut: About one-third of the bottom portion of the screen is excluded from measurement.
R/L cut: About one-third of both the right and left portions of the screen are excluded from measurement.



❹ Auto ND (ELC) Setting [Auto ND (ELC): OFF, ON]
OFF: Luminance is not automatically adjusted by the electronic shutter.
ON: The electronic shutter is controlled to automatically adjust the luminance.

Notes
- ON is automatically selected when the electronic shutter (㉔) on the submenu [Other Set] is set to [Auto ND]. OFF is selected when other than [Auto ND] is selected.
- ON is selected when the SHUTTER switch is set to [ELC] in RCU (RCB) mode, and OFF is selected when it is set to other than [ELC].



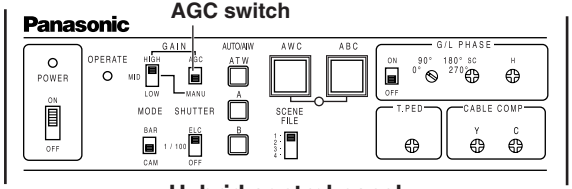
❺ Auto Gain Up Control Setting [Auto Gain Up: OFF, ON]

OFF: The light quantity is not adjusted automatically.

ON: The light quantity is adjusted automatically. The maximum to which the gain can be increased using the auto gain up function is selected by the AGC maximum gain setting (❻).

Notes

- In case of settings on the camera alone or when the iris switch on the RCU (RCB) is at [AUTO], the Auto Gain Up control may not operate if the lens iris switch is in the manual position.
- When the AGC switch on the hybrid control panel is set to AGC, the Auto Gain Up control operates in the HIGH position.



Hybrid control panel

❻ AGC Maximum Gain [AGC Max Gain: 6dB, 12dB, 18dB, 24dB, N/Eye L, N/Eye H]

This is used to set the maximum amount to which the gain can be increased when “ON” has been selected as the auto gain up setting (❺).

❼ Manual Gain Up Control Setting [Manu Gain Up: 0 dB to 30 dB, N/Eye L, N/Eye H]

Manual setting is possible only when the Auto Gain Up control is in the OFF position.

0 dB: 0 dB should be selected in normal cases.

1 dB to 30 dB: Use this range if sufficient video output cannot be obtained even when the lens iris is opened in shooting dark scenes.

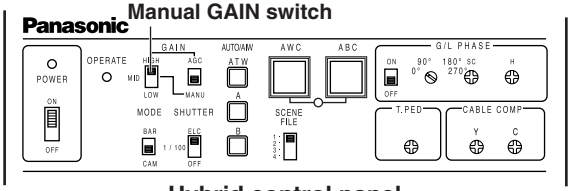
N/Eye L (Night Eye L):
Use this mode if sufficient video output cannot be obtained even if 30 dB gain up should be selected.

N/Eye H (Night Eye H):
Use this setting if it is not possible to achieve a satisfactory video output even at the Night Eye L setting.

Menu item setting

Notes

- Only 0 dB, 9 dB, or 18 dB can be selected in case of using the RCU (RCB).
- 0 dB when the manual GAIN switch on the hybrid control panel is at LOW, 9 dB when it is at MID, or 18 dB when it is at HIGH.



Hybrid control panel

❽ Black Level Setting [Pedestal: –150 to +150]
The black level (pedestal) of the luminance (Y) signal can be set. Used in adjusting the black levels of two or more cameras.

②Color Set Display

❾ Chroma Level Adjustment [Chroma Level: –3 to +3]
Chroma Level can be decreased or increased to any of three levels each.The signal output to the optional card cannot be adjusted.

❿ Skin Color Adjustment [Flesh Tone: –3 to +3]
Skin color can be decreased or increased to any of three levels each.

⓫ White Balance Setting
[White Bal: ATW, AWC A, AWC B, 3200K, 5600K]

ATW: The white balance is automatically adjusted to be always right.

AWC A, AWC B:
Once the white balance is adjusted with the ITEM/AWC switch on the back of the camera, it is no longer necessary to set the white balance again if you simply select AWC A or AWC B, provided that the camera is used under the same conditions.
Fine color adjustment can be made after setting AWC by red/blue gain adjustment in user mode or from the RCU (RCB).

3200K: The white balance is adjusted to 3200K illumination.

5600K: The white balance is adjusted to 5600K illumination.

Note

Neither 3200K nor 5600K can be set from the RCU (RCB) or the hybrid control panel.

⓬ **ATW Speed Setting**
[ATW Speed: Slow 2, Slow 1, Mid, Fast 1, Fast 2]
ATW Speed can be set.

③ G/L, Color Bar Set Display

⓭ **Horizontal Phase Adjustment [H Phase: –206 to +49]**
Horizontal phase can be adjusted when a genlock signal is supplied.

⓮ **Subcarrier Phase Coarse Adjustment**
[SC Coarse: 1, 2, 3, 4]
Coarse adjustment of subcarrier phase can be made when a genlock signal is supplied.

