Panasonic Broadcast

AK-HC910
Menu Information

Setting of Menu Items

■ Configuration of menu display screen

```
USER MENU

-1.MAINTENANCE
 2.SETTING
 3.CAM ID
 4.FILE MENU
```

USER MENU

Maintenance menu

```
-*MAINTENANCE*

 1.BLACK SHADING
 2.PED,GAMMA,FLARE
 3.KNEE,WHITE CLIP
 4.R/B GAIN
 5.DTL
 6.GAIN,AUTO IRIS
 7.S.GAIN 1
 8.S.GAIN 2
 9.S.GAIN 3
10.MATRIX
11.COLOR CORRECTION1
12.COLOR CORRECTION2
```

Using condition setting menu

```
-**SETTING**

 1.MODE
 2.SHUTTER
 3.H.PHASE
```

Camera ID setting menu

```
**CAM ID**
       ↓
ID:AKHC900
```

File managing & renewing menu

```
 *FILE MENU*

 -FILE            :USER1
 (DATA REF        :PRESET)
 SAVE FILE?       :USER1
 SAVE             :
```

Setting of Menu Items

■ USER menu (Initial screen)

```
USER MENU

-1.MAINTENANCE
 2.SETTING
 3.CAM ID
 4.FILE MENU
```

The readout data at start of power supply is the data just before cutting off the power supply, and the operation is started with the data.

1. MAINTENANCE
   It sets various adjusting data.

2. SETTING
   It sets various modes.

3. CAM ID
   It sets the camera ID.

4. FILE MENU
   It executes file loading and saving, and makes the basic setting of data display.

Menu operation is executed by the HD Controller AK-HRP900.

Setting of Menu Items

■ Maintenance menu

```
-*MAINTENANCE*

  1.BLACK SHADING
  2.PED,GAMMA,FLARE
  3.KNEE,WHITE CLIP
  4.R/B GAIN
  5.DTL
  6.GAIN,AUTO IRIS
  7.S.GAIN 1
  8.S.GAIN 2
  9.S.GAIN 3
 10.MATRIX
 11.COLOR CORRECTION1
 12.COLOR CORRECTION2
```

· Move the cursor (arrow mark) to the item to be adjusted and press the MENU key, then it enters the adjustment menu thereunder.

· Move the cursor to MAINTENANCE and press the MENU key, then it returns to USER MENU.

```
-*BLACK SHADING*

  DETECTION
  CORRECT(DIG)        :ON
  CORRECT(ANA)        :ON
```

1 Black shading correction menu

· When MENU key is pressed at DETECTION, (BLK-SHD:ACTIVE) appears, then the lens is automatically stopped down and ABB operation is executed.

· When CORRECT (DIG) is turned ON, horizontal and vertical shading correction is automatically executed. When it is turned OFF, the current value is maintained.

· Move the cursor to "BLACK SHADING" and press the MENU key, then it returns to MAINTENANCE MENU.

· When CORRECT (ANA) is set to ON, vertical shading correction (SAW tooth) is automatically corrected.

Note:
It takes about 90 sec. until completion of black shading correction.

Setting of Menu Items

1 Maintenance menu

```
-**PED,GAMMA,FLARE**

  M PED              :+027
  R PED              :+000
  B PED              :+000
  M GAMMA            :0.45
  R GAMMA            :+00
  B GAMMA            :+00
  R FLARE            :010
  G FLARE            :000
  B FLARE            :017
  GAMMA              :ON
  FLARE              :ON
```

2 Pedestal, gamma, flare adjustment menu

M PED: Master pedestal can be adjusted only by turning the control panel VR.
The R, G, B pedestal can be totally adjusted.

R, B PED: R, B pedestal adjustment. Besides the master pedestal adjustment, R, B pedestal can be independently adjusted. It is not related to DATA REF. The numeral display after normal ending of ABB is "0" for both of R, B.

M GAMMA: Master gamma adjustment. The R, G, B gamma can be totally adjusted.

R, B GAMMA: R, B gamma adjustment. Besides the master gamma adjustment, R, B gamma can be independently adjusted.