⓯ **Subcarrier Phase Fine Adjustment**
[SC Fine: –511 to +511]
Fine adjustment of subcarrier phase can be made when a genlock signal is supplied.

⓰ **Color Bar Setup Setting**
[Color Bar Set: 0.0 IRE, 7.5 IRE]
The setup level of color bar can be adjusted.

⓱ **Color Bar Setup Setting for the optional cards**
[Color Bar Set2: 0.0 IRE, 7.5 IRE]
This menu is displayed when the optional card to process video signals is inserted.
The setup level of color bar to output to the optional card can be adjusted.
Set 0.0 IRE when the SDI card is inserted.

Menu item setting

④ Sharpness (DTL) Set Display

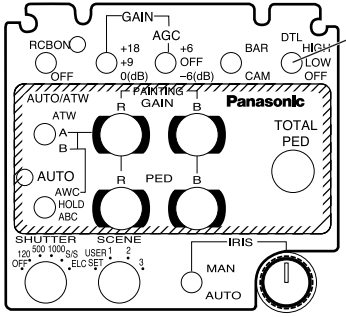
⑱ Detail Select Setting [DTL Select: Sharpness, Super DTL]
If contour correction is not sufficient at the Sharpness position when Detail Level setting is set to Low or High, select the Super DTL position.

Note

Neither Sharpness nor Super DTL is valid for contour correction if Detail Level setting is in the OFF position.

⑲ Detail Level Setting [Level: OFF, Low, High]
Detail level can be adjusted when Detail Select setting is at Sharpness. Super DTL level can be adjusted when it is at Super DTL.
In case of using the RCU (RCB), the above can be adjusted with the contour correction switch (DTL).

RCU (RCB)



DTL switch

⑳ Noise Suppress Level Setting [Noise Suppress: OFF, Low, High]
Screen noise can be reduced when Detail Level setting is at High or Low.

㉑ Clean DNR Setting [Clean DNR: OFF, Low, High]
This enables the clean DNR effect to be selected.

㉒ Flesh Noise Suppress Level Setting [Flesh Noise Sup.: OFF, Low, High]
Flesh noise is suppressed in two steps when the Detail Level Setting is at High or Low.

⑤ Other Set Display

㉓ Contrast Adjustment
[Contrast (Gamma): Low, Mid, High]
Contrast can be adjusted to any of three levels.

㉔ Electronic Shutter Setting [Shutter Speed: OFF, 1/100 to 1/10000, S/Scan, Auto ND]

OFF: Electronic shutter is turned off.
1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000: Electronic shutter operates at one of these speeds as selected.
S/Scan (Synchro Scan): Electronic shutter operates at the speed set with the electronic shutter synchro-scan setting.
Auto ND: Electronic shutter is controlled to automatically adjust the luminance.

Notes

- In case of using the RCU (RCB), none of the shutter speeds — 1/250, 1/2000, 1/4000, and 1/10000 can be selected.
- In case of using the hybrid control panel, only OFF, 1/100, or Auto ND (ELC) can be selected.
- If the lens iris switch is at M (Manual) when operating the camera alone or when the iris switch on the RCU (RCB) is at AUTO, Auto ND may not function. Set the lens iris switch to A (Auto).
- Flickering may increase at Auto ND under fluorescent lights.
- Auto ND is automatically selected if Auto ND (ELC) setting is set to ON.

㉕ Electronic Shutter Synchro Scan Setting
[Synchro Scan: 60.34Hz to 15.75kHz]
This setting is possible only when Electronic Shutter setting is at S/Scan.
Horizontal bar noise can be reduced by synchro-scan adjustment in shooting workstation scenes, for example.
❊ For luminance settings at each shutter speed and synchro-scan shutter speed, refer to the table below.

Shutter Speed	Synchro-scan	Required luminance ratio
OFF	—	1
1/100	100.3 Hz	2
1/250	250.0 Hz	4
1/500	492.2 Hz	8
1/1000	984.4 Hz	16
1/2000	1.969 kHz	32
1/4000	3.938 kHz	64
1/10000	7.875 kHz	160

㉖ CCD Read Out Mode Setting
[V Resolution: Normal, Fine]

Normal: Normal image. (CCD storage will be by field storage.)
Fine: Vertical resolution increases. (Vertical resolution is raised without increasing residual images by frame storage and Electronic shutter.) Normal is recommended for general use because sensitivity will decrease at the Fine setting.

Menu item setting

㉗ PC Control Access Speed Setting
[Baud Rate: 1200bps, 2400bps, 4800bps, 9600bps]
Select a communication speed in controlling the camera from the computer.

㉘ Component Output Setting
[Component: RGB, Y/Pr/Pb, Y/C]
This enables RGB, Y/Pr/Pb or Y/C to be selected as the component signals which are to be output from the I/F REMOTE connector.

㉙ Aspect Ratio Selection [Aspect Ratio: 16:9, 4:3]
Aspect ratio can be selected from 16:9 or 4:3.

㉚ Fan Setting [Fan SW: OFF, Auto]

OFF: Select this setting to stop the fan when its operating sound is found to be bothersome in a studio or other such environment.

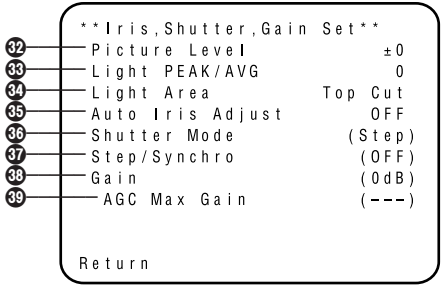
Auto: The temperature is detected automatically, and the fan starts operating when the temperature exceeds approx. 95°F (35°C).
Under normal circumstances, the “Auto” setting is used.

㉛ Language Selection [Language: English, Japanese]

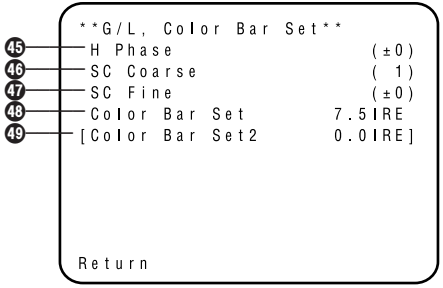
English: Menu screen is displayed in English.
Japanese: Menu screen is displayed in Japanese.

■ Sub menu (User Mode)