R FLARE: R flare adjustment

G FLARE: G flare adjustment

B FLARE: B flare adjustment

GAMMA: Gamma ON/OFF setting

FLARE: Flare ON/OFF setting

Setting of Menu Items

1 Maintenance menu

```
-**KNEE,WHITE CLIP**

  M KNEE POINT          :95.00%
  R KNEE POINT          :+00.00%
  B KNEE POINT          :+00.00%
  M KNEE SLOPE          :95.00%
  R KNEE SLOPE          :+000
  B KNEE SLOPE          :+000
  A.KNEE POINT          :95.00%
  A.KNEE LVL            :108
  WHITE CLIP LVL        :109%
  KNEE                  :MANU
  WHITE CLIP            :ON
```

3 **Knee&white clip adjustment menu**

M KNEE POINT: Master knee point adjustment.
G, B, R knee point can be totally adjusted.

R, B KNEE POINT: R, B knee point adjustment.
Besides the master knee point adjustment, R, B knee point can be independently adjusted.

M KNEE SLOPE: Master knee slope adjustment.
G, B, R knee slope can be totally adjusted.

R, B KNEE SLOPE: R, B knee slope adjustment.
Besides the master knee slope adjustment, R, B knee slope can be independently adjusted.

A. KNEE POINT: Auto knee point setting. Knee point in auto knee mode is set.

A. KNEE LVL: Auto knee level.

WHITE CLIP LVL: White clip level adjustment.
Video level with white clipped is set.

KNEE: KNEE mode (OFF/MANU/AUTO)
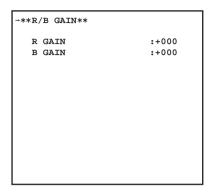OFF: Knee function is turned OFF.
MANU: Knee function is adjustable with menu.
AUTO: Auto knee function is executed.

WHITE CLIP: White clip operation setting.
With it ON, white clip is effective.

Setting of Menu Items

1 Maintenance menu

```
-**R/B GAIN**

  R GAIN              :+000
  B GAIN              :+000
```

```
-**DTL**

  DTL                 :ON
  TOTAL DTL LVL       :+00
  H DTL LVL           :11
  CRISP               :02
  LVL DEPENDENT       :2
  PEEK FREQUENCY      :10
  KNEE APERTURE       :ON
  KNEE APA.LVL        :10
  SLIM DTL            :OFF
  DTL(+)              :+00
  DTL(-)              :+00
  DTL CLIP            :0
  DTL SOURCE          :(B+G)/2
```

4 **Gain adjustment menu**

The gain of R, B GAIN is adjusted. The difference from the state of being white-balanced can be adjusted.

· The numeral value displayed after normal ending of AWB is "0" for both of R, B.

5 **Detail adjustment menu**

DTL: Setting of valid/invalid of detail function.

TOTAL DTL LVL: Horizontal and vertical detail level adjustment.

H DTL LVL: Horizontal DTL component is adjusted independently of DTL adjusted by TOTAL DTL.

CRISP: It functions to eliminate slight detail component and to reduce the noise level.

LVL DEPENDENT: It suppresses the detail of low brightness level. The brightness level to be suppressed is adjusted here.

PEAK FREQUENCY: It lifts up the detail component, and selects the central frequency.

KNEE APERTURE: It functions to emphasizes the detail component of the portion with knee applied.

KNEE APA.LVL: It sets the degree of knee aperture.

SLIM DTL: It validates the function of slimming the portion where the detail is thick and emphasized.

Setting of Menu Items

❶ Maintenance menu

```
-**DTL**

  DTL                  :ON
  TOTAL DTL LVL        :+00
  H DTL LVL            :11
  CRISP                :02
  LVL DEPENDENT        :2
  PEEK FREQUENCY       :10
  KNEE APERTURE        :ON
  KNEE APA.LVL         :10
  SLIM DTL             :OFF
  DTL(+)               :+00
  DTL(-)               :+00
  DTL CLIP             :0
  DTL SOURCE           :(B+G)/2
```

```
-**GAIN,AUTO IRIS**

  LOW GAIN             :0dB
  MID GAIN             :9dB
  HIGH GAIN            :18dB
  A.IRIS LVL           :082
  A.IRIS PEAK/AVG      :075
  A.IRIS WINDOW        :NORM1
  IRIS MODE            :LENS
  IRIS GAIN            :06
```

⑤ **Detail adjustment menu
(continued from previous page)**

DTL (+): Setting of DTL at the edge in positive direction.

DTL (–): Setting of DTL at the edge in negative direction.

DTL CLIP: Setting of clip level of DTL edge.

DTL SOURCE: Setting of video source [G, R, (3G+R) /4, (2G+R+B) /4, (G+B/2)] to create the detail.