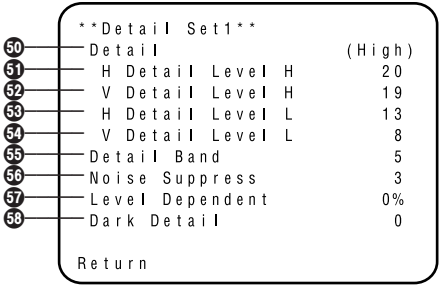
⑥Iris, Shutter, Gain Set Display



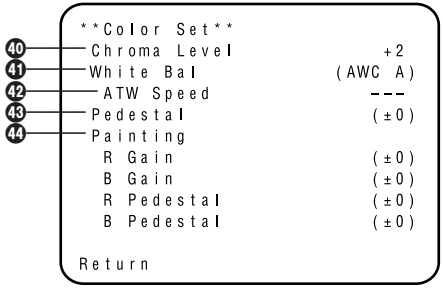
⑧G/L, Color Bar Set Display

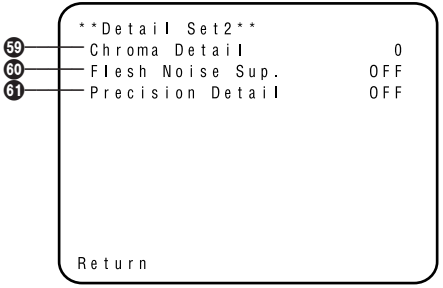


⑨Detail Set Display



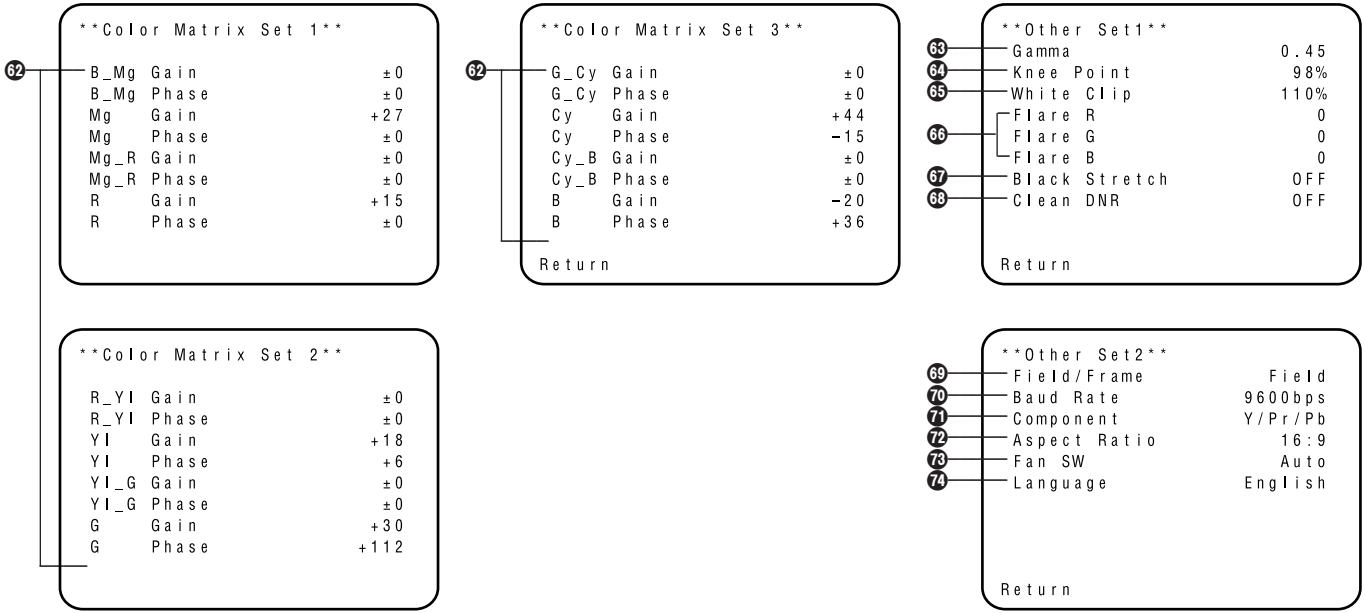
⑦Color Set Display





Menu item setting

⑩Color Matrix Set Display



⑪Other Set Display

- Settings enclosed in parentheses can be set with the RCU (RCB) switch or VR in RCU (RCB) mode.
- Settings enclosed in [ ] is displayed when the optional card to process video signals (SDI card, etc.) is inserted.
- To return to the initial settings, refer to page 53.

■ Setting and changing of the setting items (User Mode)

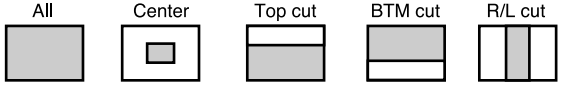
⑥ Iris, Shutter, Gain Set Display

㉜ Video Level Adjustment [Picture Level: –50 to +50]
Convergence level of AUTO IRIS, AUTO GAINUP, ELC can be adjusted.

㉝ Detecting Ratio Adjustment
[Light PEAK/AVG: P50 to A50]
The ratio of AUTO IRIS, AUTO GAINUP, ELC detected peak to average can be adjusted within a range.

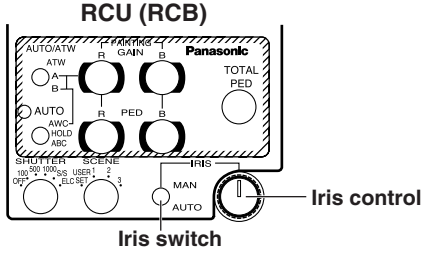
㉞ Photometric Measurement Method Setting
[Light Area: All, Center, Top cut, BTM cut, R/L cut]
A photometric measurement method can be selected for AUTO IRIS, AUTO GAINUP, ELC.

All: All the screen area is measured.
Center: The screen is measured mainly in the center area, about one-third of both the top and bottom and one-third of both the right and left portions of the screen are excluded from measurement.
Top cut: About one-third of the top portion of the screen is excluded from measurement.
BTM cut: About one-third of the bottom portion of the screen is excluded from measurement.
R/L cut: About one-third of both the right and left portions of the screen are excluded from measurement.



㉟ Auto Iris Level Fine Adjustment
[Auto Iris Adjust: OFF, ON]

OFF: The iris control is invalid when the iris switch on the RCU (RCB) or on the hybrid control panel is in the AUTO position.
ON: Fine adjustment of auto iris convergence level can be made with the iris control when the iris switch on the RCU (RCB) or on the hybrid control panel is in the AUTO position.



Menu item setting

㊱ Electronic Shutter Mode Setting
[Shutter Mode: Step, S/Scan, ELC]

Step: Electronic shutter operates at the speed selected by the Electronic Shutter Step/Synchro Scan Setting.

S/Scan (Synchro Scan):
Electronic shutter operates at the speed selected in Electronic Shutter Step/Synchro Scan Setting.

ELC: Electronic shutter is controlled to automatically adjust the luminance.

Note

If Frame 1 is selected in CCD Read Out Mode Setting (㊾), Electronic Shutter Mode Setting cannot be added.

㊲ Electronic Shutter Step/Synchro Scan Setting
[Step/Synchro: OFF, 1/100 to 1/10000 (Step), 60.34 Hz to 15.75kHz (Synchro Scan)]

This setting is possible only when Step or Synchro Scan is selected in Electronic Shutter Mode Setting.

- When "Step" has been selected as the electronic shutter mode setting:
  OFF: Electronic shutter is turned off.
  1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000: Electronic shutter operates at one of these speeds as selected.
- When "Synchro Scan" has been selected as the electronic shutter mode setting:
  Bar noise can be reduced by synchro-scan adjustment in shooting workstation scenes, for example.

❊ For luminance setting at each shutter speed and synchro-scan shutter speed, refer to the table below.

Shutter Speed	Synchro-scan	Required luminance ratio
OFF	—	1
1/100	100.3 Hz	2
1/250	250.0 Hz	4
1/500	492.2 Hz	8
1/1000	984.4 Hz	16
1/2000	1.969 kHz	32
1/4000	3.938 kHz	64
1/10000	7.875 kHz	160

Notes

- In case of using the RCU (RCB), none of the shutter speeds — 1/250, 1/2000, 1/4000, and 1/10000 can be selected.
- In case of using the hybrid control panel, only OFF, 1/100, or ELC can be selected.
- If the lens iris switch is at M (Manual) when operating the camera alone or when the iris switch on the RCU (RCB) is at AUTO, ELC may not function. Set the lens iris switch to A (Auto).
- Flickering may increase at ELC under fluorescent lights.