⑥ **Master gain, auto iris setting menu**

LOW GAIN: LOW setting of master gain.

MID GAIN: MID setting of master gain.

HIGH GAIN: HIGH setting of master gain.
• The above GAIN setting is able to set –6 to +18 dB in 3 dB step.

A.IRIS LVL: Setting of the intended convergence level of auto iris.

A.IRIS PEAK/AVG: Setting of the detection ratio of peak value and average value of the quantity of light when auto iris is operated.

A.IRIS WINDOW: Setting of the detecting position of auto iris.

IRIS MODE: Auto iris mode setting: (LENS/CAM).

IRIS GAIN: Iris loop gain adjustment.

Setting of Menu Items

❶ Maintenance menu

```
-**S GAIN 1**

 *TOTAL GAIN         :42dB
  ANLG GAIN          :36dB
  PIX MIX            :06dB
  H DTL LVL          :00
  CRISP              :0
  LEVEL DEPENDENT    :5
  PEAK FREQUENCY     :2
  M GAMMA            :0.45
  MASTER PED OFFSET  :-043
  R PED OFFSET       :-046
  B PED OFFSET       :-045
```

(Super gain 1, 2, 3 are same menu.)

7 **Super gain, Detail, Pedestal-offset level setting menu**

TOTAL GAIN: Total gain in analog, pixel addition, and memory addition is displayed.

ANLG GAIN: Gain setting in analog.

PIX MIX: Gain setting in horizontal pixel addition. Capable of setting 0/6 dB.

H DTL LVL: DTL level setting of super gain.

CRISP: Setting the function of reducing noise level of super gain. It is invalid when DTL level is "0".

LEVEL DEPENDENT: Setting of DTL suppression at low lighting intensity of super gain.

PEAK FREQUENCY: Setting of DTL boost frequency of super gain.

M GAMMA: Gain setting in super gain. Capable of setting 0/6 dB.

MASTER PED OFFSET: Setting of master pedestal offset of super gain 1.
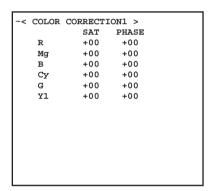
R PED OFFSET: Setting of R pedestal offset of super gain.

B PED OFFSET: Setting of B pedestal offset of super gain.

Setting of Menu Items

1 Maintenance menu

```
-< MATRIX >

   MATRIX TABLE     :A
   MATRIX R-G       :+00
   MATRIX R-B       :+00
   MATRIX G-R       :+00
   MATRIX G-B       :+00
   MATRIX B-R       :+00
   MATRIX B-G       :+00
```
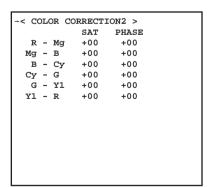
8 **Matrix menu**
   Selection of table A, B or OFF.
   Adjustment of gain of each color.
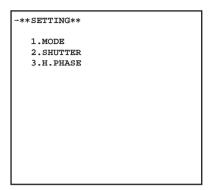
```
-< COLOR CORRECTION1 >
            SAT    PHASE
   R        +00    +00
   Mg       +00    +00
   B        +00    +00
   Cy       +00    +00
   G        +00    +00
   Y1       +00    +00
```

9 **Color correction 1 menu**
   Adjustment of gain (saturation) and
   phase of each color.

```
-< COLOR CORRECTION2 >
            SAT    PHASE
  R - Mg    +00    +00
 Mg - B     +00    +00
  B - Cy    +00    +00
 Cy - G     +00    +00
  G - Y1    +00    +00
 Y1 - R     +00    +00
```

10 **Color correction 2 menu**
   Adjustment of gain and phase of matrix.

Setting of Menu Items

❷ Setting menu

```
-**SETTING**

  1.MODE
  2.SHUTTER
  3.H.PHASE
```

☐ **Menu for various settings.**

```
-**MODE**

  BLACK STRETCH        :OFF
  D5600K               :OFF
  CABLE COMPE          :0m
  SUP GAIN             :OFF
  CAM ID               :BAR
  CAM ID POSI          :0
  MATRIX TABLE         :OFF
  COLOR CORRECTION     :OFF
  STATUS               :ON
```

[1] **Camera mode setting menu**

BLACK STRETCH: Setting of the function of expanding low-brightness analog video level.
It is set by ON/OFF.

D5600K: It is able to make color temperature correction of about 5600 degrees of electric color temperature correcting file.
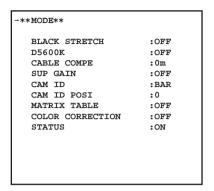It is set by ON/OFF.

CABLE COMPE: Setting of video cable compensation. It is able to set 0/25/50m.

SUP GAIN: It sets OFF/1/2/3 of MAX GAIN.

CAM ID: Setting of camera ID display.
It is set by OFF/BAR/ON.
In BAR setting, CAM ID is displayed only in BAR mode.

Setting of Menu Items

2 Setting menu

```
-**MODE**

  BLACK STRETCH       :OFF
  D5600K              :OFF
  CABLE COMPE         :0m
  SUP GAIN            :OFF
  CAM ID              :BAR
  CAM ID POSI         :0
  MATRIX TABLE        :OFF
  COLOR CORRECTION    :OFF
  STATUS              :ON
```

1 **Camera mode setting menu (continued from previous page)**

CAM ID POSI: It sets the display position of camera ID.
0: top left, 1: top right, 2: down left, 3: down right.

MATRIX TABLE: It sets A, B or OFF of Matrix table.

COLOR CORRECTION: Setting of matrix ON/OFF.

STATUS: It sets displaying/not displaying the status when AWB/ABB is executed.

```
-**SHUTTER**

  SHUTTER MODE        :OFF
  SHUTTER SPEED       :1/100
  SYNCHRO SCAN        :75.1
```

2 **Electronic shutter setting menu**

SHUTTER MODE: It selects the shutter operation. ON/SYNCHRO/OFF can be selected.
ON → Setting of normal discrete shutter speed.
SYNCHRO → Setting of synchro scan mode.

SHUTTER SPEED: Setting of normal shutter speed.
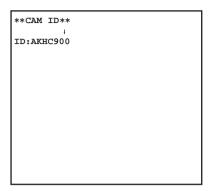
SYNCHRO SCAN: Setting of synchro scan mode.

Shutter speeds of 60 Hz to 120 Hz can be continuously changed.

```
-**H.PHASE**

  H.PHASE-COARSE      :09
  H.PHASE-FINE        :40
```

3 **Horizontal phase adjustment menu for external reference signal**

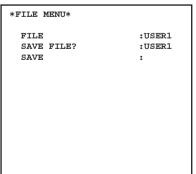**H.PHASE-COARSE:** It is able to set the horizontal phase in 15μ step.

H.PHASE-FINE: Setting of 1-step fine adjustment in the above phase adjustment.

Setting of Menu Items

3 Camera ID setting menu

```
**CAM ID**
        ↓
ID:AKHC900
```

4 File managing and renewing menu

```
*FILE MENU*

 −FILE              :USER1
  SAVE FILE?        :USER1
  SAVE              :
```
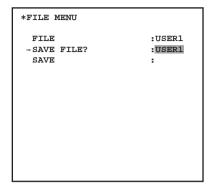
☐ **File operation menu**

▮▮▮ : blinking display.

① The file selected by FILE is loaded.
It can be selected from
[PRESET/USER1 / USER2
/CURRENT].
When desired to return to the
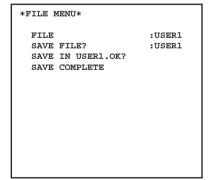previous data after loading other file,
select "CURRENT".

```
*FILE MENU*

  FILE              :USER1
  SAVE FILE?        :USER1
  SAVE              :
```

Setting of Menu Items

4 File managing and renewing menu

```
*FILE MENU

  FILE                :USER1
 -SAVE FILE?          :USER1
  SAVE                :
```

```
*FILE MENU*

  FILE                :USER1
  SAVE FILE?          :USER1
  SAVE IN USER1.OK?
 -YES
  NO
```

```
*FILE MENU*

  FILE                :USER1
  SAVE FILE?          :USER1
  SAVE IN USER1.OK?
  SAVE COMPLETE
```

☐ **File operation menu**
 (continued from previous page)

② When saving the current data, two
   files (USER1 /USER2) can be saved.
   Select the file by "SAVE FILE?"
   Select "USER1" and move the cursor
   to SAVE and press the MENU key,
   then the item menu is displayed.

③ SAVE IN USER1. OK?
   "YES" and "NO" are displayed.
   Move the cursor from "NO" to "YES"
   and check that "YES" blinks.

④ When the menu key is pressed,
   "SAVE COMPLETE" appears, then
   "SAVE" of the file is completed.