㊳ Gain Setting
[Gain: Auto, 0 dB to 30 dB, N/Eye L, N/Eye H]

Auto: The light quantity is adjusted automatically.

0 dB: 0 dB should be selected in normal cases.

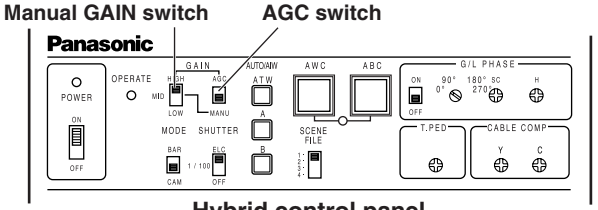
1 dB to 30 dB: Use this range if sufficient video output cannot be obtained even when the lens iris is opened in shooting dark scenes.

N/Eye L (Night Eye L):
Use this mode if sufficient video output cannot be obtained even if 30 dB gain up should be selected.

N/Eye H (Night Eye H):
Use this setting if it is not possible to achieve a satisfactory video output even at the Night Eye L setting.

Notes

- Only 0 dB, 9 dB, or 18 dB, AGC LOW, AGC HIGH can be selected in case of using the RCU (RCB).
  If the lens iris switch is at MANUAL, when operating the camera alone or when the iris switch on the RCU (RCB, Hybrid control panel) is at AUTO, AGC may not function.
- AGC HIGH when the AGC selection switch on the hybrid control panel is at AGC.
- 0 dB when the manual gain switch on the hybrid control panel is at LOW, 9 dB when it is at MID, or 18 dB when it is at HIGH.



Hybrid control panel

㊴ AGC Maximum Gain Setting
[AGC Max Gain: 6dB, 12dB, 18dB, 24dB, N/Eye L, N/Eye H]
This is used to set the maximum gain up when “Auto” has been selected as the gain setting.

⑦ Color Set Display

㊵ Chroma Level Adjustment [Chroma Level: –3 to +3]
Chroma Level can be decreased or increased to three levels. The signal output to the optional card cannot be adjusted.

㊶ White Balance Setting
[White Bal: ATW, AWC A, AWC B, 3200K, 5600K]

ATW: The white balance is automatically adjusted to the optimum position.

AWC A, AWC B:
Once the white balance is adjusted with the ITEM/AWC switch on the back of the camera, it is no longer necessary to set the white balance again if you simply select AWC A or AWC B, provided that the camera is used under the same conditions.
Fine color adjustment can be made after setting AWC by red/blue gain adjustment in User Mode or from the RCU (RCB).

3200K: The white balance is adjusted to 3200K illumination.

5600K: The white balance is adjusted to 5600K illumination.

Note

Neither 3200K nor 5600K can be set from the RCU (RCB) or the hybrid control panel.

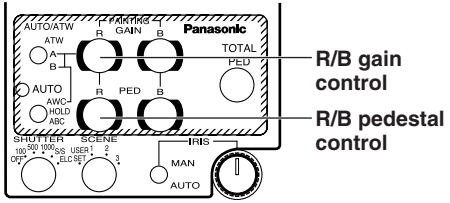
㊷ ATW Speed Setting
[ATW Speed: Slow 2, Slow 1, Mid, Fast 1, Fast 2]
ATW Speed can be set.

㊸ Black Level Setting [Pedestal: –150 to +150]
The black level (pedestal) of the luminance (Y) signal can be set. Used in adjusting the black levels of two or more cameras.

㊹ Painting Setting
[Painting: R Gain, B Gain, R Pedestal, B Pedestal: –150 to +150]

R Gain, B Gain:
Fine adjustment of the white balance can be made after AWC setting when AWC A or AWC B is selected in White Balance Setting. In case of using the RCU (RCB), use the R/B gain controls for this purpose. The set value returns to ±0 after AWC setting in using the camera alone.

R Pedestal, B Pedestal:
Fine adjustment of the black balance can be made after ABC setting.
In case of using the RCU (RCB), use the R/B pedestal controls for this purpose. The set value returns to ±0 after ABC setting in using the camera alone.



RCU (RCB)

Menu item setting

⑧ G/L, Color Bar Set Display

㊺ Horizontal Phase Adjustment [H Phase: –206 to +49]
Horizontal phase can be adjusted when a genlock signal is supplied.

㊻ Subcarrier Phase Coarse Adjustment
[SC Coarse: 1, 2, 3, 4]
Coarse adjustment of subcarrier phase can be made when a genlock signal is supplied.

㊼ Subcarrier Phase Fine Adjustment
[SC Fine: –511 to +511]
Fine adjustment of subcarrier phase can be made when a genlock signal is supplied.

㊽ Color Bar Setup Setting
[Color Bar Set: 0.0 IRE, 7.5 IRE]
The setup level of color bar can be adjusted.

㊾ Color Bar Setup Setting for the optional cards
[Color Bar Set2: 0.0 IRE, 7.5 IRE]
This menu is displayed when the optional card to process video signals is inserted.
The setup level of color bar to output to the optional card can be adjusted.
Set 0.0 IRE when the SDI card is inserted.

⑨ Detail Set Display

㊿ Detail Level Setting [Detail: OFF, Low, High]
Contour correction quantity can be selected.
Detail settings made using the Horizontal/Vertical Detail Level High/Low Setting.

51 Horizontal Detail Level High Setting
[H Detail Level H: L+1 to 63]

52 Vertical Detail Level High Setting
[V Detail Level H: L+1 to 31]

53 Horizontal Detail Level Low Setting
[H Detail Level L: 0 to H–1]

54 Vertical Detail Level Low Setting
[V Detail Level L: 0 to H–1]
Detail level can be set in horizontal (H) and vertical (V) directions with the Detail Level Setting at High or Low. Whichever the direction, H or V, the set level at High must be at least one position higher than that at Low.

55 Detail Band Setting [Detail Band: 1 to 5]
A contour correction band can be set with the Detail Level Setting at High or Low. The higher setting, the finer will be the detail.

56 Noise Suppress Level Setting
[Noise Suppress: 1 to 10]
Screen noise can be reduced with the Detail Level Setting at High or Low. If the noise suppress level is set too high, a fine object will be reproduced less sharply.

57 Level Dependent Level Setting
[Level Dependent: 0% to 25%]
Screen noise due to the detail of dark parts of an object can be reduced.
If level dependent level is set too high, however, hair, for example, will be reproduced less sharply.

58 Dark Detail Level Setting [Dark Detail: 0 to 5]
The contours of the darker portions of an object can be emphasized.
This setting is possible only when the Level Dependent Level Setting is set to 0%.

59 Chroma Detail Level Setting [Chroma Detail: 0 to 15]
The contours of high-hue portions of an object can be emphasized.

60 Flesh Noise Suppress Level Setting
[Flesh Noise Sup.: OFF, Low, High]
Flesh noise is suppressed in two steps when the Detail Level Setting is at High or Low.

61 Precision Detail Level Setting
[Precision Detail: OFF, Low, High]
This setting is to narrow detail width and suppress detail glare.

Menu item setting

⑩ Color Matrix Set Display

⑫ **B_Mg Gain:** Increases or decreases the intermediate color between blue and magenta.

B_Mg Phase: Varies the hue of the intermediate color between blue and magenta.

Mg Gain: Increases or decreases the magenta.

Mg Phase: Varies the hue of the magenta.

Mg_R Gain: Increases or decreases the intermediate color between magenta and red.

Mg_R Phase: Varies the hue of the intermediate color between magenta and red.

R Gain: Increases or decreases the red.

R Phase: Varies the hue of the red.

R_Yl Gain: Increases or decreases the intermediate color between red and yellow.

R_Yl Phase: Varies the hue of the intermediate color between red and yellow.

Yl Gain: Increases or decreases the intermediate color of yellow.

Yl Phase: Varies the hue of the yellow.

Yl_G Gain: Increases or decreases the intermediate color between yellow and green.

Yl_G Phase: Varies the hue of the intermediate color between yellow and green.

G Gain: Increases or decreases the green.

G Phase: Varies the hue of the green.

G_Cy Gain: Increases or decreases the intermediate color between green and cyan.

G_Cy Phase: Varies the hue of the intermediate color between green and cyan.

Cy Gain: Increases or decreases the cyan.

Cy Phase: Varies the hue of the cyan.

Cy_B Gain: Increases or decreases the intermediate color between cyan and blue.

Cy_B Phase: Varies the hue of the intermediate color between cyan and blue.

B Gain: Increases or decreases the intermediate color between blue and magenta.

B Phase: Varies the hue of the intermediate color between blue and magenta.

⑪ Other Set Display

㊸ Gamma Level Setting [Gamma: 0.35 to 0.55]
Gamma correction level can be set.

㊹ Knee Level Setting
[Knee Point: 88% to 98%, Dynamic]
88% to 98%: The level of video signals subject to knee (knee point) can be set.
Dynamic: Knee level is automatically adjusted according to the scene.

㊺ White Clip Level Setting [White Clip: 95% to 110%]
The peak level of video signals to be white-clipped can be set.

㊻ Flare Correction Level Setting [Flare R/G/B: 0 to 100]
Flare correction level can be adjusted.

㊼ Black Stretch Setting [Black Stretch: ON, OFF]
Black stretch to correct the suppression of black portions at low luminance can be set to ON or OFF.

㊽ Clean DNR Setting [Clean DNR: OFF, Low, High]
This enables the clean DNR effect to be selected.

㊾ CCD Read Out Mode Setting
[Field/Frame: Field, Frame 1, Frame 2]
Field: CCD storage will be by field storage.
Frame 1: Vertical resolution increases in frame storage.
Frame 2: Vertical resolution is raised without increasing residual images by frame storage and electronic shutter.

㊿ PC Control Access Speed Setting [Baud Rate: 1200bps, 2400bps, 4800bps, 9600bps]
This setting is to select a communication speed in controlling the camera from the computer.

(71) Component Output Setting
[Component: RGB, Y/Pr/Pb, Y/C]
This enables RGB, Y/Pr/Pb or Y/C to be selected as the component signals which are to be output from the I/F REMOTE connector.

(72) Aspect Ratio Selection [Aspect Ratio: 16:9, 4:3]
Aspect ratio can be selected from 16:9 or 4:3.

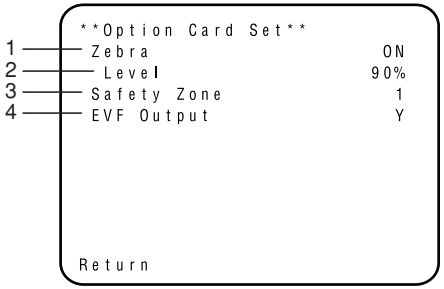
(73) Fan Setting [Fan SW: OFF, Auto]
OFF: Select this setting to stop the fan when its operating sound is found to be bothersome in a studio or other such environment.
Auto: The temperature is detected automatically, and the fan starts operating when the temperature exceeds approx. 95°F (35°C).
Under normal circumstances, the “Auto” setting is used.

(74) Language Selection [Language: English, Japanese]
English: Menu screen is displayed in English.
Japanese: Menu screen is displayed in Japanese.

Setting and changing the optional cards

⑫ Optional Card Setting Sub Menu

This sub menu appears when a studio card (AW-PB305 or AW-PB506) has been inserted into the optional card slot.



1. Zebra Indicator Setting [Zebra: OFF, ON]

This is used to select whether to display the zebra pattern on the viewfinder.

OFF: The zebra pattern is not displayed on the viewfinder.

ON: The zebra pattern is displayed on the viewfinder.

2. Zebra Level Setting [Level: 70% to 110%]

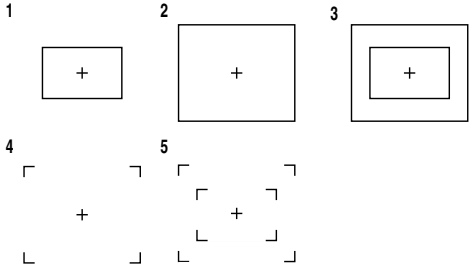
This enables the zebra pattern to be displayed so that it will provide as a general guideline for the luminance level.

❊ It can be set when “ON” has been selected as the zebra indicator setting.

3. Safety Zone Setting [Safety Zone: OFF, 1, 2, 3, 4, 5]

This is used to select the type of safety zone which is displayed on the viewfinder. A safety zone is not displayed when “OFF” is selected.

❊ The safety zone and center marker indicate electrical positions and, as such, they may be at variance with their optical positions.



The inside and outside frames denote safety zones of about 90% and about 95%, respectively.

4. EVF Output Setting [EVF Output: Y, CVBS]

This is used to set the signals to be output to the viewfinder.

Y: The luminance signal is output to the viewfinder.

CVBS: The color signals are output to the viewfinder.

❊ When “CVBS” has been selected as the setting, the zebra pattern will not be displayed on the viewfinder.

Setting to initial set

■ Setting to initial set

In case of the wrong setting in any use mode, take the following steps to return to the initial settings.

(1) Select [Initialize Data] on the main menu screen of each Use Mode. (See page 29.)
Press the YES/ABC switch, then [Initialize Data] screen shown for about 10 seconds.

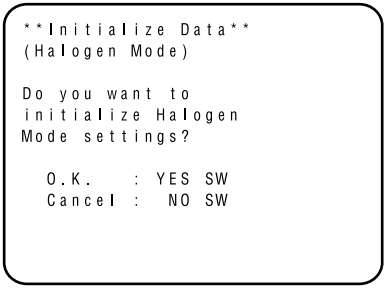
(2) Press the YES/ABC switch within about 10 seconds to return to the initial settings, the existing settings are initialized, the screen shown at ❷, and the camera returns to main menu.

(3) If the NO/BAR switch is pressed, or if the YES/ABC switch is not pressed, within about 10 seconds, the screen shown at ❸, and the camera returns to main menu, and the existing settings are not initialized.

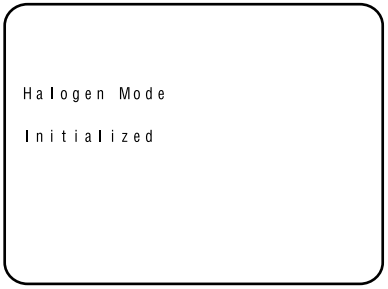
Note

If you are using an option card, the Option Card Setting Submenu will not be initialized even if “Return to Initialize” is performed.

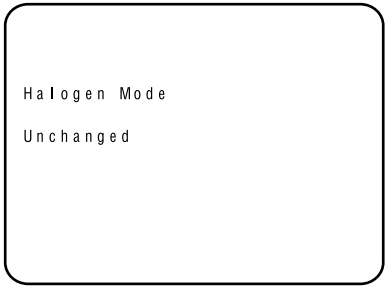
❶



❷



❸



■ Initial settings of the setting items (Factory preset values)

● Halogen, Fluorescent, Outdoor Mode

	Item	Halogen mode	Fluorescent mode	Outdoor mode
Brightness Set	Picture Level	±0	±0	±0
	Light PEAK/AVG	0	0	0
	Light Area	Top cut	Top cut	Top cut
	Auto ND (ELC)	OFF	OFF	ON
	Auto Gain Up	OFF	OFF	ON
	AGC Max Gain	---	---	N/Eye H
	Manu Gain Up	0dB	0dB	---
	Pedestal	±0	±0	-40
Color Set	Chroma Level	±0	+0	+0
	Flesh Tone	±0	±0	±0
	White Bal	AWC A	AWC A	ATW
	ATW Speed	---	---	Mid
G/L, Color Bar Set	H Phase	±0	±0	±0
	SC Coarse	1	1	1
	SC Fine	±0	±0	±0
	Color Bar Set	7.5 IRE	7.5 IRE	7.5 IRE
	Color Bar Set 2	0.0 IRE	0.0 IRE	0.0 IRE
Sharpness (DTL) Set	DTL Select	Sharpness	Sharpness	Sharpness
	Level	High	High	High
	Noise Suppress	OFF	OFF	OFF
	Clean DNR	OFF	OFF	OFF
	Flesh Noise Sup.	OFF	OFF	OFF
Other Set	Contrast (Gamma)	Mid	Mid	Mid
	Shutter Speed	OFF	OFF	Auto ND
	Synchro Scan	---	---	---
	V Resolution	Normal	Normal	Normal
	Baud Rate	9600bps	9600bps	9600bps
	Component	Y/Pr/Pb	Y/Pr/Pb	Y/Pr/Pb
	Aspect Ratio	16:9	16:9	16:9
	Fan SW	Auto	Auto	Auto
	Language	(English)	(English)	(English)

Note

When the optional card is inserted to the camera, “Language” menu will not be returned to default setting even if “Initialize Data” menu is executed.

● User Mode

	Item	User mode
Iris,Shutter, Gain Set	Picture Level	±0
	Light PEAK/AVG	0
	Light Area	Top cut
	Auto Iris Adjust	OFF
	Shutter Mode	Step
	Step/Synchro	OFF
	Gain	0dB
	AGC Max Gain	---
Color Set	Chroma Level	+2
	White Bal	AWC A
	ATW Speed	---
	Pedestal	±0
	Painting R Gain	±0
	B Gain	±0
	R Pedestal	±0
	B Pedestal	±0
G/L, Color Bar Set	H Phase	±0
	SC Coarse	1
	SC Fine	±0
	Color Bar Set	7.5 IRE
	Color Bar Set2	0.0 IRE

	Item	User mode
Detail Set 1	Detail	High
	H Detail Level H	20
	V Detail Level H	19
	H Detail Level L	13
	V Detail Level L	8
	Detail Band	5
	Noise Suppress	3
	Level Dependent	0%
	Dark Detail	0
Detail Set 2	Chroma Detail	0
	Flesh Noise Suppress	OFF
	Precision Detail	OFF

Setting to initial set

	Item	User mode
Color Matrix Set	B_Mg Gain	±0
	B_Mg Phase	±0
	Mg Gain	+27
	Mg Phase	±0
	Mg_R Gain	±0
	Mg_R Phase	±0
	R Gain	+15
	R Phase	±0
	R_Yl Gain	±0
	R_Yl Phase	±0
	Yl Gain	+18
	Yl Phase	+6
	Yl_G Gain	±0
	Yl_G Phase	±0
	G Gain	+30
	G Phase	+112
	G_Cy Gain	±0
	G_Cy Phase	±0
	Cy Gain	+44
	Cy Phase	−15
	Cy_B Gain	±0
	Cy_B Phase	±0
	B Gain	−20
	B Phase	+36

	Item	User mode
Other Set 1	Gamma	0.45
	Knee Point	88%
	White Clip	110%
	Flare R	0
	Flare G	0
	Flare B	0
	Black Stretch	OFF
	Clean DNR	OFF
Other Set 2	Field/Frame	Field
	Baud Rate	9600bps
	Component	Y/Pr/Pb
	Aspect Ratio	16:9
	Fan SW	Auto
	Language	(English)

Note

When the optional card is inserted to the camera, “Language” menu will not be returned to default setting even if “Initialize Data” menu is executed.